

ROR003 CSPA et al.

Response to comment ROR003-1

Please see the responses to the commenter's prior letter, OR102.

MICHAEL B. JACKSON
ATTORNEY AT LAW
429 MAIN STREET
POST OFFICE BOX 207
QUINCY, CALIFORNIA 95971
TEL: (530) 283-1007 FAX: (530) 283-4999

January 14, 2013

VIA E-MAIL and CERTIFIED MAIL, RETURN RECEIPT REQUESTED

Delta Stewardship Council
Attn: Terry Macaulay
980 Ninth Street, Suite 1500
Sacramento, CA 95814
E-mail: eircomments@deltacouncil.ca.gov

Re: *Comments of the California Sportfishing Protection Alliance (CSPA), California Water Impact Network (C-WIN), and AquAlliance to the Revised Draft Delta Plan Program Environmental Impact Report*

Dear Ms. Macaulay,

C-WIN, CSPA, and AquAlliance, hereinafter the groups, appreciate the opportunity to provide comments to the Recirculated Draft PEIR (RDPEIR) for the Delta Plan project. Unfortunately, most of the deficiencies we addressed in our comments to the first draft PEIR remain unaddressed by the DRPEIR. Therefore, in addition to incorporating our original comments by reference, we provide additional comments on the revised recirculated draft, attached hereto.

ROR003-1

s/MICHAEL B. JACKSON
Michael B. Jackson
Attorney for the California Water Impact
Network (C-WIN), the California
Sportfishing Protection Alliance (CSPA),
and AquAlliance

C-WIN, CSPA, and AquAlliance, Comments to
the Recirculated Draft PEIR (RDPEIR) for the Delta Plan project
January 14, 2013

TABLE OF CONTENTS

Letter to Delta Stewardship Council re: Attached Comments of Groups.....ii

TABLE OF CONTENTS..... ii

I. The RDPEIR for the Delta Plan Project Fails as a Programmatic EIR.....1

 A. The RDPEIR Fails to Provide an Adequate Project Description..... 2

 B. The RDPEIR Fails to Provide an Adequate Disclosure of the Environmental Setting of
 the Project..... 3

 1. Baseline 3

 a) An Overprescribed and Unhealthy Delta..... 7

 b) Necessary Economic Considerations..... 8

 C. The RDPEIR Fails to Provide an Adequate Impact Analysis..... 9

 D. The RDPEIR Fails to Properly Consider the Public Trust 12

 E. The RDPEIR Fails to Properly Consider Climate Change 13

 F. The RDPEIR Fails to Properly Consider Available Science 15

 G. The RDPEIR Fails to Properly Mitigate Impacts 17

 H. The RDPEIR Fails to Provide Adequate Alternatives..... 18

 I. The RDPEIR Fails to Provide an Adequate Cumulative Impact Assessment 22

II. Conclusion24

No comments

- n/a -

I. The RDPEIR for the Delta Plan Project Fails as a Programmatic EIR

Using a programmatic EIR affords a lead agency no cover for a CEQA document that “does not provide decision-makers, and the public, with the information about the project required by CEQA.” (*Planning and Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892, 916.) A program EIR cannot rationalize vague or evasive analysis. The CEQA guidelines’ list of “advantages” to preparing a program EIR include a “more exhaustive” examination of effects and alternatives, “full consideration” of cumulative impacts, and allowance for analysis of “broad policy alternatives and program wide mitigation measures” at a time when the lead agency has the best opportunity to address them properly. (Cal. Code Regs., tit. 14, § 15168(b).)

Programmatic EIRs are intended to provide a broad look at policies and potential cumulative impacts of a series of actions. A program EIR may be prepared on a series of actions that are related either: (1) geographically, (2) procedurally (where the actions are a logical step in contemplated actions), (3) in connection with the issuance of rules, regulations, plans, etc. that govern the conduct of a continuing program, or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways. (CEQA Guidelines, § 15168, subd. (a).) The benefits of Program EIRs include providing for an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action, ensuring consideration of cumulative impacts that might be slighted in a case-by-case analysis, and avoiding duplicative reconsideration of basic policy considerations, among other things. Without an understanding of the types of projects that will follow, the PDEIR cannot possibly contain substantial evidence to support its conclusions (CEQA Guidelines, § 15384), thus failing to uphold the requirements of CEQA. (See *Planning and Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892, 916) (CEQA not satisfied if document fails to provide decision-makers and the public with the required information about the project.)

The Vol.1 RDPEIR states that “[f]uture environmental documents would be completed by other agencies when they propose to implement projects that are subject to consistency reviews by the Council, or projects which are encouraged or otherwise influenced by the Delta Plan. Hence, this program EIR is not intended to provide project-level clearance for any specific project.” It is not clear whether the RDPEIR appears to permit an agency to determine that

ROR003-2

Response to comment ROR003-2

Please see the responses to the commenter's prior letter, OR102. Please also see Master Response 1, regarding the covered action consistency determination process, and Master Response 2, regarding the scope of the EIR.

unspecified future projects are “within the scope” of the Delta Plan, thereby sidestepping further environmental review. The DEIR should be revised to specify that it is not intended to be the sole environmental review for any future projects.

A. The RDPEIR Fails to Provide an Adequate Project Description

An adequate project description is vital to understanding the environmental setting, and concerns that arise therein. Without an adequate project description, crucial decisions regarding project impacts, and viable alternatives cannot be effectively determined by the agency, or the public reviewing the environmental documents. CEQA Guidelines § 15125 subdivisions (c) and (d) state that:

Knowledge of the regional setting is critical to the assessment of environmental impacts. Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project. The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed and it must permit the significant effects of the project to be considered in the full environmental context. The EIR shall discuss any inconsistencies between the proposed project and applicable general plans and regional plans. Such regional plans include, but are not limited to . . . habitat conservation plans, natural community conservation plans and regional land use plans . . . In failing to provide an adequate description of upstream areas, the RDPEIR also violates CEQA mandates on establishing a baseline.

CEQA Guidelines 15124, requires a statement briefly describing the intended uses of the EIR, including the information known to the Lead Agency. The RDPRIR and DEIR fail to include a comprehensive statement of intended uses of the RDPEIR, leaving it vulnerable to misuse in the future and violating CEQA Guidelines, section 15124. The RDPEIR does not include a revised project description that delineates the geographic scope of upstream areas.

CEQA Guidelines 15124 state that:

[t]he description of the project shall contain the following information... (a) The precise location and boundaries of the proposed project shall be shown on a detailed map, preferably topographic, [and] (c) A general description of the project’s technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities.

Vol. I RDPEIR (Section 1.4.2) included a map of a vast “upstream” area, but did not include actual analysis of most of these areas. The RDPEIR does casually mention that “operation of

ROR003-2

ROR003-3

ROR003-4

Response to comment ROR003-3

Please see Master Response 2. As explained on DEIR pages ES-9 and 1-13 to 1-14 and on RDEIR pages ES-11 and 1-2, the intended use of this EIR is by the Delta Stewardship Council to adopt the Delta Plan and associated rulemaking by the State Office of Administrative Law.

Response to comment ROR003-4

Please refer to Master Response 2. The EIR study area has not changed from the Draft Programmatic EIR to the Recirculated Draft Programmatic EIR. The study area in the EIR was delineated in the manner described in Section 1 of the Draft Program EIR because these are the areas in which the significant environmental effects of the Delta Plan may occur, which includes a greater geographic area than the area in which the Delta Stewardship Council has jurisdiction over covered actions pursuant to the Delta Reform Act. For example, the impacts of Delta ecosystem restoration projects within the Delta may include impacts associated with the construction and operating footprint of the projects, while the impacts of such projects in the Delta watershed and in areas outside the Delta that use Delta water would primarily relate to changes in water supply. Because Central Valley Project and State Water Project water flows through the Delta, many of the changes to the management or delivery of such water would “occur, in whole or in part, within the boundaries of the Delta,” would therefore potentially be a “covered action” under Water Code section 85057.5. Sections 3 through 21 of the EIR describe the existing environmental and regulatory conditions relevant to the resource under discussion. For example, Subsection 3.3.4 of the DPEIR describes the environmental setting of Delta watershed areas. Appendix D of the DPEIR summarizes the regulatory framework pertaining to water resources. As described in Section 2B of the Draft Program EIR, the Delta Stewardship Council does not propose or contemplate directly authorizing any physical activities. Rather, through the Delta Plan, the Delta Stewardship Council seeks to influence the actions, activities, and/or projects of other agencies, the details of which would be under the jurisdiction and authority of the agencies that will propose them in the future and conduct future environmental review. To the extent known, projects that may be encouraged by the Delta Plan are named in the EIR. In addition, types of projects that may be encouraged by the Delta Plan are identified.

facilities within the rivers and streams upstream of the Delta or in the Delta could result in changes in salinity in the Delta by reducing Delta freshwater inflows during some periods of the year." (p. 3-13.) However, by failing to revise the Project Description to describe the upstream areas in the impact analysis, it is impossible to determine the impacts on the project. The Revised Project (as well as the Proposed Project) supports certain projects without any quantitative justification on costs, yield, impacts on the environment, or evaluation of the public trust values involved. (CEQA Guideline 15126.5, "Discussion of Alternatives," Guideline 15146, "Degree of Specificity.") Further, "[l]ead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used." CEQA Guidelines 15130. The RDPEIR claims to have expanded its scope into upstream areas, but fails to describe these areas or justify the parameters of its scope. While this RDPEIR states that the Revised Project includes upstream areas, it fails to establish the environmental setting for these areas; thus, its discussion of potential impacts to these areas is essentially speculation. It furthermore does not include a description of the relevant regulatory schemes in these areas and how such regulations would be reconciled with the policies and recommendations in the Delta Plan. This omission violates CEQA. (CEQA Guidelines, § 15125.) The current state of the Delta as well as its tributaries must be established in order to have a legitimate discussion of a project's impacts.

ROR003-1

B. The RDPEIR Fails to Provide an Adequate Disclosure of the Environmental Setting of the Project.

The Delta is a critically important natural resource for California and the nation. It serves Californians concurrently as both the hub of the California water system and the most valuable estuary and wetland ecosystem on the west coast of North and South America. (Water Code Section 85002). The Sacramento-San Joaquin Delta watershed and California's water infrastructure are in crisis and existing Delta policies are not sustainable. Resolving the crisis requires fundamental reorganization of the state's management of Delta watershed resources. (Water Code Section 85001(a).)

ROR003-5

1. Baseline

The Environmental Setting of the RDPEIR must be revised to reflect the state of drastic overextended entitlements of water coming from the Delta. An agency may not escape its duty

Response to comment ROR003-5

Please see the responses to the commenter's prior letter, OR102. The EIR describes existing conditions in Sections 3 through 21 of the DEIR including declining conditions in the Delta, such as deteriorating water quality in Section 4.3.2.1, Factors Affecting the Delta Ecosystem. Pursuant to Public Resources Code § 15126.2(a), the EIR analyzes the Project's impacts as compared to the physical environment as it existed at the time of the publication of the Notice of Preparation (December 10, 2010). Over-appropriation of water is a legal matter and not a physical issue. Please refer to Master Response 1.

by ignoring that duty and then presenting the result as a *fait accompli* incorporated into an environmental baseline. *League to Save Lake Tahoe v. Tahoe Reg'l Planning Agency*, 739 F. Supp. 2d 1260, 1272 (E.D. Cal. 2010) aff'd in part, vacated in part, remanded, 469 F. App'x 621 (9th Cir. 2012). The DEIR and RDPEIR utterly fail to include a comprehensive analysis of the availability of water coming into the Delta. In order to demonstrate how such a comprehensive analysis could be done, we incorporate by reference the report prepared by Tim Stroshane for CSPA, CWIN, and AquAlliance in the State Board hearings regarding amendment of the Bay/Delta Water Quality Control Plan (Appendix 1 and 1a herein). This document, which includes 223 pages listing existing water rights, demonstrates that the Bay/Delta watershed is indeed grossly over-appropriated and that until this problem is resolved it is impossible for the DSC to approve a Delta Plan that can meet the requirements of the Delta Reform Act to recover the Bay/Delta and to improve reliability of the California water supply.

The average annual water supplies of the Sacramento and San Joaquin river watersheds between 1998 and 2005 totaled approximately 35 MAF. Tables 3-1 and 3-4, Volume 1 & 2. This includes groundwater extraction and agricultural return flows. The average combined unimpaired flow of the two watersheds has been identified as approximately 29 MAF. However, there are 153.9 MAF of legal claims to that water. Consequently, the watersheds are seriously over-appropriated. As California's water rights system is seniority based and restrained by Area of Origin and Watershed Protection statutes, any fair disclosure CEQA document addressing water supply reliability and Delta restoration would be seriously inadequate if it failed to extensively discuss and analyze the over-subscription of water and legal constraints on out-of-basin transfers of water.

The problem of over-appropriation has been known and well documented since the Central Valley Project Act was passed by the Legislature in 1933. Governor Earl Warren, testified in 1951 that those in State Government felt "for many years that there should be a complete adjudication of the water rights on the Sacramento River, and we believed it should be done before the Central Valley project was completed and in operation."¹ The formal Findings of the 1951 Engle Congressional Committee held that:

¹ Appendix 2. *As quoted in:* Gleason, Walter M. 1960. Opinion of Attorney Walter M. Gleason Regarding Various Legal Aspects of Burns-Porter Act (SB 1106) (Proposition One), California Senate Interim Committee on Water Projects, 28 October 1960, p. 16.

1. "For all practical purposes, the developed water supplies of the Sacramento River are overcommitted and oversubscribed."²
2. Without adjudication, "The State of California and Bureau of Reclamation officials may create a 'legal Frankenstein,' which would destroy all hope for State control of Central Valley water rights..."³
3. State and federal projects were claiming and depending upon the same Feather River water rights.⁴

Despite the clear problem, nothing was done to remedy the over-appropriation problem. In 1960, during consideration of the Burns-Porter Act (State Water Project), Senator Stephen Teale, Chairman of the California Senate Interim Committee on Water Projects asked legendary water rights attorney Walter M. Gleason to submit a legal assessment of the proposed State Water Project.⁵ In a 72-page opinion, Mr. Gleason, incorporated herein as Appendix 2, he observed that there wasn't "any accurate or proper administrative determination by the State of the extent of the 'surplus' water which is or will be available in the Central Valley for export."⁶ He described the consequences of a failure to identify and quantify vested rights, said that the project would not protect the Delta and would aggravate the existing salinity and hydrology problems,⁷ and said the export schemes were based, "wholly and entirely in assumptions."

Over-appropriation is a huge factor in determining impacts to the environment, especially in light of the current degraded condition of the Sacramento-San Joaquin Bay Delta. In 2009, the Delta Reform Act held that "[t]he Sacramento-San Joaquin Delta watershed and California's water infrastructure are in crisis." Section 85001. For example, the Delta region has a severely depleted groundwater basin, yet the RDPEIR fails to reflect the SWRCB conclusions regarding how inadequate flows into and out of the Bay Delta are contributing to this environmental hazard. As it stands, the Delta aquifer is critically over drafted, causing a void that pulls in sea water from the Bay in an easterly direction. New diversions would reduce the natural flushing of the Delta and could eliminate the natural salt water barrier created by the freshwater inflows into the Delta, causing increased migration and intrusion of brackish water in the groundwater basin. The cumulative impacts of the diversion for the Revised Project, and other activities affecting groundwater including over drafting must be addressed in the EIR.

² Ibid, p. 22.
³ Ibid, p. 49.
⁴ Ibid, p. 50.
⁵ Ibid, pp. 1-3.
⁶ Ibid, p. 17.
⁷ Ibid, p. 39.

Response to comment ROR003-6

Please see response to comment ROR003-5. Groundwater condition in the Delta and Suisun Marsh region is discussed in Subsection 3.3.3.3 of the DPEIR. The Delta Plan encourages the SWRCB to complete the updated Bay-Delta Water Quality Control Plan flow objectives. However, only the SWRCB has authority to set those objectives. The Delta Plan and the EIR therefore cannot project what those objectives will be. The Delta Plan and the sources it cites (including especially the SWRCB's 2010 Flow Criteria Report) explains that the flow objectives that best advance the coequal goals will be those that bring about more natural functional flows within and out of the Delta. *See* Delta Plan, pp. 136 to 142, 155, and sources cited therein. The EIR thus assumes, consistent with CEQA, that the SWRCB will adopt updated objectives that will advance such a flow regime. The general assumption of a more natural flow regime is sufficient for the EIR's programmatic approach. The impacts of the flow objectives are analyzed in greater, quantitative detail, in the SWRCB's Draft Substitute Environmental Document in Support of Potential Changes to the Water Quality Control Plan for the San Francisco Bay-Sacramento/San Joaquin Delta Estuary: San Joaquin River Flows and Southern Delta Water Quality (December 2012). See Master Response 5 for further discussion.

Resolving this crisis “requires fundamental reorganization of the state’s management of Delta watershed resources.” Section 85001. This revised management of Delta resources requires pursuing the coequal goals of “providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem.” Section 85054. The coequal goals “shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource and agricultural values of the Delta as an evolving place.” *Id.* For the purposes of informing planning decisions for the Delta Plan and the Bay Delta Conservation Plan, the Legislature required the State Water Resources Control Board to develop new flow criteria for the Delta ecosystem necessary to protect public trust resources. Section 85086(c)(1). The Delta Plan and its accompanying environmental documents fail miserably to implement the coequal goals required under the Delta Reform Act. From the beginning, the Stewardship Council has failed to define what it believes to be the “coequal goals” of this plan, nor has it established quantifiable goals, or measurements for achieving the goals of the plan. Instead, the Delta Plan only recommends, and the RDPEIR only evaluates, proposals that continue to violate existing environmental laws. The RDPEIR utterly fails to adequately analyze, discuss, disclose or compare defensible and quantifiable goals, yardsticks and mileposts for achieving the coequal goals and their effects on various alternatives. The RDPEIR merely proposes and analyzes a plan that perpetuates an unsustainable status quo. Further, the Stewardship Council declined to conduct a water quality analysis to evaluate the impacts to pollutant concentration and residence time from diverting additional dilution flows around an already degraded estuary. Central Valley waterways are polluted despite more than forty years of laws prohibiting pollution. Yet the Delta Plan assumes that agencies that have failed to prevent pollution will, somehow, in the future prevent pollution by implementing programs that failed to prevent pollution. The Delta Plan cannot assume, given the historical record, that continuation of programs that have failed to prevent pollution will, in fact, improve water quality. The RDPEIR is inadequate because it failed to adequately analyze, discuss and disclose how a continuation of existing and largely failed programs will produce different outcomes in the future and how continued pollution will affect various analyzed alternatives. The over appropriation of Central Valley waters has been long known and amply documented, and there can be no justification for not providing decision makers with this crucial information. Such information is fundamental for making intelligent

ROR003-7

Response to comment ROR003-7

As described in Section 2B of the Draft Program EIR, the Delta Stewardship Council does not propose or contemplate directly authorizing any physical activities, including but not limited to construction or operation of infrastructure. Rather, through the Delta Plan, the Delta Stewardship Council seeks to influence the actions, activities, and/or projects of other agencies, the details of which would be under the jurisdiction and authority of the agencies that will propose them in the future and conduct future environmental review. Without specific details of future projects, it is not possible for the Delta Stewardship Council to develop quantitative thresholds of significance, conduct site-specific quantitative analyses, and design site-specific mitigation measures. Accordingly, in the absence of specific proposed physical projects, this EIR makes a good faith effort to disclose the potentially significant environmental effects of the types of projects that may be encouraged by the Delta Plan and to identify program-level mitigation measures. Impacts on each of the potentially affected resources areas are analyzed at a program level in Sections 3 through 21 of this EIR. The comment on the performance measures in the proposed Delta Plan is a comment on the project, not on the EIR.

choices regarding water supply reliability or Delta restoration, and projects and plans cannot be evaluated properly without this information.

ROR003-7

a) An Overprescribed and Unhealthy Delta

The Delta Reform Act specifically mandates a comprehensive review and analysis of the impacts of “possible changes in total precipitation and runoff patterns” due to climate change on the Proposed Project before incorporation into the Delta Plan. The Delta Plan must specifically address the requirements of the Delta Reform Act, and must describe a review process that will ensure that the Bay Delta Conservation Plan takes a sufficiently comprehensive look at how shifts in precipitation and runoff from climate change could affect the planned project and operations, as well as the environment. The Proposed Project, however, does not require specific water reliability projects. Rather, the project contains broad requirements and recommendations that make it unclear what types of projects will actually be implemented as a result of the Proposed Project policies and recommendations. The Delta Plan must clearly and specifically address how the Delta Stewardship Council will ensure adequate review of the BDCP climate change analysis prior to incorporation of BDCP into the Delta Plan. This is an essential duty of the Delta Stewardship Council as an independent agency and should not be delegated to the Department of Water Resources or any other agency.

ROR003-8

In water resources planning, it is often assumed that future hydrologic variability will be similar to historical variability, which is an assumption of a statistically stationary hydrology. This assumption no longer holds true under climate change where the hydrological variability is non-stationary. Recent scientific research indicates that future hydrologic patterns are likely to be significantly different from historical patterns, which is also described as an assumption of a statistically non-stationary hydrology. In an article in *Science*, Milly et al. (2008) stated that “Stationarity is dead” and that “finding a suitable successor is crucial for human adaptation to changing climate.” A growing number of climate change studies have projected an increase in the frequency and severity of droughts in the Sierras and the Central Valley, and particularly under the higher greenhouse gas emissions scenarios. Major shifts in precipitation and runoff could have huge impacts on yields of proposed storage and conveyance projects, as well as huge environmental impacts. It is essential that information on potential flows and diversions under

ROR003-9

Response to comment ROR003-8

This is a comment on the project, not on the EIR. Please refer to Master Response 1 regarding the process for incorporating the BDCP into the Delta Plan.

Response to comment ROR003-9

The effects of climate change within the study period (through the year 2030) are described in Section 21, Climate Change and Greenhouse Gas Emissions, of the EIR.

drier climate change scenarios be made available so that the risk can be evaluated by the public trust agencies, and the public.

The lengthy analysis of water supply, for instance, barely addresses the State Board's Delta flow recommendations. These recommendations underscore the imperative to reduce water exports to sustain the Delta's ecosystem, as well as beneficial uses and public trust values. The State Board recommended flow criteria to protect these values in August 2010: "Recent Delta flows are insufficient to support native Delta fishes for today's habitats...." In order to preserve the attributes of a natural variable system to which native fish species are adapted, many of the criteria developed by the State Board are crafted as percentages of natural or unimpaired flows. These criteria include:

- 75% of unimpaired Delta outflow from January through June;
- 75% of unimpaired Sacramento River inflow from November through June; and
- 60% of unimpaired San Joaquin River inflow from February through June.⁸

It is inconceivable that in thousands of pages of Delta Plan and EIR that is no serious effort to disclose, analyze or discuss water availability and the over appropriation of water in the Central Valley. It is the failure to undertake these assessments that has led to the present crisis. Failure to undertake them now will simply perpetuate an unsustainable status quo that will only exacerbate an already dire situation. The Delta Stewardship Council must ensure that these deficiencies are remedied, prior to incorporation of the Bay Delta Conservation Plan into the Delta Plan, and should ensure that adequate analysis of potential drought impacts of climate change is done for all projects incorporated into the Delta Plan.

b) Necessary Economic Considerations

The Legislature has required that the Delta Protection Commission to prepare and submit to the Council an economic sustainability plan for the Delta. Section 29759. However, the Stewardship Council rejected conducting a comprehensive socioeconomic cost/benefit analysis indispensable for maximizing the use of limited resources for the greatest good for all Californians. The last time a significant water body underwent a public trust balancing in California was by the court in *Mono Lake*, which held economic analysis to be of critical

⁸ Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem, State Water Resources Control Board, Aug. 3, 2010, p. 5, available at http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow.

ROR003-9

ROR003-10

ROR003-11

Response to comment ROR003-10

Please see response to comment ROR003-5, Master Response 1, regarding SWRCB flow criteria and flow objectives, and Master Response 5.

Response to comment ROR003-11

CEQA does not require a cost-benefit analysis. That is because social and economic impacts are not effects on the environment under CEQA, and are therefore not analyzed in the EIR (CEQA Guidelines §§ 15064(e) and 15131). Please see Master Response 2. Compliance with the public trust doctrine is required by the Delta Reform Act, as recognized in Water Code sections 85022(c)(3) and 85032(h). Please see Master Response 1 regarding the public trust and BDCP.

importance in performing a public trust analysis. Although the evaluation of economic effects is optional under CEQA Guidelines (15131), the economic balancing of public trust values is so important that they should be evaluated in this RDPEIR. The economic impact of not paying for a \$12 to \$15 billion tunnel project is so significant that should be considered. Further, the DRPEIR does not include estimates for jobs lost, when CEQA requires such a description. (CEQA Guidelines, § 15131, *Citizens Association for Sensible Development of Bishop Area v. County of Inyo* (4th Dist. 1985) 172 Cal.App.3d 151, 170, (even if economic effects are not to be considered significant impacts in isolation, the EIR must determine the relationship between economic impacts and potentially significant environmental impacts.) These deficiencies must be remedied.

ROR003-11

Therefore, at a minimum, the DPEIR must set forth basic costs and clearly defined baseline conditions so that the Proposed Program can be measured against the various Alternatives, which it does not do. To this end, C-WIN/CSPA has attached “Bay/Delta Water-Economics of Choice,” a report from ECONorthwest, that showcases the critical necessity of economic analysis to the informed balancing of the public trust. This report is incorporated herein as Appendix 3. The RDPEIR is inadequate because it failed to adequately analyze, discuss, disclose or compare the economics of California’s current water distribution scheme, and failed to evaluate the socioeconomic benefits and costs of various alternatives.

C. The RDPEIR Fails to Provide an Adequate Impact Analysis

Under CEQA, a “project” includes the whole of an action that may result in either a direct or *reasonably foreseeable indirect* physical change in the environment. (CEQA Guidelines, § 15278, subd. (a) (emphasis added.) The discussion following Section 15152 states that there will be some effects for which mitigation will not be feasible at an early step of approving a particular development project, and the section would allow a Lead Agency to defer mitigation of that kind of effect to a later step. While a Program EIR need not analyze impacts that would be better addressed in a site-specific analysis, the RDPEIR fails to identify significant effects of the projects it proposes with any specificity. Moreover, the RDPEIR makes significance determinations on these impacts that for which it admittedly has little to no information.

ROR003-12

Response to comment ROR003-12

Please see response to comment ROR003-7. Mitigation measures for the significant environmental effects of the proposed Delta Plan, including the projects and actions that may be encouraged by the Delta Plan, are identified in Sections 3 through 21 of the EIR. Without specific details of future projects, it is not possible to develop site-specific mitigation measures to be implemented or adopted by other agencies. Because the ability to require changes or alterations in future projects encouraged by the Delta Plan may be within the responsibility and jurisdiction of other public agencies, in such cases the Delta Stewardship Council cannot conclude that the mitigation measure will be implemented or that the impact will be reduced to a less-than-significant level (Public Resources Code section 20181(a)(2)). Please see Master Responses 2 and 4. Neither the Delta Reform Act nor the Delta Plan affect water rights (Water Code §§ 85031, 85032(i)). Please see Master Response 5 for further discussion of the EIR’s analysis of the protections for exiting water uses and users. These protections are included in all of the alternatives analyzed in the EIR.

For example, the RDPEIR notes that the projects the Delta Plan encourages will result in long-term environmental impacts, many of which will likely be significant. The DRPEIR fails, however, to describe these types of impacts, much less offer any proposed mitigation. This approach violates CEQA. Even if the RDPEIR need not analyze each potential project in detail, it can evaluate reasonably foreseeable impacts given the general type of project and given the type of terrain and habitat in the Sierra Nevada region. For example, the DSC failed to take into account the water needs of water rights holders within the Delta watershed, and failed to consider the water needs sufficient to sustain beneficial uses, including environmental needs, in the watersheds that are protected by the "area of origin." CEQA Guidelines require "direct and indirect significant effects of the project on the environment" to be "clearly identified and described, giving due consideration to both the short-term and long-term effects. . . [including the] [s]ignificant irreversible environmental changes which would be caused by the proposed project should it be implemented." Section 15126.2, subd (a), (c). Additionally, "[i]rretrievable commitments of resources should be evaluated to assure that such current consumption is justified." *Id.* The RDPEIR utterly fails to analyze reasonably foreseeable significant effects of the project, even for projects that have already been formulated and or analyzed. (See for example the Shasta Dam raise, the Temperance Flat Reservoir, and the Sites Reservoir.) The Delta Plan incorporates and encourages the completion of the BDCP, and yet fails to provide a meaningful discussion on how this historically mammoth and expensive infrastructure would affect Californians into the future. The irretrievable commitment of upstream resources without any real analysis, and the lack of analysis of the large scale infrastructure (the BDCP) violate Section 15126.2 of CEQA.

ROR003-12

The Legislature noted that the 2009 Delta Reform Act did not, "...diminish, impair, or otherwise affect in any manner whatsoever any area of origin, watershed or origin, county of origin, or any other water rights protections, including, but not limited to, rights to water appropriated prior to December 19, 1914, provided under the law." Section 85031. Yet, the RDPEIR lists many reservoir projects that would be affected by the Delta Plan without conducting even a superficial analysis of these projects, other than to say that certain impacts may be "significant and unavoidable." A "Significant and Unavoidable" conclusion can only properly be reached after an agency has made a determination with respect to the feasibility of mitigation measures and alternatives. Public agencies may *not* approve projects with significant

environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects. (Pub. Resources Code, § 21002, *Mountain Lion Foundation v. Fish and Game Commission* (1997) 16 Cal.4th 105, 134.) Therefore, absent an analysis of the feasibility of the mitigation measures disclosed, the conclusion that certain impacts are “significant and unavoidable” is erroneous and should be eliminated from the document.

The RDPEIR fails to include substantial evidence to support its conclusion. CEQA Guidelines section 15384 defines substantial evidence as:

enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made that the project may have a significant effect on the environment is to be determined by examining the whole record before the lead agency. *Argument, speculation, unsubstantiated opinion or narrative*, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts. (Subds. (a) and (b), emphasis added.)

ROR003-12

The RDPEIR has admitted that no details are known about most of its encouraged projects, and yet claims that it has substantial evidence to supports its conclusions. This constitutes mere speculation in violation of the statute. With no quantification, there is no substantial evidence to justify this conclusion.

Water users upstream from the Delta are understandably concerned that their long-standing water rights will be seized to subsidize increased inflow in the Delta in order to maintain maximum water exports to junior water rights users that are served by the state and federal project pumps in the Delta. Such a result would directly conflict with the Delta Reform Act, which admonishes against interference with area of origin laws and the system of water rights seniority. The looming BDCP process, and the umbrella authority for BDCP built into the Delta plan, needs to be disclosed and analyzed within the DPEIR, with alternatives compared and watershed needs mitigated. The omission of these important discussions in the present draft of the DPEIR will result in a skewed and incomplete understating of potential environmental effects on the Delta, which at a minimum will serve to exacerbate water rights litigation throughout the state.

D. The RDPEIR Fails to Properly Consider the Public Trust

In pursuing the coequal goals set out in the 2009 Delta Reform Act, the Legislature held that “[t]he longstanding constitutional principle of reasonable use and the public trust doctrine shall be the foundation of state water management and are particularly important and applicable to the Delta.” Section 85023. “The longstanding constitutional principle of reasonable use and the *public trust doctrine* shall be the foundation of state water management policy and are particularly important and applicable to the Delta.” Water Code Section 85023. In the seminal California Supreme Court case of *National Audubon Society v. Superior Court of Alpine County*, (1983) 33 Cal.3d 419 in which the court held that the state has “an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust whenever feasible.” The Supreme Court further quoted, with favor, that “the requirements of the California Environmental Quality Act (Public Resources Code 21000 et. seq.) impose a similar obligation.”

The planning and allocation of limited and oversubscribed resources implies that there has been an analysis and balancing of the competing demands on these resources. Inexplicably, the Fifth Draft of the Delta Plan makes no effort to balance the public trust and resolve these competing demands for limited resources. The Stewardship Council refused to undertake a water availability analysis that is essential to separating real water from paper water, addressing the legal rights to it and providing the information necessary for informed decision-making. The state has over-promised and over-distributed scarce water resources to a historic degree. Water rights granted to divert water from the Central Valley are now more than five (5) times the average unimpaired water runoff per year, and exceed the total amount of water produced in the wettest year in California history by more than double that number. The Final Draft of the Plan contains no water availability analysis that would show, at a minimum, what water will be available to meet the Reform Act’s goals. The Stewardship Council rejected multiple comments from various groups to develop a public trust analysis to ensure that the common property rights of all Californian’s are protected and balanced against those of special interests. Yet, despite the California Supreme Court’s holding that the state must balance the public trust in water supply planning decisions, the RDPEIR fails to do so. The RDPEIR is therefore inadequate because it fails to adequately analyze, discuss, disclose or compare how a public trust balancing would

ROR003-13

Response to comment ROR003-13

Please see response to comment ROR003-5, and Master Response 1 regarding the public trust. Compliance with the public trust doctrine is required by the Delta Reform Act, as recognized in the Delta Reform Act in Water Code sections 85022(c)(3) and 85032(h). Please see DEIR Sections 2A, 2B, and 3. The Final Staff Draft Delta Plan discusses the public trust doctrine throughout, particularly at pages 81 through 83. The EIR analyzes the Delta Plan’s impacts on all relevant public trust resources, including water resources (Section 3), fisheries (Section 4), recreation (Section 18), and navigation (Section 24). The Delta Plan also recommends that the State Water Resources Control Board evaluate all applications for compliance with the constitutional principle of reasonable and beneficial use.

affect various alternatives. A public trust balancing of the present unbalanced system will inevitably affect both of the coequal goals and must be analyzed and disclosed. Further, the RDPEIR is inadequate because it fails to adequately analyze, discuss, or disclose the realities of the oversubscribed California water system, thereby failing to compare projects and alternatives within the framework of a water system already in heavy deficit. The Plan and its DEIR do none of these things. Our groups dispute the DSC's position that an analysis of the public trust doctrine is unwarranted, and request an analysis of whether it is feasible to protect the trust under each of the proposed alternatives.

ROR003-13

E. The RDPEIR Fails to Properly Consider Climate Change

The DPEIR fails to use the latest information on changing hydrology in the Delta watershed, thereby invalidating its "no project" assessment. The "harms associated with climate change are serious and well recognized." (*Massachusetts v. Environmental Protection Agency* (2007) 127 S. Ct. 1438, 1455). In 2006, the California Legislature passed Assembly Bill 32, which states that "[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California," including a "reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems." (Health & Saf. Code, § 38501(a).) The Legislature went on to list multiple uses of water it expects to be reduced or threatened by global warming, including the quality and supply of water from Sierra snowpack, hydropower generation, the protection of recreational uses, fisheries, marine life, and public health. Health & Saf. Code, § 38501(b).

ROR003-14

In addition to the Legislature's recognition of the perils of climate change, several studies sponsored by the California Climate Change Center have been published that directly address the effects of climate change on California hydrology in the future. And while an agency is not expected to foresee the unforeseeable, it is expected to use its "best efforts to find out and disclose all that it reasonably can." (CEQA Guidelines § 15144; see also *City of Richmond*, 184 Cal.App.4th at p. 96; *Vineyard*, 40 Cal.4th at p. 428.) Yet, despite the seeming recognition of climate change by the Legislature, the courts, and other organizations, climate change goes

Response to comment ROR003-14

The effects of climate change within the study period (through the year 2030) are described in Section 21, Climate Change and Greenhouse Gas Emissions, of the EIR.

virtually unmentioned in the PDEIR's discussion of the program, its potential facilities, and the existing environmental setting. The RDPEIR fails to perform cumulative impact analysis in the RDPEIR of how revised and related projects would affect water availability, environmental conditions, and fisheries throughout the Sacramento River and San Joaquin River watersheds upstream from the Delta now and in the future. These climate change projections need to be an essential part of cumulative impact evaluation of the Revised Project, together with other diversions and with actions to maintain sufficient flows to protect the Delta as well as upstream waters under the public trust doctrine.

The DSC DPEIR should therefore include climate data available to its sister agencies, such as DWR's *California Water Plan Update, 2005*. This report finds that "evaluating impacts of global climate change on the management of the SWP can be done with existing resources" and that "state government must help predict and prepare for the effects of global climate change on our water resources and water management systems." (Maurice Roos, *Accounting for Climate Change*, in DWR, *Water Plan 2005*, appendix 4.) This DWR report surveys the "large number of potential effects on California water resources infrastructure due to global warming." (*Id.* at p. 4-616.) While the EIR notes its reference to some uncertainty, that uncertainty is "primarily on the degree of change to be expected," and that the report found that "[r]esponsible planning requires that the California planning community work with climate scientists and others to reduce these uncertainties and to begin to prepare for those impacts that are well understood, already appearing as trends, or likely to appear." (Roos, *op cit.*, at 4-612.) The failure of the DPEIR to disclose and analyze potential climate change effects on the hydrology upon which the Delta Plan relies is stunningly incompetent. This omission makes it impossible for the public and the decision-makers to evaluate the alternatives, the mitigations, and the true nature of the environmental impacts of the proposed DSC program, all of which are violations of CEQA's fair disclosure requirements.

Finally, having recognized that global climate change is likely to have an enormous impact on future water supply (including a 4.5 to 6 million acre-foot reduction in snowpack), the EIR inconsistently applies that insight. Incredibly, the EIR cites climate change in its discussion of the disadvantages of Alternative 2 (due to its additional "facilities") but fails to apply climate change concerns to the Delta Plan's core issue: whether sufficient water supply will exist to serve the "reliability" component without severely compromising the Plan's ability to protect the

ROR003-14

“paramount concern” of enabling “permanent protection” of the Delta’s resources. (Wat. Code § 85022(c)(2).) This failure also makes it impossible for the DPEIR to evaluate alternatives, potential mitigations, or to provide the disclosure necessary to allow the public and the DSC decision-makers to evaluate the effectiveness of the proposed Delta Plan.

ROR003-14

F. The RDPEIR Fails to Properly Consider Available Science

The RDPEIR fails to incorporate or consider readily available science to analyze the significance of environmental impacts of the project. The Stewardship Council largely ignored the Delta Protection Commission’s Economic Sustainability Analysis, the Department of Fish and Game’s flow criteria and biological objectives report and the State Water Resource Control Board’s flow criteria for the Delta. These reports were mandated by the Legislature to inform the Delta planning process and their results must be discussed and incorporated into the Delta Plan.

The California Legislature, in the Delta Reform Act, (as specified above) tasked the SWRCB to gather the best available science and develop flow criteria for the Delta ecosystem necessary to protect public trust resources, including the volume, quality, and timing of water needed under different conditions. The SWRCB conducted a proceeding in the matter. An astonishing assemblage of biologists and scientists from resource and water agencies, academia and the NGO community testified and presented evidence in the hearing. A final report was issued on August 3, 2010. The report observes that “[r]he combined effects of water exports and upstream diversions reduced average annual net outflow from the Delta from unimpaired conditions by 33% and 48% during the 1948 – 1968 and 1986 – 2005 periods, respectively and that Sacramento River inflows over the last 18 to 22 years have been about 50% on average between April through June compared to unimpaired conditions.⁹ The report determined that “[r]ecent Delta flows are insufficient to support native Delta fishes for today’s habitats.” The report’s criteria for flows include, among many other measures, “75% of unimpaired Delta outflow from January through June and 75% of unimpaired Sacramento River inflow from November through June.”¹⁰ Existing water criteria fails to address many issues that must be considered in considering impacts on aquatic life. For example, during the SWRCB’s Delta flow hearing, Dr. G. Fred Lee pointed out that:

ROR003-15

⁹ SWRCB. 2010. Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem. 3 August 2010. 3.3.2, page 28.

¹⁰ Ibid. 1.2 Summary Determinations, Flow Criteria and Conclusions, page 5.

Response to comment ROR003-15

The EIR describes existing conditions in Sections 3 through 21 of the DEIR including declining conditions in the Delta, such as deteriorating water quality in Section 4.3.2.1, Factors Affecting the Delta Ecosystem. Section 3 of the Draft Program EIR addresses water quality issues that have been identified by the SWRCB and Central Valley and San Francisco Bay RWQCBs and that are being addressed in ongoing programs, including programs for drinking water in small and disadvantaged communities and water quality objectives to be addressed with ongoing Total Maximum Daily Load programs. The proposed Delta Plan and the alternatives assume that ongoing water quality improvement programs will be completed within the schedules currently approved by the SWRCB and RWQCBs. The California Department of Fish and Game’s 2008 report, *Ecosystem Restoration Program (ERP) Conservation Strategy for Stage 2 Implementation, Sacramento-San Joaquin Delta and Suisun Marsh and Bay Planning Area*, is one of the sources of information for Chapter 4 of the DEIR. Please see Master Response 1, regarding the Delta Protection Commission’s Economic Sustainability Plan and Delta flow criteria, and Master Response 5 regarding flow criteria.

The current US EPA criteria development approach only considers some and in some cases a small part of the impacts of chemical contaminants on aquatic life. For example, the approach currently used to develop water quality criteria does not include additive/synergistic properties of regulated chemicals that occur in concentration below the water quality criteria allowing unanticipated adverse impacts to aquatic life. Adverse impacts of chemicals to aquatic life that occur for especially sensitive species, such as zooplankton which serve as fish food organism were not included in the development of the water quality criteria. These criteria are only applicable to protecting about 90% of the species. Therefore there could readily be fish species in the Delta and its tributaries that are more sensitive to a chemical than those used to establish the water quality criterion value. There is also very limited information on chronic exposure to sub-lethal impacts of a chemical and mixtures of chemicals to fish populations. Another issue is that other stressor such as low DO, ammonia etc. that can impact the lethal and especially sub-lethal impacts of chemicals. It has been well known for over 40 years through biomarker studies that fish and other organisms show organism biochemical responses to chemical exposures at concentrations well below the water quality criterion. The significance of these biomarker responses to an organism or group of organisms is largely unknown. Chemicals can adversely impact the health of the fish and other aquatic life that weaken their ability to resist adverse impact of stressors such as low DO, elevated temperature and predation as well to disease. It's been known for over 40 years that very low levels of copper affect the "breathing" rate of some fish.¹¹

ROR003-15

Dr. Lee went on to point out, "many thousands of unregulated chemicals, including pharmaceuticals and personal care products, industrial chemicals, and other potentially hazardous chemicals, are discharged to waterways, including the Delta and its tributaries, in domestic wastewaters, agricultural runoff and waste waters."¹²

This data, and other volumes of relevant evidence are largely ignored or downplayed by the Delta Plan and the DPEIR. Relevant evidence necessary to determine whether or not the proposed Delta Plan and the alternative examined would arrest this dire situation, and whether mitigations could bring these impacts below a state of significance are not included. This is a CEQA failure of huge magnitude. In several instances, the RDPEIR notes that an impact may be "Less Than Significant" or "Significant" without any substantial evidence or science to support such a conclusion. For example, the discussion of Impact 3-3b states:

[b]ecause of the availability of alternative water supplies and continued availability of Delta water supplies, there is substantial evidence that this impact would not be significant. This conclusion is based on the inability to

¹¹ Ibid. Page 4.

¹² Ibid. Page 4.

Response to comment ROR003-16

Please see Master Response 4.

identify a reasonably plausible scenario in which a potential significant impact would occur. It is therefore concluded that this impact would likely be less than significant. Future project specific analyses may develop adequate information to arrive at a different conclusion; however, for purposes of this program-level analysis, there is no available information to indicate that another finding is warranted or supported by substantial evidence.

ROR003-15

Simply because there is not substantial evidence to support a significance determination does not imply that there is substantial evidence to support a *less than* significant determination. This example is particularly egregious considering the host of information provided by countless environmental groups demonstrating plausible scenarios in which this impact would be significant. The RDPEIR is therefore inadequate because it fails to adequately analyze, discuss and disclose the findings and information contained in the above entitled scientific reports, and how the information from these reports affects the various alternatives.

G. The RDPEIR Fails to Properly Mitigate Impacts

CEQA Guidelines 15126.4 states, “[w]here several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. Formulation of mitigation measures should not be deferred until some future time.” However, measures may “specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.” *Id.* The problem is that the mitigation measures discussed in the RDPEIR are general, rather than specific, making it impossible to determine if they will be able to effectively mitigate the impacts of the project. For example, the Revised Project allegedly adds performance measures to assist in implementation of the policies and recommendations in the Plan (RDPEIR p. ES-1) but it is not clear whether (1) some or all of the proposed mitigation must be adopted in order to be considered a “Covered Action” or “Recommended Action,” (2) whether the stated mitigation measures would reduce impacts to a less than significant level, or (3) when or how the mitigation measures are to be implemented. For example, in several instances, the RDPEIR offers potential land purchases or water transfer purchases as mitigation measures without conducting any analysis on the availability of such mitigation. This approach violates CEQA, as there can be no assurance that such mitigation measures are either available or adequate. (See *Kings County Farm Bureau v. City of Hanford* (5th Dist. 1990) 221 Cal.App. 3d 692.)

ROR003-16

Further undermining the effectiveness of the mitigation measures is the lack of measurable performance standards. The Legislature decreed that the 2009 Delta Plan “shall include performance measurements that will enable the Council to track progress in meeting the objectives of the Delta Plan.” Section 85211. The performance measurements include “quantitative or otherwise measurable assessments of the status and trends of the following: (a) The health of the Delta’s estuary and wetland ecosystem for supporting viable populations of aquatic and terrestrial species, habitats, and processes, (b) The reliability of California water supply imported from the Sacramento River or the San Joaquin River watershed.” Section 85211. “The use of performance standards is particularly appropriate in connection with ‘first tier’ approvals or other planning decisions that will necessarily be followed by additional, project-level environmental review.” (Remy, et al., Guide to the California Environmental Quality Act (11th Ed. 2007), p. 552, internal citation omitted.) CEQA further requires that lead agencies describe the impacts that will result from the mitigation measures themselves. (15126.4, subd. (a)(1)(D).)

ROR003-17

The RDPEIR fails to identify the impacts that would arise from mitigation measures, such as purchases of additional water for transfer and land purchases. With respect to water transfers being ameliorated due to releases from upstream reservoirs, the RDPPEIR fails to include a description of the multitude of impacts that will result from this drawdown. Lead agencies must analyze not only the impacts of their proposed projects, but also of their proposed mitigation measures if such measures may have a significant effect on the environment. (CEQA Guidelines, § 15126.4; *Save Our Peninsula Committee v. Monterey County Bd. Of Supervisors* (6th Dist. 2001) 87 Cal.App.4th 99.) Mitigation measures must be directly connected to an impact. Assigning mitigation measures to a group of impacts defeats the intention of demonstrating whether the measures will actually mitigate the impacts. The use of group mitigation measures should be revised and tied to specific impacts. These flaws must be remedied so the decision-makers and the public can adequately analyze whether any of the mitigation measures are reasonable.

ROR003-18

H. The RDPEIR Fails to Provide Adequate Alternatives

CEQA Guidelines 15124 (b) requires a statement of objectives sought by the proposed project, because “[a] clearly written statement of objectives will help the lead agency develop a *reasonable range of alternatives* to evaluate in the EIR and will aid the decision makers in

ROR003-19

Response to comment ROR003-17

Please see Master Response 4 regarding mitigation measures. The performance measures are part of the Delta Plan, and are not mitigation measures.

Response to comment ROR003-18

The impacts of the mitigation measures would not differ from the construction and operation impacts of the Delta Plan and the projects and actions encouraged by the Delta Plan, and are therefore covered in Sections 3 through 21 of the EIR. However, without specific details of future projects, it is not possible to develop quantitative thresholds of significance and specific mitigation measures to be implemented by other agencies.

Response to comment ROR003-19

The project objectives, as corrected to conform to the Delta Reform Act, are stated on page ES-4 of the RDEIR. The eight inherent objectives from the Delta Reform Act are reproduced on pages 1-1 to 1-2 of the DEIR. Please see Master Response 1.

preparing findings or a statement of overriding considerations, if necessary.” (emphasis added) The projective objectives set out in the RDPEIR are invalid because they overlook the statutory mandate to achieve coequal goals, does not reduce reliance on the Delta, and are otherwise so vague and ambiguous that project alternatives cannot be reasonably assessed. When project objectives are incorrectly described, there is a substantial risk that potentially feasible alternatives and mitigations that would reduce or eliminate significant environmental impacts will not be considered. (See *Habitat and Watershed Caretakers v. City of Santa Cruz* (2012) Cal.app.6th Case No. H037545). For example, the objectives of the RDPEIR overlook the statutory mandate that “coequal goals be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.” (Water Code Sec. 85054) This impacts the consideration of projects under the BDCP, as well as project alternatives that could more properly protect and enhance the value of the Delta.

ROR003-19

One of the coequal goals of the Delta Plan is providing a more reliable water supply. Achieving a more reliable water supply is one of the five categories of the Delta Plan’s policies and recommendations. The Delta Reform Act prohibits inclusion of the BDCP into the Delta Plan unless BDCP includes a comprehensive review and analysis of “[t]he resilience and recovery of Delta conveyance alternatives in the event of catastrophic loss caused by earthquake or flood or other natural disaster.” Section 85320(b)(2)(F). Throughout the Delta Plan, there are numerous references to the seismic vulnerability of Delta levees and the hypothetical potential that earthquakes could cause a major disruption in California’s water supply system in the Delta and San Francisco Bay area. A theoretical earthquake is one of the major justifications for isolated conveyance facilities.

Unfortunately, the Delta Plan only considers seismic disruption in the Bay and Delta. It fails to examine the potential for seismic disruption along the several hundred miles of aqueduct that runs parallel to and crosses documented major active earthquake faults. Nor does it evaluate the potential for seismic disruption of San Luis Reservoir. For example, the San Luis Dam (now called the B.F. Sisk Dam) was completed in 1967 and almost failed in 1981.¹³ The documents referenced in this section can be found in Appendix 4, 5, and 6. The U.S. Bureau of Reclamation found that the dam is in a seismically active area (actually there are two faults that cross the

ROR003-20

¹³ Appendix 4. Park, D., 2008. Dam Safety in California.

Response to comment ROR003-20

Seismic hazards are discussed in Section 11 (Geology and Soils) of the EIR. The EIR addresses changes in existing environmental conditions due to the proposed Delta Plan and the alternatives. If those changes in existing physical conditions are significant and adverse (“significant impacts”), feasible mitigation measures are required. CEQA does not require mitigation of existing conditions. Delta levee conditions and compliance with levee design standards, including PL 84-99, are discussed in Subsection 5.3 of the DPEIR. Delta Plan Policy RR P1 and Recommendation RR R4 are designed to prioritize State investments in Delta levees operations, maintenance, and improvements. Please see Section 2 of this FEIR for a complete text of the policies and recommendations.

reservoir) and could fail during an earthquake and inundate hundreds of square miles including Santa Nella and parts of Stockton.¹⁴

Seismic failure of the California Aqueduct or San Luis Reservoir could cause the same or similar disruptions to the reliability of the state's export water delivery system as a hypothetical failure in the Delta. Yet, the Delta Plan, DPEIR and DRPEIR focuses almost solely on potential seismic disruptions in the Bay and Delta and ignores the threats to the aqueduct, San Luis Reservoir or terminal facilities in Southern California that could pose equal, if not greater threats, to water supply reliability. The Delta Plan fails to comply with the Delta Reform Act and the DPEIR and DRPEIR fail to comport with CEQA requirements by failing to adequately analyze, discuss and disclose these other potential seismic threats to water supply reliability. What could be the justification of spending billions of dollars constructing an isolated conveyance facility that would change the hydrology of the Delta with unknown consequences while ignoring equal or similar threats south of the Delta?

ROR003-20

Engineers who routinely work on Delta levees have suggested that the doomsday predictions of seismic failure of Delta levees are vastly overstated.¹⁵ They believe that improvements can be made to upgrade levees to PL 84-99 or above criteria that would significantly reduce any threat of seismic failure at a fraction of the cost of an isolated conveyance facility. These upgrades would also protect against rising sea levels and would provide protection to people, Delta communities, farmlands and infrastructure; something not accomplished by an isolated conveyance. However, these alternatives were essentially ignored in the Delta Plan and not adequately evaluated in the DPEIR or DRPEIR. Consequently, the Delta Plan is inconsistent with requirements in the Delta Reform Act to "reduce risks to people, property and state interests in the Delta," which the Legislature said was inherent in the coequal goals for management of the Delta. The DPEIR and DRPEIR are inadequate by failing to disclose, analyze, compare and discuss these viable cost-effective alternatives.

Under the current RDPEIR, the revised project would encourage new or expanded reservoirs, groundwater production facilities, groundwater production facilities, ocean

¹⁴ Appendix 5. Bureau of Reclamation. 2007. Letter to Central Valley Project Water Contractors titled Actions to Address Dam Safety Issues at B.F. Sisk Dam, Central Valley Project (CVP, California.

¹⁵ Appendix 6. Pyke, R. 2012. Letter to Governor Brown titled The Truth About Delta Levees or The Shaky Justification for the BDCP.

ROR003-21

Response to comment ROR003-21

Please refer to Master Response 2. As described in Section 2B of the Draft Program EIR, the Delta Stewardship Council does not propose or contemplate directly authorizing any physical activities, including but not limited to construction or operation of infrastructure. Rather, through the Delta Plan, the Delta Stewardship Council seeks to influence the actions, activities, and/or projects of other agencies, the details of which would be under the jurisdiction and authority of the agencies that will propose them in the future and conduct future environmental review. To the extent known, projects that may be encouraged by the Delta Plan are named in the EIR. In addition, types of projects that may be encouraged by the Delta Plan are identified. Accordingly, in the absence of specific proposed physical projects, this EIR makes a good faith effort to disclose the potentially significant environmental effects of the types of projects that may be encouraged by the Delta Plan and to identify program-level mitigation measures. Impacts on each of the potentially affected resources areas are analyzed at a program level in Sections 3 through 21 of this EIR. The cumulative impacts of the proposed Delta Plan, in combination with the impact of the proposed BDCP and other cumulative projects, are described in Section 22 (Cumulative Impact Assessment) of the EIR. The BDCP is discussed in more detail in EIR Section 23.

Response to comment ROR003-22

Please see responses to comments ROR003-7 and ROR003-17, and Master Responses 1 and 5 regarding flow criteria and flow objectives.

desalination facilities, recycled water facilities, and the BDCP, among other things. The BDCP will have many significant environmental effects and must be considered as a cumulative project. It is improper for the DSC to encourage projects without even a minimal look at the impacts associated with these types of projects. Rather, the RDPEIR should provide at least a general description of these projects and the types of impacts that are anticipated, propose suggested mitigation measures, and indicate how these encouraged projects and their associated projects can be reconciled with the goals of the Delta Reform Act. For example, the RDPEIR could include a goal of achieving the numerical anadromous fish doubling requirements mandated by the Central Valley Project Improvement Act or define specific numerical water quality improvements required by the Clean Water Act. Instead, the Delta Plan's quantifiable performance measures consist largely of recommendations for actions and programs by other agencies. Many of these actions and programs are already underway and have been unsuccessful in preventing fisheries decline and water quality impairment.

ROR003-21

The Delta Plan fails to comply with requirements of the Delta Reform Act by not including specific quantifiable performance measures. Instead, the RDPEIR states that "[t]his EIR assumes that the Delta Plan will be successful and will lead to other agencies taking the encouraged actions." ES-2. As we show below, this unwarranted assumption ignores reality and undermines the legal adequacy of the document. For example, the Delta Plan recommendation ERP1 says that the State Water Resources Control Board should update the Bay-Delta Water Quality Control Plan and by June 2, 2014, adopt and implement updated flow objectives for the Delta that are necessary to achieve the coequal goals. However, deferring updated flow objectives does not historically achieve quantifiable performance measures.¹⁶ In the analysis of

¹⁶ In 1978 the State Water Board adopted D-1485 and a water quality control plan. The Board stated that "protection all fishery species in the Delta would require the virtual shutting down of the project export pumps." In 1986, Judge Racanelli ruled that D-1485 was inadequate and, in the next year, USEPA notified the Board that the water quality control plan was inadequate under the federal Clean Water Act. In October 1988, following hundreds of days of hearings, the State Water Board released a draft Water Quality Control Plan for Safinity. It called for significant reductions in Delta exports. In response to protests from exporters, Governor Deukmejian ordered the Board to withdraw the proposed order. In December 1992, the State Board released draft Water Right Decision 1630. It called for numerous measures including a significant reduction in exports. Internal documents from the State Water Contractors revealed that they believed that D-1630 would have required, at least, a 25-50% reduction in exports. In response to pleas from exporters, Governor Wilson ordered the Board to withdraw D-1630 in 1993. In 1995 the State Board released a Water Quality Control Plan for the Bay-Delta and essentially readopted it with minor changes in 2006 (8 years late). The 1995 plan was implemented through Water Rights Decision D-1641 in late 2000. The requirements in both the 1995 plan and D-1641 are seriously deficient, as evidenced by increasing exports and plummeting fisheries. Further, all of the protective standards in D-1641, including the Vernalis flow objective, interior Delta salinity standards, outflow objectives and the inflow/export ratio have been routinely

ROR003-22

various evaluated alternatives, the Stewardship Council refused to address the historic failure to implement and enforce existing environmental laws and regulations by agencies responsible for the prevention of fishery and water quality declines. This is significant because, without disclosure of the failings of these agencies to implement and enforce existing environmental laws, the public cannot understand how likely it is that the laws will be ignored in the future. The RDPEIR fails to fully inform the public when it fails to adequately analyze, discuss, and disclose the chronic failure to implement and comply with legal requirements of the responsible agencies, and the consequences of those failures as they pertain to the various evaluated alternatives.

ROR003-22

The DPEIR and RDPEIR are therefore inadequate because they fail to adequately identify, analyze, discuss, disclose or compare defensible and quantifiable goals, yardsticks and mileposts for achieving the coequal goals and their effects on the various alternatives.

I. The RDPEIR Fails to Provide an Adequate Cumulative Impact Assessment

CEQA defines "cumulative impacts" as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Guideline § 15355. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project "when added to other closely related past, present, and reasonably foreseeable probable future projects." Guideline § 15355(b). The discussion of cumulative impacts in an EIR is required to reflect "the severity of the impacts and their likelihood of occurrence." Guideline § 15130(b). Required contents include either a list of past, present, and probable future projects producing related or cumulative impacts, or a summary of projections that describe and evaluate the conditions contributing to the cumulative effect. Guideline § 15130(b)(A), (B). It is clear that all projects within the watershed must be assessed, given that the Guideline section uses as an example: "Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect." Guideline § 15130(b)(2).

ROR003-23

In *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, an EIR was held to violate CEQA for failing to consider possible curtailment in obtaining water

violated without consequence. Last year was no exception. Vernalis flow was violated in the spring, salinity standards were violated most of the summer and I/O standard was being violated as recently as late October, when 68% of inflow was being diverted. Exports have increased, water quality has worsened and fisheries have continued their precipitous decline following every State Water Board Delta water quality or water right decision over the last 30-plus years.

Response to comment ROR003-23

The proposed BDCP is a reasonably foreseeable future project that is not part of the Delta Plan. It is being evaluated by the Department of Water Resources as the CEQA lead agency. The cumulative impacts of the proposed Delta Plan, in combination with the impact of the proposed BDCP, are described in EIR Sections 22 and 23. Please refer to Master Response 1.

from a river and the cumulative impacts of that effect. 108 Cal.App.4th at 871. Pursuant to Guideline § 15130(b)(1)(A), CEQA requires an agency to assess the changing environment resulting from the incremental impacts of the project “when added to other closely related past, present, and reasonably foreseeable probable future projects.” “The Agency must interpret this requirement in such a way as to ‘afford the fullest possible protection of the environment.’” *Friends of the Eel River*, 108 Cal.App.4th 859, 868. In clear violation of the requirements of Guideline § 15130(b)(1), there is neither a list nor summary of projections of past, present, and reasonably foreseeable probable future diversions in the RPDEIR or Draft EIR.

Here, there has been complete failure to identify and evaluate the impacts of the BDCP Delta Tunnels which would have the capacity to divert 15,000 cfs of water from the Sacramento River upstream from the Delta. The BDCP is mentioned in a sentence including 11 other items under the Water Resources portion of the Cumulative Impact Assessment. (RDPEIR 22-2). The only cumulative impact information about the BDCP project is provided in the Cumulative Impact Assessment in the Draft EIR. There, a brief description in a table states that the BDCP permits and related EIR/EIS were scheduled to be completed by December 2012. That, of course, has not happened. The only additional information provided in the table is “modify SWP and CVP Delta water conveyance facilities and operations in the Delta.” (RDPEIR 22-24).

The RPDEIR has failed to take into account the impact of diverting 15,000 cfs upstream from the Delta on whether existing and future water supplies and minimum stream flow requirements can be satisfied, and has failed to evaluate the environmental impacts of diverting 15,000 cfs. Having claimed that the BDCP project is a cumulative project, the Council must evaluate cumulative impacts including those caused by the cumulative project. Moreover, this is *not* a defect that can be cured by responses to comments in a Final EIR. Consequently, neither the public nor the decision-makers have before them basic, foundational information on which to enable one to even start in evaluating the cumulative impacts of this project together with other related projects. In order to comply with CEQA, a new Draft EIR must be prepared that includes the necessary information and analysis to allow the public and decision-makers to conduct informed review of the cumulative impacts of this project and other related projects. This RDEIR fails to do so with respect to the reasonably foreseeable effects of the BDCP as currently proposed (including 23.6.5: Agriculture and Forestry Resources, 23.6.13: Noise, 23.6.16:

Recreation.) Further, the RDEIR does not address the potential of the major new diversions on the Sacramento River to interfere with recreation, both during and after construction.

II. Conclusion

The absence of these analyses has sabotaged the entire Delta planning process. As previously discussed, the Delta Reform Act states, "[t]he Sacramento-San Joaquin Delta watershed and California's water infrastructure are in crisis and existing Delta policies are not sustainable. Resolving the crisis requires fundamental reorganization of the state's management of Delta watershed resources." The Delta Plan was envisioned to be that "fundamental reorganization." Instead, it simply kicks the status quo can down the road.

The Delta has declined because water projects have deprived the estuary of half its flow; turned the natural hydrograph on its head; reduced temporal and spatial variability; eliminated crucial habitat, complexity and diversity and deprived the estuary of dilution necessary to assimilate increased pollutant loading. No estuarine ecosystem in the world has survived this level of abuse. California's water supply system is in crisis because the state has over promised, over-allocated, wasted and inequitably distributed scarce water resources. The Delta Plan and RDEIR are fundamentally inadequate because they have avoid addressing tough questions, such as:

1. What does water supply reliability mean in an arid state where we have granted rights to far more water than actually exists?
2. What is the definition of co-equal goals and what are the yardsticks by which they are measured?
3. Does water supply reliability apply to both public trust resource needs and consumptive uses?
4. Are statutory requirements to protect water quality and listed species equivalent to water supply reliability for lawns or surplus, subsidized and non-food crops?
5. Is the standard by which we measure water supply reliability the same for junior and senior appropriators?
6. Does efficient and multiple use of water have higher priority over waste, inefficient and unreasonable use?
7. Should we prioritize consumptive use on the basis of economic benefit?
8. Does health and safety take precedence over certain agricultural uses of water?
9. Are food crops more important than non-food commodities?
10. Is it reasonable that the Westside of the San Joaquin Valley, comprising 0.3 % of the state's economy and population, should receive two-thirds of Delta exports while urban areas representing half the state's population and economy get one-third?

ROR003-23

Response to comment ROR003-24

Comment noted. Please see responses to comments ROR003-2 through ROR003-23.

ROR003-24

11. Is protection of a "national treasure" and one of the world's great estuaries more valuable to society than irrigating impaired soils, that by the nature of being irrigated, discharge prodigious quantities of toxic wastes back to our waterways?
12. If someone uses water that generates pollutants that eliminate assimilative capacity and beneficial use of water for others, should the degraded water be deducted from the water supply provided the polluter?
13. Should water supply reliability be conditioned upon specific and quantitative requirements to maximize reclamation, reuse, conservation and development of alternative local sources of water?
14. Do uses of water that require vast public subsidies have the same priority as uses that don't require subsidy of public funds and are uses that internalize adverse impacts equal to uses that externalize them?

ROR003-24

Because the Delta Plan and RDPEIR have failed to address the root causes of the Delta's decline and our water supply crisis, they are inadequate as fair disclosure documents and fail to comport with CEQA, the Delta Reform Act and are inconsistent with numerous statutes. The RPDEIR and Draft EIR are so fundamentally and basically inadequate and conclusory in nature with respect to disclosure and analysis of cumulative impacts that meaningful public review and comment have been precluded. We urge you to prepare and circulate a new Draft EIR so that the public and decision-makers are afforded the information and analysis with respect to cumulative impacts that they must have pursuant to CEQA.

Dated: February 14, 2013

s/MICHAEL B. JACKSON
Michael B. Jackson
Attorney for the California Water Impact
Network (C-WIN), the California
Sportfishing Protection Alliance (CSPA),
and AquAlliance



AQUALLIANCE
DEFENDING NORTHERN CALIFORNIA WATERS

**Testimony on
Water Availability Analysis
for Trinity, Sacramento, and San Joaquin River Basins
Tributary to the Bay-Delta Estuary**

Submitted by
Tim Stroshane
Senior Research Associate
California Water Impact Network (C-WIN)

and on behalf of
California Sportfishing Protection Alliance
and AquAlliance

October 26, 2012

for

**Workshop #3
Analytical Tools for Evaluating the Water Supply,
Hydrodynamic, and Hydropower Effects of the Bay-Delta Plan
November 13 and 14, 2012**

The State Water Resources Control Board called for workshops to receive information from and discuss with participating parties the scientific and technical bases for considering potential changes to the 2006 Water Quality Control Plan for the San Francisco/Sacramento-San Joaquin Delta Estuary for Phase II of the Board's comprehensive review of this plan.

According to the State Board's public notice for these workshops, the prompts for Workshop 3 testimony are:

1. What types of analyses should be completed to estimate the water supply, hydrodynamic, and hydropower effects of potential changes to the Bay-Delta Plan?
2. What analytical tools should be used to evaluate these effects? What are the advantages, disadvantages and limitations of these tools?

No comments

- n/a -

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

The California Water Impact Network, the California Sportfishing Protection Alliance, and AquAlliance (hereinafter, C-WIN) are pleased to submit this testimony to the State Water Resources Control Board. This testimony addresses the close linkage between the Board's public trust responsibilities on behalf of the State of California, its water quality control planning function, and its duty to regulate water rights in California. Water quality control planning efforts to date have led the Board to consider proportional tributary contributions needed to meet Delta inflow objectives from the Sacramento and San Joaquin River Basins to improve water quality and protect all beneficial uses, including fish and wildlife, in the Delta. The State Water Resources Control Board has authority over water rights in the Basins that would enable it to reallocate water usage and ensure compliance with the Board's new instream flow objectives.

Water availability analysis is an important method for modeling how the Board would implement new flow objectives. Our testimony illustrates the use of a planning-level water availability analysis for the Trinity River (much of whose flows are diverted to the Central Valley watershed of the Bay-Delta Estuary), and the major tributaries of the Sacramento and San Joaquin River Basins. We incorporate into the analysis the Basins' hydrologic variability, instream flow requirements based on the Board's 2010 public trust Delta flow determinations, and then operate publicly available water rights data and priorities on the divertable flows that remain in the system. We find that under public trust protective flow determinations, the promised water represented in water rights claims far exceed flow conditions available to these claims in most years.

We recommend for the Bay-Delta Plan's implementation program that the State Water Resources Control Board draw on its new flow determinations to increase the seasons during which rivers in the Bay-Delta Estuary's Central Valley watershed are fully appropriated, and push back the water rights priority date on which Term 91 curtailments are now based. Our water availability analysis suggests distinct parameters for both actions.

Finally, we conclude that the Board should use the Bay-Delta Plan process to tighten up its regulation of surplus water usage and export by the State Water Project and Central Valley Project to avoid permanently damaging Sacramento Valley groundwater resources. The Board's Delta flow determinations, coupled with comprehensive enforcement of water rights priorities, can help to protect both groundwater and surface water resources in the Sacramento Valley over the long term.

Government's Public Trust Responsibility

Governments have a permanent fiduciary responsibility and obligation to protect the public trust. In *National Audubon Society v. Superior Court* (1983) 33 Cal 3d 419, 441, the court held that "the public trust is more than an affirmation of state power to use public property for public purposes. It is an affirmation of the duty of the state to protect the people's common heritage of streams, lakes, marshlands and tidelands, surrendering that right of protection only in rare cases when abandonment of that right is consistent with the purposes of the trust." The act of appropriating water is an acquisition of a property right from the waters of the state, an act that is therefore subject to regulation under the state's public trust responsibilities.

The State Water Resources Control Board has invoked its public trust responsibilities in regulating the waters of California and now acknowledges that the public trust is one of its ongoing regulatory responsibilities. Its most publicly prominent instance came in Water Rights Decision 1631 (D-1631) in 1994. In D-1631, the Board balanced the needs of the City of Los Angeles for water supply from the tributaries of Mono Lake with the lake's own needs for water to sustain its ecosystem. It required Los Angeles to make releases from each of its tributaries that would sustain riparian ecosystems and help restore fish populations to the tributaries by prescribing lake level targets in a

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

specified time period. (State Water Resources Control Board 1994) The Board has also adopted regulations governing how it treats the public trust in matters of the appropriation of water in California. (State Water Resources Control Board 2011b: Article 14, Standard Permit Terms and Conditions)

The trial court in *United States v. State Water Resources Control Board* (1986, 182 Cal.App.3d 82) determined that the State Water Resources Control Board had the authority to modify an appropriative water right permit once it had been issued, and that it could reduce the US Bureau of Reclamation's Central Valley Project permits to gain compliance from the Bureau. But the trial court held new fish and wildlife objectives the Board had approved in Water Rights Decision 1485 (D-1485) in 1978 to be invalid because the Board failed to identify the *source* of its authority. Justice John Racanelli, the author of the subsequent appellate court decision cited above, stated that the source of the Board's authority to issue and enforce new fish and wildlife objectives such as those contained in Water Rights Decision 1485 (D-1485) was the Public Trust Doctrine:

...the state as trustee of the public trust retains supervisory control of the state's waters such that no party has a vested right to appropriate water in a manner harmful to the interests protected by the public trust. (182 Cal.App.3d 82, 149)

Stevens (2005) summarizes the present range of coverage that American and California law gives the public trust doctrine:

1. It applies to all navigable streams.
2. It applies to ecological preservation.
3. It applies to wetland areas.
4. It applies underground (citing the Waiahole decision from Hawai'i).
5. It applies to artificially enlarged waters.
6. It applies to wild animals, including fish.¹

The Public Trust and Paper Water

In the next few years, the State Water Resources Control Board is expected to make several crucial decisions on California's water future. These decisions include:

¹ The California Constitution also provides an absolute right to fish among the fundamental declared rights it accords all California citizens. Article I, Section 25 states:

ARTICLE 1 DECLARATION OF RIGHTS

Section 25. The people shall have the right to fish upon and from the public lands of the State and in the waters thereof, excepting upon lands set aside for fish hatcheries, and no land owned by the State shall ever be sold or transferred without reserving in the people the absolute right to fish thereupon; and no law shall ever be passed making it a crime for the people to enter upon the public lands within this State for the purpose of fishing in any water containing fish that have been planted therein by the State; provided, that the legislature may by statute, provide for the season when and the conditions under which the different species of fish may be taken.

In combination with California Fish and Game Code Section 5937, which provides that owners of dams must preserve fish populations downstream in "good condition", preservation of this right logically should be construed as an important aspect of the public trust responsibilities of government. It retains meaning as a right only when there exist sufficient fish to catch sustainably.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

- Determining how to provide sufficient flows from the Sacramento and San Joaquin River's major tributaries to the Bay-Delta Estuary.
- Updating its 2006 Bay-Delta Water Quality Control Plan to include those new Sacramento and San Joaquin River flow and South Delta salinity objectives.
- Deciding whether to extend the water rights *permits* of the California State Water Project and the federal Central Valley Project, or instead *license* them at levels that represent reasonable and public trust protective water usage.
- Deciding whether and/or how to permit a "north Delta diversion"—a diversion that is now more familiarly known as the Peripheral Tunnels Project.
- Deciding whether and/or how to permit new reservoirs on the San Joaquin River and in the southwestern Sacramento Valley (and/or to raise existing dams to increase storage elsewhere) that would be added to the storage capacities of the Central Valley Project and the State Water Project.

As a regulatory agency, the State Water Resources Control Board is not known for making and holding to courageous or visionary decisions that protect beneficial uses of water throughout California. Their record of delay and incrementalism has contributed to the poor condition of the Bay Delta Estuary and the great rivers of its watershed, the great Sacramento and San Joaquin Rivers.

The State Water Resources Control Board has authority to make bold decisions and hold to them. (Cahill 2008)

The State Water Resources Control Board will need to balance protection of the public trust with other competing beneficial uses of water reliant on the Delta. The Board has already determined the flows that fish and other aquatic species need. (State Water Resources Control Board 2010: 114-123) In completing and implementing the Bay-Delta Plan, the Board's next step is to evaluate the feasibility of measures needed to protect public trust resources fully. (California Supreme Court 1983; Kibel 2011: 6) These steps will need to include: determination of flow needs of public trust resources, water rights reallocation, flow modification, benefit-cost analysis, and habitat restoration. In the process, key questions must be answered:

1. How does the State Water Resources Control Board intend to prioritize water use in terms of coequal goals, of public trust balancing? How does its long-established water rights priority system fit into this policy framework?
2. What does water supply reliability mean in an arid state where we have granted rights to far more water than actually exists? Should water supply reliability be conditioned upon specific requirements to maximize reclamation, reuse, conservation and development of alternative local sources of water?
3. Is the standard by which we measure water supply reliability the same for junior and senior appropriators? Do uses of water that require vast public subsidies have the same priority as uses that don't require subsidy of public funds? Are uses that internalize adverse impacts equal in priority to uses that externalize them?
4. Should the worth of water be confined only to its economic value in use? Or does water supply reliability apply to both public trust resource needs as well as consumptive uses (i.e., is legislation needed for better protection of public resources through water rights)?
5. Are statutory requirements to protect water quality and listed species equivalent to water supply reliability for lawns or surplus, subsidized, and non-food crops? Are food crops more

No comments

- n/a -

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

important than non-food commodities when it comes to allocating water? Does health and safety take precedence over certain agricultural uses of water?

6. Does efficient use of water have higher priority over wasteful and inefficient use? Is protection of the Bay-Delta Estuary as a "national treasure" and one of the world's great estuaries more valuable to society than irrigating impaired soils, that by their nature when irrigated, discharge prodigious quantities of salt and toxic wastes back to our waterways and aquifers?

Answers to these questions are central to resolving California's water problems.

The California Legislature consolidated the State of California's water rights and water quality control responsibilities in the State Water Resources Control Board in 1967. Since that time, the Board has considerable authority to grapple with these questions and arrive at answers and solutions from them. The Board has authority to:

- Plan for water quality control.
- Receive, condition, and approve new water rights applications as permits.
- Regulate and license water rights permits specifying the point of diversion, diversion flows, place of use, and purpose of use for water.
- Investigate pre-1914 and riparian water rights to determine whether such claims to divert and use water are legal, including follow-up enforcement against illegal uses when determined (discussed below).
- Investigate and enforce the state's prohibition of waste and unreasonable use and wasteful and unreasonable method of diversion of water under the California Constitution, Article X, Section 2.
- Protect the public trust. As an agency of the state, the Board is charged with ensuring the state of California carries out its fiduciary responsibility to protect air, running water, the sea, and the seashore, "these things that are common to all," as stated originally in Roman law (the Institutes of Justinian).

California's constitution promises water rights only up to what is a reasonable use. No one has a right in California to use water unreasonably, not even the federal government. (California Constitution, Article X, Section 2) The Public Trust Doctrine provides that no one has a vested right to appropriate water in a manner harmful to the interests protected by the public trust. (*National Audubon Society v. Superior Court*, 33 Cal.3d 419, 189 Cal.Rptr 346, 658 P.2d 709) And the dictionary definition of usufructuary rights, of which both riparian and appropriative water rights are examples, indicates that a fundamental principle of usufruct is that it connotes only a right to use a resource like water, not to waste or use it unreasonably. The State Water Resources Control Board, in taking up all of the key questions we outline above, will be deciding whether and how California's abundant legal authorities apply to the Bay-Delta Estuary's Central Valley watershed.

The Public Trust and Proportional Delta Inflows

In mid-2009, the State Water Resources Control Board updated its review of the Water Quality Control Plan which its Water Right Decision 1641 (D-1641) implements. The Board took the position that to change its water quality and flow criteria it needed more scientific information about flows reasonably needed to protect fish and wildlife beneficial uses (State Water Resources Control Board, 2009: 17). Its impetus to consider making changes at that time included pronounced fisheries declines among both open water resident and migratory fish, and the still-unfolding impacts of climate change and its impacts on the Bay-Delta estuarine system (State Water

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

Resources Control Board, 2009: 9). The California Department of Fish and Game sought to build a salmon survival model to assist the Board's need for additional information. (California Department of Fish and Game 2010)

Later in 2009, the California Legislature directed the State Water Resources Control Board to prepare a report on Delta flow criteria that would "develop new flow criteria for the Delta ecosystem necessary to protect public trust resources" and in so doing "use the best available scientific information." The Legislature directed the Board to gather the information as part of an "informational proceeding" rather than through an evidentiary hearing. And the Legislature charged the Board with including volume, quality and timing of water necessary for the Delta ecosystem under different conditions (California Water Code: Section 85086(c)).

The Board produced its Delta flow criteria report after taking detailed testimony on the best available science for key fish species and ecosystems. The report identified a set of broad flow regimes for upstream tributaries providing inflow to the Bay-Delta Estuary that fish need to survive and recover. They represent the Board's consideration of the best available fishery and hydrologic science it considered during 2010 addressing the question: what flows do fish need? The Board confirms this when it stated in a footnote, "...the flow criteria developed in this proceeding are intended to halt population decline and increase populations of certain species," and acknowledged that, "Recent Delta flows are insufficient to support native Delta fishes for today's habitats...Flow and physical habitat interact in many ways, but they are not interchangeable." (State Water Resources Control Board 2010: 5, 120)

The Board states that the flow criteria "must be considered" in context:

- The flow criteria do not consider any balancing of public trust resource protection with public interest needs for water.
- The State Water Board does not intend that the criteria should supersede requirements for health and safety such as the need to manage water for flood control.
- There is sufficient scientific information to support increased flows to protect public trust resources; *while there is uncertainty regarding specific numeric criteria, scientific certainty is not the standard for agency decision making.* (State Water Resources Control Board 2010: 4; emphasis added)

The Board's flow determinations are:

- 75 percent of unimpaired Delta outflow from January through June.
- 75 percent of unimpaired Sacramento River inflow from November through June.
- 60 percent of unimpaired San Joaquin River inflow from February through June.
- Increased fall Delta outflow in wet and above normal years.
- Fall pulse flows on the Sacramento and San Joaquin Rivers to stimulate migrating fish.
- Flow criteria in the Delta interior to help protect fish from mortality in the central and southern Delta caused by operations of the state and federal water export pumps.

In essence, these flow determinations represent the Board's answer to the question, "what flows do fish need in the Central Valley watershed and the Bay-Delta Estuary?" The State Water Resources Control Board's 2010 Delta flow criteria report acknowledged that protective Delta outflows start with protective tributary inflows to the Delta. The Board's Delta inflow criteria rely on a percentage of unimpaired flow measure, which enables the flow criteria on the Sacramento and San Joaquin rivers to more closely mimic their natural hydrographs than now occurs.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

For the San Joaquin River, the State Water Resources Control Board approved its determination that 60 percent of unimpaired flow from February through June for the river basin would protect juvenile Chinook salmon during their peak emigration period. For the Sacramento River, the Board adopted the criterion of 75 percent of unimpaired flow from November through June. (This is because numerous runs of migratory salmon use the Sacramento River Basin for more of the year.) These constrained periods would also benefit the rearing period of juvenile salmon in the basin's major tributaries upstream. The Board also adopted in that report (2010) a fall season Delta inflow criterion calling for an average flow of 3,600 cubic feet per second for 10 days sometime during late October.

Nearly all scientists testifying to the Board in March 2010 agreed that mimicking the natural hydrograph (in shape if not in magnitude and volume of flow) is necessary to improve conditions for native fish species, and to counter invasive species in the Delta. Existing Board water quality and flow objectives intended to protect fish and wildlife beneficial uses in the south Delta are not working, as shown in abundant evidence presented to the Board at its hearings for the Delta Flow Criteria report. The Board includes much of that data in its report. (State Water Resources Control Board 2010) C-WIN provide a brief evaluation of the Vernalis Adaptive Management Plan to supplement this record of failure in Appendix A to this testimony.

In August 2010, the State Water Board approved these currently nonbinding Delta inflow determinations for the Sacramento and San Joaquin rivers. (State Water Resources Control Board 2010: 114-123) The State Water Resources Control Board observed that using such flow criteria would mean that "to achieve the attributes of a natural hydrograph, the criteria are advanced as a percentage of unimpaired flow on a 14-day average, *to be achieved on a proportional basis from the tributaries to the San Joaquin River.*" (State Water Resources Control Board, 2010: 120, emphasis added) The Board makes an important point that mimicking natural hydrograph and improving prospects for species recovery depends on achieving proportional flow allocations from all the major tributaries. Proportional tributary contributions would be needed to implement the Board's broader Delta inflow criteria. The Board will need to answer key questions including: what should those proportions be, how should responsibility for them be assigned, and who will be responsible for providing them? And: when will the upper San Joaquin River be included by the Board in making these determinations? (Right now, the Board excludes the upper San Joaquin River from its Bay-Delta Estuary planning deliberations. C-WIN evaluates the Board's stance in Appendix B.)

The question for the Board is how to do proportional flows *legally*. Proportional tributary contributions from Delta inflow are not new. In 1992, the California Department of Fish and Game proposed a method to identify tributary contributions to Delta inflows based on the pro rata share of unimpaired runoff each tributary generates to the Delta, as identified in the California Department of Water Resource's Bulletin 120 each year (California Department of Fish and Game, 1992). Other allocation methods could be devised as well, such as one based on reservoir storage on these same tributaries. The State Water Board in its Draft Water Right Decision 1630 presented such a method, but which excluded contributions from the San Joaquin River above Mendota Pool (State Water Resources Control Board, 1992: Tables IV and V).

Proportional tributary contributions needed to fulfill Delta inflow determinations from the Trinity River, and the major tributaries of the Sacramento and San Joaquin River Basins will require changes to the water rights of major water users in these Basins. The State Water Resources Control Board has authority over water rights to reallocate water usage and ensure compliance with the Board's Delta inflow objectives.

No comments

- n/a -

Paper Water Means Boundary Disputes and Clouded Titles

Property is often legally conceived as a bundle of rights representing "investment-backed expectations" of a future stream of benefits accruing to its owner, usually in the form of money. Water rights are a form of property, conveying to their owners rights to use water from a stream. Unlike real property in land, however, we have a situation in which far more in rights to use water have been granted by the state or claimed by right holders than Nature and reality actually provide.

California's modern water code and its body of water rights case law is the result of more than a hundred and sixty years of legislation and legal precedent. Riparian water rights are the most paramount rights, followed by pre-1914 appropriative rights and, lastly, post-1914 appropriative rights, as determined by the seniority requirements of first-in-time-and-use.

But despite this accumulated legal tradition, human promises of water exceed Nature's provisions. A shorthand description of this condition is "paper water." The paper water problem in the area of water and rivers in California has close analogies in concepts like "clouded title," and "boundary dispute" for a piece of real property (say, a house, or a plot of land) that has more than one owner claiming the same piece or portion of ground. Typically, boundary disputes are resolved by one or more disputants engaging the services of a surveyor to establish where the boundary is actually located. From there, the owners have a common set of facts on which they may agree to resolve their boundary dispute.

"Clouded title" has relevance here as well. A clouded title means the ownership of a title in water has some defect or potential defect arising from a competing claim for the same source of water.

One of the earliest recognitions of the problem of paper water in California occurred over a century ago and helps illustrate the clouded condition of paper water. In 1900, Frank Soulé, a professor of civil engineering at the University of California, was retained by the US Department of Agriculture's Office of Irrigation Investigations to study water rights claims in the San Joaquin River basin. Soulé found that the San Joaquin River's average winter and spring months' flows were approximately 5,000 to 6,000 cubic feet per second. In drier late summer and fall months, flows could get as low as 150 cubic feet per second. Soulé researched water rights claims to all tributaries of the San Joaquin River watershed to see how they matched up with flows in the river. Actual flows from the 1895-1909 period averaged about 2.02 million acre-feet, according to state records. (State Water Resources Board 1951: Table 62) He visited the recorders' offices for Stanislaus, Merced, and Fresno counties and itemized 315 claims to San Joaquin River waters totaling 36,571,471 miners inches of flow (there are 50 miners inches to a cubic foot per second). This converts to 731,429 cubic feet per second. Stretched out over a year (Soulé did not specify the seasons for which the claims were made), this translated into an annual claim of water rights of 529.9 million acre-feet of water, over 260 times greater than average flow of the San Joaquin River in that period. For an eight-month irrigation season of about 246 days, such flows would amount to 356.9 million acre-feet, nearly 180 times greater than San Joaquin River flows. These, Soulé contended, were the "definite claims," ones that had well-defined diversion points and amounts claimed. Six separate individuals claimed "all the water flowing in the San Joaquin River," a definite claim, if exaggerated. His summary for the San Joaquin did not include claims to the Fresno and Chowchilla rivers, which are much smaller watersheds, but the grandiosity continued there. On the Fresno River, some 670,799 miner's inches were the subject of 50 claims (about 13,416 cubic feet per second or 9.7 million acre-feet a year), and on the Chowchilla just 14 claims aggregated to 31,008 cubic feet per second (or about 22.5 million acre-feet annually). (Soulé 1901: 222, 232)

Clouded titles in water have been allowed to fester since before Professor Soulé began studying the problem in 1900. Failure by the State of California to quiet titles to water since assuming authority

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

for appropriate water rights in 1914 contributes untold expectations for benefit streams that fuel controversy in California water resources planning and development ever since.

C-WIN is not a lone contemporary voice on the problem of paper water. In September 2008, State Water Resources Control Board staff informed the Delta Vision Blue Ribbon Task Force about water rights, use, and flows in the Delta watershed. It stated in part:

- The "total face value of the approximately 6,300 active water right permits and licenses within the Delta managed by the State Water Board, including the already assigned portion of state filings, is approximately 245 million AFA [acre-feet annually]." Our organizations note that this 245 million acre-feet of face value in water rights was permitted by the Board and its predecessors in the Central Valley watershed (including imports from watersheds like that of the Trinity River). (State Water Resources Control Board 2008)
- Face value "does not include pre-1914 and riparian water rights." Riparian water rights, in the absence of some form of watershed adjudication, are usually unquantified but nonetheless require real, wet water. (State Water Resources Control Board 2008) And,
- That "the total face value of the unassigned portion of state filings for consumptive use (excluding state filings for the beneficial use of power) within the Delta watershed is approximately 60 million [acre-feet annually]." These are claims the State has filed to reserve water for further expansion of the State Water Project. (State Water Resources Control Board 2008; see also Appendix C.)

Other matters exacerbate the paper water problem:

- The SWRCB does not know how much water is actually used (and by whom) since state law has yet to require full accounting of either surface or ground water use.
- The SWRCB does not know the extent of paramount riparian or senior pre-1914 water rights either.
- Climate change is likely to alter the timing and reduce the volume of runoff into California's rim dams and overall state and federal water systems. (Knowles and Cayan 2002) It is also likely to decrease natural groundwater recharge as well, which would further reduce runoff volumes where river reaches benefit from groundwater inflows.
- Increased cold water pools and groundwater support from gaining streams will be needed to maintain water temperatures below rim dams according to estimates by the SWRCB and Department of Fish and Game of the increased inflow and outflow necessary to protect rivers and the Delta public trust resources. (California Department of Fish and Game 2010: 51, Table 5)

Given these constraints, the obligation to achieve a public trust balancing of water supply reliability with fish and ecosystem survival cannot rest on maintenance of existing levels of supply from either Delta exports or the rim dams on all major Central Valley tributaries in the Delta watershed. The State Water Resources Control Board must use its water rights authority in the service of meeting these water quality challenges on behalf of public trust resources.

The Delta Watermaster acknowledges the problem of paper water in a recent report on the State Water Resources Control Board's role in the Delta Stewardship Council's Delta Plan process (Wilson 2011). He expresses concern, however, that "the face value of water rights is not a sufficient

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

measure of water that can be used to determine the over-allocation of water in the [Delta] watershed." He cites four main reasons for his concern:

- The face value of many water rights are for nonconsumptive uses, such as hydropower.
 - **C-WIN Response:** As much as possible, water availability analysis should factor out water rights claims that are primarily devoted to nonconsumptive uses and hydropower generation in particular. C-WIN's analysis factors out all single-purpose hydropower generation water rights claims, whether pre- or post-1914. Where multiple purpose of use claims include hydropower generation, we assume these rights are still primarily consumptive use claims, especially when irrigation is one of the other purposes of use for which claims are made. Hydropower generation is considered incidental to the other consumptive uses.
- The face value represents a maximum possible water diversion, which is far greater than what is actually used;
 - **C-WIN Response:** We agree that face value often represents a maximum possible diversion (and/or storage amount). We also agree that it may be far greater than what is actually used in many cases. But C-WIN's review of water right claims shows that some rivers' claims far exceed maximum unimpaired flows and even reservoir capacity on that river. (The Trinity River is a good example of this.) This is less a criticism of face value than an acknowledgement of paper water by the Delta Watermaster. Nor does it justify continuation of the practice by the State Water Resources Control Board. Since the maximum possible flow (and use) can occur only relatively rarely in California's hydrology, C-WIN suggests that this extra increment of claims be eliminated because it will occur in the future with even less frequency than now occurs. Reliable rights are only meaningful when they can be exercised with relative frequency.
- Permit/license terms, such as those for protection of instream uses, further reduce below the face value the amount of water that can be diverted;
 - **C-WIN Response:** The State Water Resources Control Board needs to continue having some standard method for quantifying the value of water rights as property. This is the only way that increments of title to water as property can be described and titles cleared or quieted in the event of dispute. Moreover, quantified water rights are the only way to conduct reality-based water resources planning and development. This extends to employing a standard method for quantifying and measuring instream flows that benefit public trust resources. If the Board and Delta Watermaster are to enforce instream flows, they must quantify instream flow commitments and ensure that they are fulfilled *prior* to the exercise of permitted or licensed water rights claims.
- Water, when applied, is typically not consumed up to the full face value and the same water (return flow) is often used multiple times as it runs downstream.
 - **C-WIN Response:** While C-WIN acknowledges the reality of return flow in diversion of water for consumptive irrigation uses, there is no consistently available data that measures the volume and occurrence of return flow to rivers. Some estimates, both recent (California Department of Water Resources 2005: water balances for Sacramento and San Joaquin River Basins) and historical (Wiel 1928: 259) put return flow at between 60 and 65 percent of originally diverted volumes. Of course, the reality of return flow, however, means that river flow can decrease by as much as a third of diversion quantities each time it is applied; the more frequently water is diverted to consumptive use, the sooner surface flows are depleted in the immediate

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

river reach downstream. Return flows do not reach the river from which they were diverted instantaneously. Once diverted there occurs a time lag between the diversion and its application, and when water actually returns to the river, and even then, it may only reach the river in small increments, depending on the surface return flow and/or subsurface transmissivity getting back to the river. Meanwhile, the diverted water is gone from the river, thereby depleting its flow until some later time and lower location. If return flow is truly important to determining water availability and avoiding boundary disputes and clouded water titles, then California needs to invest in getting data from each watershed that quantifies the volume, timing, and duration of return flow, instead of ignoring it. (State Water Resources Control Board 1983:9-10)

C-WIN's methodology recognizes each of these facets of "face value" or face amount of water rights. Unfortunately, the Delta Watermaster's remarks do not clarify whatever else it is that face value quantities in water rights are supposed to positively describe. If the quantities in water rights are not relevant to face value, then on what basis can separable, stable, and reliable rights to water use be analyzed and judged? The Watermaster acknowledges that "while actual water use may be only a fraction of the face value of water rights, the state's water supplies have been over-allocated in many areas."² (Delta Watermaster 2011b: 5) C-WIN shows in this testimony that it is possible to use the "data" of water rights in combination with data on flows and diversions to generate a consistent and meaningful picture of the problem of overallocation of water supplies and rights in the San Joaquin River Basin. Our water availability analysis illustrates the usefulness of having *some idea* of the magnitude of the paper water problem as compared with having *no idea*. All of California needs better data on all facets of the problem of paper water.

Tables 1 and 2 provide static (snapshot) views of total water rights in the Trinity, San Joaquin River and Sacramento River Basins. Total water rights reported in these two tables are for consumptive uses. Hydropower generation water rights have been excluded from this analysis.

In Table 1, average annual unimpaired flow for the San Joaquin River Basin is about 6.2 million acre-feet compared with 32.7 million acre-feet of consumptive water rights claims. The ratio of total claims to average unimpaired flow for the San Joaquin Basin is 5.3 acre-feet of consumptive use claims to every acre-foot of unimpaired flow in the Basin. About 49 percent of total consumptive water claims are by riparian and pre-1914 claimants, while 51 percent is by post-1914 claimants (that is, permits and licenses) regulated by the State Water Resources Control Board.

Specifically on the major tributaries of the San Joaquin River Basin, the ratio of total consumptive use claims to unimpaired flow ranges from about 5.6 on the Stanislaus to 6.3 acre-feet of claims to every unimpaired acre-foot of flow on the San Joaquin River (including valley floor and upper watershed claims).

In Table 2, average annual unimpaired flow in the Sacramento Valley (essentially, average Sacramento River inflow to the Delta) is about 21.6 million acre-feet. Consumptive water rights claims are estimated at about 120.6 million acre-feet. The ratio of total consumptive use claims to average unimpaired flow in the Sacramento River Basin is about 5.6 acre-feet of claims per acre-foot of unimpaired flow. Ratios of claims to unimpaired flow to range from 2.2 on the Yuba River to 6.8 on the Trinity River.

² The Delta Watermaster suggests that for the Delta the process for determination of fully appropriated streams from the Water Code Sections 1205 through 1207 be used (p. 5).

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

Table 1 Consumptive (Irrigation) Water Rights Summary for San Joaquin River Basin					
Flows and Consumptive Water Rights	Thousands of Acre-Feet				
	Stanislaus River	Tuolumne River	Merced River	San Joaquin	Basin Total
Average Annual Unimpaired Flow	957	1,851	956	1,728	6,181
Total Consumptive Water Right Claims	5,318	11,015	5,495	10,828	32,656
Ratio of Total Claims to Unimpaired Flow	5.56	5.95	5.75	6.27	5.28
Total Riparian & Pre-1914 Claims	1,401	8,185	4,525	2,014	16,125
Ratio of Riparian & Pre-1914 Claims to Unimpaired Flow	1.46	4.42	4.73	1.17	2.61
Total Post-1914 Claims	3,917	2,831	970	8,814	16,532
Ratio of Post-1914 Claims to Unimpaired Flow	4.09	1.53	1.01	5.10	2.67

Sources: State Water Resources Control Board (e-WRIMS); Public Record Act responses from various public water and irrigation districts; California Water Impact Network. Sum of major tributaries' unimpaired flow does not equal Valley total due to omission of other watersheds from the table.

Table 2 Consumptive (Irrigation) Water Rights Summary for Trinity and Sacramento River Basins					
Flows and Consumptive Water Rights	Thousands of Acre-Feet				
	Trinity River	Feather River	Yuba River	American River	Sacramento Valley Total
Average Annual Unimpaired Flow	1,283	4,370	2,287	2,621	21,619
Total Consumptive Water Right Claims	8,725	15,717	5,093	9,847	120,571
Ratio of Total Claims to Unimpaired Flow	6.80	3.60	2.23	3.76	5.58
Total Riparian & Pre-1914 Claims	134	3,855	92	286	47,883
Ratio of Riparian & Pre-1914 Claims to Unimpaired Flow	0.10	0.88	0.04	0.11	2.21
Total Post-1914 Claims	8,591	11,863	3,596	9,561	72,688
Ratio of Post-1914 Claims to Unimpaired Flow	6.70	2.71	1.57	3.65	3.36

Sources: California Department of Water Resources, 2007; State Water Resources Control Board (e-WRIMS); Public Record Act responses from various public water and irrigation districts; California Water Impact Network. Sum of major tributaries' unimpaired flow does not equal Valley total due to omission of other watersheds from the table. Trinity River is included because a large portion of its runoff is exported to the Sacramento River via federal Central Valley Project facilities.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

On a basin-wide basis, riparian and pre-1914 water claims account for about 40 percent of total consumptive use claims of 120.7 million acre-feet, and post-1914 claims (permits and licenses) in the Sacramento River Basin amount to about 60 percent of total consumptive use claims.

The largest water claims on Sacramento River Basin tributaries belong to the Feather River and the American River. The mainstem Sacramento (which is incorporated into the total for the Valley) includes the Pit and McCloud rivers and numerous small creeks that enter it from the east and west. C-WIN estimate that the largest component of pre-1914 water rights claims is held by the Glenn-Colusa Irrigation District. This District claims 26 million acre-feet in rights to divert directly from the Sacramento, as well as another 12 million acre-feet in rights from west side creeks.

On the Trinity River, the US Bureau of Reclamation is a significant claimant of post-1914 water rights, and given the small amount of riparian and pre-1914 water rights claims on the Trinity, the Bureau's Trinity River rights are reliable, as conditioned and limited by the Trinity River Record of Decision. (US Department of the Interior 2000) The Trinity's ratio of total consumptive claims to average unimpaired flow is 6.8 acre-feet of claims to every acre-foot of unimpaired flow.

There is another, more dynamic approach that we also include in this testimony to characterize excess claims to water use relative to flows. This planning-level analysis of water availability incorporates into the model hydrologic variability, instream flow requirements and publicly available water rights priorities on the divertable flows that remain in the system.

Applying Water Availability Analysis

In Tables 3A and 3B and accompanying charts, we present results of applying both a diversion cap (derived from the State Board's 2010 Delta flow determinations) and the water rights priority system in the manner that the State Water Resources Control Board is legally authorized to proceed. The unimpaired flow hydrology for this analysis was obtained from the California Department of Water Resources (2007). This analysis proceeds from the basic water rights premises that:

- 1) Instream flows needed to meet water quality and flow objectives have top priority.
- 2) When applying water rights, riparian rights are paramount, followed by—
- 3) Pre-1914 water rights claim water based on seniority date, followed by—
- 4) Any water left over is provided to junior water rights holders, in order of priority date (whether pre-1914 rights or post-1914 permits and licenses).

Detailed model results, water rights, and flow data employed in the analysis are found in Appendix D. Assumptions embedded in the method are itemized in Appendix E of this report.

To apply the water rights priority system in the context of providing new Delta inflows from the major tributaries, C-WIN's analysis builds in a range of flows from the 10th through 90th percentiles of the 82-year unimpaired flow hydrology available from the California Department of Water Resources (2007). 25th, 50th (median), and 75th percentile (quartile) flows are also considered. C-WIN's analysis summarizes total regulated period unimpaired flow, the Delta inflow contribution, and calculates a "diversion cap." (See Appendices D.1, D.2, and E.)

Water rights priorities are then assigned to allocate the diversion cap flows for the regulation period to paramount riparian and senior water right holders first. Detailed tables of our model results are provided in Appendix D.1 for the Trinity and the major Sacramento and San Joaquin River Basin tributaries. On the major tributaries, there are generally few significant water rights holders, and relatively small blocs of riparians may be known and allocated flows prior to pre-1914

Water Availability Analysis
 Workshop 3 Testimony, Bay Delta Plan
 Submitted by California Water Impact Network,
 California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

Table 3A
Summary of Water Availability Analysis Results Incorporating Water Rights Claims
for Major Tributaries of the San Joaquin River Basin

River/ Instream Flow Objective	Annual Total		
	Riparians and Senior Pre-1914 Right Holders	Major Water Right Claimants	Other Junior Major Claimants
Stanislaus	Various, including Tuolumne Utilities District	Oakdale & South San Joaquin Irrigation Districts	US Bureau of Reclamation
40% Diversion Cap	29 TAF in all percentile flows.	198 to 758 TAF in all percentile flows.	81 to 250 TAF in the 50 th to 90 th percentile flows.
Tuolumne	Various, including Tuolumne Utilities District	Turlock Irrigation District, Modesto Irrigation District	City & County of San Francisco
40% Diversion Cap	23 TAF across all percentile flows.	408 to 1,662 TAF across all percentile flows.	95 TAF in only the 90th percentile flows.
Merced	Various, including Gallo interests	Merced Irrigation District	Not applicable
40% Diversion Cap	218 to 283 TAF across all percentile flows.	5 to 594 TAF from 40th to 90th percentile flows, about 14% of all claims.	Not applicable
San Joaquin	Below Friant Dam, and along Fresno Slough	San Joaquin River Exchange Contractors	US Bureau of Reclamation
40% Diversion Cap	172 TAF in all percentile flows.	248 to 817 TAF in all percentile flows.	89 to 413 TAF in 75th to 90th percentile flows.

Sources: California Department of Water Resources, 2007; State Water Resources Control Board, 2010, 2012; other primary and secondary sources compiled by the California Water Impact Network. See Appendix D for details of data and supporting model results.

right holders. Pre-1914 water right claims tend to comprise the majority, or in most cases exceed the unimpaired flows in most (and in some cases, all) decile flows reported in the analysis.

Water Availability Analysis
 Workshop 3 Testimony, Bay Delta Plan
 Submitted by California Water Impact Network,
 California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

Table 3B Summary of Water Availability Analysis Results Incorporating Water Rights Claims for the Trinity River and the Major Tributaries of the Sacramento River Basin			
River/ Instream Flow Objective	Annual Total		
	Riparians and Senior Pre-1914 Right Holders	Major Water Right Claimants	Other Junior Major Claimants
Trinity	Various, small claimants	US Bureau of Reclamation	Not applicable
25% Diversion Cap	134 TAF in all percentile flows.	77 to 454 TAF across all percentile flows.	Not applicable.
Sacramento River above Feather River Confluence	Various, including Anderson- Cottonwood ID and Glenn Colusa ID	Early Post-1914 to early 1927 claimants	CVP and Feather River Project Filings from 1927 through 1961
25% Diversion Cap	2,094 to 5,983 TAF ranging across all percentile flows.	0 TAF across range of all percentile flows.	0 TAF across range of all percentile flows.
Feather River	Western Canal WD and Joint Water Districts, adjudication decrees	South Feather and Thermalito 1920s Rights	DWR 1927, 1951, and 1956 Claims
25% Diversion Cap	729 to 1,972 TAF ranging across all percentile flows.	4 to 34 TAF from 20 th to 90 th percentile flows.	7 to 236 TAF in all percentile flows.
Yuba River	Various, including Nevada ID, City of Nevada City	Nevada ID and Yuba Co WD 1920s Rights	Yuba County Water Agency 1927 Claims
25% Diversion Cap	258 to 1,004 TAF ranging across all percentile flows.	10 to 12 TAF only at 25 th to 60 th percentile flows.	20 to 81 TAF among 50 th to 80 th percentile flows.
Bear River	Various, including Nevada ID	Camp Far West and Nevada ID Claims	South Sutter Water District Claims
25% Diversion Cap	26 to 92 TAF ranging across all percentile flows.	1 to 54 TAF across all percentile flows.	4 to 9 TAF from 50 th to 90 th percentile flows.
American River	Various, including San Juan Water District, Nevada ID and City of Sacramento Post-1914 Claims	Georgetown Divide PUD and Placer County Water Agency	US Bureau of Reclamation
25% Diversion Cap	291 to 1,006 TAF ranging across all percentile flows.	8 to 183 TAF from 50 th from all percentile flows.	9 to 139 TAF in all percentile flows.
Sources: California Department of Water Resources 2007; State Water Resources Control Board 2010 and 2012; other primary and secondary sources compiled by the California Water Impact Network. See Appendix D for details of data and supporting model results.			

Water Availability Analysis
 Workshop 3 Testimony, Bay Delta Plan
 Submitted by California Water Impact Network,
 California Sportfishing Protection Alliance, and AquAlliance

No comments
 - n/a -

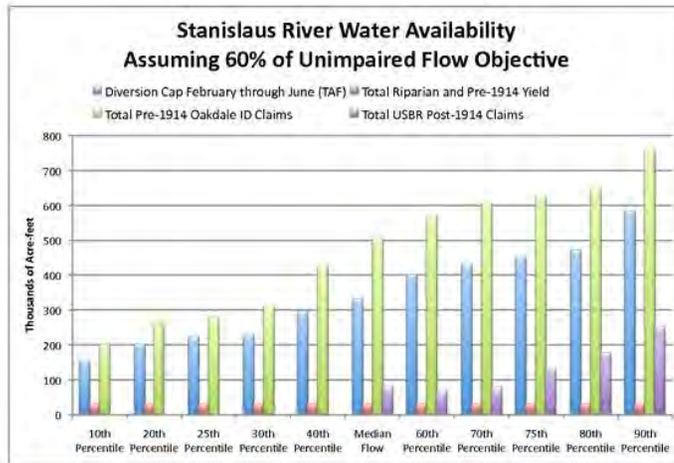
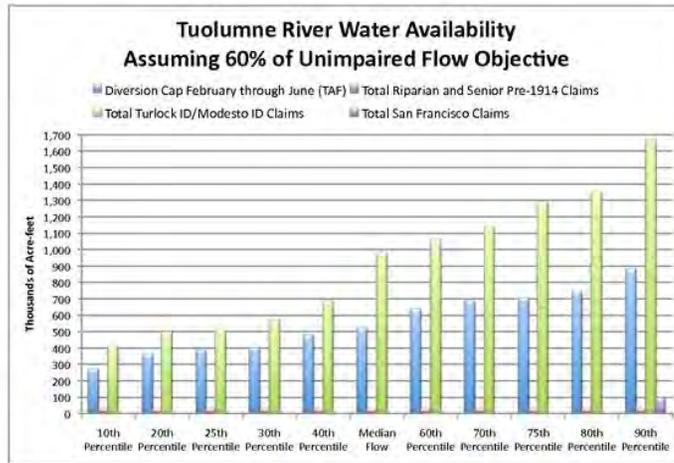


Figure 1, above. Figure 2, below.



Water Availability Analysis
 Workshop 3 Testimony, Bay Delta Plan
 Submitted by California Water Impact Network,
 California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

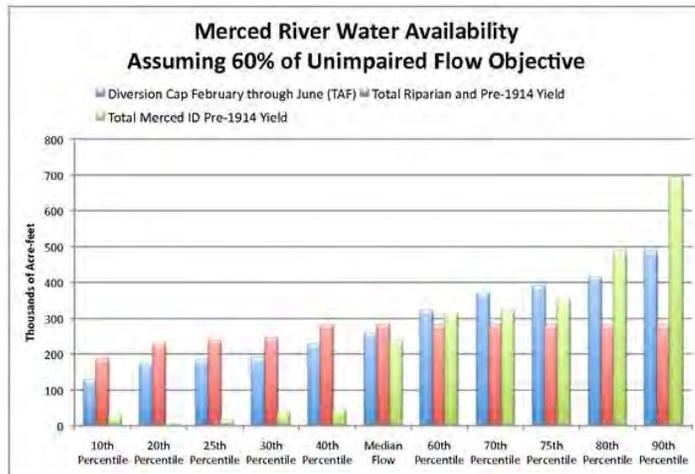
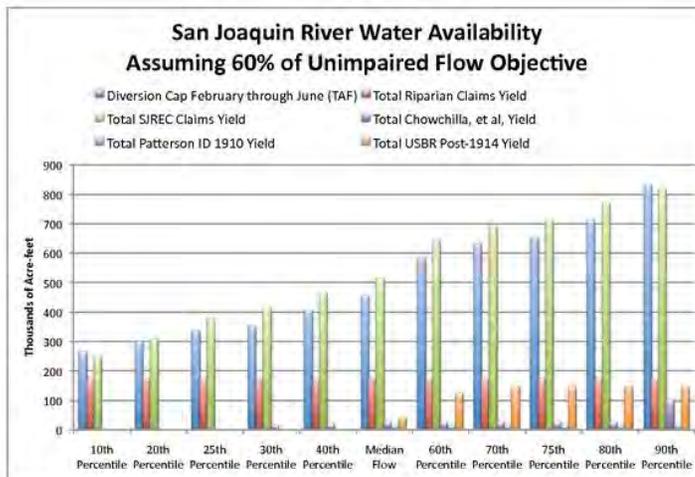


Figure 3, above. Figure 4, below.



No comments

- n/a -

Stanislaus River (Figure 1)

Implications: Under strict application of both the 40 percent diversion cap and the water rights priority system in the Stanislaus River watershed, the US Bureau of Reclamation's water rights for New Melones Reservoir yields only a small fraction of Bureau claims in actual supplies.

Tuolumne River (Figure 2)

Implications: Under strict application of both the 40 percent diversion cap and the water rights priority system, the City and County of San Francisco would have reliable rights to water only in the wettest 10 percent of flows.

Merced River (Figure 3)

Implications: Under strict application of the water rights priority system to the 40 percent diversion cap, Merced Irrigation District's pre-1914 water rights exceed its post-1914 claims significantly, but are junior to a large amount of riparian and senior pre-1914 right holders.

San Joaquin River (Figure 4)

Implications: Only the small riparian allocations along the upper San Joaquin River would have fully reliable flows. The Exchange Contractors would have full claims on flows about 30 percent of the time (at the 70th percentile flows and above). The Bureau of Reclamation would not receive allocations except in the wettest 30 percent of years at all, and would receive its full allocation no more than about 10 percent of the time.

Trinity River (Figure 5)

Implications: Riparian and pre-1914 water right holders on this river system are few. The Bureau's post-1914 water rights to develop Trinity Reservoir and Lewiston Dam, and the hydropower complex linked to Keswick Dam along Clear Creek are the dominant water rights on the Trinity River. As noted in Table 2, however, the consumptive use rights alone appear to be quite excessive relative to Trinity River's unimpaired flow hydrology.³

Sacramento River Above Feather River Confluence (Figure 6)

Implications: Because of large pre-1914 water rights claims by Glenn-Colusa Irrigation District along the Sacramento River, no water would be available to the US Bureau of Reclamation, except from Trinity River exports. Strict application of this pattern of water rights claims would dramatically reduce water available for export from the Sacramento River Basin and potentially undermine the San Joaquin River Exchange Contract.

³ Our analysis applies to the Trinity the Board's 75 percent of unimpaired flow determination for November through June. This flow determination exceeds those of the 2000 Trinity Restoration Record of Decision. (US Department of the Interior 2000)

Water Availability Analysis
 Workshop 3 Testimony, Bay Delta Plan
 Submitted by California Water Impact Network,
 California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

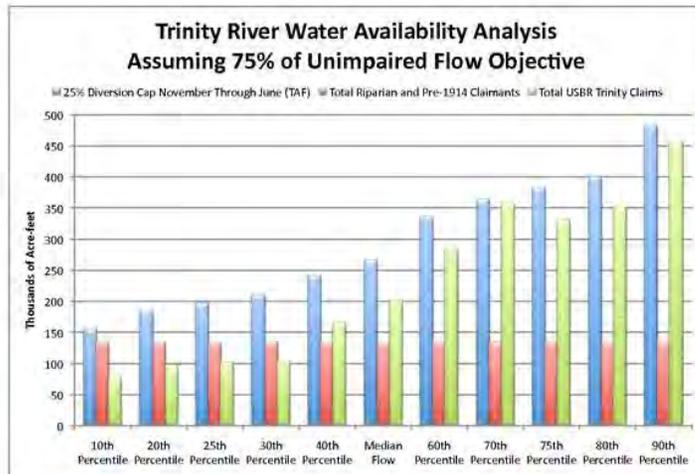
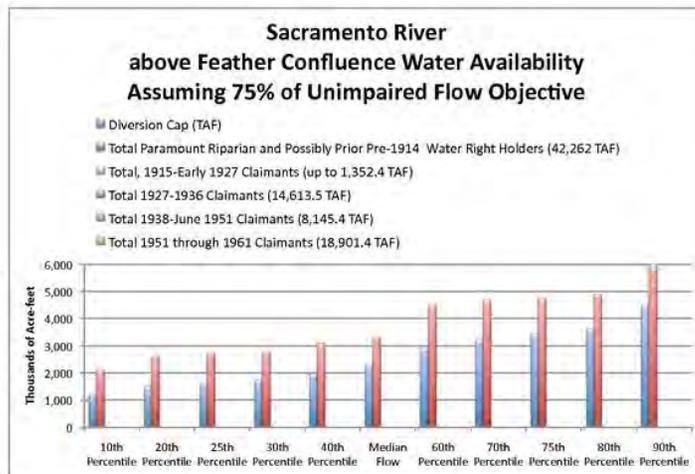


Figure 5, above. Figure 6, below.



No comments

- n/a -

Feather River (Figure 7)

Implications: The Department of Water Resources' 1927, 1951, and 1956 water rights claims for the Feather River Project (now the State Water Project) would receive almost no water under a 25 percent diversion cap scenario. In drier years, even at relaxed diversion cap scenarios, DWR would receive only very small amounts. This is due to senior pre-1914 water rights claimants such as the Joint Water Districts⁴ and Western Canal Water District, whose rights predate the cultivation of rice in the Butte County region, and were adjudicated in 1923. DWR's claims amount to about 10.4 million acre-feet (MAF) on the Feather River alone for consumptive uses.

Yuba River (Figure 8)

Implications: Nevada Irrigation District and Yuba County Water District, through their pre-1914 claims and 1920s water rights claims, would have senior claims to Yuba River flows. Full operation of these claims would nearly eliminate Yuba County Water Agency diversions under a 25 percent diversion cap scenario.

Bear River (Figure 9)

Implications: Because of senior water rights claims by Nevada Irrigation District and Camp Far West Irrigation District, South Sutter Water District would see its supplies reduced significantly relative to its claimed rights under a 25 percent diversion cap scenario.

American River (Figure 10)

Implications: The US Bureau of Reclamation's Central Valley Project facilities along the American River would receive very little water supplies from operation of the water rights priority system under a 25 percent diversion cap, despite having claimed up to 5.35 million acre-feet.

Discussion

Assuming that the State Water Board adopts the 75 percent unimpaired flow determination for the upstream tributaries of the Sacramento River Basin, the 60 percent of unimpaired flow determination for the San Joaquin River Basin, and that the water rights priority system is applied, it becomes evident that several significant water rights claimants that are junior in priority contribute dramatically to the problem of paper water: They have been promised water far in excess of flow conditions available to them in most years.

Table 4 summarizes the major water rights claimants whose titles to water in the Central Valley watershed tributaries should be considered clouded, whose property "boundaries" are in dispute.

⁴ The Joint Water Districts include Butte Water District, Biggs-West Gridley Water District, Richvale Irrigation District, and Sutter Extension Water District, the successors to pre-1914 water rights accumulated by the Sutter Butte Canal Company.

Water Availability Analysis
 Workshop 3 Testimony, Bay Delta Plan
 Submitted by California Water Impact Network,
 California Sportfishing Protection Alliance, and AquAlliance

No comments
 - n/a -

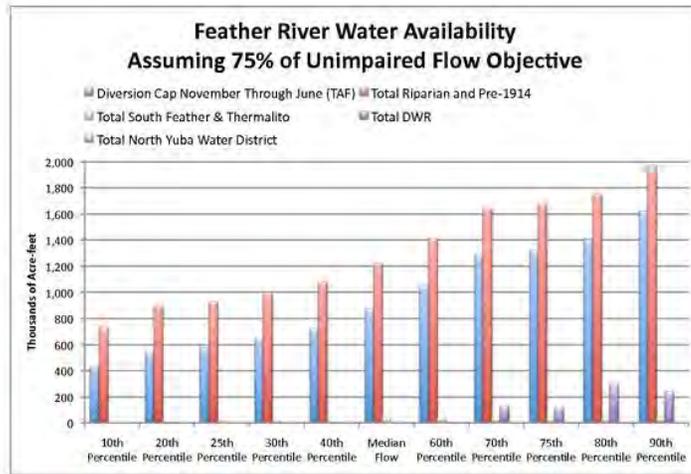
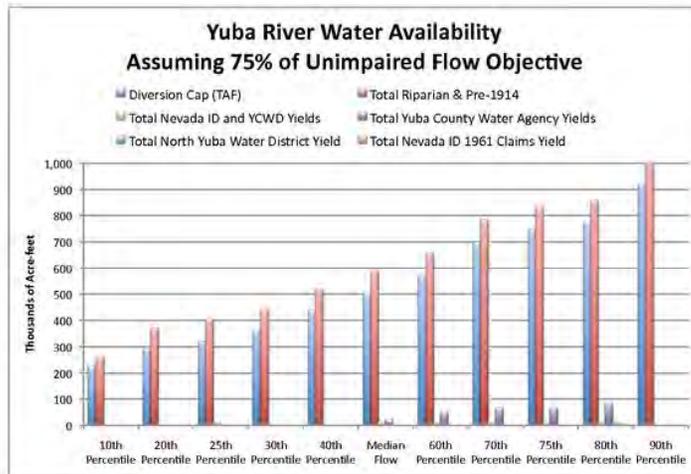


Figure 7, above. Figure 8, below.



Water Availability Analysis
 Workshop 3 Testimony, Bay Delta Plan
 Submitted by California Water Impact Network,
 California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

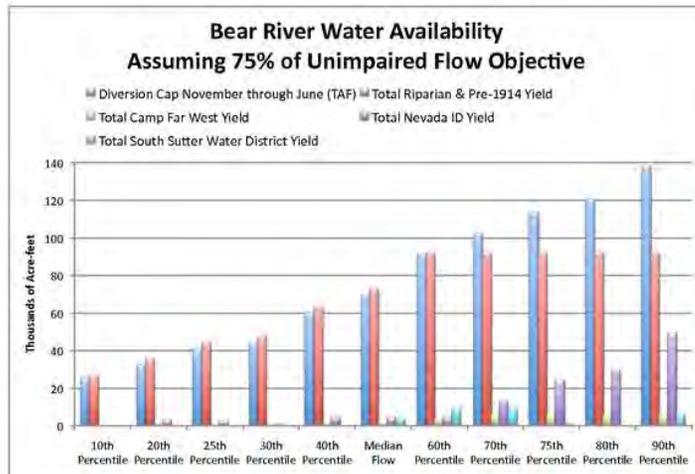
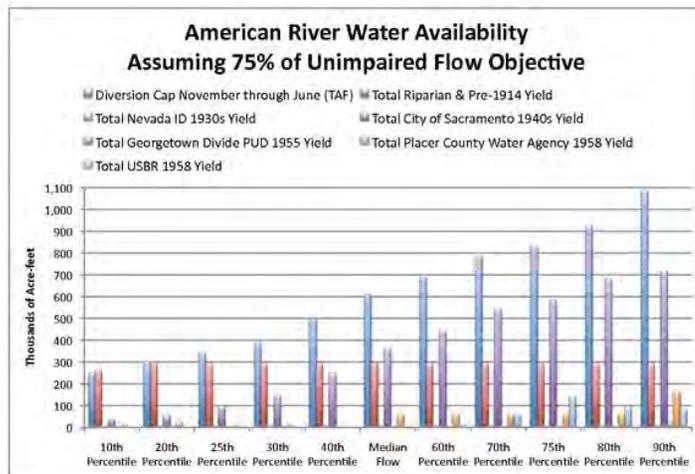


Figure 9, above. Figure 10, below.



Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

Table 4 Summary of Watershed Consumptive Water Rights Claimants by Reliability (Based on Legal Priority) of Claims		
Watershed	Claimants with Highly Reliable Rights	Claimants with Potentially Clouded Titles to Water
Stanislaus River	Various claimants covered by Stanislaus River decree of 1929; Oakdale ID, South San Joaquin ID	US Bureau of Reclamation (New Melones)
Tuolumne River	Tuolumne Utilities District, Turlock Irrigation District, Modesto Irrigation District	City and County of San Francisco (1901 through 1911 rights)
Merced River	Gallo, various riparian and pre-1914 parties to early Merced River decrees	Merced Irrigation District (post-1914 rights)
San Joaquin River	Paramount riparian claimants, San Joaquin River Exchange Contractors, Clowella WD, Tranquility & James IDs, Patterson ID	US Bureau of Reclamation (post-1916 rights)
Trinity River	Various small riparian and pre-1914 claimants, US Bureau of Reclamation	US Bureau of Reclamation (has overstated water claims compared with actual basin hydrology)
Sacramento River (including west and east creeks, Pit and McCloud Rivers)	Various small riparian and pre-1914 claimants, claimants among adjudicated watersheds in Pit River region, Anderson-Cottonwood Irrigation District, Glenn-Colusa Irrigation District	US Bureau of Reclamation (Shasta Lake)
Feather River	Upper watershed adjudicated claimants, Joint Water Districts, Western Canal WD	California Department of Water Resources (Lake Oroville)
Yuba River	Browns Valley ID, Nevada ID, Yuba County WD	Yuba County Water Agency (1927 rights), Nevada ID (1930s rights), and North Yuba Water District (1958 rights)
Bear River	Nevada ID, Camp Far West ID	South Sutter Water District (1952 and 1981 rights)
American River	City of Folsom, San Juan WD, Georgetown Divide PUD, El Dorado ID, Nevada ID, Placer County Water Agency, City of Sacramento	US Bureau of Reclamation (Folsom Lake), Foresthill PUD
Sources: California Department of Water Resources; State Water Resources Control Board; California Water Impact Network.		

By adopting its public trust Delta inflow determinations as flow objectives in the Bay-Delta Plan for each major tributary, and applying water rights priorities—in that order—the State Water Resources Control Board can use its authority to eliminate paper water (water claims that do not have a basis in water rights law) in the Bay-Delta Estuary's Central Valley watershed. The California Constitution reminds us that no one in California has a right to use or divert water wastefully or unreasonably. The state's public trust responsibility requires protection of the waters of the state for the benefit of all beneficial users, not just water rights holders. The state's water quality control planning obligations carry out this responsibility. It also helps the state meet its public trust

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

obligations as well. The doctrine of prior appropriation requires that senior water right holders be served before junior water right holders. The water quality control planning process and the water rights priority system on the major tributaries of the Sacramento and San Joaquin River Basins should be used as tools for eliminating paper water—that is, for quieting water titles, and ending trespasses and boundary disputes that compromise public trust resources—from the Bay-Delta Estuary's Central Valley watershed.

Paths for Aligning Water Rights with All Other Beneficial Uses and River Flows

We see three primary paths by which the State Water Resources Control Board can align water rights with all other beneficial uses and river flows:

- Water quality control plan implementation,
- Fully-appropriated streams declaration and Term 91, and
- Court adjudication.

Water Quality Control Plan Implementation. The State Water Resources Control Board has approved a Delta inflow determination for the San Joaquin River at Vernalis of 60 percent of unimpaired flow during the February through June period. For the Sacramento the Board approved a 75 percent of unimpaired flow determination for the November through June period. In doing so, the Board would implicitly place a cap on total diversions for each major tributary of 40 percent of unimpaired flow for the San Joaquin River and 25 percent of unimpaired flow for the Sacramento River Basin. These objectives would result in instream flows that are substantially greater in most years than current instream flow requirements now provide. In our water availability analysis, we also apply the Sacramento River Basin 75 percent objective rather than the Trinity Record of Decision flow objectives to the water availability analysis for the Trinity River. (US Department of the Interior 2000: 12)

Key water rights holders in these basins possess riparian and pre-1914 water rights that exist prior to the regulatory powers of the State Water Resources Control Board. On the question of implementing water quality control plans and adhering to state water rights law, the issue has arisen of the Board's jurisdiction over those water rights that the Board did not originally consent to.

Attorney Tim O'Laughlin, representing the San Joaquin River Group Authority (SJRGA), has asked the State Water Resources Control Board to "identify the legal theory or approach it will use at the implementation proceeding in order to obtain the necessary flows to meet the additional flow requirements identified" in the Board's flow studies. Without that legal theory or approach, O'Laughlin argues, the State Water Resources Control Board will be unable to complete economic or other impacts analysis in its Substitute Environmental Document on the San Joaquin River Flow and South Delta salinity objectives. He further contended in February 2011 that the Board is operating according to *some* kind of theory since it

blatantly **suggests** that additional flows will come from the Stanislaus, Tuolumne, and Merced Rivers. [State Water Resources Control Board 2011c, pp. 78, 81, and 85-89] This foreshadowing demonstrates that the SWRCB not only believes that, regardless of the Vernalis flow alternative eventually adopted, it will be able to obtain flow from all the tributaries, but that it intends to do so. That approach, however, completely ignores the existence of the water right priority system. (See, e.g., *Pleasant Valley Canal Company v. Borror* (1998) 61 Cal.App.4th 742, 770; *City of*

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

Barstow v. Mojave Water Agency (2000) 23 Cal. 4th 1224, 1243; see also *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal. App.4th 937, 961). As the SJRGA has pointed out to the SWRCB on numerous occasions, any approach to allocating responsibility for new Vernalis flow requirements must incorporate the water rights priority system. That said, the SJRGA recognizes that strict application of the water right priority system does not produce straightforward results such that the water required to meet the selected Vernalis flow alternative would come from a particular waterway or tributary, or that such water would roughly be divided equally or proportionally among such waterways and tributaries. (O'Laughlin 2011a: 1-2; emphasis in original)

O'Laughlin, on behalf of SJRGA, asserts that the Board has no jurisdiction to regulate pre-1914 appropriative water rights or riparian rights, regardless of any legal theory the Board intends to use in the implementation phase. If responsibility for new Vernalis flow requirements is determined solely based on the water rights priority system, writes O'Laughlin, "junior water right holders will be required to reduce or completely cease their water use before senior appropriators will be required to reduce theirs" as required in California's doctrine of prior appropriation. (O'Laughlin 2011a)

He wrote to the Board subsequently in June 2011 about its jurisdiction in the Bay-Delta proceedings. There he stated, "It now appears that the [Substitute Environmental Document] is being prepared solely on the basis of percentage of natural flow, without regard to the nature or priority of the water rights affected, and will therefore be the subject of immediate litigation." (He is here apparently referring to the Board's proposed use of a percentage of unimpaired flow as the basis for limiting diversions.) O'Laughlin also reiterated in this letter to the Board that it

does not have jurisdiction over pre-1914 appropriative water rights for any reason, including the implementation of water quality objectives adopted pursuant to the State Water Resources Control Board's authority under Porter-Cologne. Given the prevalence of pre-1914 appropriative rights held in the San Joaquin River Basin, and the scope of the percentage of natural flow that the [Board] is considering, it is almost certain that there will be times and conditions where the [Board] will not be able to implement a percentage of natural flow. It is arbitrary and capricious for the [Board] to continue to consider a percentage of natural flow as one of its objectives without knowing how often, if ever, it will be able to require such percentages be met. (O'Laughlin 2011b)

O'Laughlin argues that the Board's flow objective results may not be achievable if, for example, flow is 100 cfs and the Board applies a 60 percent instream flow criterion to this waterway while pre-1914 water right holders may claim 80 percent of the flow in the stream. In that case, the Board, contends O'Laughlin, "would not be able to obtain the full 60 percent flow it desired." O'Laughlin contends that this not only renders the Delta flow criterion infeasible, it means that evaluation of criterion alternatives under the California Environmental Quality Act in the Substitute Environmental Document will also be infeasible and the SED thus inadequate.

Of course, contrary to the Racanelli decision, O'Laughlin elevates the water rights priority system to paramount status in California water and environmental law. It is plain from a review of state water case law that water rights priorities, while important, are not paramount considerations when the Board takes up the protection of beneficial uses of water. As Justice Racanelli stated, water quality control planning must concern itself with the regulation of *beneficial uses*, not water rights strictly speaking. Beneficial uses include, and go well beyond, water rights and their relative priorities. (See sidebar, page 26.) The Racanelli decision made clear that the State Water Resources Control Board has authority to implement its water quality control plan by regulating all beneficial uses. Adjusting quantities in water rights is within its authority.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

Moreover, the Board retains authority to regulate pre-1914 water rights under its constitutional authority to prohibit waste and unreasonable use of water. The Legislature provided in the California Water Code key sections that do not limit the Board's authority to investigate rivers and streams in the service of the state's constitutional provisions (emphases added).

275. The department and board shall take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water in this state.

...
1050. This division is hereby declared to be in furtherance of the policy contained in Section 2 of Article X of the California Constitution and in all respects for the welfare and benefit of the people of the state, for the improvement of their prosperity and their living conditions, and *the board and the department shall be regarded as performing a governmental function in carrying out the provisions of this division.*

1051. The board for the purpose of this division may:
(a) *Investigate all streams, stream systems, portions of stream systems, lakes, or other bodies of water.*
(b) Take testimony in regard to the rights to water or the use of water thereon or therein.
(c) *Ascertain whether or not water heretofore filed upon or attempted to be appropriated is appropriated under the laws of this State.*

...
1052. (a) *The diversion or use of water subject to this division other than as authorized in this division is a trespass.*
(b) Civil liability may be administratively imposed by the board pursuant to Section 1055 for a trespass as defined in this section in an amount not to exceed five hundred dollars (\$500) for each day in which the trespass occurs.
(c) The Attorney General, upon request of the board, shall institute in the superior court in and for any county wherein the diversion or use is threatened, is occurring, or has occurred appropriate action for the issuance of injunctive relief as may be warranted by way of temporary restraining order, preliminary injunction, or permanent injunction.
(d) Any person or entity committing a trespass as defined in this section may be liable for a sum not to exceed five hundred dollars (\$500) for each day in which the trespass occurs. The Attorney General, upon request of the board, shall petition the superior court to impose, assess, and recover any sums pursuant to this subdivision. In determining the appropriate amount, the court shall take into consideration all relevant circumstances, including, but not limited to, the

Beneficial Uses Served in the Bay-Delta Water Quality Control Plan:

- Municipal and Domestic Supply
- Industrial Service Supply
- Industrial Process Supply
- Agricultural Supply
- Ground Water Recharge
- Navigation
- Water Contact Recreation
- Non-Contact Water Recreation
- Shellfish Harvesting
- Commercial and Sport Fishing
- Warm Freshwater Habitat
- Cold Freshwater Habitat
- Migration of Aquatic Organisms
- Spawning, Reproduction, and/or Early Development
- Estuarine Habitat
- Wildlife Habitat
- Rare, Threatened, or Endangered Species

Source: State Water Resources Control Board 2006: 8-9.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

extent of harm caused by the violation, the nature and persistence of the violation, the length of time over which the violation occurs, and the corrective action, if any, taken by the violator.

(e) All funds recovered pursuant to this section shall be deposited in the Water Rights Fund established pursuant to Section 1550.

(f) The remedies prescribed in this section are cumulative and not alternative.

...
1825. It is the intent of the Legislature that *the state should take vigorous action to enforce the terms and conditions of permits licenses, certifications, and registrations to appropriate water, to enforce state board orders and decisions, and to prevent the unlawful diversion of water.*

...
2501. The board may determine, in the proceedings provided for in this chapter, all rights to water of a stream system whether based upon appropriation, riparian right, or other basis of right.

Nothing in these sections of the Water Code prevents the Board from investigating pre-1914 water rights and eliminating illegal diversions should they be found. Water Code Section 275, appears to extend this authority of the Board to determining whether any water use is wasteful or unreasonable, or any method of use, or method of diversion is wasteful or unreasonable.

These sections provided authority for the Board to investigate pre-1914 and riparian water rights in the Delta recently. In these investigations, the Board has issued water rights orders that in at least one instance adjusted the rights of a riparian water right holder. (Wilson 2012) Mr. O'Laughlin is surely aware of this authority. On behalf of the San Joaquin River Group Authority, his comments on the Board's 2008-2012 strategic work plan helped initiate the Delta water rights investigations in 2008. He cited California Water Code Section 1825 to support the San Joaquin River Group Authority's recommendation that the Board investigate Delta riparian and pre-1914 water rights. (San Joaquin River Group Authority 2008: 64)

When the Board moves to adjust diversion amounts in the Delta's major tributaries. The Board should apply a diversion cap during the regulated period applicable to each tributary (including the Upper San Joaquin River; see Appendix B) and then allocate diversions according to water rights priority. C-WIN analyzes operation of the water rights priority system in the following river profiles.

Our testimony analyzes water availability using water rights priorities as a way of identifying the legal method for allocating responsibility for Delta inflows that are fully protective of public trust resources in the Delta.

The Board announced in two notices (dated February 13, 2009, and April 1, 2011, the latter containing revisions to the earlier Notice) its intent to revise the Bay Delta Water Quality Control Plan of 2006. This plan traces its lineage to the 1995 Bay Delta Water Quality Control Plan and the Bay-Delta Accord. The San Joaquin River flow and South Delta salinity objective process is likely to be a step in the right direction away from these failed plans. The well-documented failures of this misguided loyalty include:

- Anadromous fishery declines throughout the Central Valley watershed of the Delta estuary.
- Declines of pelagic (open water) aquatic ecosystem regimes throughout the Delta
- Continued listing of endangered species, including salmon, steelhead, Delta smelt, longfin smelt, Sacramento splittail, and green sturgeon.
- Chronic violations from 2005 through 2009 of south Delta salinity objectives in both the Bay-Delta Water Quality Control Plan and Water Rights Decision 1641 that are intended to protect agricultural beneficial uses in this part of the Delta.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

- Historic record Delta pumped exports between 2000 and 2006, peaking at nearly 6.4 million acre-feet. (More recently, 2011 exports reached 6.7 million acre-feet.)

From the two NOPs, it appears the Board prepares to incorporate flow objectives for major tributaries of the San Joaquin River: the Stanislaus, the Tuolumne, and the Merced rivers. It appears to us the Board intends to require fair share flow contributions from each of these important rivers to flows of the mainstem San Joaquin as inflow to the Delta as measured at Vernalis. Our organizations welcome this prospect in concept, and support the Board's efforts toward this goal, despite legal, ecological, and engineering challenges ahead.

The 1986 Delta Water Cases decision (also named as the "Racanelli decision" for its author, presiding Justice John Racanelli of the Third District Court of Appeals in California) bears review because it defines the Board's water quality planning duties for the Delta and its watershed. (California Appeals Court, Third District 1986) When it comes to the Board's role in undertaking its duty to fulfill its water quality planning function, the Racanelli court stated:

In its *water quality* role of setting the level of water quality protection, the Board's task is not to protect water rights, but to protect 'beneficial uses.' The Board is obligated to adopt a water quality control plan consistent with the overall statewide interest in water quality [citation to California Water Code §13240] which will ensure 'the reasonable protection of *beneficial uses*' (§13241, emphasis added). Its legislated mission is to protect the 'quality of all the waters of the state...for use and enjoyment by the people of the state.' (§ 13000, 1st para., emphasis added.) (California Appeals Court, Third District 1986: 178)

Thus, protection of beneficial uses must be the Board's paramount goal in this process. Beneficial uses make up "all competing demands for water" which must receive Board attention during public trust balancing and analysis. Water rights are among the Board's implementation tools for achieving the protection of beneficial uses in California's Central Valley watershed and Delta estuary, not strictly ends in themselves in this context.

Justice Racanelli wrote that the State Water Resources Control Board has a dual role of regulating both water quality and adjudicating water rights. The Racanelli court stated:

In performing its dual role, including development of water quality objectives, the Board is directed to consider not only the availability of unappropriated water...but also *all* competing demands for water in determining what is a reasonable level of water quality protection. (California Appeals Court, Third District 1986: 179-180)

The Delta Water Cases came about because the Board construed its scope for water quality planning too narrowly, focusing on the major stakeholders in the Delta: the Bureau, the Department of Water Resources, and their respective contractors. The Board erred in doing so, the Racanelli court stated.

...the Board must consider 'past, present, and probable future beneficial uses of water'...as well as 'water quality conditions that could reasonably be achieved through the coordinated control of *all* factors which affect water quality in the area'. Unfortunately, the Board neglected to do so. (California Appeals Court, Third District 1986: 180)

That was 26 years ago. As we will indicate below, C-WIN is deeply concerned that the Board may still neglect significant, realistic alternatives that will be essential to fulfilling its water quality planning role for solving problems in the Bay-Delta estuary and the larger Central Valley watershed.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

Fortunately, the Board can avoid such neglect. Justice Racanelli wrote that the Board "need only take *the larger view of the water resources* in arriving at a reasonable estimate of all water uses, an activity well within its water rights function to determine the availability of unappropriated water." And he added, "We think a similar *global perspective* is essential to fulfill the Board's water quality planning obligations." (California Appeals Court, Third District 1986, emphasis added) Justice Racanelli stated later that the Board compromised its role in previous water quality control plans when it defined its scope for action too narrowly "in terms of enforceable water rights. In fact," the judge wrote, "the Board's water quality obligations are not so limited."

...in order to fulfill adequately its water quality planning obligations, we believe the Board cannot ignore other actions which could be taken to achieve Delta water quality, such as remedial actions to curtail excess diversions and pollution by other water users. (California Appeals Court, Third District 1986: 182)

The Board's "paramount duty" remains to "provide 'reasonable protection' to beneficial uses, considering all the demands made upon the water." Finally, Justice Racanelli concludes about the Board's water quality planning powers:

Thus, we do not believe that difficulty in enforcement justifies a bypass of the legislative imperative to establish water quality objectives which in the judgment of the Board will ensure reasonable protection of beneficial uses. (California Appeals Court, Third District 1986: 182)

C-WIN believes that a credible water quality control plan for the Bay Delta estuary must take what Racanelli deemed the "global perspective" in order to redress the ecological collapse and cumulative salinization and pollution resulting from the Board's water quality planning efforts to date. The 1994 Bay-Delta Accord's water quality control planning pendulum swung too far in favor of water right holders and water contractors, and their respective beneficial uses. The Board's duty now is to credibly balance all of the beneficial uses of water in the estuary so that public trust resources are protected, and so that reasonable uses and methods of diversion of water are employed by all water users.

In addition to the water quality planning obligations that Justice Racanelli eloquently addressed, recent state legislation provides additional authority to the State Water Resources Control Board. Using this added authority, the Board can better protect water quality and beneficial uses in the Bay-Delta Estuary and the Central Valley watershed. We point to two new laws enacted in 2009.

The State Water Resources Control Board has already fulfilled its obligation under California Water Code Section 85086(c) and (e) to prepare a public trust assessment of the Bay-Delta flow criteria needed to protect fish and wildlife beneficial uses. While not a "balancing" analysis required under public trust doctrine, the Board's *Delta Flow Criteria Report* provides valuable scientific analysis and findings that must be used to help the Board fulfill its water quality planning responsibilities and achieve protective public trust resource outcomes in the Bay-Delta estuary. The report employed the best available science in arriving at its findings. (State Water Resources Control Board 2010b)

The same legislative package also changed the California Water Code to recognize the need to reduce reliance on the Delta as a source of water for California:

85021. The policy of the State of California is to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency. Each region that depends on water from the Delta watershed shall improve its regional self-reliance for water through investment

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts.⁵

These new laws provide the Board with additional legal and political tools aiding the protection of all beneficial uses, particularly fish and wildlife beneficial uses whose protection has been neglected for decades.

The Water Code's Fully Appropriated Stream Provisions and Term 91. The Board will need to revise its 1998 water rights order concerning fully appropriated streams, and revisit its application of Term 91 curtailment of post-1978 water rights permittees. Our water availability analysis helps show where key seasonal and priority thresholds may occur under the Board's new Delta inflow objectives.

California's Water Code implicitly acknowledges the potential for over-appropriation to occur and provides a process by which the State Water Resources Control Board may take steps to avoid or prevent excessive water promises. The Board can declare streams to be fully-appropriated on a month by month basis in every watershed of California under Sections 1205 through 1207. Its statutory language is reproduced in Appendix F to this testimony.

Section 1205(b) provides that a declaration that a stream system is fully appropriated shall contain a finding that the supply of water in the stream system is fully applied to beneficial uses where the Board finds that previous water rights decisions have determined that no water remains available for appropriation. According to Section 1206(a) once a stream system is declared fully appropriated by the Board, the Board shall not accept for filing any application for a permit to appropriate water from the stream system described in the declaration, and may cancel an application pending on that date. Section 1206(b) states that the the Board may provide for exceptions to application filings under specified conditions, which may limit the purpose of use, the instantaneous rate of diversion, the season of diversion or the amount of water diverted annually.

Past State Water Resources Control Boards have declared fully-appropriated streams in California. (State Water Resources Control Board 1989; 1991; and 1998) The Board's most recent 1998 declaration included major reaches of all tributaries to the Sacramento and San Joaquin River Basins as fully appropriated, including the Trinity River. (State Water Resources Control Board 1998: Exhibit A)

The Board has also designated as fully appropriated some rivers and streams that are adjudicated or have reaches designated for protection under state and federal wild and scenic river legislation. Major portions of the Trinity, Middle Fork of the Feather, the Tuolumne, and the Merced are designated as wild and scenic rivers. Wild and scenic rivers are off-limits to appropriations year-round. Other rivers and streams are fully-appropriated primarily during irrigation season. Appendix G summarizes selected critical reaches of the Bay-Delta Estuary's Central Valley Watershed that are designated as fully-appropriated by the State Water Resources Control Board.

The Board's Full Appropriation Declaration blurs the distinction between water rights claims and water usage by claimants. Commendably, the Board has identified reaches of streams that are off-limits to new permanent applications to appropriate water. C-WIN identified several streams where it appears that the Board has excluded riparian and pre-1914 water rights in formulating its declaration. This appears to be the case on the Sacramento mainstem, the Tuolumne, the Merced, and the Yuba. On these rivers, substantial periods of the year are still officially open under the

⁵ California Water Code §85021, passed November 2009.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

Board's declaration to applications to appropriate. Substantial amounts of pre-1914 water rights do not appear to be considered in the Board's determination that a stream is fully appropriated.

Section 1205(b) does require that the Board's declaration "shall contain a finding that the supply of water in the stream system is being fully applied to *beneficial uses* where the board finds that previous water rights decisions have determined that no water remains available for appropriation." (For a list of all Bay-Delta beneficial uses, see sidebar, page 26, above.) Note that the full-appropriation declaration legislation states that the supply of water is "being fully applied to beneficial uses" and not merely to the claims of water right holders.

There is no explicit analysis in the 1998 declaration by the State Water Resources Control Board of full application of water to beneficial uses as a direct consequence of citing its water rights decisions. This means that the full appropriation declarations are likely incomplete, albeit from a different standpoint. The Board may have construed Water Code Section 1205(b) as requiring the Board to rely on its archive of water rights decision, appropriately enough. But Water Code Section 1205(b) does not expressly limit the Board to use only water rights decisions, adjudications, and other determinative documents to justify these findings as evidenced by the Board's additional reliance on wild and scenic river designations. Its approved 2010 flow objectives for the Sacramento and San Joaquin River basin (while legislated to be informational and predecisional in Water Code Section 85086(c)(1)), could also be used to support findings of full appropriation for the Sacramento River, the San Joaquin River, and their other major tributaries. Instream flows serve natural beneficial uses as surely as water rights claims serve economic uses. Accounting for these instream flows as part of full appropriation declarations would increase the periods of full appropriation to include November through June throughout the Sacramento Basin, and February through June in the San Joaquin Basin, given the magnitude of water rights claims we have identified.

Moreover, Board decisions like Water Rights Decision 1594 (D-1594) acknowledge the Board's duty to account for all beneficial uses, such as those protected by the Board's Delta water quality and flow objectives.

C-WIN's planning-level water availability analysis allocates unimpaired flow hydrology, among instream flow objectives first, followed by water rights in order of priority status for the Sacramento and San Joaquin River basins. This planning-level method of water availability analysis demonstrates that the waters of the Sacramento and San Joaquin River Basin, from a planning standpoint, should indeed be declared fully appropriated. The full spectrum of beneficial uses is fully accounted for in allocating the Basins' flows to full protection of instream beneficial uses as well as those of all water rights claimants in California's water rights priority system. Moreover, this water availability analysis uses instream flow determinations that the Board itself endorsed in 2010 as Delta protective of public trust resources. It also indicates which major claimants have either poorly reliable or no water rights once all beneficial uses are accounted for.

A problem with the State Water Resources Control Board's fully-appropriated declaration involves its reliance on Water Right Decision 1594 (D-1594) from 1984. D-1594 authorizes the Board to place into permits (whose priority dates come after August 16, 1978) a new permit condition (called Term 91) notifying all permittees of its intent to curtail diversions of water right permittees. Curtailment occurs when flow and water quality conditions in the Delta demand that reservoir releases are needed to enable the California Department of Water Resources and the US Bureau of Reclamation to meet Delta water quality standards established by the Board. August 16, 1978, is significant as the date on which the Board adopted Water Right Decision 1485. This decision made the Bureau and the Department responsible for meeting water quality objectives in the Delta.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

D-1594 expressly addresses water availability for appropriation (diversion) in the Bay-Delta Estuary's Central Valley watershed by subordinating junior appropriative water rights to adherence to Delta water quality objectives. D-1594 is cited by the State Water Board as the water right decision authority for including the Sacramento-San Joaquin Delta in the 1998 fully-appropriated streams water right order. This decision reaffirms the Board's reserved jurisdiction to revisit the season of diversion of water right permittees in the Bay-Delta Estuary watershed, and it establishes with standard permit Term 91 its authority to curtail diversions by post-1978 diverters so that storage releases by the Bureau and the Department can meet Delta water quality objectives.

In this decision, the Board states:

The availability of water for appropriative water right permittees is affected by the quantity needed to satisfy holders of prior rights and the quantity necessary for protection of other beneficial uses. (State Water Resources Control Board 1983: 2)

In the process leading up to D-1594, the Board initiated a process to conduct a planning-level water availability analysis. Unfortunately, it abandoned that analysis:

Staff had originally proposed a comprehensive analysis of water supply and demand which attempted to identify and quantify water usage by all diverters below the foothill reservoirs within the Delta watershed. [SWRCB Exhibit. 1, pp. 19-20] This approach was discontinued [apparently in April 1983, according to reporter's transcript dated April 11, 1983, p. 14, lines 16-20] due to the lack of adequate data for factors such as return flow, groundwater accretions, unmeasured tributary inflow, riparian use, appropriative use, and Delta consumptive use. (State Water Resources Control Board 1983: 9-10)

D-1594 states at least twice that application of Term 91 to post-1978 permittees is an "interim solution" or an "interim measure." Nearly 30 years later, the Board still employs Term 91's method of calculating water availability. D-1594 commits the Board to occasionally requiring the post-1978 permittees in the Delta's extensive watershed to curtail deliveries when flows are insufficient to meet Delta water quality objectives and protect the Delta's beneficial uses.

Our planning-level water availability analysis focuses on water rights claims compared to historical hydrology. As we earlier showed, it finds there are far more water right diversion claims than there are flows in the Bay-Delta Estuary's Central Valley watershed (including the Trinity River claims of the Bureau). Our water availability analysis incorporates Board-approved instream flow determination the Board approved as fully protective of public trust resources in the Bay-Delta Estuary and its watershed. Its results suggest that *making Delta water quality and flow objectives fully protective of public trust resources will require moving the priority date of Term 80 permittees far earlier than 1978 for determining when and for whom Term 91 diversion curtailments would occur.* This is necessary because the State Water Resources Control Board (2010) found that current Delta flow objectives on the mainstem and tributaries of the two basins, including the Vernalis Adaptive Management Plan on the San Joaquin River, are insufficiently protective of the Delta's fish and wildlife beneficial uses. (State Water Resources Control Board 2010: 9-10) Conversely, this means that Term 91 *currently* applies Delta water quality objectives that are well known to be ineffective at protecting public trust resources in the Delta.

C-WIN believes it will be necessary for the State Water Resources Control Board to revisit Term 91 and D-1594's method of estimating water availability in the Bay-Delta Estuary's Central Valley watershed when implementing new Delta inflow (instream flow) objectives for the Sacramento and San Joaquin River Basins and their major tributaries upstream of the Delta. For the same reason, the Board's 1998 water rights order must also be revisited to update and expand the seasons where

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

appropriations would be prohibited as a matter of protecting all beneficial uses in compliance with Water Code Section 1205 through 1207. The Board should include these actions in the Bay-Delta Plan's implementation program.

In sum: the Board has acknowledged that existing Delta water quality and flow objectives for the Bay-Delta Estuary are inadequate. (State Water Resources Control Board 2000: 5) However, the Board *assumes* these water quality and flow objectives when it enforces Term 91 on post-1978 water rights permittees. Improving these objectives will mean the Board must curtail diversions by water right permittees (also probably licensees) with priority dates *earlier* than August 16, 1978, in order for Board-required Delta water quality and flow objectives to perform their functions protecting Delta watershed public trust resources. As part of its Phase III process to implement the Bay-Delta Plan, the Board must take testimony on how to determine this earlier priority date.

In all types of hydrology and using the Sacramento River Basin flow determination of 75 percent of unimpaired flow from November through June, C-WIN's water availability analysis suggests that for the Sacramento River Basin above the Feather River confluence, and the Feather River basin itself, the earliest date for curtailment should be December 19, 1914. On the Yuba and the Bear Rivers, the date of curtailment could be somewhat later, ranging from 1924 on the Yuba to 1941 on the Bear. On the American River, the earliest date should coincide with the priority date of Placer County Water Agency's 1958 water rights.

In all types of hydrology and applying the San Joaquin River Basin flow determination of 60 percent of unimpaired flow from February through June, C-WIN's water availability analysis suggests that for the Stanislaus and Merced Rivers, the Term 91 curtailment date should be December 19, 1914. On the Tuolumne River, the Term 91 curtailment date should be 1871. On the upper San Joaquin River, our analysis suggests that Term 91 curtailment dates should be on or before the dates of the Bureau of Reclamation's permits for Friant Dam and Millerton Lake in 1916. (See Appendix D.1 for Water Availability Analysis model results.)

The Board has acknowledged that current Delta water quality and flow objectives do not protect Delta fish and wildlife beneficial uses adequately. The Board must decrease the seasons of diversion for the Delta and its major tributaries of the Sacramento and San Joaquin River Basin watersheds, because the Board is obligated under the Public Trust Doctrine to protect all beneficial uses in the Delta. To implement this obligation, the Board must also revisit its Fully-Appropriated Streams Declaration and push back the priority date used to conduct diversion curtailments under Term 91.

Court Adjudication. Still another path that may be used is that of adjudication by a court of competing water rights claims in a watershed. It may take years of painstaking testimony and argumentation by attorneys and (usually) engineers. But the present situation of extreme uncertainty and unreliability, clouded water titles, trespassing on the public trust, and related boundary disputes of many surface and groundwater water rights throughout the Bay-Delta Estuary's Central Valley watershed argues for its consideration.

In the 1930s and 1940s, staff within the Department of the Interior and the old State Water Rights Board advocated an adjudication of water rights prior to construction of the Central Valley Project. Both Governor Earl Warren and State Water Rights Board Chairman Henry Holsinger testified during the Clair Engle's Congressional hearings in 1951 that a complete adjudication of water rights on the Sacramento River should have occurred prior to the completion of the Central Valley Project. In fact, the Engle committee concluded that, "[t]hat for all practical purposes, the developed water supplies of the Sacramento River are overcommitted and oversubscribed." This was prior to approval and construction of the State Water Project. That project was predicated on obtaining some 5,000,000 acre- feet of water annually from north coastal streams (Figure 11). With the

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
 Submitted by California Water Impact Network,
 California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

exception of about 1 million acre-feet of Trinity River flows to the Central Valley Project service area, this "surplus" of surface water to the Delta system never arrived. Adjustments to the State Water Project should have been made earlier, but were not. The logical result is that the Delta's native aquatic ecosystems have collapsed.

A reliable source of surplus water for the State Water Project and the Central Valley Project eludes the Department and the Bureau, so far. Because surface water imports from north coast watersheds were precluded by wild and scenic river designations the Department and the Bureau have instead tried to establish a "water market" to transfer water from northern California across the Delta as an interim strategy for increasing water supplies in dry years for low-priority water service contractors south of the Delta. C-WIN, CSPA and AquAlliance see this as a grave threat to the regional aquifers of the Sacramento Valley from the Delta to Redding.

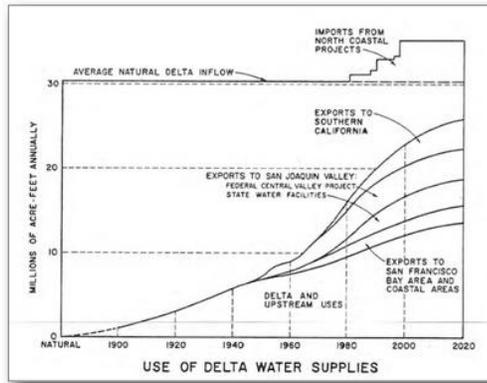


Figure 11

Source: California Department of Water Resources, 1960: 13.

This threat is manifest in "groundwater substitution transfers." In such water transfers, surface water rights are transferred by "willing sellers" to the Department or the Bureau. The agencies facilitate the transportation of the water in the deal to the buyer south of the Delta using their export pumps near Tracy. To continue producing their crop however, the seller replaces or substitutes the surface water supply with water pumped from underground. The seller is thus able to achieve a net profit from the gross revenues from selling surface water rights, less the cost of pumping water from below ground, and still can sell a crop after harvest.

Such transactions however assume that groundwater may be treated simply as an individual's property under their land. Such a legal theory runs straight into the reality of groundwater in the Central Valley watershed being a regional commons, a shared resource, particularly among all individual landowners of the Sacramento Valley who overlie its extensive aquifers. One landowner or a set of landowners in one general location may cause a region-wide cone of depression by pumping a lot of groundwater to replace surface water they sold to someone south of the Delta. Such intensive pumping can damage the wells of neighbors near to and far from the scene of the original pumping. Many of the Valley's rivers are well known as "gaining" streams—that is, surface flows are actually enhanced upslope by accretions from groundwater sources. Too much groundwater pumping lower down in the aquifers for the "surplus" benefitting only the State Water Project and the Central Valley Project could drastically lower water tables upslope and reduce river flow permanently if allowed to become "the new normal." Potentially permanent injuries to many beneficial users of water in the Sacramento Valley would result.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

A glimpse of this prospect occurred in 1994 when the Department sponsored a drought water bank program. The program resulted in damage to a municipal well and to individual wells in Durham and Cherokee areas of Butte County. More recently, the Department and the Bureau have since 2002 repeatedly sought "willing sellers" to offer surface water among the numerous public and private Sacramento Valley water right holders in Sacramento, Yolo, Sutter, Butte, Glenn, and Colusa counties. The State Water Resources Control Board in 1996 engaged in proceedings to determine the responsibility of Sacramento River Basin diverters to meet water quality standards in the Bay-Delta Estuary. The Board had completed phases 1 through 7 of the proceeding that led in 2000 to adoption of Water Rights Decision 1641 (D-1641). Phase 8 of that proceeding was to focus on the Sacramento River and its tributaries. In Phase 8, the Department of Water Resources and the Bureau of Reclamation, as operators of the state and federal export projects, claimed that certain water right holders in the Sacramento Valley must cease diversions or release water from storage to help meet water quality standards in the Delta. Sacramento Valley water users claimed that their water use has not contributed to any water quality problems in the delta, and, as senior water right holders and water users within the watershed and counties of origin, they are not responsible for meeting these standards. To avoid both litigation and independent regulatory action by the State Water Resources Control Board, water diverters throughout the Sacramento River Basin executed an agreement in April 2001. (Northern California Water Association, 2001) As a result of the Sacramento Valley Water Management Agreement, the Phase 8 process was dismissed by the State Water Resources Control Board. (State Water Resources Control Board 2001)

The Department and the Bureau have encouraged planning approaches to regional water management to facilitate water transfers, such as those in this partial list:

- The Department of Water Resources undertook a draft and final Program Environmental Impact Report in 1993 on a drought water bank, but to our knowledge has never certified this document.
- The Sacramento Valley Water Management Agreement, signed in 2002, but which ten years on still lacks a programmatic environmental review document. It expired December 31, 2010.
- The 2000 Governor's Advisory Drought Planning Panel Report, Critical Water Shortage Contingency Plan, which also promised a program environmental document on a drought response water transfer program, but was never undertaken.
- The Sacramento Valley Integrated Regional Water Management Plan of 2006, overseen by a joint powers authority of numerous water agencies in the Valley.
- DWR's last Drought Water Bank in 2009 sought authorization for over 100,000 acre-feet of temporary transfers of water, though only 16,000 acre-feet were eventually supplied to Southern California buyers.
- The Northern Sacramento Valley Integrated Regional Water Management Plan, now in development.
- The Delta Stewardship Council's Delta Plan, whose planning scope includes the entire Sacramento Valley and assumes a groundwater surplus is necessary for meeting Delta export water demands. The Council has also expressed support for water transfers using groundwater substitution.
- The Bay Delta Conservation Plan, which would provide coverage from a 50-year habitat conservation plan for Governor Brown's recently announced Peripheral Tunnels Project. This project has no identified water source, other than acknowledgement by the Bureau of Reclamation that it would reroute existing surface flows around the Delta from the Sacramento River Basin. (Vlaminis et al 2012)

C-WIN, CSPA, AquAlliance, and other knowledgeable experts are concerned that long term impacts of regional use of groundwater to substitute for transferred surface supplies will accelerate the depletion of the Valley's groundwater supplies. There are significant gaps in scientists' grasp of how

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

the aquifer system recharges; how surface flows and groundwater systems interact in the Valley's creeks and rivers; how supplies contained within upper and lower aquifers interact; how the aquifers respond in the long-term to increasingly intense demands on them, even during wetter years. And the regional effect of declines in groundwater levels on river and creek flows and riparian corridor species and wetland ecosystems has never been adequately explored. These are beneficial uses upstream along the major tributaries of the Sacramento River Basin that must also be considered part of the public trust responsibilities of the State Water Resources Control Board in its Bay-Delta Plan. (Vlamis et al 2012)

State and federal water planners assume that surface and groundwater flows will always be there to support this hoped-for surplus. Based on that assumption they continue each winter and spring to plan the next water transfer program that relies on and encourages groundwater substitution transfers. This assumption has been built into the Department and the Bureau's chief water supply and operations planning tool, CalSIM II. When surface water supplies for riparian and appropriative water right holders are exhausted in model runs through CalSIM II, the model's automatic response is to add pumped groundwater to make up for any deficit to water demands in the model. (Draper and Bourez 2004; slide 20; Close et al 2003: 26-27; California Department of Water Resources and US Bureau of Reclamation 2004: Appendix A) Sacramento Valley groundwater activity is explicitly modeled to include "minimum groundwater pumping" for those land uses that rely exclusively on groundwater in the Valley. (California Department of Water Resources and US Bureau of Reclamation et al 2004: Appendix A) San Joaquin Valley groundwater is not modeled. (Close et al 2003) This can result in low estimates of salinity reaching the south Delta. (San Joaquin Valley CalSIM II External Review 2006: 45) Upper bounds on potential pumping from aquifers in the Sacramento Valley are undefined. According to Close et al:

This does not represent reality, since, if CalSIM II is used for statewide planning, it would allow pumping of vast quantities of water for export to southern parts of the state, something which agency staff [i.e. California Bay-Delta Authority Science Program and the Association of Bay Area Governments] claim is unrealistic. Realistic upper bounds to pumping from any of the aquifers represented in the model need to be developed and implemented. (Close et al 2003: 26-27)

The Department and the Bureau responded that CalSIM II does explicitly model the "impact on groundwater storage of each sub-basin." They state that CalSIM II runs that result in groundwater pumping over and above the natural and artificial recharge and which causes depletion of the basin will cause CalSIM II to no longer run. They also state, however, that CalSIM II "does not include local ground water inventories" but instead relies on a historically-modeled calibration of approximated inventories. They state further that "no groundwater is exported from the overlying watershed (except in the form of surface water return flow or tailwater that results from irrigation using groundwater)." (California Department of Water Resources and US Bureau of Reclamation 2004: A-1) Thus, CalSIM II assumes that groundwater "backstops" surface water rights holders and their needs for supplies, when in reality groundwater now backstops river flows (and all associated beneficial uses associated with those flows). It is small comfort that CalSIM II ceases to work when a basin is depleted from the program's operations; more to the point, it fails to assume, let alone build in a rational groundwater management strategy of sustained yield.

CalSIM II's reliance on groundwater to meet overall water demand when surface supplies must not be the de facto water supply development strategy for the state of California when supplies run low. When supplies run low—as they are forecasted to as climate change affects the American West—the state and its responsible and lead agencies must increase other means of stretching water supplies. This can be done through water recycling, reuse, conservation, and a range of urban, industrial, and agricultural efficiency measures.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

Bibliography (including references in appendices)

- Cahill, V., for E.G. Brown. 2008. *Reallocation of Water Under Specified Conditions*, letter representing the California Attorney General to John J. Kirlin, Executive Director of Delta Vision, 9 July. Accessible online at http://deltavision.ca.gov/BlueRibbonTaskForce/July2008/Handouts/Item_3_Attachment2.pdf.
- California Appeals Court, Third District. 1986. *United States of America, et al, v. State Water Resources Control Board (and seven other cases)*, 182 Cal.App. 3d 82, July.
- California Department of Fish and Game. 1992. *Summary and Recommendations for the Department of Fish and Game's Testimony on the Tributaries to the Sacramento-San Joaquin Estuary*, presented to the State Water Resources Control Board, Interim Water Rights Actions Phase, Bay-Delta Estuary Proceedings, WRINT-DFG Exhibit No. 29, 8 pages.
- California Department of Water Resources and US Bureau of Reclamation. 2004. *Peer Review Response: A Report by DWR/Reclamation in Reply to the Peer Review of the CalSIM-II Model Sponsored by the CalFED Science Program in December 2003*. August. 27 pages plus six appendices. Accessible online at [http://baydeltaoffice.water.ca.gov/modeling/hydrology/Peer%20Review%20Response%20\(August%202004\).pdf](http://baydeltaoffice.water.ca.gov/modeling/hydrology/Peer%20Review%20Response%20(August%202004).pdf).
- California Department of Water Resources. 1960. *Bulletin 76: Delta Water Facilities*. December, 61 pages.
- California Department of Water Resources. 2007. *California Central Valley Unimpaired Flow Data*, 4th edition, Bay Delta Office, May, 50 pages.
- California Supreme Court. 1983. *National Audubon Society, et al., v. The Superior Court of Alpine County and Department of Water and Power of the City of Los Angeles, et al.* S.F. 24368. Filed February 17, 1983. Cited as 33 Cal.3d 419, 189 Cal.Rptr. 346, cert. denied, 464 U.S. 977. Accessible online at <http://www.monobasinresearch.org/images/legal/nassupct.htm>.
- California Water Project Authority, 1951. *Data and Information on the Central Valley Project*, October 29, 66 pages.
- Close, A., Hanneman, WM, Labadie, JW, Loucks, DP, Lund, JR, McKinney DC, and Stedinger, JR. 2003. *A Strategic Review of CALSIM II and its Use for Water Planning, Management, and Operations in Central California*. December 4, 129 pages. Accessible online at <http://sacramentoportal.org/modeling/CALSIM-Review.pdf>.
- Domagalski JL, Knifong DL, McCoy DE, Dileanis PD, Dawson BJ, and Majewski MS. 1998. *Water Quality Assessment of the Sacramento River Basin, California—Environmental Setting and Study Design*. United States Geological Survey Water Resources Investigations Report 97-4254. National Water Quality Assessment Program. Accessible online at <http://pubs.er.usgs.gov/publication/wri974254>.
- Draper, A, and Bourez, W. 2004. *CalSIM II Sacramento River Basin Hydrology Enhancements*. Powerpoint presentation, February 26. 58 slides. Accessible online at <http://www.cwemf.org/Asilomar/Draper.pdf>.
- Garner, B.A., ed. 2010. *Black's Law Dictionary*, Abridged Ninth Edition.
- Gronberg, JM, Dubrovsky NM, Kratzer CR, Domagalski JL, Brown LR, and Burow KR. 1998. *Environmental Setting of the San Joaquin-Tulare Basins, California*. United States Geological Survey Water Resources Investigations Report 97-4205. National Water Quality Assessment Program. Accessible online at <http://pubs.er.usgs.gov/publication/wri974205>.
- Holsinger, H. 1936. *Comments Pertaining to Some Fundamental Theories of California Water Law*. An address presented before Sacramento Section, American Society of Civil Engineers on February 4, manuscript in the Water Resources Collections and Archives, University of California, Riverside.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

Bibliography (including references in appendices)

- Horwitz, M.J. 1977. *The Transformation of American Law, 1780-1860*, Cambridge, MA: Harvard University Press, 356 pages.
- Hutchins, W.A.. 1956. *The California Law of Water Rights*, prepared for the US Department of Agriculture, 571 pages.
- Kibel P.S. 2011. Instream Flow and the Public Trust: Statutory Innovation in California's 2009 Delta Reform Act. 13 Water Resources Committee Newsletter 4 (ABA, January 2011). Accessible online at <http://digitalcommons.law.ggu.edu/pubs/444/>
- Knowles, N. and D.R. Cayan. 2002. Potential effects of global warming on the Sacramento/San Joaquin watershed and the San Francisco estuary. *Geophysical Research Letters* 29(18): 1891-1894. Accessible online at http://cirrus.ucsd.edu/~pierce/crd/globalwarming/knowles_cayan_2002.pdf.
- Littleworth, A.L. and E.L. Garner, *California Water II*, 2nd edition, Point Arena, CA: Solano Press Books, 2007, 428 pages.
- Northern California Water Association. 2001. *The Sacramento Valley Water Management Agreement*. 28 pages including three appendices. Accessible online at http://www.norcalwater.org/res/docs/sac_valley_water_mgmt_agrmt.pdf.
- O'Laughlin, T. 2011a. *Draft Technical Workshop: Need to Disclose Legal Theory Behind Intended Plan of Implementation*. Letter to Charlie Hoppin, Frances Spivy-Weber, Tam Doduc, and Dwight Russell, State Water Resources Control Board, February 22, 3 pages. Accessible online at http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/docs/sjrf_sprtrinfo/022211sirga2.pdf.
- O'Laughlin, T. 2011b. *SWRCB's Jurisdiction in the Bay-Delta Proceedings*, Letter to Charlie Hoppin, Frances Spivy-Weber, and Tam Doduc, State Water Resources Control Board, June 27, 2 pages. Accessible online at http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/docs/sjrf_sprtrinfo/062711sirga2.pdf.
- Pearsall, J., ed. 1999. *Oxford Concise English Dictionary*, Tenth Edition.
- Review Panel. 2010. *The Vernalis Adaptive Management Program (VAMP)*, prepared for the Delta Science Program, May 11, 45 pages. Accessible online at http://www.sjrg.org/peerreview/review_vamp_panel_report_final_051110.pdf.
- San Joaquin River Group Authority. 2000. *San Joaquin River Agreement*, and Appendix A: Vernalis Adaptive Management Plan. Accessible online at <http://www.sjrg.org/agreement.htm>.
- San Joaquin River Group Authority. 2008. *South Delta Hydrology and Water Rights: Comments of the San Joaquin River Group Authority*, prepared by O'Laughlin & Paris LLP, Chico, CA, 8 July, 73 pages plus appendices. Accessible online at http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/strategic_plan/comments/south_delta_diversion_report.pdf.
- San Joaquin River Group Authority. 2011. *2010 Annual Technical Report on Implementation and Monitoring of the San Joaquin River Agreement and the Vernalis Adaptive Management Plan (VAMP)*. Prepared for the California Water Resources Control Board in compliance with D-1641. September. 167 pages. Accessible online at http://www.sjrg.org/technicalreport/2010/2010_SIRGA_Annual_Technical_Report.pdf.
- San Joaquin Valley CalSIM II External Review. 2006. *Review Panel Report: San Joaquin River Valley CalSIM II Model Review*. 12 January. 87 pages. Accessible online at http://science.calwater.ca.gov/pdf/calsim/calsim_II_final_report_011206.pdf.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

Bibliography (including references in appendices)

- Soulé, F. 1901. "Irrigation from the San Joaquin River," in Elwood Mead, *Report of Irrigation Investigations*, US Department of Agriculture Office of Irrigation Investigations. Accessible at University of California at Riverside, Water Resources and Collections Archives, Call No. G4094 C1.
- State Water Resources Board. 1951. *Bulletin No. 1: Water Resources of California*, State of California, 648 pages.
- State Water Resources Control Board. 1983. *Water Right Decision 1594: In the Matter of Water Right Permits in the Sacramento-San Joaquin Delta Watershed in which the Board Reserved Jurisdiction to Change the Season of Diversion (Term 80 Permits)*, November 1983, 61 pages, plus Appendix A, and Order WR 84-2, amending and affirming Decision 1594 and Denying Petitions for Reconsideration, February 1984, 29 pages. Accessible online at http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1550_d1599/wrd1594.pdf.
- State Water Resources Control Board. 1989. *Order WR 89-25: In the Matter of Declaration of Fully Appropriated Stream Systems in California: Order Adopting Declaration of Fully Appropriated Stream Systems and Specifying Conditions for Acceptance of Applications and Registrations*. November 16, 58 pages plus Exhibit A. Accessible online at http://www.swrcb.ca.gov/waterrights/board_decisions/adopted_orders/orders/1989/wro89-25.pdf.
- State Water Resources Control Board. 1991. *Order WR 91-07: In the Matter of Declaration of Fully Appropriated Stream Systems in California: Order Revising Declaration of Fully Appropriated Stream Systems*. August 22, 28 pages plus revisions to Exhibit A. Accessible online at http://www.swrcb.ca.gov/waterrights/board_decisions/adopted_orders/orders/1991/wro91-07.pdf.
- State Water Resources Control Board. 1992. *Draft Water Right Decision 1630: San Francisco Bay/Sacramento-San Joaquin Delta Estuary*, December, 121 pages.
- State Water Resources Control Board. 1994. *Mono Lake Basin Water Right Decision 1631: Decision and Order Amending Water Right Licenses to Establish Fishery Protection Flows in Streams Tributary to Mono Lake and to Protect Public Trust Resources at Mono Lake and in the Mono Lake Basin*, September 28, 212 pages. Accessible online at http://www.swrcb.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1631.pdf.
- State Water Resources Control Board. 1998. *Order WR 98-08: In the Matter of Declaration of Fully Appropriated Stream Systems in California: Order Revising Declaration of Fully Appropriated Stream Systems*. November 19, 28 pages plus Exhibit A. Accessible online at http://www.swrcb.ca.gov/waterrights/board_decisions/adopted_orders/orders/1998/wro98-08.pdf.
- State Water Resources Control Board. 2000. *Revised Water Right Decision 1641: In the Matter of Implementation of Water Quality Objectives for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary; A Petition to Change Points of Diversion of the Central Valley Project and the State Water Project in the Southern Delta; and A Petition to Change Places of Use and Purposes of Use of the Central Valley Project*, December 29, 1999, revised in accordance with Order WR 2000-02, March 15, 193 pages. Accessible online at http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1641_1999dec29.pdf.
- State Water Resources Control Board. 2001. *Order WR 2001-05*. April. Accessible online at http://www.swrcb.ca.gov/waterrights/board_decisions/adopted_orders/orders/2001/wro2001-05.pdf.

Water Availability Analysis
Workshop 3 Testimony, Bay Delta Plan
Submitted by California Water Impact Network,
California Sportfishing Protection Alliance, and AquAlliance

No comments

- n/a -

Bibliography (including references in appendices)

- State Water Resources Control Board. 2008. *Water Rights Within the Bay-Delta Watershed*. Provided to the Delta Vision Blue Ribbon Task Force for its October 16 and 17, 2008, meeting. Document dated September 26, 2008, 4 pages. Accessible online at [http://deltavision.ca.gov/BlueRibbonTaskForce/Oct2008/Response from SWRCB.pdf](http://deltavision.ca.gov/BlueRibbonTaskForce/Oct2008/Response%20from%20SWRCB.pdf).
- State Water Resources Control Board. 2010. *Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem*, prepared pursuant to the Sacramento-San Joaquin Delta Reform Act of 2009, 178 pages. Accessible online at http://www.swrch.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/final_rpt.shtml
- State Water Resources Control Board. 2011a. *Revised Notice of Preparation and Notice of Additional Scoping Meeting (San Joaquin River Flow and South Delta Water Quality Objectives)*, 18 pages. Accessible online at http://www.swrch.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/docs/notice_sjr_flow_southern_delta_scoping_mtg_with_attachments.pdf.
- State Water Resources Control Board. 2011b. California Code of Regulations, Title 23 Waters, Division 3 State Water Resources Control Board and Regional Water Quality Control Boards (Sections pertaining to water rights), January, 168 pages. Accessible online at http://www.swrch.ca.gov/laws_regulations/docs/wrregs.pdf.
- State Water Resources Control Board. 2011c. *Technical Report on the Scientific Basis for Alternative San Joaquin River Flow and Southern Delta Salinity Objectives*. October, 170 pages, including appendices. Accessible online 6 December 2011 at http://www.swrch.ca.gov/water_issues/programs/peer_review/docs/sanjoaquin_river_flow/technical_report.pdf.
- Steinberg, T. 1991. *Nature Incorporated: Industrialization and the Waters of New England*. Amherst, MA: University of Massachusetts Press, 284 pages.
- Stevens, J.S. 2005. *Applying the Public Trust Doctrine to River Protection*, presentation given June 9, 2004 at University of California at Davis, reprinted in California Department of Water Resources, *California Water Plan Update 2005, Volume 4*, pp. 393-400. Accessible online at <http://www.waterplan.water.ca.gov/docs/cwpu2005/vol4/vol4-environment-applyingpublictrustdoctrine.pdf>.
- US Department of the Interior. 2000. *Record of Decision: Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement/Environmental Impact Report*. December. 28 pages plus three appendices. Accessible online at <http://odp.trrp.net/Library/Details.aspx?document=227>.
- Vlams, B., Krieger, C., and Jennings, B. 2012. *Letter re: Initial Study and Proposed Negative Declaration for the Butte Water District 2012 Water Transfer Program*, to Mark Orme, General Manager, Butte Water District, Gridley, CA, March 29, 2012, 22 pages.
- Wiel, S.C. 1928. The Pending Water Amendment to the California Constitution, and Possible Legislation (Concluded), *California Law Review* 16(4): 257-280, May.
- Wilson, C.M. 2011. *The State Water Resources Control Board's Role in Implementing the Delta Plan*, Report to the State Water Resources Control Board and the Delta Stewardship Council by the Delta Watermaster. 8 pages. Accessible online at http://www.swrch.ca.gov/board_info/agendas/2011/mar/031511_9att.pdf.
- Wilson, C.M. 2012. *Water Right Compliance and Enforcement in the Delta*. Report to the State Water Resources Control Board and the Delta Stewardship Council by the Delta Watermaster. 9 pages. Accessible online at http://www.swrch.ca.gov/board_info/agendas/2012/feb/020712_9_with%20report.pdf.

No comments

- n/a -

**Appendix A
River Flow Regulation to the Bay-Delta Estuary**

In 1992, the Board proposed in a draft Bay-Delta water right decision regulating flows to the Delta from the San Joaquin River Basin by apportioning responsibility for Delta inflows according to the size of major reservoirs on the Basin's major tributary streams. This draft decision was withdrawn by order of then-governor Pete Wilson. While the Board considers regulating inflows from the San Joaquin River tributaries once again, many years of delay have elapsed: This section recounts and evaluates the Board's record regulating inflows to the Delta from the San Joaquin River Basin.

After backing away from its "global" approach to regulating inflow to the Delta from the San Joaquin River in 1993, the State Water Resources Control Board instead chose to continue regulating Delta conditions in part by regulating flow and water quality at Vernalis. In Water Rights Decision 1641 (D-1641), the Board assigned responsibility for meeting the Vernalis water quality standards to the California Department of Water Resources and the US Bureau of Reclamation and added interior Delta salinity objective monitoring sites to evaluate compliance by the Department and the Bureau. The Department has no regulating reservoirs of its own on San Joaquin River Basin rivers, so it fell to the Bureau to provide most of the flows to Vernalis from the Basin to meet the Board's objectives there. The bulk of the flows the Bureau has available for this purpose come from its New Melones Dam and Reservoir facility on the Stanislaus River. This strategy has been largely unsuccessful for the Bureau, the Department and the Board. Migratory fish populations and open water fish populations endemic to the Delta have crashed over the last decade since D-1641 was implemented. An experiment to provide helpful spring flows for migratory salmon, called the Vernalis Adaptive Management Plan, has achieved only limited results (Review Panel, 2010).

Table 13 summarizes the State Water Resources Control Board's present river flow objectives set for compliance at Vernalis and Rio Vista. These flow criteria were adopted as part of its Water Right Decision 1641 (D-1641) in 2000. Under D-1641, the Board currently regulates flows on the San Joaquin River at Vernalis during two main periods of the year: February 1 through June 30, and throughout the month of October. Within the February to June period, there are two regimes as well. One flow regime is in place from February 1 through April 14 and then again from May 16 through the end of June. The second flow regime occurs generally from April 15 to May 15, a 31-day period in which spring pulse flows are required to increase over the early and late spring periods. The spring pulse flow is intended to aid young salmon smolts migrating to the ocean by improving their chances of survival as they pass through the Delta. Minimum flow criteria in this spring regime vary depending on the water year type, and the water year type is generally finally forecasted by May 1. Note that these flow rates are a monthly average, which allows for great variability as long as the average is maintained throughout the 30-day running average during these flow regimes.

October minimum flows must be 1,000 cubic feet per second or greater using a 30-day running average. This is a period of time when adult fall-run Chinook salmon return from the ocean to migrate upstream and spawn in their natal streams. Again, as with the February through June regime, the use of a 30-day running average allows upstream water right holders wide latitude in providing flows that meet the Vernalis flow standard for October as long as the 30 day running average during October is not less than 1,000 cubic feet per second of flow.

Instead of implementing D-1641 San Joaquin River flow objectives to benefit fish and wildlife, the State Water Resources Control Board approved the San Joaquin River Agreement under which the major water right holders of the San Joaquin River Basin agreed to provide spring pulse flows

Appendix A

Table 13
State Water Resources Control Board
D-1641 Flow Regulations at Vernalis

Compliance Location	Water Year Type	Time Period	Minimum Monthly Average Flow Rate (cfs)
Sacramento River at Rio Vista	All	September	3,000
	W, AN, BN, D	October	4,000
	Critically Dry	October	3,000
	W, AN, BN, D	Nov-Dec	4,500
	Critically Dry	Nov-Dec	3,500
San Joaquin River at Airport Way Bridge, Vernalis	W, AN	Feb-Apr 14 and May 16-Jun	2,130 or 3,420
	BN, D		1,420 or 2,280
	C		710 or 1,140
	W	Apr 15 to May 15	7,330 or 8,620
	AN		5,730 or 7,020
	BN		4,620 or 5,480
	D		4,020 or 4,880
	C		3,110 or 3,540
All	October	1,000	

Source: State Water Resources Control Board, 2000.
Key to Water Year Types: W = Wet; AN = Above Normal; BN = Below Normal; D = Dry; C = Critically Dry.

intended to benefit outmigrating salmon smolts.¹ The Board agreed to its provisions as a voluntary approach to achieve the objectives. In exchange for providing these spring pulse flows totaling up to 110,000 acre-feet, the Agreement called upon the state and federal pumps in the south Delta to limit their export rates to certain specified levels. The Agreement further called upon the state, federal and San Joaquin River Group Authority member agencies to participate in an annual experimental study of the effects of these pulse flows on salmon smolt survival and other ecological indicators in the San Joaquin River in the Vernalis area. That study was called the Vernalis Adaptive Management Plan (VAMP).

The State Water Resources Control Board hoped that by using VAMP to implement its D-1641 flow criteria for the San Joaquin River at Vernalis, the scientific study would find salmon smolt survival is closely related to the humanly manageable actions of river flow, export limits at the pumps, and maintaining a barrier at the head of Old River to direct smolts toward

Suisun Bay and the Pacific Ocean via the most direct and safest route. The Board also hoped that increased smolt survival would contribute to increased salmon escapement (that is, fish leaving the ocean in late summer and early fall to spawn in the fall).

¹ The parties to the agreement included California Departments of Water Resources and Fish and Game; United States Department of the Interior agencies Reclamation and Fish and Wildlife; and member agencies of the San Joaquin River Group Authority: South San Joaquin and Oakdale irrigation districts on the Stanislaus River; Modesto and Turlock irrigation districts on the Tuolumne; Merced Irrigation District on the Merced River; and Central California Irrigation District, Firebaugh Canal Water District, Columbia Canal Company, and San Luis Canal Company on the upper San Joaquin River. Other parties included state and federal water contractors south of the Delta export pumps, and two environmental community parties: the Natural Heritage Institute and the Bay Institute of San Francisco.

No comments

- n/a -

Appendix A

The VAMP seeks to test the hypothesis that increasing San Joaquin River flows, sharply limiting Delta export pumping during the spring pulse flow period, and blocking fish access to Old River (which leads to the state and federal export pumps) will increase survival rates of young salmon juveniles and smolts migrating through the Delta to the Pacific Ocean (San Joaquin River Group Authority, 2000: Section 2.5).

The 110,000 acre-feet of water from these agencies was intended for use in reaching "target flows" under VAMP at Vernalis that increased flow in the San Joaquin at Vernalis over defined

Existing Flow (cfs)	Single Step Target Flow (cfs)	Double-Step Target Flow (cfs)
0 to 1,999	2,000	3,200
2,000 to 3,199	3,200	4,450
3,200 to 4,449	4,450	5,700
4,450 to 5,699	5,700	7,000
5,700 to 6,999	7,000	Existing Flow
7,000 or greater	Existing flow	Existing flow

Source: San Joaquin River Agreement, 2000, Articles 5.5 and 5.6.

No comments

- n/a -

Year	VAMP Target Flow Period	Target flow Condition	VAMP Target Flow	Actual Mean Flow	Existing Flow	VAMP Supplementing Flows (AF)	Delta Export Target	Actual Delta Exports
2000	4/15-5/15	Double-step	5,700	5,869	4,800	77,680	2,250	2,155
2001	4/20-5/20	Single-step	4,450	4,224	2,909	78,650	1,500	1,420
2002	4/15-5/15	Single-step	3,200	3,301	2,757	33,430	1,500	1,430
2003	4/15-5/15	Single-step	3,200	3,235	2,290	58,065	1,500	1,446
2004	4/15-5/15	Single-step	3,200	3,155	2,088	65,591	1,500	1,331
2005	5/1-5/31	na[a]	>7,000	10,390	10,390	0	2,250	2,986[b]
2006	5/1-5/31	na[a]	>7,000	26,220 to 24,262 [c]	26,020	0	1,500 to 6,000	1,599 to 5,748[c]
2007	4/22-5/22	Single-step	3,200	3,263	2,721	33,330	1,500	1,486
2008	4/22-5/22	Single-step	3,200	3,163	1,939	75,250	1,500	1,520
2009	4/19-5/19	Off-ramp	na	2,260	2,260	0	na	1,990
2010	4/25-5/25	Single-step	4,450	5,140	4,830	23,980	1,500	1,515
Average VAMP Supplementing Flows						40,543	Acre-feet	

Source: San Joaquin River Group Authority 2011: Table 2-8; California Water Impact Network. Notes: [a] Existing flow greater than maximum VAMP Target Flow of 7,000 cfs; [b] May 1 through 25 average was 2,260 cfs; exports were increased starting May 26 in conjunction with increasing existing flow; May 26 through 31 average was 6,012 cfs; [c] "First fish release-recapture period"/"Second fish release-recapture period"; "na" means not available or not applicable.

No comments

- n/a -

"existing flows" that would occur in the River in the absence of the VAMP flows. The VAMP flows were intended to be released during the spring pulse flow period coinciding with the State Water Resources Control Board's flow criteria period of April 15 through May 15 (or a reasonable 31-day period thereabouts based on the presence or absence of migrating salmon). The Agreement employs the State Board's water year classification scheme as an indicator for determining target flows. Wet years would have an indicator of 5, decreasing by one to Critical years having an indicator of 1. Double step target flows could be invoked under VAMP in situations where the sum of present plus current water year indicators added to 7 or greater. When that occurred, a "double step" target flow, showed in Table 14, would become the new target flow.

The Agreement also limits Central Valley Project and State Water Project export pumping during this same mid-April to mid-May period. Combined export rates for the pumps would be limited to no more than 1,500 cubic feet per second when Vernalis target flows are between 2,000 and 4,450 cubic feet per second. When the target flow reach 5,700 cubic feet per second, combined export rates are limited to no more than 2,250 cubic feet per second. And when target flows reach 7,000 cubic feet per second, the pumping plants are limited either to 1,500 or 3,000 cubic feet per second (San Joaquin River Group Authority, 2000: Article 6.4). The rationale for this "either/or" export rate at the high VAMP target flow is explained in Appendix A of the Agreement as a matter of safety and operational capacity of installing the barrier at the head of Old River and minimum pumping capacity of the export pumps, as well as the intent of the US Fish and Wildlife biological opinion that export rates in this period be less than 50 percent of the required Vernalis standard. Hence, the export pumping rate at a target flow of 7,000 cubic feet per second would be able to go as high as 3,000 cfs (San Joaquin River Group Authority, 2000, Appendix A, p. 3).

At present, VAMP is a 12-year study. Through 2010, double step target flows have been invoked once (San Joaquin River Group Authority [SJRG], 2011: Table 2-8). Table 15 below summarizes VAMP flow activity from 2000 to 2010 (SJRG, 2011). This table shows that over the course of the VAMP experiments through 2010, average supplemental VAMP flow contributions have averaged just 40,543 acre-feet per year, about 37 percent of the maximum annual commitment by SJRG agencies of 110,000 acre-feet for VAMP.

Previous studies have shown that salmon smolt survival could be enhanced if increased flows were directed primarily down the mainstem of the San Joaquin River below Vernalis past Stockton (Review Panel, 2010). To facilitate fish using that route, the San Joaquin River Agreement called upon the Department of Water Resources to install a fish barrier at the head of Old River (which is a direct route for San Joaquin River water to the state and federal export pumps near Old River at the export pumps where fish can be all too easily entrained and killed).

In the event that more water than the 110,000 acre-feet was needed to meet target flows, the US Bureau of Reclamation and the California Department of Water Resources could approach the agencies making up the San Joaquin River Group Authority as willing sellers of additional water. As Table 15 reveals, neither the Bureau nor the Department needed to purchase additional water for VAMP flows, since no VAMP flows exceeded 110,000 acre-feet.

VAMP results have largely been inconclusive because there have been only a narrow range of flows subject to VAMP researchers. The State Water Resources Control Board permitted the VAMP experiment to proceed in D-1641 for over a decade. Table 16 compares spring pulse flow range criteria set by the State Board in D-1641 with mean (average) VAMP flows. For years with VAMP results (of which there were only 8 of 11 total), only four years yielded VAMP results that actually complied with D-1641 flow criteria at Vernalis (2000, 2001, 2007, and 2008). Four other VAMP flow years were *beneath* the D-1641 flow criteria, and did not comply with the Board's adopted objective. It appears that VAMP as a regulatory experiment performs adequately only half the time when it can be invoked. Of the three years with no VAMP flow results, two were wet years (2005 and 2006) where high flows on the San Joaquin overwhelmed the need to regulate or experiment. The

Appendix A

remaining year (2009) was considered an "off-ramp" year (that is, a dry year following two critically dry years). VAMP and Agreement requirements were in part short-circuited by prolonged dry weather in order to protect upstream water supply reliability. It appears from these results that VAMP and the San Joaquin River Agreement have failed to "provide the environmental benefits in the lower San Joaquin River and Delta at a level of protection equivalent to the San Joaquin River portion of the 1995 WQCP for the duration of this Agreement (SJRGA, 2000: Section 2.5.3)." In effect, protective flows for Delta public trust resources such as Chinook salmon populations have been delayed for the sake of seeking greater scientific certainty.

Table 16
Comparison of D-1641 Spring Pulse Flow Criteria and Mean Actual VAMP Flows, 2000-2010 (Years with VAMP Results Only)

Year	San Joaquin River Basin Water Year Type	Spring Pulse Flow Range Criteria, D-1641 (cubic feet per second)	Mean Actual VAMP Flows (cubic feet per second)
2000	Above Normal	5,730 or 7,020	5,869
2001	Dry	4,020 or 4,880	4,224
2002	Dry	4,020 or 4,880	3,301
2003	Below Normal	4,620 or 5,480	3,235
2004	Dry	4,020 or 4,880	3,155
2007	Critically Dry	3,110 or 3,540	3,263
2008	Critically Dry	3,110 or 3,540	3,163
2010	Above Normal	5,730 or 7,020	5,140

Source: SJRGA, 2011; State Water Resources Control Board, 2000; California Water Impact Network. **Years in bold did not comply with minimum D-1641 flow criteria.**

No comments

- n/a -

No comments

- n/a -

Appendix B

Omission of the Upper San Joaquin River from the Bay-Delta Plan

The Board proposes different flow objectives for the Sacramento and San Joaquin Rivers. C-WIN and CSPA applaud the State Water Resources Control Board's decision to include the major tributaries of the San Joaquin River Basin (specifically, the Stanislaus, the Tuolumne, and Merced rivers) and of the Sacramento River Basin (the Trinity [via Central Valley Project facilities], Pit, Feather, Yuba, Bear, and American) in its proposed analysis of San Joaquin River flow requirements and the scope of the Bay-Delta Plan. The Upper San Joaquin River (above its confluence with the Merced River) is excluded from the Plan by the Board. The Board has not provided adequate rationale to justify excluding the Upper San Joaquin River from the "project area" for purposes of environmental evaluation of proposed San Joaquin River flow criteria. The State Water Resources Control Board wants to use the criterion of "salmon-bearing tributaries" to justify excluding the upper San Joaquin River. The Board then states in a footnote:

Currently, the San Joaquin River does not support salmon runs upstream of the Merced River confluence (upper San Joaquin River). However, pursuant to the San Joaquin River Restoration Program (SJRRP), spring-run Chinook salmon are planned to be reintroduced to the upper San Joaquin River no later than December 31, 2012. Flows needed to support this reintroduction are being determined and provided through the SJRRP. During the next review of the Bay-Delta Plan, the State Water Board will consider information made available through the SJRRP process, and any other pertinent sources of information, in evaluating the need for any additional flows from the upper San Joaquin River Basin to contribute to the narrative San Joaquin River flow objective. State Water Resources Control Board 2011a: Map on page 1 and narrative on page 3 of Attachment 2)

In essence, if it adheres to this reasoning during this process, the State Water Resources Control Board would allow the SJRRP to determine what those flows are to be, and would allow the SJRRP to dictate the Board's time schedule for Basin-wide flow objective-setting and implementation. This provides incentive to minimize the upper San Joaquin River's contribution to overall basin flows to benefit the Delta. It will put greater pressure on the water right holders on the tributaries of the San Joaquin to provide additional flows. In its Water Rights Orders 2010-0029 and 2009-0058-DWR, the Board authorized interim schedules for "experimental flows" sought by the parties to the San Joaquin River Restoration Program and settlement agreement. At minimum, these interim flows should be incorporated into the project description, so that it is clear that upper San Joaquin River flows will contribute to solving flow and water quality problems in the Delta. In addition, there needs to be a basic description in the Substitute Environmental Document of how future contributions from the upper San Joaquin River will contribute to improving the health of the Bay-Delta estuary. This can be expressed in the form of project alternatives, but it must not be deferred.

No comments

- n/a -



Two common measures of water amounts are "acre-feet (AF)" and "cubic feet per second (cfs)." An acre-foot is 325,851 gallons of water, and is a measure of the *volume* of water, or about the amount of water that two families of four in California consume in a year. (There are 748052 gallons to a cubic foot, and 43,560 cubic feet in an acre-foot.) Cubic feet per second measures the *rate of flow* of a volume of water: a cubic foot of water that flows past a given point within a second of time passing. Since there are 43,560 square feet to an acre, 3600 seconds in an hour and 24 hours in a day and 365.25 days in an average year, one cubic foot per second flowing yields about 1.98 acre-feet per day in volume, or about 724.46 acre-feet in a year's time. For perspective, the San Joaquin River Basin's "unimpaired flow" has been estimated by the California Department of Water Resources to average about 6.18

Figure C-2: Location of Sacramento Valley floor in the Sacramento River Basin. Source: Domagalski et al 1998.

million acre-feet per year. The average annual natural or unimpaired flow of the Upper San Joaquin River (above its confluence with the Merced River) is about 1.8 million acre-feet.

"Unimpaired flow" is one of several phrases (such as "full natural flow", "natural flow", and "natural runoff") used by the California Department of Water Resources to approximate "what would have occurred" on California streams "had man not altered the flow of water in the basin." (California Department of Water Resources, 2006: 5). Estimation of unimpaired flow by the Department typically assumes the current configuration of contemporary altered rivers, dams, levees, and the absence of former wetlands, floodplains and other features of rivers that may no longer exist. In some instances, it is possible that "natural flow," other things being equal might be less than "unimpaired flow" in a situation where wetlands and floodplains were reconstructed. These features of rivers tend to absorb water or at a minimum slow the rate of flow. For this report, unimpaired flows are used for the description and analysis of natural Basin hydrology, but the reader should keep in mind that, other things being equal, restoration of more natural conditions in the Basin might yield flows somewhat lower than those characterized by unimpaired conditions.

No comments

- n/a -

The State Water Resources Control Board employs a measure of water rights it calls "face amount" or "face value" that it applies to the rights it administers. Typically, descriptions of water rights have three basic components that describe the quantity of the right:

- "Direct diversion rates" (usually measured in cubic feet per second, or older rights may be stated in "miners inches")
- "Collection to storage" or "contribution to storage" which is the amount of water that may be cumulated in a reservoir.
- "Season" during which the diversions and collections are permitted to occur under the water right. For a season that is "January 1 to December 31 inclusive"

To estimate the face amount, the direct diversion rate is converted to cubic feet per day (that is, 3600 seconds in an hour multiplied by 24 hours in a day), then multiplied by the number of days contained in the diversion season to derive a maximum volume (in cubic feet) for the entire diversion season. That amount is divided by 43,560 square feet per acre, to arrive at the acre-footage volume for the diversion season. If a storage amount (in acre-feet) is included in the water right, it is either substituted because it represents a cap on the entire collection to storage for the year, or is added to the diversion volume to arrive at the total face amount. The water right terms and conditions in state-issued permits and licenses usually say whether the collection to storage is capped or not.

Additional geographic components of water rights are used to pinpoint both where the diversion and/or storage occur and where the water so diverted/stored is to be used. These are the "point of diversion" and the "place of use." This information is presented frequently in terms of the American "township and range system." The base map meridian in the San Joaquin River Basin is always the Mount Diablo Base and Meridian ("MDB&M"). For some rights, a familiar water facility is stated.

Finally, the water rights also state what the "purpose of use" for the water is intended: most often in the San Joaquin River Basin the purposes of use are for "irrigation" or "power generation" (meaning the generation of hydroelectricity by running water through power plant turbines). Other uses may include fish and wildlife, recreation, municipal, and industrial uses.

Water Rights and Water Law in California

The use of water is first and foremost a matter of owning rights to its *use*. In our capitalist economy, this means use of water is a form of property right. This kind of property right is known as a *usufruct*. *Black's Law Dictionary* defines a usufruct as:

"a right for a certain period to use and enjoy the fruits of another's property without damaging or diminishing it, but allowing for any natural deterioration in the property over time." (Garner 2010)

A usufruct, according to the Oxford English Dictionary, "is a right to use another's property short of the destruction or waste of its substance." (Pearsall 1999) As water lawyers Arthur Littleworth and Eric Garner wrote, "Water rights are usufructuary, a right to the use of water, not a right to own it." (Littleworth and Garner 2007: 27) The 20th century California water law authority, Wells Hutchin, wrote: "Water flowing in a natural stream is not the subject of private ownership," and cites the California Supreme Court's earliest water rights decision which stated in part, "the right of property in water is *usufructuary*, and consists not so much of the fluid itself as the advantage of its use. (Hutchins 1956: 36; *Eddy v. Simpson* 3 Calif 249 (1853), 252)"

Appendix C

The history of water rights in California has long been contentious. The state legislature beginning at statehood never passed a law that established California's water rights system. Instead, it was cobbled together by the court system on a case-by-case basis. In all cases, water rights in California give their owner a right to use, but not to hoard or otherwise possess water; all uses must be reasonable. The question, of course, is "what is reasonable?"

Riparian Rights

Prior to statehood, California's territorial legislature adopted the English Common Law for its legal code. This action implied that landowners had riparian rights to water, consistent with the common law, when they owned property abutting a stream. **Riparian rights** are predominant in California and are held by those who own parcels of land that abut a flowing stream or spring. (Analogously, land owners may possess "overlying rights" to pump water from the ground for use on their property.) Riparian water rights are "part and parcel of the land" and are held in common with other riparian land owners along the same stream. A map of the streams of California gives an impression of the large number of potential riparian water right holders there are in California (Figure C-3). Riparian water rights are not quantified. But right holders along a stream share the river in common. They may make explicit agreement with neighbors divert water subject to reasonable use. Riparian water right holders may irrigate their lands immediately adjacent to the river, and their drainage must be returned to the river. They may have small ponds, under California state law, for purposes of managing their irrigation efforts, watering livestock, and incidental domestic uses. Riparian rights are the predominant water right in California and riparian diverters have priority to divert for use before prior appropriators do. Unlike appropriative water rights (see below), riparian water rights cannot



Figure C-3
Source: U.S. Geological Survey.

No comments

- n/a -

be lost to the right holder from disuse. However, in specific circumstances such rights may be severed from land, usually having to do with land subdivision.

Appropriative Water Rights

Appropriative water rights are the other major form of water rights in California. Under the doctrine of prior appropriation, right holders gain the right to use a specific quantity of water from a stream, and no more. They may move that water out of the watershed. In California, this right arose in the Sierra Nevada mining districts in the 1850s, though the right's doctrine was known in the humid eastern United States where it facilitated American accommodation of mill-wheel technology to water law (Steinberg 1991; Horwitz 1977: 34-40). It follows the logic of mining claims: the miner who was first in time had the prior right not only to the mining claim but to the water in the adjacent stream needed to work the claim. "First in time, first in right," is the familiar adage for this right. Appropriators may divert their supplies only in order of the dates of their claims. The earlier the claim in time, the more senior the right. In dry years such a right has a more reliable water supply than rights with later dates of claim. Rights later in time are considered to be more junior, and have lower reliability of actual supply in dry years.

Appropriative rights have another important aspect: the water right must be *diligently exercised* year-in and year-out. The water must be applied to beneficial use under the right or else the right can be lost. "Use it or lose it," is another familiar adage for appropriative water rights. Once someone obtains the right, they must develop the facilities to divert, transport and store the water in a diligent manner, and once those facilities are completed, the water must be demonstrably used to the extent the right allows, or the right to use may be reduced or lost. Generally, long-distance canals, dams, and hydropower plants are the subjects of appropriative water rights. But it is also true that small ditches to parcels non-riparian in their location may rely on appropriative water rights to divert water to a ditch that irrigates some acreage, provides private domestic use, facilitates a mining claim, or runs a small hydroelectric generator.

Prescriptive Rights

Prescriptive rights come into play when one water user uses water adversely to the rights of another. They may divert water for years without discovery or objection by a neighboring user. In California, if that usage continues for five years or longer, that use may be demonstrated in court to have ripened into a legitimate right through the prescripitor's adverse use against the other existing right holder(s). This right has come into play in some instances in the San Joaquin River Basin, most notably involving rights held by San Francisco, and rights that came to be acquired by the US Bureau of Reclamation on the upper San Joaquin River.

State Water Rights Regulation

There are other water rights in California besides these. Groundwater is the subject of overlying rights. These rights are analogous to riparian rights because land owners may drill wells to pump groundwater for use on their properties. And like riparian rights, their overlying rights are held in correlation to the rights of neighbors over the same underground reservoir (or "aquifer") of water. In other words, both riparian and overlying rights holders use water from their sources in common with those of other adjacent land owners. Their rights are not quantified, but receive a percent share of the yield of the river or aquifer. Groundwater rights are not described in this report, but are very important to the history and use of water throughout the San Joaquin Valley. Groundwater has never been formally regulated by a state-level administrative agency. But some groundwater basins are regulated under supervision of court-appointed watermasters.

Appendix C

Until 1914, California water rights were obtained either by purchasing riparian land or by posting a noticed claim at the site of the intended river diversion or dam site, and then recording that claim within a specified time at the local County Recorder's office. Beginning December 19, 1914, the start date for California's formal administrative system of water rights regulation approved by referendum, appropriative water rights may only be obtained by filing an application with the state water rights board. Today, that regulatory authority is vested in the Division of Water Rights of the State Water Resources Control Board. Applications are prioritized by the date on which they are filed with the Division, and have been since December 19, 1914.

However, the Water Commission Act only committed California to regulate appropriative water rights moving forward from December 19, 1914. Riparian and appropriative rights (now known as "pre-1914" water rights) created before this date are unregulated from the new water rights administration. While unregulated, the State Water Resources is empowered to investigate these prior water rights (both riparian and pre-1914). There is disagreement about how far the Board's authority reaches in adjusting rights that might, for example, come into conflict with post-1914 water rights.

Legally speaking, stream flows are first available to riparian diverters, and any surplus determined by the State Water Resources Control Board is then available for appropriation by other water rights applicants. In deciding whether to permit a new water right on a stream, the State Water Resources Control Board performs a water availability analysis that determines whether such a surplus is available for new appropriations.

Exceptional Water Rights: The State Filings

Before taking up analysis of "paper water" in the San Joaquin River Basin in detail, it is necessary to present background and context for where the tremendous quantities of federal Bureau of Reclamation water rights originated.

California, on one hand, has a rather complex water rights system, what some scholars and attorneys call the "California Doctrine" (e.g., Holsinger 1936). Riparian right holders (owners of riparian lands) generally have paramount (but unquantified) claim to a correlative (i.e., "pro rata" fair share) of waters of a stream or lake, followed by appropriators who made their claims prior to 1914 and who perfect their quantified flow and storage rights by diligent completion of their facilities and diversion for use. The next class of water right holders are those who applied for rights to appropriate and use water through California's permit system that began in December 1914. These right holders are regulated by the State Water Resources Control Board today. Riparian and pre-1914 right holders are exempt from the Board's permit process.

Because of the California Doctrine and the state's water rights permit and license system, priority of application of water to use has long been the established system for determining whose rights get served and whose don't during droughts. One of the more difficult problems for state water policy, in the 1920s, became how the state could acquire water rights for a project of statewide scope when claims, permits, and licenses for water rights (especially the system for *acquiring* water rights) cumulated as the state's economy developed through time. How could the state gather the rights it needed to move forward with statewide coordinated water development? The state was clearly a late-comer to obtain water rights for a state-sponsored system, and its rights were likely to face larger cutbacks during droughts than those with more senior rights on the same river systems.

When the Water Code was adopted by the State Legislature in 1914, it included (and still includes) Sections 104 and 105, which state:

No comments

- n/a -

Appendix C

Section 104. It is hereby declared that the people of the State have a paramount interest in the use of all the water of the State and that the State shall determine what water of the State, surface and underground, can be converted to public use or controlled for public protection.

Section 105. It is hereby declared that the protection of the public interest in the development of the water resources of the State is of vital concern to the people of the State and that the State shall determine in what way the water of the State, both surface and underground, should be developed for the greatest public benefit.

These provisions provide a policy rationale, if not the tools, for the State to intervene in the cumulating claims of water rights (essentially private rights) on behalf of the public interest in coordinated water development. Provoked by growing perceptions of shortage around the fast-developing state, which were aggravated by drought and litigation in the early 1920s¹, the State of California came up with its first statewide plan to develop and reallocate water to meet the state's water problems. In 1925, state planners realized they had to address how water rights could be obtained without injury to vested rights. The California Water Project Authority describes the problem this way in 1951:

With respect to the protection of water rights and water requirements in carrying out such a plan of coordinated development, [a 1925 report to the Legislature on California's water resources] contains the following statement...:

The whole discussion of the diversion of surplus waters from the Sacramento River into the San Joaquin Valley, must be predicated upon the institution of a coordinated development in both valleys that gives full protection against present or future loss to the owners of vested rights and to present users of water as well as to those potential users whose lands lie tributary to streams from which exportations of water are proposed. (California Water Project Authority, 1951: 21-23)

A 1926 California Supreme Court decision once again upholding riparian over appropriative rights made the water rights issue for statewide development even more immediate. In 1927, a Legislative committee studying the "coordinated plan of development" recommended the legislature "*at once* take the necessary steps, either through its proper officials or by legislation, to file on or withdraw from filing by private parties the water rights to be utilized and required for the consummation of the coordinated plan. (California Water Project Authority, 1951: 23; italics added)"

The Legislature passed the Feigenbaum Act, Chapter 286, Statutes of 1927² to authorize the California Department of Finance to file applications for water rights "for any water which in its judgment is or may be required in the development and completion of the whole or any part of a general or coordinated plan looking toward the development, utilization, or conservation of the water resources of the State."³ The Act gave the State the power to literally but fictitiously *stop time* for the purpose of filing applications for water rights on behalf of the state water plan:

¹ The case of *Town of Antioch v. Williams Irrigation District*, the first Delta water case that attempted to address low Delta inflows and tidal salinity intrusion, was filed during dry conditions in 1920, and decided by the California Supreme Court in 1922.

² Today, portions of its provisions live on in Water Code sections 10500 and 10504, while other sections of the Feigenbaum Act were subsequently repealed in 1953. The Feigenbaum Act is also mentioned in Jackson and Mikesell, (1979: 29).

³ Water Code §10500, quoted in California Water Project Authority (1951: 28).

No comments

- n/a -

Appendix C

Section 10501. Any application filed by the Department of Finance within nine months after July 29, 1927, has priority as of that date and such priority shall be retained over any application made by others subsequent application made by others subsequent to that date in conflict therewith, regardless of any requirements or provisions for water or the use thereof, until October 1, 1955.

Section 10502. Any priority under this part may be maintained and extended by further legislative enactment.⁴

The Feigenbaum Act further empowered the Department of Finance to "release from priority or assign any portion of any appropriation filed by it under this part when the the release or assignment is for the purpose of development not in conflict with such general or coordinated plan." While benefiting from a special state-filed priority date under the Act, assignees would still be obligated to proceed with their water development plans with due diligence. Assignees of these applications could include state agencies, commissions, and departments, as well as the United States of America or any of its departments or agencies.⁵

Subsequent legislation also enables counties and watersheds of origin to benefit from such state filing assignments. State filings provide the State of California with the water rights-equivalent of a "wild card" (within some limits) that can reserve, withdraw or otherwise control the waters of any California river or stream so that they may be incorporated into either the State Water Project or the Central Valley Project, either for export or to benefit areas of origin—until or unless that state filing right is revoked by the State Water Resources Control Board.

State Filings for San Joaquin River Basin Water Rights

According to State Water Resources Control Board records, there have been 26 state filings on rivers and creeks of the San Joaquin River Basin since enactment of the Feigenbaum Act in 1927.⁶ They are listed in Appendix J. The filings include claims for creeks and tributaries of the Stanislaus, Merced, and San Joaquin Rivers. No state filings appear to exist for the Tuolumne River.

In the San Joaquin River Basin, state filings were assigned to the US Bureau of Reclamation to develop Friant Dam, its associated Madera and Friant-Kern Canals, and New Melones Dam and Reservoir on the Stanislaus River. State filing Application 5638 was assigned to the Bureau to supplement earlier, insufficient water rights applications for the Friant Dam site filed in 1916 and 1919.

The rest of the state filings are as yet unassigned and therefore technically (if not politically) still in play with regard to coordinated statewide water development and/or area of origin claims. For example, Application 5949 (priority date of July 30, 1927) on the south fork of the Stanislaus River has been the subject of requests for assignment by Pacific Gas & Electric Company (beginning in 1951) and by Tuolumne Regional Water District (1980s). Neither request for assignment was acted on by the State, deferring action until some sort of coordinated plan of development was further

⁴ These sections were repealed in 1953.

⁵ Water Code § 10504, quoted in California Water Project Authority (1951). This provision remains in effect today.

⁶ According to eWRIMS, the State Water Board's online water rights application database, there are 185 active state filings. San Joaquin River Basin state filings amount to about 14 percent of all state filings at this time. Excel file accessed and downloaded 12 November 2010 and updated in July 2011. They may be found by searching on both California Department of Finance and State Water Resources Control Board.

No comments

- n/a -

along. Meanwhile, 184 other state filings throughout California have similar status as Application 5649.

Additional file research at the State Water Resources Control Board Records Room would be necessary to determine the current status of these and other state filing applications.

Reasonable Use of Water

Even before Californians amended their constitution in 1928, legal precedents set by California courts required that water use among riparians had to be reasonable, and water use between appropriators had to be reasonable. Appropriators also were accountable to riparians for reasonable use. Major political conflict arose about water rights though because California law contained no requirement that the water use of riparians with respect to appropriators had to be reasonable. Then, in 1928, California voters approved an amendment to the California Constitution that required all water use in California by any water right holder (riparians included) had to be reasonable and not wasteful.⁷ The California Constitution stresses that "the right to water...does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water." Where riparian rights were once entitled to the "full natural flow" of the stream to which the rights attached, the California Constitution now limits attachment of the riparian right to "no more than so much of the flow thereof as may be required or used consistently with this section, for the purposes for which such lands are, or may be made adaptable, in view of such reasonable and beneficial uses" without "depriving any riparian owner of the reasonable use of water of the stream...or as depriving any appropriator of water to which the appropriator is lawfully entitled."

The question remains under this doctrine: what uses, methods of use, and methods of diversion represent are reasonable, and how does that translate into more efficient allocation and use of water so that waste of water and significant environmental impacts of water development are avoided or at least mitigated? In case law, the answer is a matter of the facts involved.

The new Delta Watermaster, Craig M. Wilson, whose office was created by the water reform legislation of 2009, calls the Reasonable Use Doctrine "the cornerstone of California's complex water rights laws. All water use must be reasonable and beneficial regardless of the type of underlying water right. No one has an enforceable property interest in the unreasonable use of water. (Wilson, 2011: 3)"

⁷ [Article X, Section 2 of the California Constitution.](#)

No comments

- n/a -

No comments

- n/a -

Appendix D
Supporting Data and Analyses

Contents

- D.1 Water Availability Analysis Spreadsheet Models**
- D.2 Unimpaired Flow Hydrology**
- D.3 Adjudication Decree Quantification**
- D.4 Consumptive Statements of Diversion and Use**
- D.5 Other Pre-1914 Consumptive Water Rights**
- D.6 Post-1914 Consumptive Water Rights**
- D.7 Sacramento River Post-1914 Water Rights Priorities**

No comments

- n/a -

Appendix D

Section D.1

Water Availability Analysis Spreadsheet Models

Trinity River Water Rights Yield Analysis

75% Inflow Criterion Scenario	Water Year Flow Percentile										
	10th Percentile	20th Percentile	25th Percentile	30th Percentile	40th Percentile	Median Flow	60th Percentile	70th Percentile	75th Percentile	80th Percentile	90th Percentile
Total Annual Unimpaired Flow (TAF)	679	789	824	866	1,025	1,133	1,424	1,582	1,611	1,683	2,035
November through June Unimpaired Flow (TAF)	624	743	785	836	968	1,064	1,341	1,455	1,529	1,599	1,930
Delta Inflow Criterion (75% of UF, TAF)	468	557	589	629	736	798	1,006	1,081	1,147	1,199	1,448
Diversion Cap (TAF)	156	186	195	210	242	266	335	364	382	400	483
Riparian and Pre-1914 Claimants (134.1 TAF)	126	126	126	126	126	126	126	126	126	126	126
USBR 1927 Trinity Claim (3,349.9 TAF)	30	60	70	84	116	140	209	238	256	274	357
USBR 1959 Trinity Claim (3,030.6 TAF)	0	0	0	0	0	0	0	0	0	0	0
USBR 2002 Trinity Claim (2,203.1 TAF)	0	0	0	0	0	0	0	0	0	0	0
Remaining Flows, July-October	55	46	39	27	57	69	62	127	82	65	105
Riparian and Pre-1914 Claimants (134.1 TAF)	8	8	8	8	8	8	8	8	8	8	8
USBR 1927 Trinity Claim (3,349.9 TAF)	47	37	31	19	49	61	74	119	74	77	97
USBR 1959 Trinity Claim (3,030.6 TAF)	0	0	0	0	0	0	0	0	0	0	0
USBR 2002 Trinity Claim (2,203.1 TAF)	0	0	0	0	0	0	0	0	0	0	0
Total Riparian and Pre-1914 Claimants	134	134	134	134	134	134	134	134	134	134	134
Total USBR Trinity Claims	77	97	101	103	165	201	284	327	330	350	454

No comments

- n/a -

Feather River Water Rights Yield Analysis

Tributary Inflow Criteria	Diversion Cap		90% average regulated period share of flow during water year										
	75%	60%	50%	40%	30%	20%	10%	Flow	Percentile	Percentile	Percentile	Percentile	Percentile
75% Inflow Criterion													
Total Annual Unimpaired Flow (TAF)	2,607	2,511	2,638	2,932	3,251	3,854	4,596	5,673	5,767	6,268	7,095		
November through June Unimpaired Flow (TAF)	1,705	2,150	2,270	2,562	2,893	3,466	4,201	5,160	5,260	5,583	6,470		
Delta Inflow Criterion (75% of UF, TAF)	1,276	1,612	1,703	1,921	2,170	2,600	3,151	3,870	3,945	4,187	4,852		
Diversion Cap (TAF)	426	538	568	640	723	867	1,050	1,290	1,315	1,396	1,617		
Paramount Riparian and Possibly Prior Pre-1914 Water Right Holders (Total 3,493 TAF)	426	538	568	640	723	867	1,050	1,290	1,315	1,396	1,617		
South Feather WPA and Thermaito Water & Sewer 1920s Rights (331.8 TAF)	0	0	0	0	0	0	0	0	0	0	0		
DWR 1927, 1951, and 1956 Rights (10,417.2 TAF)	0	0	0	0	0	0	0	0	0	0	0		
North Yuba Water District 1958 Rights (624 TAF)	0	0	0	0	0	0	0	0	0	0	0		
DWR 1967 Right (83 TAF)	0	0	0	0	0	0	0	0	0	0	0		
Remaining Flow July-October (TAF)	303	360	368	371	359	388	395	513	507	685	625		
Paramount Riparian and Possibly Prior Pre-1914 Water Right Holders (Total 3,493 TAF)	303	355	355	355	355	355	355	355	355	355	355		
South Feather WPA and Thermaito Water & Sewer 1920s Rights (331.8 TAF)	0	6	13	16	4	33	34	34	34	34	34		
DWR 1927, 1951, and 1956 Rights (10,417.2 TAF)	0	0	0	0	0	0	7	124	118	297	236		
North Yuba Water District 1958 Rights (624 TAF)	0	0	0	0	0	0	0	0	0	0	0		
DWR 1967 Right (83 TAF)	0	0	0	0	0	0	0	0	0	0	0		
Total Riparian and Pre-1914	729	892	922	965	1,078	1,221	1,405	1,645	1,670	1,750	1,972		
Total South Feather & Thermaito	0	6	13	16	4	33	34	34	34	34	34		
Total DWR	0	0	0	0	0	0	7	124	118	297	236		
Total North Yuba Water District	0	0	0	0	0	0	0	0	0	0	0		

No comments

- n/a -

No comments

- n/a -

Yuba River Water Rights Yield Analysis

Tributary Inflow Criteria	Diversion Cap	94% average regulated period share of flow during water year										
		10th Percentile	20th Percentile	25th Percentile	30th Percentile	40th Percentile	Median Flow	60th Percentile	70th Percentile	75th Percentile	80th Percentile	90th Percentile
75% Inflow Criterion												
Total Annual Unimpaired Flow (TAF)		921	1,231	1,262	1,521	1,626	2,123	2,428	2,949	3,164	3,284	3,765
November through June Unimpaired Flow (TAF)		884	1,151	1,268	1,428	1,746	2,006	2,280	2,780	2,993	3,079	3,681
Delta Inflow Criterion (75% of U_F, TAF)		663	863	951	1,078	1,300	1,505	1,710	2,085	2,245	2,310	2,761
Diversion Cap (TAF)		221	288	317	329	437	502	570	695	748	770	920
Paramount Riparian and Possibly Prior Pre-1914 Water Right Holders (1,497 TAF)		221	288	317	329	437	502	570	695	748	770	920
Nevada ID and Yuba County Water District 1920s Rights (212.6 TAF)		-	-	-	-	-	-	-	-	-	-	-
Yuba County Water Agency 1927 Right (1,159 TAF)		-	-	-	-	-	-	-	-	-	-	-
Nevada ID 1920s Rights (212.6 TAF)		-	-	-	-	-	-	-	-	-	-	-
North Yuba Water District 1958 Rights (145.1 TAF)		-	-	-	-	-	-	-	-	-	-	-
Nevada ID 1961 Right (101.2 TAF)		-	-	-	-	-	-	-	-	-	-	-
Yuba County Water Agency 1966 Rights (76) TAF)		-	-	-	-	-	-	-	-	-	-	-
Remaining Flow July-October (TAF)		27	94	95	81	90	117	148	169	171	204	84
Paramount Riparian and Possibly Prior Pre-1914 Water Right Holders (1,497 TAF)		27	80	85	83	80	85	85	85	85	85	84
Nevada ID and Yuba County Water District 1920s Rights (212.6 TAF)		-	-	10	-	-	12	12	12	12	12	-
Yuba County Water Agency 1927 Right (1,159 TAF)		-	-	-	-	-	20	51	66	66	66	-
Nevada ID 1920s Rights (212.6 TAF)		-	-	-	-	-	-	-	6	8	12	-
North Yuba Water District 1958 Rights (145.1 TAF)		-	-	-	-	-	-	-	-	8	-	-
Nevada ID 1961 Right (101.2 TAF)		-	-	-	-	-	-	-	-	-	6	-
Yuba County Water Agency 1966 Rights (76) TAF)		-	-	-	-	-	-	-	-	-	15	-
Total Riparian & Pre-1914		258	268	402	442	516	587	635	780	833	825	1,094
Total Nevada ID and YCWD Yields		0	0	10	0	0	12	12	12	12	12	0
Total Yuba County Water Agency Yields		0	0	0	0	0	20	51	66	66	66	0
Total North Yuba Water District Yield		0	0	0	0	0	0	0	0	8	8	0
Total Nevada ID Yield		0	0	0	0	0	0	0	0	0	6	0

Blue River Water Rights Yield Analysis

No comments

- n/a -

Tributary Inflow Criteria	Diversion Cap										
	75% of unimpaired flow	60% of unimpaired flow	50% of unimpaired flow	40% of unimpaired flow	0% average regulated period share of flow during water year						
75% Inflow Criterion	10th Percentile	20th Percentile	25th Percentile	30th Percentile	40th Percentile	Median Flow	60th Percentile	70th Percentile	75th Percentile	80th Percentile	90th Percentile
Total Unimpaired Flow (TAF)	102	137	171	181	247	290	384	434	452	489	567
November through June Unimpaired Flow (TAF)	102	130	155	177	239	278	365	410	453	482	553
Delta Inflow Criterion (75% of UF, TAF)	76	98	128	132	179	209	274	308	340	361	415
Diversion Cap (TAF)	25	33	41	44	60	70	91	103	113	120	138
Paramount Riparian and Possibly Prior Pre-1914 Water Right Holders (92.1 TAF)	25	33	41	44	60	70	89	89	89	89	89
Camp Far West 1918 Right (4.8 TAF)	0	0	0	0	0	0	0	0	0	0	0
Nevada ID 1921 Rights (77.5 TAF)	0	0	0	0	0	0	0	0	20	27	45
Camp Far West 1922 and 1924 Rights (8.6 TAF)	0	0	0	0	0	0	0	0	0	0	0
Nevada ID 1929 Right (50.9 TAF)	0	0	0	0	0	0	0	0	0	0	0
Camp Far West 1941 Right (5 TAF)	0	0	0	0	0	0	0	0	0	0	0
South Sutter Water District 1952 Right (139.5 TAF)	0	0	0	0	0	0	0	0	0	0	0
Lake of the Pines 1966 Right (4.2 TAF)	0	0	0	0	0	0	0	0	0	0	0
South Sutter Water District 1981 Right (130.7 TAF)	0	0	0	0	0	0	0	0	0	0	0
Remaining Flow July-October (TAF)	1	7	6	4	0	12	18	24	9	7	11
Paramount Riparian and Possibly Prior Pre-1914 Water Right Holders (92.1 TAF)	1	3	3	3	3	3	3	3	4	4	3
Camp Far West 1918 Right (4.8 TAF)	0	0	0	0	0	0	0	0	0	0	0
Nevada ID 1921 Rights (77.5 TAF)	0	3	2	1	3	3	3	3	1	1	3
Camp Far West 1922 and 1924 Rights (8.6 TAF)	0	0	0	0	0	0	0	0	0	0	0
Nevada ID 1929 Right (50.9 TAF)	0	0	0	0	2	2	2	2	2	0	2
Camp Far West 1941 Right (5 TAF)	0	0	0	0	0	0	0	0	0	0	0
South Sutter Water District 1952 Right (139.5 TAF)	0	0	0	0	0	4	0	0	1	0	5
Lake of the Pines 1966 Right (4.2 TAF)	0	0	0	0	0	0	0	0	0	0	0
South Sutter Water District 1981 Right (130.7 TAF)	0	0	0	0	0	0	5	0	0	0	1
Total Riparian & Pre-1914 Yield	26	30	44	47	63	75	89	92	92	92	92
Total Camp Far West Yield	0	0	0	0	1	3	3	3	3	3	5
Total Nevada ID Yield	0	3	2	1	4	4	4	13	24	30	49
Total South Sutter Water District Yield	0	0	0	0	0	4	0	0	1	0	6
Total Lake of the Pines Yield	0	0	0	0	0	0	0	0	0	0	0

No comments

- n/a -

Tributary Inflow Criteria	Diversion Cap		Water Year Flow Percentile										
	75% of unimpaired flow	60% of unimpaired flow	10th Percentile	20th Percentile	25th Percentile	30th Percentile	40th Percentile	Median Flow	60th Percentile	70th Percentile	75th Percentile	80th Percentile	90th Percentile
75% Inflow Criterion Scenario													
Total Annual Unimpaired Flow (TAF)	5,372	6,984	2,371	2,877	3,860	4,862	6,162	7,046	8,151	9,442	10,897	12,359	13,819
November through June Unimpaired Flow (TAF)	4,638	5,876	1,710	2,085	2,721	3,462	4,162	4,851	5,638	6,425	7,212	8,000	8,787
Delta Inflow Criterion (75% of UF, TAF)	3,479	4,487	1,762	2,184	2,911	3,642	4,572	5,308	6,044	6,975	7,906	8,837	9,768
Diversion Cap (TAF)	1,893	1,498	1,612	1,701	1,920	2,291	2,863	3,165	3,421	3,679	3,937	4,195	4,452
Paramount Riparian and Prior Pre-1914 Water Right Holders (42,261.8 TAF)	1,190	1,809	1,542	1,701	1,920	2,291	2,863	3,165	3,421	3,679	3,937	4,195	4,452
Water Right Holders with Petitions 1915 to Early 1927 (1,252.4 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Early CVP Sacramento River State Filings, Other Claimants, 1927-1936 (11,263.6 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
1938 CVP and Post-War Claimants through June 1951 (8,145.4 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
1951 Feather River Project, CVP, State Filings, Other Claimants through 1961 (18,501.4 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Remaining Flows, July-October (TAF)	934	1,107	1,201	1,071	1,139	999	1,595	1,493	1,257	1,263	1,263	1,263	1,263
Paramount Riparian and Prior Pre-1914 Water Right Holders (42,261.8 TAF)	934	1,107	1,201	1,071	1,139	999	1,595	1,493	1,257	1,263	1,263	1,263	1,263
Water Right Holders with Petitions 1915 to Early 1927 (1,252.4 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Early CVP Sacramento River State Filings, Other Claimants, 1927-1936 (11,263.6 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
1938 CVP and Post-War Claimants through June 1951 (8,145.4 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
1951 Feather River Project, CVP, State Filings, Other Claimants through 1961 (18,501.4 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Paramount Riparian and Possibly Prior Pre-1914 Water Right Holders (1,433.3 TAF)	2,091	2,526	2,743	2,773	2,869	3,290	3,858	4,657	4,679	4,802	4,802	4,802	4,802
Total, 1915-Early 1927 Claimants (up to 1,252.4 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total 1927-1936 Claimants (14,613.5 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total 1938-June 1951 Claimants (8,145.4 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total 1951 through 1961 Claimants (18,501.4 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0

Stamets River Water Rights Yield Analysis

No comments

- n/a -

60% Instream Flow Criterion	Tributary Inflow Criteria		Diversion Cap		85% Average of Regulated Period to Total Flow during Water Year															
	60%	50%	40%	30%	40% of unimpaired flow	50% of unimpaired flow	60% of unimpaired flow	70% of unimpaired flow	10th Percentile	20th Percentile	25th Percentile	30th Percentile	40th Percentile	Median Flow	60th Percentile	70th Percentile	75th Percentile	80th Percentile	90th Percentile	
Total Annual Unimpaired Flow (TAF)	457	592	637	680	894	1,107	1,265	1,359	1,460	1,559	1,612									
Feb-June Unimpaired Flow Level (TAF)	382	500	551	566	740	822	994	1,077	1,127	1,160	1,189									
Delta Inflow Criterion (60% of UF, TAF)	239	300	330	340	444	493	596	646	676	708	725									
Diversion Cap (TAF)	153	200	220	226	296	329	398	431	451	472	583									
Paramount Riparian and Possibly Prior Pre-1914 Water Right Holders (29.4 TAF)	25	25	25	25	25	25	25	25	25	25	25									
Pre-1914 Oskdale ID Claims (1,371.4 TAF)	128	175	195	201	271	304	372	406	425	447	588									
Total USBR Post-1914 Claims (3,400 TAF)	0	0	0	0	0	0	0	0	0	0	0									
Remaining Flows, July through January	79	92	87	114	154	265	271	282	333	380	454									
Paramount Riparian and Possibly Prior Pre-1914 Water Right Holders (29.4 TAF)	4	4	4	4	4	4	4	4	4	4	4									
Pre-1914 Oskdale ID Claims (1,371.4 TAF)	70	88	82	110	150	199	199	199	199	199	199									
Total USBR Post-1914 Claims (3,400 TAF)	0	0	0	0	0	61	67	79	129	176	250									
Total Riparian and Pre-1914 Yield	39	39	39	39	39	39	39	39	39	39	39									
Total Oskdale ID Claims	198	262	277	311	421	503	572	605	625	646	758									
Total USBR Claims	0	0	0	0	0	61	67	79	129	176	250									

Tuolumne River Water Rights Yield Analysis

No comments
- n/a -

Tributary Inflow Criteria	Diversion Cap		75% Average of Regulated Period to Total Flow during Water Year										
	60%	40%	10th Percentile	20th Percentile	25th Percentile	30th Percentile	40th Percentile	Median Flow	60th Percentile	70th Percentile	75th Percentile	80th Percentile	90th Percentile
60% Instream Flow Criterion													
Total Annual Unimpaired Flow (TAF)	836	1,053	1,107	1,163	1,216	1,266	1,316	1,366	1,416	1,466	1,516	1,566	1,616
Feb-June Unimpaired Flow Level (TAF)	575	698	751	804	857	910	963	1,016	1,069	1,122	1,175	1,228	1,281
Delta Inflow Criterion (60% of UF, TAF)	405	539	572	591	613	629	647	664	682	699	717	734	751
Diversion Cap (TAF)	270	359	384	394	475	520	531	682	702	741	741	875	875
Gallo Riparian and Tuolumne Utilities District Pre-1914 Claims (22.6 TAF)	17	17	17	17	17	17	17	17	17	17	17	17	17
Turlock ID/Modesto ID 1855 and 1871 Claims (3,382.1 TAF)	253	342	367	376	458	502	514	665	685	724	724	858	858
San Francisco 1901, 1902, and 1908 Claims (1,840.1 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Modesto ID 1908 Claim (40 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
San Francisco 1908 through 1911 Claims (4,114.9 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Turlock ID 1911 Claim (100 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Remaining Flow, July-January	161	154	146	199	228	417	451	477	609	631	631	804	804
Gallo Riparian and Tuolumne Utilities District Pre-1914 Claims (22.6 TAF)	5	5	5	5	5	5	5	5	5	5	5	5	5
Turlock ID/Modesto ID 1855 and 1871 Claims (3,382.1 TAF)	155	149	141	193	222	412	446	471	603	626	626	804	804
San Francisco 1901, 1902, and 1908 Claims (1,840.1 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Modesto ID 1908 Claim (40 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
San Francisco 1908 through 1911 Claims (4,114.9 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Turlock ID 1911 Claim (100 TAF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Riparian and Senior Pre-1914 Claims	23	23	23	23	23	23	23	23	23	23	23	23	23
Total Turlock ID/Modesto ID Claims	408	491	508	570	680	964	1,060	1,136	1,288	1,349	1,349	1,662	1,662
Total San Francisco Claims	0	0	0	0	0	0	0	0	0	0	0	0	0

Morced River Water Rights Yield Analysis

No comments

- n/a -

60% Instream Flow Criterion	Tributary Inflow Criteria		Diversion Cap		81% Average of Regulated Period to Total Flow during Water Year															
	60%	50%	40%	30%	40% of unimpaired flow	50% of unimpaired flow	60% of unimpaired flow	70% of unimpaired flow	10th Percentile	20th Percentile	25th Percentile	30th Percentile	40th Percentile	Median Flow	60th Percentile	70th Percentile	75th Percentile	80th Percentile	90th Percentile	
Total Annual Unimpaired Flow (TAF)	409	492	577	562	669	906	1,077	1,160	1,220	1,389	1,708									
Jan-June Unimpaired Flow Level (TAF)	326	432	459	471	566	646	805	924	977	1,030	1,223									
Delta Inflow Criterion (60% of UF, TAF)	196	259	275	283	341	389	483	554	586	618	734									
Diversion Cap (TAF)	130	173	183	189	227	259	322	370	391	412	489									
Decrees + Riparian Claims (282.7 TAF)	130	173	183	189	227	226	226	226	226	226	226									
Morced ID Pre-1914 Claims + SDUs (4,193.3 TAF)	0	0	0	0	0	31	94	142	163	184	261									
Remaining Flow, July-January	82	60	69	91	101	258	272	336	283	359	465									
Decrees + Riparian Claims (282.7 TAF)	55	55	55	55	55	55	55	55	55	55	55									
Morced ID Pre-1914 Claims + SDUs (4,193.3 TAF)	27	5	14	36	46	203	217	181	188	304	430									
Total Riparian and Pre-1914 Yield	185	226	236	244	282	283	283	283	283	283	283									
Total Morced ID Pre-1914 Yield	27	5	14	36	46	235	311	323	351	469	692									

San Joaquin River Water Rights Yield Analysis

No comments

- n/a -

Tributary Inflow Criteria	77% Average of Regulated Period to Total Flow during Water Year										
	10th Percentile	20th Percentile	25th Percentile	30th Percentile	40th Percentile	Median Flow	60th Percentile	70th Percentile	75th Percentile	80th Percentile	90th Percentile
60% Instream Flow Criterion											
Total Annual Unimpaired Flow (TAF)	813	928	1,052	1,128	1,257	1,449	1,684	2,047	2,195	2,322	3,018
Feb-June Unimpaired Flow Level (TAF)	656	749	839	881	1,007	1,137	1,458	1,572	1,623	1,779	2,075
Delta Inflow Criterion (60% of UF, TAF)	394	450	503	529	604	682	875	943	974	1,068	1,245
Diversion Cap (TAF)	262	300	335	353	403	455	583	629	649	712	830
Paramount Riparian Claims (171.7 TAF)	131	131	131	131	131	131	131	131	131	131	131
Pre-1914 San Joaquin River Exchange Contractors Claims (816.6 TAF)	131	168	204	221	271	323	452	497	518	580	625
Pre-1914 Chowchilla, Tranquility & James Claims (111.1 TAF)	0	0	0	0	0	0	0	0	0	0	74
Patterson ID 1910 Claims (60.2 TAF)	0	0	0	0	0	0	0	0	0	0	0
Post-1914 USBR Claims (623.2 TAF)	0	0	0	0	0	0	0	0	0	0	0
Remaining Flow, July-December	157	179	214	248	250	312	396	475	572	543	942
Paramount Riparian Claims (171.7 TAF)	40	40	40	40	40	40	40	40	40	40	40
Pre-1914 San Joaquin River Exchange Contractors Claims (816.6 TAF)	117	139	173	191	191	191	191	191	191	191	191
Pre-1914 Chowchilla, Tranquility & James Claims (111.1 TAF)	0	0	0	15	19	26	26	26	26	26	26
Patterson ID 1910 Claims (60.2 TAF)	0	0	0	0	0	14	14	14	14	14	14
Post-1914 USBR Claims (623.2 TAF)	0	0	0	0	0	40	124	146	146	146	146
Total Riparian Claims Yield	172	172	172	172	172	172	172	172	172	172	172
Total SIREC Claims Yield	348	307	377	413	463	515	643	689	709	772	817
Total Chowchilla, et al, Yield	0	0	0	15	19	26	26	26	26	26	100
Total Patterson ID Yield	0	0	0	0	0	14	14	14	14	14	14
Total USBR Yield	0	0	0	0	0	40	124	146	146	146	146

No comments

- n/a -

Appendix D

**Section D.2
Unimpaired Flow Hydrology**

No comments

- n/a -

Unpaired Flow Hydrology for Trinity, Sacramento, and San Joaquin River Basins
(Thousands of Acre-Feet)

Indicator	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL	Regulated Period Total	Regulated Period as % of Total Flow
Trinity River at Lewiston															
Minimum Flow	0	4	7	10	14	19	37	27	7	2	0	0	200	176	85.9%
Maximum Flow	134	413	544	552	648	515	380	662	514	248	77	35	2,990	2,567	96.0%
Average Flow	17	52	102	130	157	181	209	249	129	40	13	8	1,383	1,205	94.0%
10th Percentile	3	10	18	26	46	60	111	111	42	11	4	1	679	624	90.7%
20th Percentile	7	13	24	34	59	100	141	150	59	17	6	3	789	743	92.4%
25th Percentile	8	15	28	43	76	114	147	160	63	19	7	4	824	785	92.9%
30th Percentile	9	17	36	47	83	134	160	176	77	20	7	4	866	838	93.3%
40th Percentile	10	22	48	69	111	147	185	201	86	24	9	6	1,025	968	93.9%
Median Flow	12	33	59	93	130	165	207	223	97	27	10	7	1,133	1,064	94.5%
60th Percentile	14	42	86	120	153	179	234	262	110	35	12	8	1,424	1,341	94.9%
70th Percentile	16	54	117	149	167	199	252	282	156	42	15	10	1,582	1,455	95.3%
75th Percentile	17	66	149	173	195	214	260	307	178	46	16	10	1,611	1,529	95.6%
80th Percentile	19	76	163	209	234	230	270	339	204	55	18	12	1,863	1,599	95.8%
90th Percentile	29	128	240	295	286	312	316	411	254	73	33	16	2,035	1,930	96.7%
Sacramento River to Feather Confluence (Including Pit River)															
Minimum Flow	201	223	259	284	321	352	290	284	238	203	177	184	3,825	2,633	68.8%
Maximum Flow	1,377	2,697	4,792	6,915	6,817	7,171	3,556	2,481	1,851	771	477	442	29,936	23,892	93.3%
Average Flow	356	594	1,210	1,778	1,944	1,838	1,380	955	564	363	302	299	11,583	10,263	96.9%
10th Percentile	243	265	322	449	554	728	610	459	327	265	220	219	5,572	4,639	81.4%
20th Percentile	158	313	421	576	758	983	786	578	386	283	241	242	6,984	5,876	83.3%
25th Percentile	271	324	480	693	911	1,079	808	605	403	295	254	250	7,371	6,170	84.3%
30th Percentile	287	341	509	693	1,017	1,186	835	646	418	302	266	266	7,877	6,806	85.3%
40th Percentile	306	379	624	931	1,221	1,360	985	752	456	319	280	274	8,880	7,721	86.5%
Median Flow	325	430	676	1,321	1,589	1,518	1,123	812	461	334	266	300	10,162	9,163	87.6%
60th Percentile	351	486	1,039	1,645	2,044	1,714	1,326	955	546	375	318	320	13,046	11,451	88.6%
70th Percentile	381	622	1,074	2,156	2,351	2,134	1,656	1,121	612	400	341	335	14,151	12,650	89.9%
75th Percentile	405	651	1,474	2,445	2,585	2,293	1,839	1,255	661	408	352	340	14,345	13,688	90.6%
80th Percentile	420	758	2,062	2,858	2,795	2,456	2,023	1,343	706	431	358	346	15,697	14,434	91.1%
90th Percentile	451	1,132	2,690	3,890	3,921	3,292	2,531	1,568	917	483	378	376	19,369	17,849	92.1%

No comments

- n/a -

Unpaired Flow Hydrology for Trinity, Sacramento, and San Joaquin River Basins
(Thousands of Acre-Feet)

Indicator	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL	Regulated Period Total	Regulated Period as % of Total Flow
Feather River															
November Through June															
Minimum Flow	53	57	62	69	89	92	100	101	64	63	58	46	995	733	73.7%
Maximum Flow	855	1,240	1,997	2,539	2,678	2,283	1,830	1,700	1,122	370	197	154	9,418	8,608	91.4%
Average Flow	106	191	376	497	555	663	682	638	324	151	80	87	4,370	3,926	89.8%
10th Percentile	63	73	96	132	161	279	307	216	109	86	67	59	2,007	1,705	84.9%
20th Percentile	70	92	119	135	220	369	379	316	159	98	74	65	2,511	2,150	85.6%
25th Percentile	73	100	126	160	247	396	418	361	176	106	61	72	2,638	2,270	86.1%
30th Percentile	77	107	139	184	303	415	471	402	186	113	84	73	2,932	2,562	87.4%
40th Percentile	82	121	168	263	366	465	528	444	220	119	91	78	3,251	2,893	89.0%
Median Flow	93	132	205	320	467	540	611	537	281	134	96	86	3,854	3,466	89.9%
60th Percentile	103	144	270	402	565	646	686	631	294	142	103	89	4,596	4,201	91.4%
70th Percentile	110	178	349	554	674	743	837	784	342	164	104	97	5,673	5,160	91.0%
75th Percentile	114	194	405	668	748	782	885	838	401	173	112	99	5,767	5,260	91.2%
80th Percentile	120	219	330	724	761	870	932	939	453	198	118	104	6,268	5,583	89.1%
90th Percentile	143	332	659	1,131	1,103	1,216	1,134	1,188	662	253	143	100	7,095	6,470	91.2%
Yuba River															
November Through June															
Minimum Flow	0	13	17	20	29	35	58	78	37	6	0	0	370	324	87.6%
Maximum Flow	451	677	1,341	1,482	1,351	993	888	929	713	275	66	45	4,925	4,729	96.0%
Average Flow	32	90	200	266	293	350	362	411	206	56	23	19	2,287	2,157	94.3%
10th Percentile	13	21	33	47	64	148	189	161	44	15	9	10	921	884	96.0%
20th Percentile	17	29	43	63	127	199	231	229	75	21	12	13	1,231	1,151	93.5%
25th Percentile	17	31	48	82	143	213	249	265	89	25	13	13	1,363	1,268	92.0%
30th Percentile	19	35	57	100	155	218	283	282	107	27	14	15	1,521	1,438	94.5%
40th Percentile	22	39	74	133	168	244	307	330	127	34	18	17	1,826	1,746	95.6%
Median Flow	25	46	108	186	240	261	336	397	162	38	19	19	2,123	2,006	94.5%
60th Percentile	29	59	134	224	292	320	403	461	203	46	24	20	2,428	2,280	93.9%
70th Percentile	33	92	189	309	344	373	429	506	246	63	27	22	2,949	2,760	93.6%
75th Percentile	34	91	248	354	411	394	454	539	284	67	29	23	3,164	2,993	94.6%
80th Percentile	38	107	286	400	452	421	491	564	309	84	32	25	3,284	3,079	93.8%
90th Percentile	43	174	414	573	566	576	539	708	428	108	42	30	3,765	3,681	97.8%

No comments

- n/a -

Unimpaired Flow Hydrology for Trinity, Sacramento, and San Joaquin River Basins
(Thousands of Acre-Feet)

Indicator	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL	Regulated Period Total	Regulated Period as % of Total Flow
November Through June															
Bear River															
Minimum Flow	0	0	0	0	2	1	0	0	0	0	0	0	13	9	69.2%
Maximum Flow	85	109	225	244	312	208	175	60	52	36	33	18	740	736	99.5%
Average Flow	4	14	41	62	69	61	38	17	7	5	7	2	320	309	96.6%
10th Percentile	0	3	8	9	14	16	7	4	0	0	0	0	102	102	99.2%
20th Percentile	0	2	10	13	21	26	13	6	2	0	0	0	137	130	95.2%
25th Percentile	1	4	12	15	25	31	14	8	3	0	0	0	171	165	96.8%
30th Percentile	1	5	14	19	27	35	18	10	3	1	0	0	181	177	97.7%
40th Percentile	2	6	16	20	35	41	22	12	4	2	0	1	247	239	96.7%
Median Flow	3	8	23	43	52	50	25	15	5	2	1	1	290	278	95.9%
60th Percentile	4	10	31	42	67	61	34	18	7	3	1	2	384	365	95.3%
70th Percentile	5	14	38	70	88	71	49	20	8	3	2	2	434	410	94.5%
75th Percentile	5	16	54	93	104	76	56	22	10	4	2	3	462	453	98.1%
80th Percentile	6	18	65	111	113	88	62	25	11	5	3	3	489	482	98.6%
90th Percentile	7	32	112	152	146	121	74	40	14	7	3	4	567	551	97.5%
November Through June															
American River															
Minimum Flow	0	6	3	11	24	42	75	92	17	0	0	0	349	334	95.7%
Maximum Flow	335	985	1,309	1,988	1,866	1,172	1,254	1,136	942	382	90	61	6,380	5,842	91.6%
Average Flow	25	85	200	298	325	367	441	501	265	66	16	12	2,621	2,503	95.5%
10th Percentile	9	15	25	44	95	153	212	180	48	5	0	2	1,041	964	94.5%
20th Percentile	11	21	35	58	119	212	264	260	86	13	3	4	1,252	1,188	94.9%
25th Percentile	12	26	42	70	138	228	292	283	107	16	4	5	1,416	1,363	96.3%
30th Percentile	13	30	48	98	153	239	309	326	131	20	6	6	1,613	1,556	96.5%
40th Percentile	15	34	81	124	205	293	372	401	169	33	10	8	2,023	1,983	98.0%
Median Flow	17	44	99	159	257	341	417	487	222	42	13	10	2,521	2,422	96.1%
60th Percentile	19	53	128	255	317	382	462	553	282	62	17	12	2,844	2,731	96.0%
70th Percentile	22	63	164	353	361	440	528	627	352	84	19	14	3,300	3,140	95.2%
75th Percentile	26	77	184	421	425	449	554	653	375	88	21	15	3,554	3,311	93.2%
80th Percentile	29	90	276	488	513	528	589	692	422	96	25	17	3,886	3,687	94.9%
90th Percentile	36	161	488	635	696	665	657	701	516	134	34	21	4,525	4,340	95.9%

No comments

- n/a -

Unpaired Flow Hydrology for Trinity, Sacramento, and San Joaquin River Basins
(Thousands of Acre-Feet)

Indicator	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL	Regulated Period Total	Regulated Period as % of Total Flow
November Through June															
Sacramento Valley Total															
Minimum Flow	322	324	353	386	462	544	527	582	398	267	244	259	5,584	4,065	72.8%
Maximum Flow	1,185	5,129	9,750	12,592	13,050	11,922	7,667	5,762	4,757	1,701	794	670	48,368	44,187	91.4%
Average Flow	527	998	2,076	3,013	3,299	3,343	2,939	2,526	1,387	646	444	420	21,619	19,581	90.6%
10th Percentile	344	399	487	662	972	1,409	1,326	1,072	526	309	303	305	10,049	8,779	87.4%
20th Percentile	373	453	636	870	1,350	1,844	1,716	1,415	756	431	345	336	12,363	10,624	85.9%
25th Percentile	380	504	710	979	1,620	2,019	1,783	1,558	670	460	365	345	13,599	11,909	87.6%
30th Percentile	403	521	791	1,076	1,691	2,154	1,989	1,686	886	484	380	368	14,670	13,051	89.0%
40th Percentile	419	585	1,014	1,571	2,074	2,503	2,281	2,092	1,018	517	400	388	16,461	14,710	89.4%
Median Flow	462	660	1,303	2,094	2,705	2,639	2,737	2,258	1,143	569	419	414	19,436	17,667	91.0%
60th Percentile	510	820	1,609	2,722	3,387	3,163	3,000	2,550	1,312	610	463	442	23,670	21,209	89.6%
70th Percentile	539	954	2,059	3,671	3,882	3,796	3,397	2,988	1,471	715	484	475	27,725	25,397	91.6%
75th Percentile	573	1,052	2,456	4,160	4,512	4,069	3,853	3,287	1,776	750	506	485	26,202	26,048	92.4%
80th Percentile	594	1,236	3,492	4,803	5,008	4,442	4,216	3,640	1,921	798	552	510	30,108	27,868	92.9%
90th Percentile	661	1,977	4,271	6,604	6,460	5,715	5,068	4,537	3,519	1,025	590	534	39,614	33,016	92.7%
February Through June															
Stanislaus River															
Minimum Flow	0	2	3	3	1	13	35	44	11	0	0	0	156	107	69.0%
Maximum Flow	86	366	412	659	532	415	433	595	632	286	77	38	2,980	3,266	110.7%
Average Flow	10	26	53	82	96	126	192	283	176	53	13	7	1,120	957	85.5%
10th Percentile	3	6	9	13	23	51	100	101	41	7	2	1	487	362	83.7%
20th Percentile	4	2	12	18	33	71	133	163	59	13	4	2	592	500	84.4%
25th Percentile	5	6	13	22	40	78	136	175	71	16	5	3	637	551	86.4%
30th Percentile	6	9	14	25	45	82	152	188	96	20	6	3	680	566	83.3%
40th Percentile	7	10	19	34	55	97	173	238	127	27	7	4	894	740	82.7%
Median Flow	8	14	25	42	72	105	192	281	167	36	9	5	1,107	822	74.3%
60th Percentile	10	19	32	59	98	124	207	322	193	51	11	5	1,265	994	78.6%
70th Percentile	11	23	45	86	108	143	227	355	223	63	14	7	1,399	1,077	79.2%
75th Percentile	12	27	50	104	115	154	248	375	240	72	17	8	1,460	1,127	77.2%
80th Percentile	12	31	58	117	130	161	254	390	248	83	19	10	1,559	1,180	75.7%
90th Percentile	16	46	124	179	195	233	275	439	331	111	26	13	1,912	1,459	76.3%

No comments

- n/a -

Unimpaired Flow Hydrology for Trinity, Sacramento, and San Joaquin River Basins
(Thousands of Acre-Feet)

Indicator	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL	Regulated Period Total	Regulated Period as % of Total Flow
February Through June															
Tuolumne River															
Minimum Flow	0	1	4	5	8	23	79	106	17	10	0	0	384	330	85.9%
Maximum Flow	52	522	650	1,033	616	679	650	960	1,016	652	205	104	4,632	2,904	62.7%
Average Flow	17	46	88	125	147	191	274	446	353	123	26	12	1,951	1,411	76.2%
10th Percentile	4	6	13	22	42	86	162	214	90	17	3	1	836	675	80.8%
20th Percentile	5	9	20	33	60	117	186	294	137	22	6	3	1,053	890	85.3%
25th Percentile	6	12	24	40	64	125	195	326	158	28	8	3	1,107	961	86.8%
30th Percentile	7	14	27	43	70	129	221	347	222	36	10	4	1,183	984	83.2%
40th Percentile	9	17	35	56	88	146	240	380	291	57	14	5	1,416	1,189	83.9%
Median Flow	11	24	48	78	119	160	268	449	336	70	18	7	1,786	1,299	72.7%
60th Percentile	12	35	58	107	145	176	290	495	401	109	21	10	2,030	1,578	77.6%
70th Percentile	16	48	81	133	186	216	319	537	451	142	27	13	2,181	1,704	78.1%
75th Percentile	18	55	93	150	193	232	328	551	476	161	30	16	2,363	1,755	74.2%
80th Percentile	21	68	106	176	231	295	344	574	529	189	34	18	2,483	1,852	74.6%
90th Percentile	39	96	218	298	308	338	385	658	598	302	55	22	3,093	2,188	70.8%
February Through June															
Merced River															
Minimum Flow	0	1	1	3	3	8	31	39	13	4	0	0	151	128	44.5%
Maximum Flow	51	259	373	634	362	370	429	565	656	352	97	47	2,786	1,837	93.6%
Average Flow	7	20	43	66	85	101	147	241	171	56	13	6	956	746	80.6%
10th Percentile	1	4	5	10	18	37	80	102	43	8	2	0	409	326	79.6%
20th Percentile	2	5	8	13	26	52	93	135	53	11	3	0	492	432	87.8%
25th Percentile	2	6	10	16	30	58	101	163	69	15	4	1	527	459	87.0%
30th Percentile	3	6	10	20	34	60	113	175	83	16	4	1	562	471	83.8%
40th Percentile	4	8	16	23	47	89	129	205	114	26	6	2	669	569	84.9%
Median Flow	5	9	22	37	55	82	142	246	147	33	8	4	906	648	71.5%
60th Percentile	6	14	28	48	73	96	158	268	171	46	11	5	1,077	809	74.8%
70th Percentile	7	18	34	66	104	115	171	290	208	52	13	6	1,160	924	79.7%
75th Percentile	9	21	42	82	118	131	181	309	227	62	15	7	1,220	973	80.1%
80th Percentile	11	22	52	95	148	152	192	321	261	79	17	8	1,389	1,030	74.1%
90th Percentile	16	41	100	159	201	167	216	387	335	121	31	12	1,700	1,233	71.8%

No comments

- n/a -

Unpaired Flow Hydrology for Trinity, Sacramento, and San Joaquin River Basins
(Thousands of Acre-Feet)

Indicator	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL	Regulated Period Total	Regulated Period as % of Total Flow
San Joaquin River															
Minimum Flow	5	6	7	10	11	19	57	75	35	16	9	4	361	277	54.7%
Maximum Flow	176	247	461	735	472	465	613	1,096	1,166	757	380	170	4,642	2,896	68.3%
Average Flow	19	33	59	83	103	144	236	432	374	168	52	24	1,778	1,789	76.6%
10th Percentile	7	10	15	16	20	67	127	209	121	41	14	8	813	656	80.7%
20th Percentile	10	13	16	24	42	83	155	240	148	46	16	10	928	749	80.7%
25th Percentile	10	15	19	28	49	69	168	273	172	51	21	11	1,052	839	79.7%
30th Percentile	11	16	21	33	55	95	173	314	212	58	23	12	1,128	881	78.2%
40th Percentile	13	19	31	40	63	100	203	372	278	91	28	14	1,257	1,007	80.1%
Median Flow	16	22	36	48	76	119	234	419	325	115	34	15	1,449	1,137	78.5%
60th Percentile	19	26	43	67	89	134	249	464	373	145	42	18	1,854	1,458	78.7%
70th Percentile	21	33	54	82	113	162	279	509	476	181	51	22	2,047	1,572	76.8%
75th Percentile	24	37	62	95	134	174	289	543	500	213	63	27	2,105	1,623	77.1%
80th Percentile	25	42	73	112	163	201	308	594	581	266	73	33	2,322	1,779	76.6%
90th Percentile	34	66	114	186	289	332	350	704	642	364	125	42	3,018	2,075	68.8%
San Joaquin Valley Total															
Minimum Flow	9	13	17	23	25	65	204	266	76	36	11	7	1,061	679	48.8%
Maximum Flow	426	1,535	2,213	3,813	2,315	2,603	2,578	3,563	3,792	2,151	731	346	16,977	12,250	90.6%
Average Flow	55	140	280	425	529	668	929	1,467	1,117	413	107	50	6,181	4,711	78.7%
10th Percentile	16	29	47	67	124	266	501	629	304	78	24	13	2,535	2,033	80.2%
20th Percentile	25	40	60	101	180	368	559	636	401	98	34	18	3,273	2,732	83.5%
25th Percentile	28	43	67	124	200	381	631	982	475	107	40	20	3,361	2,921	86.4%
30th Percentile	30	48	75	134	220	403	685	1,044	612	135	43	21	3,826	2,966	81.8%
40th Percentile	35	52	105	174	261	448	765	1,225	639	213	52	27	4,385	3,623	82.6%
Median Flow	39	69	140	222	370	570	901	1,404	970	251	68	31	5,896	4,187	71.0%
60th Percentile	47	98	198	357	488	625	954	1,639	1,157	346	92	38	6,559	5,069	77.3%
70th Percentile	56	130	244	419	614	726	1,084	1,732	1,304	442	106	44	7,393	5,752	77.8%
75th Percentile	63	147	268	481	763	876	1,135	1,880	1,490	489	121	58	7,934	5,847	74.9%
80th Percentile	72	187	330	616	875	971	1,154	1,925	1,653	623	132	67	8,667	6,347	73.2%
90th Percentile	95	271	615	977	1,224	1,147	1,462	2,451	2,070	948	243	84	11,004	7,891	71.7%

No comments

- n/a -

Appendix D

**Section D.3
Adjudication Decree Quantifications**

No comments

- n/a -

Butte Creek Decree
Butte County Decree No. 18917
Seasons of Use
Continuous, regardless of season 365.25 days
April 1 through October 15 198.00 days
March 1 through October 15 228.00 days

Claimants	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments								Total, cfs	Total, AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority (cfs)	Fourth Priority Face Value (AF)		
Schedule 3, Foreign Water Rediversion Group													
Duiker Mutual Water Company	1,796.20	50	Yerrett (Ditch and Coach Lateral)	3.33	2,414.63							3.33	2,414.63
RLI Incorporated	3,600.00	50	Yerrett (Ditch and Edge Slough)	3.33	2,414.63	50.00	36,223.14					53.33	38,637.76
Forest Investment Company	17,027.00	50	Yerrett (Ditch and Edge Slough)	3.33	2,414.63	50.00	36,223.14					53.33	38,637.76
Subtotal, Schedule 3, Foreign Water Rediversion Group	22,843.20			10.00	7,243.90	100.00	72,446.28	0.00	0.00	0.00	0.00	110.00	79,691.16
Schedule 4, Nonconsumptive Claimants on Butte Creek and Tributaries													
Harold B. Balmert	Power	27	Unnamed Spring	0.20	144.89							0.20	144.89
Anson E. Smith	Power	26	Ellet	1.00	1,376.48							1.00	1,376.48
David S. Webb and Mary D. Webb	Power	13	Webb	0.75	108.97							0.75	108.97
Herbert W. Whitton, Marjorie C. Whitton, Oliver H. Young, George Reed, Anna Moul, Y.H. Park, and Luchs V. Pohl	Power	20A, 20B, 28B	Dunka No. 1, Dunka Pump, Curkwa Little	3.45	2,499.40							3.45	2,499.40
Jack I. Pohl	Power	28	La Monte	12.00	9,345.57							12.00	9,345.57
Jack I. Pohl	Power	28B	Red Pump	9.85	645.79							9.85	645.79
W. J. Peterson and Elizabeth I. Gaudin	Power	36	Dunn	0.50	362.43							0.50	362.43
Grace D. Taylor	Power	37	Thomas	0.20	162.23							0.20	162.23
J. H. McLean and C. J. McLean	Power	45A, 45B	Butte Bell, McLean Skier	0.00	652.02							0.00	652.02
Marjorie A. Smith	Power	46	Shill	2.50	1,811.16							2.50	1,811.16
Pacific Gas & Electric Company	Power	45	Butte Creek, Cotterville Canal	84.50	64,114.96							84.50	64,114.96
Pacific Gas & Electric Company	Power	47	179.50	130,041.07								179.50	130,041.07
United Mining Company	Power	49	Electric, Mining Co	305.00	220,064.16							305.00	220,064.16
Subtotal, Schedule 4, Nonconsumptive Claimants on Butte Creek and Tributaries				596.85	432,395.63							596.85	432,395.63
Schedule 5, Little Butte Creek and Tributaries Claimants Group													
David S. Webb and Mary D. Webb	Power	13	Webb	0.10	72.45							0.10	72.45
Anna Spangler	Power	13B	Spangler Pipe	0.20	144.89							0.20	144.89
Estate of Ernest Blumhag	Power	14	Blumhag	0.25	181.12	0.25	181.12					0.50	270.58
Vandegriff Trust	Power	20, 20A	Richardson, Richardson	1.00	2,173.19							1.00	2,173.19

Butte Creek Decree
 Butte County Decree No. 18917
 Seasons of Use
 Continuous, regardless of season 365.25 days
 April 1 through October 15 198.00 days
 March 1 through October 15 229.00 days

Claimants	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments				Fourth Priority (cfs)	Fourth Priority Face Value (AF)	Total, cfs	Total, AF		
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)					Third Priority Class (cfs)	Third Priority Face Value (AF)
Pinaloa Irrigation District	11,191.00	22, 23	Paradise ID, Hildreth	0.00	0.00	0.00	3,181.02		0.00	3,181.02			
Harold D. Hatfield	Domestic	27	High Spring	0.20	144.89				0.20	144.89			
S.A. Vandegriff	Domestic	23A	Vandegriff	0.50	362.23				0.50	362.23			
Jack I. Post	Domestic	28, 28B	La Motte, Post Pump	0.15	108.67				0.15	108.67			
D.A. Hook, W.S. Hook, and (Alan H.) Hook	3.00	24A	Hook	0.30	72.45	0.30	39.27		0.20	111.72			
S.A. Vandegriff	Domestic	24B	Hook	1.00	724.46				1.00	724.46			
S.A. Vandegriff	Domestic	24C	Hook	1.00	724.46				1.00	724.46			
Alison E. Smith	Domestic	26	Ellet	0.10	72.45				0.10	72.45			
Norbert W. Whitton, Marjorie C. Whitton, Olive M. Young, George Ross, Anna Ross, T.H. Park, and Lucile V. Park	Domestic	26A, 26B, 26C	Lansky Middle, Lansky Pump, Lansky Lateral	0.05	36.22				0.05	36.22			
Ellis C. Evers	13.00	30	Todd (Evers)	1.00	724.46	1.00	392.73		2.00	1,117.19			
H.W. Skellin and Alice Skellin	4.40	31	Burke	0.00	0.00	0.00	263.13	0.66	259.20	1.33	522.33		
H.D. March and Jennifer March	14.40	31	Burke	0.00	0.00	0.00	263.13	0.66	259.20	1.33	522.33		
Pharmax and Dwight	4.00	31	Burke	0.00	0.00	0.00	263.13	0.66	259.20	1.33	522.33		
George F. McLean and C.J. McLean	17.10	32	McLean	0.30	72.45	0.30	196.36		2.50	981.82	3.10	1,250.63	
Subtotal, Schedule 5, Little Butte Creek and Tributaries Group	11,263.30			7.75	5,614.59	11.66	4,857.75	1.98	777.80	2.50	981.82	24.09	12,031.75
Schedule 6, Upper Butte Creek and Tributaries Claimants (above Little Butte Creek)													
John J. Mahan and Jim J. Doyle	21.30	6	Orby Stephenson	0.20	144.89	0.30	137.82			0.50	282.71		
() Trunks and Ida May Franks	105.85	7, 8	Upper Stephenson	0.20	144.89	1.00	706.91			2.00	851.80		
L.B. Stephenson	25.00	8A, 8B, 8C	Lower Stephenson	0.50	362.23	0.50	196.36			1.00	558.60		
USDA Lassen NRE Forest	30.40	1, 3	Jainville B.L. Pipes, Jones	0.25	181.12	0.25	98.18			0.50	279.30		
F.K. Mckay and J.H. Medema	112.00	3, 4	Mckay, Mckay-Medema	1.50	1,086.69	1.50	589.09			3.00	1,675.79		
Edwin B. Copeland	33.00	5	Jones	0.50	362.23	0.50	196.36			1.00	558.60		
F.H. Lucas and Estate of Wm. Johnson	38.30	5	Linda Jones	0.20	144.89	0.50	196.36			0.70	541.26		
F.H. Lucas and Estate of Wm. Johnson	150.00	5B	Cable Creek	0.70	362.23	1.50	589.09			2.00	851.32		
F.H. Lucas and Estate of Wm. Johnson	70.00	5A	Willow Creek	0.25	181.12	0.25	137.85			0.60	318.57		
Ann Kennedy Anderson, Donald Mathewson, and Wilfred M. Plonkoff	10.00	5A	Willow Creek	0.05	36.22	0.20	78.95			0.25	114.77		
W.J. McGinn and Elizabeth J. Caspek	57.90	9A	McGinn-Springs, Jones	0.40	144.89	0.40	144.18			1.00	459.07		

No comments
 - n/a -

Butte Creek Adjustment - Butte County Debris No. 18917, November 6, 1942

Butte Creek Decree
 Butte County Decree No. 18917
 Seasons of Use
 Continuous, regardless of season 365.25 days
 April 1 through October 15 198.00 days
 March 1 through October 15 229.00 days

Claimants	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments								Total, cfs	Total, AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority (cfs)	Fourth Priority Face Value (AF)		
W. J. McLean and Elizabeth T. Casdik	209.00	36	Davis	0.25	181.12	0.10	10.27					0.35	220.19
J. H. Lucas, G. W. Lucas, and C. F. Lucas	32.00	0, 98	Lucas Springs, McLean Springs	0.20	114.89	0.00	23.64					0.00	380.53
J. H. Lucas, G. W. Lucas, and C. F. Lucas	30.00	364	Lucas	0.20	144.89	0.50	100.30					0.70	341.26
Gene D. Taylor	5.00	37	Thomas	0.25	181.12	0.25	88.18					0.50	278.30
Eleanor Sheple-Walch	Domestic	39	Thomas, Wash. Pipe Butte Meadows	0.01	7.24							0.01	7.24
USDA Lassen Hill Forest	Domestic	44	Meadows Pipes	0.10	72.45							0.10	72.45
Public Gas & Electric Company	Public Service	45	Butte Creek Canal	1.18	851.24							1.18	851.24
Public Gas & Electric Company	Domestic	45	Butte Creek Canal	0.33	235.45							0.33	235.45
Public Gas & Electric Company	Domestic	47	Cerritos Canal	0.50	362.23							0.50	362.23
L. H. McLean and C. J. McLean	Domestic	456, 458	Butte Bill, McLean Skare	0.10	72.45							0.10	72.45
Margaret A. Smith	Domestic	46	Smith	0.03	21.73							0.03	21.73
Electric Mining Company	Domestic	49	Electric Mining Co.	0.10	72.45							0.10	72.45
Subtotal Schedule B, Upper Butte Creek and Tributaries Group	899.00			7.59	5,498.67	9.65	3,789.62	0.00	0.00	0.00	0.00	17.24	9,288.49

No comments
 - n/a -

No comments

- n/a -

Butte Creek Decree
Butte County Decree No. 18917
Seasons of Use
Continuous, regardless of season 355.25 Acre
April 1 through October 15 198.00 Acre
March 1 through October 15 229.00 Acre

Claimants	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments										Total, cfs	Total, AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)				
				First Priority, All Year (cfs)	First Priority, All Year (AF)	First Priority, Apr 1 - Oct 15 (cfs)	First Priority, Apr 1 - Oct 15 (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)				
Schedule 7, Lower Butte Creek and Tributaries Claimants (Below Little Butte Creek)															
Dixton Mutual Water Company		50	Permit and Crotch Laterals	4.80	3,477.42	11.20	4,398.55						16.00	7,875.97	
Donald Hale and Alice Wiley Hale	186.20	51	Hale	0.90	652.02	2.30	824.71						3.00	1,476.74	
USDA Bureau of Plant Industry	154.50	53	Russ Garden Pump	0.60	434.68	3.80	549.82						2.00	984.50	
Clarence S Entler	81.00	54	Exception Entler	0.35	239.07	0.88	386.35						1.13	545.40	
Mary E. Roth	75.00	54	Completion Entler	0.17	123.16	0.39	153.16						0.56	276.32	
Ger P. Compton	699.00	54	Completion Entler	0.50	362.21	1.17	457.51						1.67	819.76	
Ger P. Compton	241.00	54	Completion Entler	0.50	362.21	1.17	457.51						1.67	819.76	
A F. Linsinger and Linnora E. Linsinger	527.10	55	Merrell	1.20	899.36	3.80	1,492.36						5.00	2,391.72	
Permit Investment Company	211.00	56	Colony Upper	0.80	434.68	1.40	549.82						2.00	984.50	
Edwin A. Carlson and Gladys Carlson	36.70	56	Colony Upper	0.14	101.42	0.39	133.53						0.48	234.95	
D A Hawk, W S Hook	90.00	56	Colony Upper	0.12	86.94	0.27	186.94						0.39	192.97	
Elmo Jacks and Louie Jacks	24.90	56	Colony Upper	0.09	65.70	0.22	86.40						0.31	151.60	
Samuel A. Atkins and Barbara Ina Atkins	30.00	56	Colony Upper	0.11	79.09	0.26	102.11						0.37	181.80	
Samuel A. Atkins and Barbara Ina Atkins	34.00	56	Unlimited Pump	0.13	91.48	0.30	117.82						0.43	212.00	
Durham Mutual Water Company, Ltd.	3,566.20	56, 59	Colony Upper, Colony Lower	13.00	8,693.55	32.70	12,942.18						44.70	21,535.74	
The Federal Land Bank of Berkeley	156.50	57	Olinco Pump Washfield	0.90	434.68	1.40	549.82						2.00	984.50	
Verney F. Washfield	14.00	58	Washfield Pump	0.05	36.22	0.13	51.05						0.18	87.28	
Ralph J. Berber, C. W. Butler, and F. T. Wood, and W. B. Wood	178.00	56	Colony Upper	0.60	434.68	1.40	549.82						2.00	984.50	
Stephen Vermege	47.30	56	Colony Upper	0.30	217.16	0.70	279.91						1.00	497.07	
Corporation of America	20.00	56	Colony Upper	0.12	86.94	0.28	109.76						0.40	196.70	
George Sidka, Anna Sidka, Joel Belich, Same Belich, and Steve Volkovich	86.75	56	Colony Upper	0.40	289.79	0.94	369.16						1.34	658.95	
L. E. Wheelock and Nellie Wheelock	13.00	56	Colony Upper	0.08	57.96	0.18	70.89						0.26	128.85	
George Blomd and Edna May Brandt	50.00	59B	Bromell Pump	0.12	86.94	0.27	106.04						0.39	192.97	
Ray White	53.00	60A	Ray White Pump	0.20	144.89	0.46	189.05						0.66	325.55	
E. I. Adams and Lou R. Adams	1,191.20	56	Colony Upper					1.48	1,072.20				1.48	1,072.20	
E. I. Adams and Lou R. Adams	2,533.20	60	Adams					4.52	3,274.57				4.52	3,274.57	
Robert C. Gurril	2,282.00	61	Gurril							1.00	24.46		1.00	74.46	

No comments

- n/a -

Butte Creek Decree
Butte County Decree No. 18917
Seasons of Use
Continuous, regardless of season 365.25 days
April 1 through October 15 198.00 days
March 1 through October 15 229.00 days

Claimants	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments										Total, cfs	Total, AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority (cfs)	Fourth Priority Face Value (AF)				
Herbert W. Whitten and Maryje E. Whitten	665.30	56, 90	Colony Upper, Adams							0.75	543.35	0.75	543.35		
C. E. Hilde	541.60	67	White Fences							1.00	724.46	1.00	724.46		
Subtotal, Schedule 7, Lower Butte Creek and Tributaries Claimants Group	13,702.40			24.66	17,865.25	63.25	24,840.00	6.00	4,346.78	2.75	1,992.27	96.66	49,044.30		
Additional Continuous Year-Round Usage Claimants - Special Class															
Louis L. Downs		17	Huang Spring	0.03	23.73										
Frances B. Mahlin, A.C. Musselman, George F. Meyer		104, 18	Hamilton Ditches	0.50	462.21										
Joe J. Sadi		24	Sage Flinties	0.15	108.67										
Merill Musselman and Florence V. Musselman		184	Musselman Spring Pipe Line	0.10	72.45										
Eldo Howe Mann		35	Hoku Spring Pipeline	0.09	14.49										
Janis M. McElmgv		33, 34	McElmgv North McElmgv Main Ditches	1.00	724.46										
Janis M. McElmgv		34d	Little and McElmgv Spring Channel	0.10	72.45										
S. A. Vandegriff		240	Vandegriff Spring Ditch	0.50	362.23										
S. A. Vandegriff		24E	McHairs Ditch	0.15	108.67										
Anna Spangler		15d	Spangler Pipe	0.05	36.22										
Estate of Emma Domina		14d	Dunning Spring Ditch	0.15	108.67										
Vandegriff Trust		21	McLeodbrook Ditch	1.00	724.46										
F. F. Whittick		24b, 25	Happ Canal	0.20	144.89										

No comments

- n/a -

**Butte Creek Decree
Butte County Deed No. 18917**

Seasons of Use

Continuous, regardless of season	365.25	days
April 1 through October 15	198.00	days
March 1 through October 15	229.00	days

Claimants	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments								Total, cfs	Total, AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority (cfs)	Fourth Priority Face Value (AF)		
Ray I. Pearson, Orval Pearson, Durbin A. Cartwright, and Hilmer Laughlin	Domestic Stockwater	246, 25	Hugo Canal	0.05	36.22								
A P Kaudert	Domestic Stockwater	246, 25	Hugo Canal	0.05	36.22								
Subtotal, Additional Continuous Usage Claimants				4.05	2,934.07								
Additional Irrigation Season Usage Claimants - Special Class													
F. E. Whitlock	Irrigation	246, 25	Hugo Canal	0.40	289.79								
Ray I. Pearson, Orval Pearson, Durbin A. Cartwright, and Hilmer Laughlin	Irrigation	246, 26	Hugo Canal	0.05	36.22								
A P Kaudert	Irrigation	246, 27	Hugo Canal	0.05	36.22								
Tim Diamond Hatch Company	Domestic Stockwater, Irrigation	10, 104, 106, 107	Quinnot Match System	2.00	1,418.93	Continuous							
Richard A. Colgan Jr	Domestic, Commercial	40	Colgan Pipe Line	0.11	101.82	Continuous							
J. K. Hickey and H. H. Hinderman	Domestic, Stockwater	2	Hickey Hinderman Pipe Line	0.07	50.71	Continuous							
Edwin H. Copeland	Domestic, Stockwater		Riparian	0.40	114.89	Continuous							
J. H. Lucas	Domestic, Stockwater, Irrigation		Riparian	0.40	289.79	Continuous							
Carl Hedner Swartz and Esther M. Swartz	Domestic, Stockwater, Irrigation		Riparian	0.15	106.62	Continuous							
E. L. Adams and Lou R. Adams	Domestic, Stockwater	64, 65	Adams Hardin Storage Dam, Adams Hardin Pump	0.82	594.06	Continuous	Riparian						
E. L. Adams and Lou R. Adams	Irrigation	64, 65	Adams Hardin Storage Dam, Adams Hardin Pump	3.00	916.36	May 1 - Oct 1							
E. L. Adams and Lou R. Adams	Domestic, Stockwater	64, 65	Adams Hardin Storage Dam, Adams Hardin Pump	1.00	724.46	Continuous	Riparian						

No comments
- n/a -

**Butte Creek Decree
Butte County Decree No. 18917**

Seasons of Use

Continuous, regardless of season	365.25	days
April 1 through October 15	198.00	days
March 1 through October 15	228.00	days

Claimants	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments								Total, cfs	Total, AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority (cfs)	Fourth Priority Face Value (AF)		
E. I. Adams and Lou R. Adams	Irrigation	64, 65	Adams Hamlin Slough Ditch, Adams Hamlin Pump	3.58	1,003.53	May 1 - Oct 1							
Herbert W. Whitten and Marjorie C. Whitten	Domestic	64, 65	Adams Hamlin Slough Ditch, Adams Hamlin Pump	0.00	434.08	Continuous							
Herbert W. Whitten and Marjorie C. Whitten	Irrigation	64, 65	Adams Hamlin Slough Ditch, Adams Hamlin Pump	3.00	908.36	May 1 - Oct 1							
Ralph C. Gerrill	Domestic, Stockwater	66	Gerrill Hamlin Ditch	1.00	724.46	Continuous							
Ralph C. Gerrill	Irrigation	66	Gerrill Hamlin Ditch	14.00	2,138.18	Apr 15 - Jun 30							
E. I. Adams and Lou R. Adams	Irrigation	64, 65	Adams Hamlin Slough Ditch, Adams Hamlin Pump	3.22	1,108.78	Apr 1 - Sep 30							
Herbert W. Whitten and Marjorie C. Whitten	Irrigation	64, 65	Adams Hamlin Slough Ditch, Adams Hamlin Pump	1.38	459.85	Apr 1 - Sep 30							
Ralph C. Gerrill	Irrigation	66	Gerrill Hamlin Ditch	6.70	1,209.32	Apr 1 - Jun 30							
Ralph C. Gerrill	Irrig	66	Gerrill Hamlin Ditch	21.70	3,214.18	Jul 1 - Sep 30							
Subtotal, Additional Irrigation Season Usage Claimants				63.46	16,200.87								
Surplus Class Rights Claimants													
Paradise Irrigation District	Irrigation	72	Majalla Reservoir	1480-1510	8,500.00	subject to completion of bond #271							
Paradise Irrigation District	Domestic, Stockwater	72	Majalla Reservoir	1480-1510	0.00	Continuous							
Ralph C. Gerrill	Irrigation	61	Gerrill Ditch	14.00	2,526.04	Jul 1 - Sep 30							
E. I. Adams and Lou R. Adams	Irrigation	56, 60	Colony Upper Adams	9.00	3,337.20	Apr 1 - Sep 30							
Herbert W. Whitten and Marjorie C. Whitten	Irrigation	56, 60	Colony Upper Adams	3.45	1,252.26	Apr 1 - Sep 30							

No comments
- n/a -

**Butte Creek Decree
Butte County Decree No. 18917**

Seasons of Use

Continuous, regardless of season	325.25	days
April 1 through October 15	198.00	days
March 1 through October 15	229.00	days

Claimants	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments											Total, cfs	Total, AF	
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority (cfs)	Fourth Priority Face Value (AF)						
E. I. Adams and Lou R. Adams	Irrigation	56.99	Colony Upper, Adams	4.00	693.42	15	Apr 1 - Jun 15										
E. I. Adams and Lou R. Adams	Irrigation	56.99	Colony Upper, Adams	1.00	198.74	15	Apr 1 - Jun 15										
Herbert W. Whitten and Marjory C. Whitten	Irrigation	56.99	Colony Upper, Adams	2.40	381.79	15	Apr 1 - Jun 15										
Ralph C. Gerrill	Irrigation	61	Gerrill Ditch	15.00	3,444.61	30	Apr 1 - Sep 30										
Ralph C. Gerrill	Irrigation	61	Gerrill Ditch	6.76	2,431.91	30	Apr 1 - Sep 30										
E. E. White	WV	62	White Flange	8.50	3,448.26	30	Apr 1 - Sep 30										
Parrot Investment Company	Domestic	50	Parrot Ditch	5.00	1,688.00	31	Oct 16 - Mar 31										
M. B. T. Incorporated	Domestic	50	Parrot Ditch	5.00	1,688.00	31	Oct 16 - Mar 31										
Parrot Investment Company	Domestic, Stockwater, Irrigation	50	Parrot Ditch	25.00	9,818.18	15	Apr 1 - Oct 15										
M. B. T. Incorporated	Domestic, Stockwater, Irrigation	50	Parrot Ditch	25.00	9,818.18	15	Apr 1 - Oct 15										
California Lumber, Inc.			Butte Creek	2.50	1,811.16		Continuous										
Nuba Consolidated Gold Fields			Butte Creek	2.50	1,811.16		Continuous										
Western Canal Company	Irrigation	0.3	Western Canal	33.33	5,029.29	15	Apr 1 - Jun 15										
Subtotal, Additional Surplus Class Claimants				164.76	60,987.30												

No comments

- n/a -

**Butte Creek Decree
Butte County Decree No. 18917**

Seasons of Use

Continuous, regardless of season	355.25	days
April 1 through October 15	198.00	days
March 1 through October 15	228.00	days

Claimants	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments								Total, cfs	Total, AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority (cfs)	Fourth Priority Face Value (AF)		
Summary	Total, cfs	Total, AF											
Schedule 3, Foreign Water Deliveries Order	110.00	79,690.18											
Schedule 4, Consumptive Claimants on Butte Creek and Tributaries	596.85	432,395.63											
Schedule 5, Upper Butte Creek and Tributaries Claimants Group	24.00	12,931.37											
Schedule 6, Upper Butte Creek and Tributaries Claimants (above Upper Butte Creek)	17.24	8,288.49											
Schedule 7, Lower Butte Creek and Tributaries Claimants (below Upper Butte Creek)	98.16	49,944.30											
Additional Continuous Year Round Users Claimants - Special Class	4.05	2,934.03											
Additional Irrigation Season Users Claimants - Special Class	53.48	26,200.62											
Subtotal, Consumptive Use Claimants in Butte Creek System	315.50	169,189.68											
Subtotal, Basic Claimants to Butte Creek System Flows	912.35	601,585.30											
Subtotal, Additional Surplus Class Claimants	164.78	90,987.30											
Total, All Consumptive Use Claimants to Butte Creek System	480.28	230,176.97											
Total, All Claimants to Butte Creek System	1,077.13	662,572.60											

No comments

- n/a -

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Allotments			Total Allotments Face Value (AF)
							Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	
Schedule 3, Claims from Wolf Creek and its Tributaries										
David J. Anderson	16.40	130C	Haur Creek-Camp	0.30	217.34				0.09	217.34
David J. Anderson	24.00	130D	Haur Creek Springs	0.40	369.79				0.00	369.79
Setzer Forest Products, Inc.	Domestic	59A	Setzer Camp Pipeline	0.05	36.22					36.22
Bidwell Water Company	Municipal	64	Round Valley Reservoir	2.00	1,448.93					1,448.93
Bidwell Water Company	7.10	65	Kauffman Short and Marel	0.10	72.45	0.10	48.60			121.04
Arnold S. Cahis & Nellie E. Cahis	10.00	66	Short and Marel	0.07	50.71	0.11	53.45			104.17
John Rilva	4.00	60	Short and Marel	0.03	21.73	0.04	19.44			41.17
H.A. Marel & Mabel Francis Marel	24.50	66	Short and Marel	0.10	72.45	0.15	72.89			145.34
Albert E. Moksness & Randall H. Smith	30.30	76	Rucks Valley	0.50	362.23					362.23
Russel L. Jones	1.50	76A	Jones	0.15	108.67					108.67
Dellina Taddel	12.60	77	Taddel	0.25	181.12					181.12
A F. Archbutt	12.60	77	Taddel	0.25	181.12					181.12
Wolf Creek Timber Co., Inc.	Industrial	61	Cedar Mill Lower Pump	0.10	72.45					72.45
Setzer Forest Products, Inc.	Industrial	62	Clark	0.28	136.07					136.07
Setzer Forest Products, Inc.	Industrial	63	Setzer Standby Pump							0.00
Setzer Forest Products, Inc.	15.00	63A	Setzer Standby Pump							0.00
Helen J. Shaw	146.50	62	Clark	0.70	340.17					340.17
E T Kuntler & Edna H Kuntler	125.40	62	Clark	0.70	307.12					307.12
E T Kuntler & Edna H Kuntler		78	Williams Creek	0.50	362.23	0.20	97.19			459.42
H G McClane	62.70	67, 79	Schleser Gatt Williams Creek	0.10	72.45	0.75	564.46			436.91
A.O. Lowrie	249.00	67	Schleser	0.45	326.01	2.25	1,093.39			1,419.40
Wesley T Wheeler & Ladd C Wheeler	94.30	67	Schleser	0.10	72.45	0.45	218.66	0.50	242.98	534.10
United States of America	66.60	67	Schleser	0.03	36.22	0.30	145.79	0.35	170.08	352.09
C G Fredericksen & Helen V Fredericksen	193.60	68	Fredericksen & Fergay Hamblin Spring	0.38	271.67	1.60	911.16			1,182.83
Dan Guidici and James Guidici	334.00	68	Fredericksen & Fergay	0.38	271.67	1.60	911.16			1,182.83
Dan Guidici and James Guidici		70, 72	Fergay	0.20	144.89	1.40	680.33			825.22
R Avery Sheehan and Sarah Sheehan	167.10	69, 71	McIntosh	0.15	108.67	0.87	422.78	0.73	354.74	886.19

Name of Claimant	Acres to be supplied	Diversion No. as per DWR Map	Name of Diversion System	First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Allotments Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Total Allotments, Face Value (AF)
L E Wheelock & C H Wheelock	95.00	69, 73	McIntosh, Wheelock	0.05	36.22	0.53	257.55	0.42	304.10	497.88
W B Ferry R L Perry, Ivy Mae Hoald and Susie Perry (Regurs)	136.90	69, 73, 74	McIntosh, Wheelock, Perry	0.05	36.22			1.35	856.03	692.26
Subtotals, Schedule 3 - Wolf Creek Group	1,838.70			8.38	5,837.26	10.90	5,296.86	3.25	1,627.93	12,762.05
Schedule 4: Claimants from Lights Creek and Its Tributaries										
United States of America	3.00	85B	Morton Creek	0.15	108.67					108.67
William M Hosken	219.00	60, 80A	Hosken Cocks Creek; Proposed Hosken Pump		0.00	1.80	728.93			728.93
Fred Ratcliffe-Smith & Mildred Ratcliffe-Smith	62.00	81	Smiths Cocks Creek	0.50	362.23	0.50	242.98			605.21
Martin A Baker & Clio B Baker	35.00	82	Burns Cocks Creek	0.70	144.89	0.25	121.49			266.38
W S Quigley & Icie A Quigley	20.80	83	Quigley Pasture	0.30	144.89	0.10	48.60			193.49
W S Quigley & Icie A Quigley	37.00	84	Quigley Meadow		0.00	0.45	218.68			218.68
Walter E Cliff & Ruth H Cliff	66.60	85	Cliff Cocks Creek	0.10	72.45	0.38	182.23			254.68
J B Peter	157.70	96	Peter Creek	1.00	724.46	1.00	485.95			1,210.41
J B Peter		97	Peter Creek Barn							0.00
J B Peter		96	Peter Creek Upper Field							0.00
J B Peter		99	Peter Creek Lower Field							0.00
Arthur Peter and Emma A Peter	14.30	100	A. Peter			0.20	97.19			97.19
Oera Johnson	69.10	103	Road Dam Downey Upper, Downey Lower	0.10	72.45	0.75	364.46			436.91
A J Downey and D W Downey	Power	86, 87		1.50	1,086.69					1,086.69
California-Engles Mining Company	Domestic & Industrial	87A	Engels	0.10	72.45		0.00			72.45
Hattie Potts	10.00	87B	Potts	0.10	72.45	0.10	48.60			121.04
James T Freeman & Elma L Freeman	87.70	88	Freeman & Bates	0.40	289.79	1.05	510.25			800.03
E B Bates and Minnie Bates	87.80	88	Freeman & Bates	0.40	289.79	1.05	510.25			800.03
Ralph Difanti & Elvessa Difanti	195.40	89	Difanti & Smith	0.60	434.68	1.58	755.37	0.68	328.02	1,528.07

No comments

- n/a -

No comments

- n/a -

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Allotments			Total Allotments, Face Value (AF)
							Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	
Fred Ratcliffe-Smith & Mildred Ratcliffe-Smith	65.00	89	Dulotti & Smith	0.20	144.89	0.53	255.12	0.23	109.34	509.36
Nartin A Maier & Clae B Maier	93.00	90	Burns	0.20	144.89	1.00	485.95			630.84
W S Quigley & Iola A Quigley	247.40	91	Quigley Upper	0.30	144.89	2.90	1,409.26			1,554.15
W S Quigley & Iola A Quigley	152.20	92	Quigley Middle	0.30	144.89	1.70	626.12			971.01
I B Peter	44.50	93	Peter Upper	0.10	72.45	0.45	216.68			291.12
Arthur Peter and Emma A Peter	100.00	93	Peter Upper	0.10	72.45	1.25	607.44			679.89
Arthur Peter and Emma A Peter	126.90	95	Peter Lower	0.10	72.45	0.75	364.46	0.33	157.93	594.84
W S Quigley & Iola A Quigley	69.00	94	Quigley & Cliff	0.10	72.45	0.75	364.46			436.91
Walter E Cliff & Kath M Cliff	169.40	94	Quigley & Cliff	0.10	72.45	0.75	364.46	0.63	303.72	740.63
S S Openshaw, Gerald Openshaw, & Gorn Openshaw	Stockwater	95A	Lights Creek	0.05	36.22					36.22
C H Tarson & H W Aubeley Lumber Company	Industrial	104	Tarson Mill	0.20	144.89					144.89
Subtotals, Schedule 4 - Lights Creek Group	2,131.70			6.90	4,998.29	18.98	9,220.91	1.85	899.01	15,118.71
Schedule 5: Claimants from Streams in Upper Tributary Area										
Clover Valley Lumber Company	40.00	3A	Low	0.20	144.89	0.25	106.12			251.01
Clover Valley Lumber Company	50.00	3B	Hallett	0.20	144.89	0.30	127.34			272.23
United States of America	12.00	2	Boulder Creek	0.20	144.89	0.05	21.22			166.12
Clover Valley Lumber Company	43.60	3, 4	Antelope North, Antelope East	0.10	72.45	0.25	148.56			221.01
F W Flux and Alma A Flux	45.70	5	Flux Antelope	0.10	72.45	0.28	116.73			189.17
W S Quigley & Iola A Quigley	39.60	6, 7	Quigley Upper, Antelope, Quigley Antelope Springs, Humphrey	0.10	72.45	0.28	116.73			189.17
Jack W Humphrey	32.80	8, 9	West, Humphrey East	0.10	72.45	0.18	74.28			146.73
Claude Harwood and Lavinia Harwood	43.70	7E	Fitch Canyon	0.10	72.45	0.30	127.34			199.79
Elsbet R Spraker & Roy E Harwood	6.00	7A	S & H Cabin	0.10	72.45	0.05	21.22			93.67
Elsbet R Spraker & Roy E Harwood	35.60	7B	Thompson Creek	0.10	72.45	0.20	84.69			157.34
Clover Valley Lumber Company	13.50	7C	Devils Upper	0.10	72.45	0.05	21.22			93.67
Clover Valley Lumber Company	13.70	7D	Devils Lower	0.10	72.45	0.05	21.22			93.67

No comments

- n/a -

Name of Claimant	Acres to be supplied	Diversion No. as per DWR Map	Name of Diversion System	First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Allotments Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Total Allotments, Face Value (AF)
Clover Valley Lumber Company	63.40	9B	Boyle Last Chance	0.20	144.89	0.35	148.58			293.45
Howard Bass, Warren Bass, Dudley Bass, Claude Bass, deceased	26.50	9C	Bass	0.10	72.45	0.15	63.67			136.12
Howard Bass, Warren Bass, Dudley Bass, Claude Bass, deceased	9.80	9D	Bass Cabin	0.10	72.45	0.05	21.22			93.67
Howard Bass, Warren Bass, Dudley Bass, Claude Bass, deceased	11.00	9E	Upper Poison	0.10	72.45	0.05	21.22			93.67
Howard Bass, Warren Bass, Dudley Bass, Claude Bass, deceased	24.50	9F	Lower Poison	0.10	72.45	0.15	63.67			136.12
Clark C Rowland	38.60	10, 10A	Rowland Dike Creek, Rowland Power Dike Upper West, Dike upper East.	0.20	144.89	0.18	74.28			219.17
Westover Company	617.00	11, 12, 13, 14, and 15	Dike Upper Meadow Dam, Dike Middle Dam	0.50	362.23	4.25	1,803.97			2,166.20
Westover Company	58.50	2H	Clover Overflow	0.30	217.34	0.25	106.12			323.45
Westover Company	24.50	105	Clover Valley Ranch Spring	0.20	144.89					144.89
George Humphrey	560.00	17 through 27	Upper Delta Huck, North Spring Clover Upper, Clover Middle, Clover North Meadow, Clover South Meadow, Clover Lower, Spring Ch Lake Spring Ch Lower, Crocketer Creek Crocketer Old Channel	1.00	724.46	1.50	1,485.62			2,210.08
R M Conklin	270.00	16, 29	Guidici Drive, Guidici Clover	0.50	362.23	2.00	848.93			1,211.16

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Allotments			Total Allotments, Face Value (AF)
							Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	
Douglas Valley Lumber Company	Industrial	1	Upper Tributary of Stream System	1.00	724.46					724.46
Subtotals, Schedule 5 - Upper Tributary Area Group				5.80	4,201.88	13.25	5,624.13	0.00	0.00	9,826.02
Schedule 6, Indian Creek in Genesee and Indian Valleys Group										
I LaRue Robinson & Elizabeth Evans Robinson	362.90	36	Robinson	0.78	565.08	4.50	2,166.78			2,731.86
P R Evans	14.10	36, 37	Robinson, Evans	0.02	14.46	0.20	97.19			111.68
Joseph C. Kattner	4.80	30, 31, 32	Pratt Lower, Pratt House Cumow	0.10	72.45	0.20	97.19			169.64
Department of Veteran Affairs & Edward D Richi & Helen Rehl	116.60	33, 34, 35	Upper, Cumow Patlaru, Cumow	0.50	362.23	1.35	656.03			1,018.26
J W Goodhue	Domestic & Power	38	Goodhue	0.50	362.23	9.50	4,616.53			4,978.76
John B Sobrero & Lena M Sobrero	0.50	38A, 38B	Sobrero Field, Sobrero House	0.10	72.45					72.45
Mary Sobrero, Heirs	5.30	39, 40	Sobrero East, Sobrero West	0.10	72.45	0.20	97.19			169.64
Willoughby T Grace and Helen M Grace	291.70	41, 42, 43, 44	Ward Upper West, Ward Middle West, Ward East, Ward Pipelms	1.00	724.46	4.50	2,166.78			2,911.24
Plumas Land Company	Mining	46, 47	Walker Plume, Walker Pipe	2.00	1,448.93					1,448.93
Willoughby T Grace and Helen M Grace	96.80	48, 49	Gritzly Upper, Gritzly Lower	1.00	724.46	1.40	680.33			1,404.79
Willoughby T Grace and Helen M Grace	46.80	45	Hoselkus	0.45	326.01					326.01
W J Beacom	18.00	50	Buscom	0.40	289.79	0.25	170.06			459.87
W J Beacom	Fish Culture	50	Buscom	0.50	362.23					362.23
William F Haskler	66.30	51, 52	Barnes East, Barnes West	0.50	362.23	0.63	403.34			765.57

No comments

- n/a -

No comments

- n/a -

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Allotments			Total Allotments, Face Value (AF)
							Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	
James G Young, William G Young, George W Young, and Hazel Dalton	Municipal	53	Taylorville	1.00	724.46					724.46
Claude E Young & Ivy M Young	78.10	54	Mill Race	0.50	362.23	1.00	485.95			648.18
W H Dolphin	153.40	54	Mill Race	0.73	528.86	1.47	714.35			1,243.20
H C Neer and Eva M Neer	110.00	54	Mill Race	1.00	724.46	0.60	291.57			1,016.03
Lloyd E Hardgrave & John A Hardgrave	233.70	54	Mill Race	1.52	1,101.18	1.03	500.53			1,601.71
Lloyd E Hardgrave & John A Hardgrave	24.30	54	Mill Race	0.15	108.67	0.30	145.79			254.45
Colburn J Smith and Wilma T Smith	167.90	54	Mill Race	0.75	543.35	1.65	601.82			1,345.17
Samuel F Brown, Hazel Brown and Fletcher L Brown	295.10	54	Mill Race	1.00	724.46	2.70	1,312.07			2,036.53
Luc G Johnson	370.80	54	Mill Race	1.00	724.46	3.60	1,749.42			2,473.88
S S Openshaw, Gerald Openshaw and Gene Openshaw	693.40	54	Mill Race	1.90	724.46	7.60	3,693.22			4,417.69
Raul Sobrero & Helen Sobrero	144.50	54	Mill Race	0.67	485.39	1.13	549.12			1,034.51
Samuel F Brown and Hazel Brown	230.60	54	Mill Race	0.50	362.23	2.40	1,166.28			1,528.51
Samuel F Brown and Hazel Brown	249.20	54	Mill Race	1.00	724.46	2.10	1,020.50			1,744.96
T L Hannon & H S Hannon	76.80	54	Mill Race	0.32	231.83	0.70	340.17			571.99
George F Dymeyer & Jane Dymeyer	6.20	54	Mill Race	0.01	7.24	0.07	34.02			41.26
L E Wheelock & Nellie Wheelock	123.50	54	Mill Race	0.50	362.23	1.00	485.95			648.18
Albert A Toscani, Ernest J Toscani, Chester M Toscani, and Arthur F Toscani	346.60	54	Mill Race	1.00	724.46	2.70	1,312.07	0.60	291.57	2,326.10
A J Sheehan & C J Sheehan	66.70	54	Mill Race			0.20	144.89	0.65	315.67	460.76
David R Strong	57.40	54	Mill Race			0.20	144.89	0.55	267.27	412.17
B B Gregory & Estelle E Gregory	32.40	54	Mill Race			0.20	144.89	0.20	97.19	242.08
J E Cardozo & Marion Cardozo	72.40	54	Mill Race					2.15	1,044.79	1,044.79
S S Openshaw, Gerald Openshaw and Gene Openshaw	338.50	55	Snyder			0.40	289.79	3.00	1,457.85	1,747.64
H C Neer and F C Neer	200.00	57A	Neer Pump					2.50	1,811.16	1,811.16
Mrs. A L Gehret	46.50	58A	Gehret Pump					0.60	434.68	434.68
A J Sheehan & C J Sheehan	32.00	58B	Sheehan Pump					0.40	289.79	289.79
Subtotal, Schedule 6 - Indian Creek in Genesee and Indian Valleys Group	5,033.80			20.60	14,923.93	54.08	26,918.71	10.65	6,010.17	47,492.81
Schedule 7, "Special Class" Rights on Indian Creek Stream System										
Marian A Flood Norma A Flood	Domestic and resort	125	Hamplin Springs	0.06	43.47					43.47
Fred Prasun & Molly Prasun	6.00	125A	Hamplin Springs Collecting	0.15	108.67					108.67
Alford S Calais & Nellie A Calais	See Schedule 3	127	Short Spring	0.10	72.45					72.45
Bidwell Water Company	Municipal	129	Buckeye Ravine Pipeline	Entire Flow						0.00
Forest Lodge Resort	Domestic and resort	130	Clark Ravine	0.50	362.23					362.23

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Allotments			Total Allotments, Face Value (AF)
							Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	
Wolf Creek Timber Company, Inc.	Domestic	130A, 130B	Western Pacific Pipeline	0.08	54.33					54.33
A O Lewis	Domestic	131	Schaser Spring Pipeline	0.02	14.48					14.48
Wesley T Wheeler & Idella C Wheeler	Domestic	131	Schaser Spring Pipeline	0.01	7.24					7.24
W B Perry, R L Perry, Ivy Mau Heald, and Susie Perry	48.80	132	Perry Springs	0.58	398.45					398.45
L E Wheelock & Eva Huer	5.40	132	Perry Springs	0.05	36.22					36.22
United States of America in Trust	70.00	133	Hickerson West Springs	0.65	470.90					470.90
T L Hannon & W S Hannon	58.40	134, 134A	East Springs, Hickerson	0.95	668.24					668.24
W B Perry, R L Perry, Ivy Mau Heald, and Susie Perry	Domestic	133	Lower Springs, Hickerson West Springs	0.05	36.22					36.22
United States of America in Trust	22.30	135	Chico Springs	0.62	449.17					449.17
John F Davidson & Lena Davidson	12.90	136	Leggett Springs	0.10	72.45					72.45
Jamies T Frooman & Elma L Frooman	Domestic	137A	Kumuck Pipeline	0.02	14.49					14.49
J B Ruler	Domestic	96A	Ruler Pipeline	Entire Flow						0.00
J LaRue Robinson & Elizabeth Evans Robinson	Domestic	143	School Spring Pipeline	0.001	0.72					0.72
John Davis & Evelyn Cunningham	2.00	106	Davis Spring	0.15	108.67					108.67
Willoughby T Grace & Helen H Grace	Domestic	48A	Hoselikus Spring Pipeline	Entire Flow						0.00
S S Openshaw, Gerald Openshaw, and Gene Openshaw	66.70	137	Snyder Spring	0.45	326.01					326.01
United States of America	Domestic	107A	Taylorville Suppression Camp Pipeline	0.01	7.24					7.24
Burr J Sherick & Edwin R Sherick	0.90	108	Hotel Pipe	0.025	18.11					18.11
G R Clark	Domestic	109	Clark Pipe	0.02	14.49					14.49
Mabel Tarosh	0.20	109	Clark Pipe	0.02	14.49					14.49

No comments

- n/a -

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Allotments			Total Allotments, Face Value (AF)
							Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	
A F Viacava	34.80	110, 111, 112	Viacava Upper, Viacava Middle, Viacava Lowell	0.50	362.23					362.23
United States of America in Trust	8.00	1124	Smith & Junkins	0.23	166.63					166.63
S S Opunshaw, Gerald Opunshaw, and Gene Opunshaw	269.70	113, 114	Hough Creek Upper, Hough Creek Lower	3.40	2,463.17					2,463.17
Plumas Unified School District	Domestic	108	Hotel Pipe	0.025	18.11					18.11
J E Cardoza and Marion Cardoza	42.50	1144, 1148	Cardoza	0.55	398.45					398.45
J E Cardoza and Marion Cardoza	99.10	115 & 115A	Cardoza Springs	1.00	724.46					724.46
August C Frehlich	8.80	123	Crescent	0.15	108.67					108.67
H C Haur	1.00	123	Crescent	0.02	14.49					14.49
Sorsoli Water Company	Municipal	123	Crescent	0.13	94.18					94.18
B B Gregory & Estelle E Gregory	7.00	123A	Domestic Spring Pipeline	0.05	36.22					36.22
Margaret Fritzie, Frances Fritzie, and Theresa Fritzie	Domestic & Industrial	118	Fritzie	1.50	1,086.69					1,086.69
Dawn Institute of Science & Art	Domestic	119	Indian Falls	0.01	8.69					8.69
Subtotal, Schedule 7 - "Special Class" Rights Group	707.40			12.148	8,800.77					8,800.77
Schedule 8, "Surplus Class" Rights on Indian Creek Stream System										
Jack W Humphrey	00.00	9A	Humphrey Last Chance Clover Lowell, Spring Channel					0.60	275.00	275.00
George Humphrey	245.00	23, 25, 26, 27	Lowell, Crocker Creek, Crocker Old Channel					1.75	742.81	742.81
Westovar Company	320.00	11, 12, 27 1/2	Dixie Upper, Upper East, Crocker Lower					2.90	976.26	976.26
R H Conkin	328.00	16, 20	Guidici Dixie, Guidici Clover					3.00	1,273.39	1,273.39

No comments

- n/a -

No comments

- n/a -

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Allotments			Total Allotments, Face Value (AF)
							Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	
W E Cooper, Ed Cooper & J A Ritchy		85C	Proposed Cooper					0.50	212.23	212.23
S S Openshaw, Gerald Openshaw, and Gene Openshaw	15.60	95A	Proposed Lights Creek					0.25	53.06	53.06
C H Tavan and H W Ambrey Lumber Company	17.00	104	Tanesh Mill Pump					0.25	53.06	53.06
William F Martins	76.20	51, 52A	Barnes East, Proposed Barnes Pump					0.76	322.59	322.59
E T Kuntler & Edna H Kuntler	36.00	---	Proposed					0.24	101.87	101.87
Almanor Lumber Company	8.40	---	Proposed					0.06	25.47	25.47
Subtotal, Schedule 8 - "Surplus Class" Rights	1,206.20							9.51	4,036.64	4,036.64
Special Class Claimants										
Browell Water Company	Municipal	64	Round Valley Reservoir		4,800.00	Winter season				
K R Doyle and Murray Doyle	Domestic Stockwater, Irrigation	7F	Doyle Reservoir		45.00	Winter Season				
Subtotal, Special Class Claimants					4,845.00					
Surplus Class Claimants										
J LaFay Robinson & Elizabeth Evans Robinson	Domestic Stockwater	I	Taylor Lake		200.00					
Charles H Bryson Sr and Estate of Kathryn Bryson	Domestic, Resort	117	Avant Pipe Line	0.02	1.59	Continuous, Year-long				
Dawn Institute of Science & Art	Domestic, Resort	120	Jackson Springs Pipe Line	1.25	905.58	Continuous, Year-long				
Subtotal, Surplus Class Claimants				1.27	1,117.17					
Summary of Indian Creek Adjudication										
	Acreage to be supplied	First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Total Allotments, Face Value (AF)		
Schedule 3 - Wolf Creek Group	1,838.70	8.38	5,837.26	10.00	5,286.86	3.35	1,627.93	12,762.00		
Schedule 4 - Lights Creek Group	2,131.70	6.90	4,999.79	16.98	9,210.91	1.65	899.01	15,118.71		
Schedule 5 - Upper Tributaries Group	2,081.60	5.80	4,201.88	13.25	5,624.13	0.00	0.00	9,826.02		
Schedule 6 - Indian Creek in Genesee & Indian Valleys Group	8,033.60	20.00	14,923.93	54.08	26,518.71	10.05	6,010.17	47,452.61		
Schedule 7 - Special Class Group	707.40	12.148	6,800.774	0.000	0.000	0.000	0.000	6,800.774		
Schedule 8 - Surplus Class Group	1,206.20	0.00	0.00	0.00	0.00	9.51	4,036.64	4,036.64		
Subtotal, Special Class Claimants								4,845.00		
Subtotal, Surplus Class Claimants								1,117.17		
Total Face Value (AF), Indian Creek Decree	12,999.40	53.83	38,762.64	97.21	46,660.61	25.36	12,573.75	103,959.17		

Wabigoon Water Right (and its Successors Above Beckwith) Date: County of Plumas, Case No. 2008

Summary of Use:
 Continuous, beneficial of record
 Year: 1979 (up October 31)
 Year: 1979 (up October 31)
 Year: 1979 (up October 31)

Name of Claimant	Acreage to be supplied	Diversion No. as per work log	Name of Diversion System	Allotments								Total Allotments, AF	Check, 1984 CFS
				First Priority Class (PR)	First Priority Face Value (AF)	Second Priority Class (PR)	Second Priority Face Value (AF)	Third Priority Class (PR)	Third Priority Face Value (AF)	Fourth Priority Class (PR)	Fourth Priority Face Value (AF)		
Schedule 1, Claimants from Last Chance Creek and its Tributaries Above Adams Road													
C. Meador & W. May (weir)	100.42	1, 2, 3	Boxed Upper North End Valley Weir South, Boxed Lower North	2.30	702.41							702.41	2.30
C. Cleaveland & W. May (weir)	11.70	4	Boxed South Creek Weir, Hill & Kerrel, Kerrel Spring, Orange Hill & Kerrel	0.70	273.88							273.88	0.70
Adams Road & Adams (weir)	101.62	5, 6, 7	Kerrel Spring, Orange Hill & Kerrel	1.60	733.72							733.72	1.60
Meador Weir	13.67	6, 7	Kerrel Spring, Orange Hill & Kerrel	0.70	461.7							461.7	0.70
Deer Hill Gutter	18.00	1	Top Left Ditch	0.20	111.00							111.00	0.20
Deer Hill Gutter	7.00	84	Top Ditch, Green	0.10	17.00							17.00	0.10
Deer Hill Gutter	11.80	1	Top Ditch	0.20	75.8							75.8	0.20
Deer Hill Gutter	17.80	11, 12	Top Ditch, Hill & Kerrel	0.60	118.81	0.50	180.0					298.81	0.80
Charles A. Gutter, Fred J. Gutter, Hill & Kerrel, and Wabigoon	27.00	10, 12	Orange Hill & Kerrel, Lower Left Ditch, Orange Hill & Kerrel, Orange Hill & Kerrel, Orange Hill & Kerrel, Orange Hill & Kerrel	0.20	129.0							129.0	0.20
Charles A. Gutter, Fred J. Gutter, Hill & Kerrel, and Wabigoon	79.70	13, 24, 26	Orange Hill & Kerrel, Orange Hill & Kerrel, Orange Hill & Kerrel, Orange Hill & Kerrel, Orange Hill & Kerrel	1.00	890.0							890.0	1.00
Deer Hill Gutter	11.10	15, 18	Top Ditch, Hill & Kerrel	0.60	385.71							385.71	0.60
Deer Hill Gutter	11.00	20	Orange Hill & Kerrel	0.60	311.0							311.0	0.60
Fred J. Gutter and Fred & Gutter	103.00	18, 19	Orange Hill & Kerrel, Orange Hill & Kerrel, Orange Hill & Kerrel	1.00	103.00							103.00	1.00
Charles A. Gutter, Fred J. Gutter, Hill & Kerrel, and Wabigoon	27.00	14, 17	Orange Hill & Kerrel, Orange Hill & Kerrel, Orange Hill & Kerrel	0.70	75.0							75.0	0.70
Wabigoon	79.20	20	Orange Hill & Kerrel	1.00	289.0							289.0	1.00

No comments
 - n/a -

Middle Fork Feather River (and its Tributaries Above Beckwith) State Counts of Flumes, Cross No. 5398

Season of Use
 Continuous, 12/1/01 to Present 243.25 Acre
 Year 17/1/01 to 03/31/11 243.25 Acre
 Year 12/1/01 to 03/31/11 243.25 Acre

Name of Claimant	Acreage to be supplied	Diversion No. as per State Map	Name of Diversion System	Allotments										Total Allotments, Fee Value (AF)	Check, 1984 CFS		
				First Priority Class (AF)	Second Priority Class (AF)	Third Priority Class (AF)	Fourth Priority Class (AF)	Fifth Priority Class (AF)	Sixth Priority Class (AF)	Seventh Priority Class (AF)	Eighth Priority Class (AF)	Ninth Priority Class (AF)	Tenth Priority Class (AF)				
Frank Dotts	54.82	19	Lower end of Dotts Foundation Dam, Dotts Foundation Dam, Dotts Foundation Dam	0.00	217.38											272.38	1.88
Frank Dotts	27.91	20, 21	Dotts Spring, Dotts Spring and Dotts Spring	0.00	26.91											26.91	0.12
SUBTOTAL, Schedule 3 - Last Chance Creek Group	1,441.10			18.00	7,140.56	0.50	148.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,322.84	18.12
Frank Guido and Myrtle A Guido	281.45	31, 29	F Frank Guido Upper RA Guide Dam	1.80	182.18		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	184.18	4.82
Myrtle Guido & The Guido	82.30	31, 29	F Frank Guido Upper RA Guide Dam	5.91	101.89								0.00	0.00	0.00	107.80	1.59
Les E Guido	181.06	31	A L Guido Dam	1.00	179.38	1.00	28.99									209.37	3.00
Les Guido & Gemma Guido	37.10	28, 28	M Guido Upper Dam, Guido Lower Dam	1.00	36.84	1.40	13.12						0.00	0.00	0.00	50.96	1.00
John West Guido	146.25	25, 26, 27, 28	F Frank Guido Dam, Frank Guido Upper, Frank Guido Lower, Frank Guido Lower	1.00	145.38	0.00	14.32									160.70	1.00
Frank Dotts	270.58	26, 26, 27, 28	F Frank Dotts Upper, F Frank Dotts Middle, F Frank Dotts Lower	0.00	117.04			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	117.04	0.88
Frank Dotts	11.21	31, 31	F Frank Dotts Lower, Frank Dotts Lower	1.00	10.13											10.13	0.12
Frank Dotts	21.32	32, 32	Channel, Frank Dotts Lower	0.00	20.17											20.17	0.23
Philip Bink & Berna Bink	220.25	31, 31, 31	Lower, Bink Bink Dam, Bink Bink Dam, Bink Bink Dam				2.00	138.00								140.00	2.12
Henry J Bink & The Bink	231.00	30, 30, 31	Channel, Bink Bink Dam, Bink Bink Dam, Bink Bink Dam				2.00	138.00	1.00	180.00						319.00	3.12
John H Bink & Berna Bink	120.00	31, 31	Channel, Bink Bink Dam, Bink Bink Dam				1.00	138.00								138.00	1.00
C O Bink & Berna Bink	100.00	30	Channel, Bink Bink Dam, Bink Bink Dam				0.00	138.00	1.00	138.00						276.00	1.00

No comments

- n/a -

Middle Fork Feather River (and its Tributaries Above Beckwith) State Counts of Flows, Case No. 2008

Season of Use
 Continuous, 10/1/01 to Present
 Year: 12/01/01 to 12/31/13
 Month: 12/01/01 to 12/31/13

Name of Claimant	Acreage to be supplied	Diversion No. as per State Map	Name of Diversion System	Allotments								Total Allotments	Check, 1984 CFS
				First Priority Class (AF)	Second Priority Class (AF)	Third Priority Class (AF)	Fourth Priority Class (AF)	Fifth Priority Class (AF)	Sixth Priority Class (AF)	Seventh Priority Class (AF)	Eighth Priority Class (AF)		
Amick Family	81.92	26, 41, 41, 42	Jefferson North Canal, Hodge Upper North Fork Canal, Hodge Lower North Fork Canal, Hodge Lower North Fork Canal, Hodge North Fork Canal, Hodge Lower North Fork Canal				375	1,285	185	715	1,920	118	
Josephine Robert	200.40	43, 44, 45	Wherry North, Wherry South, Wherry Lower Dam, Wherry North, Wherry South, Wherry Lower Dam				140	544.5	0.0	140.0	784.5	50.0	
G. J. Laffoon & J. Laffoon	299.25	43, 44, 45	North Fork, North Fork, North Fork, Wherry Lower Dam				140	544.5	0.0	140.0	1,024.5	240	
L. J. Laffoon & J. Laffoon	240.17	43, 44, 45	North Fork, North Fork, North Fork, Wherry Lower Dam				140	544.5	0.0	140.0	1,024.5	240	
G. J. Laffoon & J. Laffoon	170.00	45, 51	Dalton North, Dalton South, Modoc North, Modoc South, Modoc Lower Dam						7.0	544.5	611.5	170	
J. D. Modoc	70.00	45, 51	Modoc North, Modoc South, Modoc Lower Dam						0.0	770.0	770.0	0.0	
W. H. Humphrey	44.44	46, 57	Humphrey East Side, W. H. Humphrey West Side	4.0	1,044.0	1.0	1,044.0			0.0	2,092.0	0.0	
John Merrill	72.00	50	Merrill North, Merrill South, Merrill Lower Dam		110	550.0				0.0	660.0	110	
Ernest Merrill	42.00	50, 50	Merrill North, Merrill South, Merrill Lower Dam			0.0	110.0			0.0	110.0	0.0	
Glenn Merrill & Arnold Merrill	28.00	47, 48	Humphrey West Side, Merrill North, Merrill South, Merrill Lower Dam				1.0	51.0		0.0	51.0	0.0	
Archie Merrill & Eugene Merrill	14.00	50, 50	Merrill North, Merrill South, Merrill Lower Dam				0.0	110.0			110.0	0.0	
Edward Merrill & S. C. Beck	21.00	57, 58	Humphrey West Side, Merrill North, Merrill South				0.0	81.0			81.0	0.0	

No comments
 - n/a -

Wabigoon Fork Feather River (and its Tributaries Above Beckwith) Drainage
County of Plumas, Case No. 2008

Summary of Use
 Continuous, Interbasin of Appeal: 281.24 Acre
 Year 1 (7/1/04-6/30/11): 241.20 Acre
 Year 2 (7/1/11-6/30/18): 300.00 Acre

Name of Claimant	Acreage to be supplied	Division No. as per Dam Map	Name of Division System	Allotments										Total Allotments Fee Value (AF)	Check, 1984 CFS	
				First Priority Class (AF)	First Priority Fee Value (AF)	Second Priority Class (AF)	Second Priority Fee Value (AF)	Third Priority Class (AF)	Third Priority Fee Value (AF)	Fourth Priority Class (AF)	Fourth Priority Fee Value (AF)	Fifth Priority Class (AF)	Fifth Priority Fee Value (AF)			
Oneil II Spill & Control System	180.10	51, 52, 53	John Uppe Tail Channel, Bear Ridge Exp. Channel, John Lower Tail Channel					1.85	172.48				0.30	166.30	432.21	1.15
L.S. Jefferson & Sons C. Jefferson	323.02	54, 55, 56	Jefferson Upper Tail Channel, Jefferson Middle Tail Channel, Jefferson Lower Tail Channel					1.13	103.34	1.10	179.35		0.30	166.30	1,597.94	0.00
Ward & Sons	288.80	55, 56, 58, 59, 72	Jefferson Middle Tail Channel, Jefferson Lower Tail Channel, Upper Tail Channel, Middle Tail Channel, Lower Tail Channel							0.11	1,021.81		1.00	166.30	1,187.91	1.83
S. & Sonnet	88.68	67, 70, 72	Upper Tail Channel, Middle Tail Channel, Lower Tail Channel, Upper Tail Channel, Middle Tail Channel, Lower Tail Channel							1.10	161.19		1.11	166.30	1,189.11	0.00
Jacobsen Water	111.76	61, 66, 68, 70	Upper Tail Channel, Middle Tail Channel, Lower Tail Channel, Upper Tail Channel, Middle Tail Channel, Lower Tail Channel							0.16	1,107.61		1.00	166.30	1,274.11	1.00
Demery, Duda & Hubert's Sons	141.20	73, 99	Upper Tail Channel, Middle Tail Channel, Lower Tail Channel, Upper Tail Channel, Middle Tail Channel, Lower Tail Channel										2.10	302.20	160.20	1.00
Subtotal, List Claims Creek Below Frenchman Creek Drainage	5,476.10			0.35	3,471.07	18.80	5,874.38	18.60	8,188.42	16.80	7,854.95	12.10	6,970.20	28,998.68	15.01	
May I Fork & Upper Tail	212.00	31, 33	Upper Tail Channel, Middle Tail Channel, Lower Tail Channel			0.41	19.31	2.40	19.11					121.20	0.00	
Edward Duda & W. C. Duda	60.70	70	Upper Tail Channel, Middle Tail Channel, Lower Tail Channel			0.10	277.88	1.40	388.37					487.00	0.00	
Oneil II Spill & Control System	133.10	50	Upper Tail Channel, Middle Tail Channel, Lower Tail Channel			0.10	190.10							190.10	1.00	

No comments

- n/a -

Middle Fork Feather River (and its Tributaries Above Beckwith) District
County of Plumas, Case No. 2024

Season of Use
 California, Westfall of season
 Year 17 (Start: October 31)
 Year 18 (Start: September 30)

Name of Claimant	Acreage to be supplied	Division No. as per Div. Map	Name of Division System	Allotments								Total Allotments Fee Value (AF)	Check, 1984 CFS	
				First Priority Class (CFS)	Second Priority Class (CFS)	Third Priority Class (CFS)	Fourth Priority Class (CFS)	Fifth Priority Class (CFS)	Sixth Priority Class (CFS)	Seventh Priority Class (CFS)	Eighth Priority Class (CFS)			
C. Claborn & Sons & Lafferty	81.88	26, 64, 67	Lafferty North Channel, Lafferty Upper East Channel, Deer Duffer Lafferty East Channel, Lafferty Ridge East Channel		0.01	128.88	1.21	819.21					1,118.88	1,118
James Foreley	125.52	26, 65	Lafferty North Channel, Lafferty Ridge East Channel		0.42	128.10							149.52	149
J. J. Jones & Sons	242.22	41, 42, 43	Deer North, Deer South, Deer Middle	0.01	244.21	0.01	244.21						732.42	732
C. Claborn & Lafferty	80.00	50, 51	Deer North, Deer South, Middle	0.46	188.54								328.02	328
D. H. Haggard	89.00	52, 53	South, Middle, North	0.46	188.54	0.10	38.61						349.23	349
Wabigoon Company	43.00	54, 55	North North, North South	0.43	188.57								341.51	341
James Howell & Adams Powell	21.51	60	Lower Deer Channel, Upper Deer Channel				0.45	36.20					81.51	81
W. H. Haggard	88.88	55, 56, 57	Upper Deer Channel, Middle Deer Channel, Deer Channel		0.36	349.14							349.14	349
Shoreline Creek**	61.51	58	Deer Channel, Deer Channel				0.10						61.51	61
Archie E. Dettl	45.17	61, 59	Deer, A) Deer East, Deer Middle		0.20	242.34							242.34	242
Archie Howell	228.82	59	Deer Channel, Deer Channel		0.55	228.18							228.18	228
James Nelson, Ltd. & Sons, 381 D. Hwy. 214, Colusa, Plumas County 95923, Ltd. & Sons	51.50	59	Deer Channel		0.20	242.34							242.34	242
Yehel J. Rubiner	18.47	59	Deer Channel		0.10	38.61							38.61	38
Josephine Robert	61.50	59	Deer Channel		0.20	242.34							242.34	242
Bernard E. Davis & Robert E. Hutto	113.88	59	Deer Channel		0.25	388.84	0.25	49.12					238.02	238
Subtotal, Last Chance Creek Group Below Adams Fork	2,718.00			1.20	1,299.42	5.70	2,241.19	6.43	1,168.80	0.00	0.00	0.00	4,699.17	4,699
Schubert & Clements from Tenthredin Creek and Tributaries	71.00	70A	Deer Channel	0.20	388.34								388.34	388
Upper Valley (Lower Chance)	75.21	77, 79	Deer Channel, Deer Channel	0.20	388.34								388.34	388

No comments
 - n/a -

Middle Fork Feather River (and its Tributaries Above Beckwith) State County of Plumas, Case No. 2008

Season of Use
 Continuous, throughout of season
 Year: 12 (through October 31)
 Month: 12 (through September 30)

Name of Claimant	Acreage to be supplied	Diversion No. as per State Map	Name of Diversion System	Allotments											Total Allotments (AF)	Check, 1984 CFS	
				First Priority Class (AF)	Second Priority Class (AF)	Third Priority Class (AF)	Fourth Priority Class (AF)	Fifth Priority Class (AF)	Sixth Priority Class (AF)	Seventh Priority Class (AF)	Eighth Priority Class (AF)	Ninth Priority Class (AF)	Tenth Priority Class (AF)				
Clare Wiley Lumber Company	101.75	86.99	Class 101 Buckhorn Lands	1.85	1,033.21									21	99.17	1,113.42	1.83
Wey-Cutthrope	46.49	78.85	West Lands East Turner South	5.35	503.12											507.47	0.78
Wey-Cutthrope	134.70	84, 83, 232	Turner North Lands Central	7.75	1,753.82											1,761.57	2.02
Clare Wiley Lumber	Domestic	87	Class Central Dam	3.94	28.86											29.80	0.04
Clare Wiley Lumber Company	104.75	82, 82, 83	Class Central Dam East Turner	1.20	891.89	1.90	24.98			0.41	18.83					1,044.98	2.03
East Regional Area of Feasibility	111.80	82, 83	North East Lands East	2.20	148.88	1.00	85.84						0.00	10.44	1,044.92	1.82	
13 West	87.47	86, 232	Class East West Lands North	0.70	262.39											263.09	0.90
13 West	182.72	87, 89	West East Lands North	1.50	941.80	0.60	188.68						0.81	19.41	1,279.89	2.13	
13 West	Domestic	253	Upper North	0.95	484.44											485.39	1.80
Max Dorn & Max Dorn	80.60	90, 91	Division Central Dam East Channel			0.66	189.44									189.44	0.43
Max Dorn & Max Dorn	88.67	107	Class West Division Dam	0.70	111.19	0.10	99.08									210.27	2.40
Old Grant	18.00	80	Division Dam										0.22	14.87	14.87	0.10	
Lois S. Lathrop	34.70	103	Class West Division Dam										0.20	16.34	16.34	0.20	
Bank Valley Land	59.20	102	Class West Division Dam										0.21	16.27	16.27	0.21	
Alan Quate, Barbara Quate, & Stephen Quate	87.70	82	Class East Division Dam			1.00	859.98									859.98	1.00
Lesly F. Davis	87.80	82	Class East Division Dam			0.90	467.23	0.01	238.52							705.75	1.10
Jeffrey Davis	120.00	82	Class East Division Dam			0.80	450.90	0.01	277.89							728.79	1.18
Jeffrey Davis	114.00	84, 85	Class East Division Dam			1.00	613.70									613.70	1.00
Max Dorn & Carl V. Dorn	85.00	82	Class East Division Dam			0.80	477.14									477.14	0.82
Alvin C. Dorn & Glenn Dorn	160.00	84, 85	Class East Division Dam			1.80	718.83									718.83	1.00
Alvin C. Dorn & Glenn Dorn	299.80	86, 87	Class East Division Dam Class East Division Dam			2.40	1,046.18									1,046.18	2.00
Bernard E. Duda & Katherin E. Duda	140.00	90, 91, 106	Class East Division Dam Class East Division Dam			1.60	124.71									124.71	1.00
Kate Quate, Thomas Quate, & Stephen Quate	62.00	102	Class East Division Dam			0.40	301.10									301.10	0.40
Max Dorn & Carl V. Dorn	89.00	100, 101	Class East Division Dam			1.10	456.20									456.20	1.10

No comments

- n/a -

Walla Wall Feather River (and its Tributaries Above Beckwith) Basin
County of Plumas, Case No. 2008

Season of Use
 Continuous, throughout of season
 Year: 12/1/01-10/31/11
 Month: 12/1/01-10/31/11

Name of Claimant	Acreage to be supplied	Diversion No. as per Dam Reg.	Name of Diversion System	Allotments							Total Allotments, Fee Value (AF)	Check, 1984 CFS		
				First Priority Class (CFS)	Second Priority Class (CFS)	Third Priority Class (CFS)	Fourth Priority Class (CFS)	Fifth Priority Class (CFS)	Sixth Priority Class (CFS)	Seventh Priority Class (CFS)				
Jack Jackson & Arjoe Smith	61.32	102, 103	Upper Ditch Lower Ditch Ditch Upper Ditch Lower Ditch	0.00	1,857.81	0.00	239.02			0.00	39.50	1,166.33	1.11	
Albert C. Deth & Glenn Deth	391.28	922, 923, 924, 925	General, A & C Deth Ridge, A & C Deth Horse Arch	0.20	1,208.26	1.00	318.51					1,526.97	4.30	
Samuel J. Smith & Building Co. (Subs)	88.42	95, 106	Juniper Ditch, Lower Ridge Ditch	0.11	297.52	0.20	98.17					395.69	1.00	
Joseph Deth & Louis Deth	298.52	111, 112	Upper and Lower Ditch	2.50	2,117.81	0.00	317.00					2,434.81	6.70	
Bartholem Deth	80.00	110	Ditch and Ditch	0.00	80.00					0.00	80.00	80.00	0.20	
Agustin Deth	3.17	111	Lower Ditch	0.00	80.00							80.00	0.20	
Julius Deth	176.20	101, 103, 114	General Ditch Ditch	2.50	1,188.18	1.50	418.10			0.00	278.68	1,884.96	5.00	
Albert C. Deth & Glenn Deth	234.32	115	A & C Deth Ditch Ditch	2.00	810.22	0.00	318.00					1,128.22	3.00	
Arthur C. Deth	88.42	113, 114	General, A & C Deth Ditch Ditch	0.80	817.28							817.28	2.00	
The Federal Land Bank of Merino	146.25	115, 116, 117	Ditch Ditch Ditch Ditch			2.20	812.10					812.10	2.00	
Albert C. Deth & Glenn Deth	81.90	104	General Ditch			1.00	418.10					418.10	1.00	
Armed Deth	89.60	108	A & C Deth Ditch			0.80	297.60					297.60	0.70	
Charles W. Deth	88.42	109	A & C Deth Ditch			0.45	158.01					158.01	0.40	
The Federal Land Bank of Merino	76.00	108, 109	A & C Deth Ditch Ditch			0.80	317.00					317.00	0.80	
W. B. Hunsomey	94.20	104	General Ditch			0.80	118.00			0.00	88.00	208.00	0.50	
W. B. Hunsomey	113.14	118	General Ditch			1.00	418.10	2.40	823.00			1,241.10	3.00	
Charles W. Deth	117.30	100, 113	General Ditch Ditch			1.10	418.10					418.10	1.00	
Joseph A. Deth, Jr.	129.80	118	General Ditch			1.00	317.00					317.00	0.80	
Armed Deth	70.80	118	General Ditch			0.80	317.00					317.00	0.80	
Subtotal, Claims from Smithwick Creek and its Tributaries Group	5,888.60			10.91	7,825.92	33.11	15,514.15	13.20	5,239.36	0.00	2,779.89	2.89	21,446.48	67.14

No comments
 - n/a -

Middle Fork Feather River (and its Tributaries Above Beckwith) - Down
County of Plumas, Case No. 2008

Seasons of Use
 Continuous, regardless of season
 Year 1 (through October 31)
 Year 2 (through September 30)

Name of Claimant	Acreage to be supplied	Diversion No. as per Diversion System	Name of Diversion System	Allotments										Total Allotments (AF)	Check, 1984 CFS		
				First Priority Class (AF)	Second Priority Class (AF)	Third Priority Class (AF)	Fourth Priority Class (AF)	Fifth Priority Class (AF)	Sixth Priority Class (AF)	Seventh Priority Class (AF)	Eighth Priority Class (AF)	Ninth Priority Class (AF)	Tenth Priority Class (AF)				
M O Writings, (H Writings, A Writings) Sonoma	119.00	173	Water Creek South Channel	0.10	70.40			1.31	33.54							65.96	143
High 8 Turbs, (H Turbs, H O Deer Turb)	42.70	175, 187	Church Creek Turb	0.10	72.40			0.40	108.00							211.10	550
High 8 Turbs, (H Turbs, H O Deer Turb)	60.00	175, 202	Water Creek South Channel	0.10	72.40			0.90	217.02							428.32	1100
High 8 Adams	100.00	176	Adams Mountain	0.10	72.40	0.40	108.00	1.10	289.10							470.00	1184
Deak 8 Methodist	79.40	177	Methodist Spring Brook	0.40	311.00											311.00	781
Deak 8 Methodist	84.00	177	Methodist Spring Brook	0.20	164.00	0.90	231.00									395.00	1000
Deak 8 Methodist	33.00	180	Church Creek	0.10	74.40	0.40	108.00									182.40	463
Deak 8 Methodist	71.70	184, 193	Church Creek	0.10	164.00	0.40	108.00									272.00	683
Frank 8 Franklin	117.50	185	Franklin	0.60	243.00	1.20	470.00									613.00	1550
Frank 8 Franklin	88.90	188	Lower Reservoir	0.10	77.40			1.00	269.00							346.40	870
T 2 Turbs, (H Turbs, Frank Turbs & Deer Turb)	0.00	189	Franklin	0.02	24.40											24.40	61
High 8 Turbs, (H Turbs, and Deer Turb)	79.40	191, 182	Turbs Reservoir	0.40	164.00	0.40	108.00									272.00	683
High 8 Turbs, (H Turbs, and Deer Turb)	79.00	183	Deer Turb	0.40	168.00											168.00	420
High 8 Turbs, (H Turbs, and Deer Turb)	71.40	184, 193	Church Creek	0.10	164.00			0.10	108.00							272.00	683
High 8 Turbs, (H Turbs, and Deer Turb)	228.40	187	Deer Turb Reservoir	0.10	36.00	0.20	80.00	1.00								116.00	290
Aber 8 Ouzel	38.00	188	Church Creek	0.60	417.00											417.00	1040
Aber 8 Ouzel	148.00	188	Church Creek	0.10	164.00	1.40	544.00									708.00	1770
Aber 8 Ouzel	134.10	187	Lower Reservoir	0.20	164.00			1.30	365.00							529.00	1320
Samuel Deane, God 1 Deane, Samuel Deane, Allen 8 Deane, and Bradley & Woodcock (Habitat, Keel Creek Fund)	201.80	189	Deer Turb Reservoir	0.20	164.00			1.00	315.00	1.00	269.00					748.00	1870
Charles W. C. & Nancy & Estate of Virginia (Habitat)	201.00	189, 190	Deer Turb Reservoir	0.20	164.00			1.00	214.00	0.20	108.00					486.00	1210
Tadpole (Habitat)	181.00	191, 192	Deer Turb Reservoir	0.10	164.00			1.00	317.00	1.00	270.00					751.00	1870

No comments
 - n/a -

Wade Park Feather River (and its Tributaries Above Beckwith) State County of Plumas, Case No. 2018

Season of Use
 Continuous, 12 months of year
 Year: 12 (through October 31)
 Month: 12 (through September 30)

Name of Claimant	Acreage to be supplied	Division No. as per State Map	Name of Division System	Allotments								Total Allotments Fee Value (AF)	Check, 1984 CFS		
				First Priority Class (PR)	First Priority Fee Value (AF)	Second Priority Class (PR)	Second Priority Fee Value (AF)	Third Priority Class (PR)	Third Priority Fee Value (AF)	Fourth Priority Class (PR)	Fourth Priority Fee Value (AF)				
Wade Park	277.25	204, 201	Feather River Upper Beckwith Feather Cave Agriculture		0.30	369.21	2.16	391.08	1.11	538.25	1,451.64	112			
Wade Park (and its Tributaries Above Beckwith)	104.90	201	Turne Meadow Agriculture	0.70	144.85	0.30	274.34	0.80	383.07						
George A. Hendricks	120.00	176, 203	Wade Meadow Agriculture		0.50	852.91	1.50	786.69			786.69	1.00			
James H. Hendricks	189.00	176, 204	Feather River Upper Beckwith Feather Cave Agriculture		0.50	852.91	1.50	385.04	0.40	189.88	1,119.92	2.40			
F. Hendricks, Jr.	251.25, 251, 252, 253, 254, 255		Wade Meadow Agriculture		1.00	1,066.94	3.00	2,120.84	1.00	644.70	2,833.48	6.00			
F. Hendricks, Jr.	411.50	210, 214	Wade Meadow Agriculture		0.70	343.53	2.10	951.74	1.00	320.34	1,615.61	1.40			
F. Hendricks, Jr.	160.00	212, 214	Wade Meadow Agriculture		0.50	852.91	1.00	336.38	0.20	118.00	1,317.50	1.00			
F. Hendricks, Jr.	276.50	214, 220	Wade Meadow Agriculture						0.20	1,189.00	1,189.00	0.00			
Wade Park & Wade Park	134.50	211, 214	Wade Meadow Agriculture		0.40	482.23	0.40	738.02	0.40	238.02	1,458.27	1.10			
Wade Park & Wade Park	121.75	213, 213	Wade Meadow Agriculture		0.70	144.85			1.20	459.91	479.56	1.00			
Wade Park & Wade Park	113.90	214	Wade Meadow Agriculture						0.40	287.02	300.26	1.40			
F. Hendricks	399.40	213, 215	Wade Meadow Agriculture		0.20	181.14			0.20	1,011.53	1,192.67	0.40			
F. Hendricks	115.10	218	Wade Meadow Agriculture		0.20	181.14			1.00	388.49	569.53	1.40			
Wade Park	146.80	216, 217	Wade Meadow Agriculture		0.20	181.14			0.10	376.88	557.96	2.00			
Wade Park	11.90	220	Wade Meadow Agriculture						0.40	317.38	317.38	0.00			
James H. Hendricks	127.50	220, 220	Wade Meadow Agriculture						0.40	317.38	317.38	0.00			
Subtotal Schedule 7 - Claims from Wade Park and its Tributaries (Wade, Miller and Turner Creeks)	1,712.45			0.30	6,049.28	10.00	14,282.12	29.00	11,904.13	22.00	6,528.80	5.00	2,151.88	16,977.62	65.10

No comments

- n/a -

Middle Fork Feather River (and its Tributaries Above Beckwith) State County of Plumas, Case No. 2008

Season of Use
 Continuous, Year-Round of season
 Year: 12/04/08 - 03/31/11
 Month: 12/04/08 - September 30

Name of Claimant	Acreage to be supplied	Diversion No. as per Divert Map	Name of Diversion System	Allotments												Total Allotments Face Value (AF)	Check, 1984 CFS	Total Allotments Face Value (AF)	Check, Total CFS
				First Priority Class (CFS)	First Priority Face Value (AF)	Second Priority Class (CFS)	Second Priority Face Value (AF)	Third Priority Class (CFS)	Third Priority Face Value (AF)	Fourth Priority Class (CFS)	Fourth Priority Face Value (AF)	Fifth Priority Class (CFS)	Fifth Priority Face Value (AF)	Sixth Priority Class (CFS)	Sixth Priority Face Value (AF)				
Schedule 12, Citizens of Middle Fork of Feather River, and Tributaries Cold, Middle, Town and Perry Creeks																			
S.C. Lindvall	8.00	127	Feather and Camp Spring	0.04	28.80	0.06	21.14										49.94	5.18	
S.C. Lindvall	1.00	128	San Pablo	0.00	24.00												24.00	0.00	
John Arnold & Arva Arnold	144.00	131	Arnold Spring, Hot Spring, Hot Spring	1.00	108.00	1.00	396.00										1,404.00	2.00	
General Morgan	17.00	126, 133	General Morgan Area	1.00	108.00												108.00	1.18	
James A Morgan	11.00	133	General Morgan	0.00	0.00			0.00	0.00								0.00	0.00	
Carl L Jensen	50.00	125, 126	Carl Jensen	0.00	144.00			0.00	0.00								144.00	1.00	
Carl L Jensen	140.00	121, 122, 123, 124	Carl Jensen	0.00	144.00	0.00	0.00	0.00	0.00								1,200.00	2.00	
Carl L Jensen	60.00	133	General Morgan	0.00	144.00			0.00	0.00								144.00	1.00	
Carl S. O'Brien & Catherine O'Brien	181.00	129	High O'Brien	0.00	362.00	1.00	351.00			0.00	0.00						1,074.00	2.00	
Arva & Bill	100.00	120, 124	Arva & Bill	0.00	362.00	1.00	351.00										1,074.00	1.00	
Arva & Bill	20.00	133	General Morgan	0.00	144.00												144.00	0.00	
Wendell Peter O'Brien	13.00	136	Wendell Peter O'Brien	0.00	362.00												362.00	0.00	
Arva O'Brien	7.00	133	General Morgan	0.04	28.80												28.80	0.04	
Theresa E Miller	9.00	124	San Pablo	0.04	28.80			0.00	0.00								28.80	0.14	
Carl Jensen	1.00	124	San Pablo	0.00	24.00			0.00	0.00								24.00	0.00	
John A. Hendall	1.00	124	San Pablo	0.00	24.00			0.00	0.00								24.00	0.00	
Frank O'Brien	2.00	124	San Pablo	0.01	7.20												7.20	0.01	
Charles	7.00	133	General Morgan	0.10	72.00			0.00	0.00								72.00	0.00	
Theresa E Miller & Frank J. Miller	188.00	128, 129, 130, 131	Theresa E Miller & Frank J. Miller	0.00	362.00			0.00	0.00								1,264.00	3.00	
Frank J. Allen & Cynthia Allen	110.00	142	Frank J. Allen & Cynthia Allen	0.00	144.00			0.00	0.00								144.00	0.00	
Frank J. Allen & Cynthia Allen	80.00	126	Frank J. Allen & Cynthia Allen	0.00	144.00	0.00	0.00										144.00	0.00	
Walter Tarr	50.00	142, 143	Walter Tarr	0.00	144.00			0.00	0.00								1,440.00	0.00	
Arva & Bill	200.00	131	General Morgan	0.00	144.00					0.00	0.00						1,440.00	0.00	
Arva & Bill	212.00	149	Arva & Bill	0.00	362.00			0.00	0.00					0.00	0.00		1,784.00	0.00	
Arva & Bill	100.00	147	Arva & Bill	0.00	362.00			0.00	0.00								1,092.00	0.00	

No comments
 - n/a -

Midvale Feather River (and its Tributaries Above Beckwith) Diversion
County of Plumas, Case No. 2008

Season of Use:
 Continuous, remainder of season
 Year: 12/04/07-October 31, 2018
 Month: 12/04/07-September 30, 2018

Name of Claimant	Acreage to be supplied	Diversion No. as per Diversion System	Name of Diversion System	Allotments					Total Allotments, Fee Value (AF)	Check, 1984 CFS					
				First Priority Class (AF)	Second Priority Class (AF)	Third Priority Class (AF)	Fourth Priority Class (AF)	Fifth Priority Class (AF)							
Arvo & Moe	328.02	145	152				2.02	762.79	2.02	762.81	1,366.09	1.08			
Allen & Dier	8.00	145		0.01	36.22		0.01	36.61			13.68	0.11			
May Hill Ranch	3.00	145		0.01	36.22		0.01	36.61			13.69	0.10			
Francisco G. Soto & Miral J. Soto	61.62	141	149A				1.00	311.25			111.91	1.00			
Horrod G. Adams	157.85	149		0.30	300.22		1.01	472.07	0.31	122.98	457.27	2.00			
Self Use & Foreland M. Lee	159.90	149		0.30	300.22		1.01	472.07	0.31	122.98	517.57	1.90			
Self Use & Foreland M. Lee	121.20	249					1.01	518.88			518.88	1.01			
Self Use & Foreland M. Lee	118.41	150	151				1.01	475.21			275.71	1.45			
Judge & Henderson	138.81	145	15A	0.20	194.89		1.00	714.61			489.44	2.00			
Walter H. Smith	232.20	221		0.20	194.89		0.10	332.44			612	36.11	1,006.46	2.00	
Robert L. Davidson	134.70	222		0.20	194.89		1.00	532.52			560.96	1.00			
Alan Lyman	227.40	222	223	0.20	194.89		0.01	412.22			488.12	2.20			
F. Christensen & Co.	1,309.70	224, 225, 227, 229	226, 227, 228, 229	0.00	370.11	0.00	1,983.41	0.20	2,052.81	0.70	1,483.71	2.70	1,071.07	3,888.33	18.10
Debrae S. Smith & Jeffrey Smith	141.10	226	229				0.10	371.18	0.40	129.60	375.21	1.45			
Debrae C. Smith	141.10	226									341	362.07	462.91	3.00	
Debrae C. Smith	122.80	226, 229, 231				0.40	294.18	1.40	333.11		441.18	1.80			
Lisa R. Smith	150.40	226							1.00	415.53	341	579.96	760.06	3.00	
John R. Smith	244.80	222, 223		0.10	300.22		0.20	312.40			2.61	327.18	1,411.80	1.60	
M. R. Summers	222.90	229							0.20	472.70		472.71	2.00		
R. H. Summers	868.10	311, 316					0.10	1,248.12	0.40	512.60	1.50	851.61	2,798.66	10.00	

No comments
 - n/a -

Middle Fork Feather River (and its Tributaries Above Beckwith) Dam
County of Plumas, Case No. 2018

Summary of Use
 Continuous, 100% of hours
 Year: 12/01/01-01/01/11
 Year: 12/01/01-01/01/11

Name of Claimant	Acreage to be supplied	Diversion No. or Job Description	Name of Diversion System	Allotments								Total Allotments, Fee Value (AF)	Check, 1984 CFS			
				First Priority Class (CFS)	First Priority Fee Value (AF)	Second Priority Class (CFS)	Second Priority Fee Value (AF)	Third Priority Class (CFS)	Third Priority Fee Value (AF)	Fourth Priority Class (CFS)	Fourth Priority Fee Value (AF)					
11-Mountain 1	Domestic, Stockwater, Irrigation	201	Upper Canyon Creek Dam	0.02	8731											
11-Mountain 2	Domestic, Stockwater, Irrigation	201	Upper Canyon Creek Dam	0.03	1134											
11-Mountain 3	Domestic, Stockwater, Irrigation	201	Upper Canyon Creek Dam	0.00	2063											
11-Mountain 4	Domestic, Stockwater, Irrigation	201	Upper Canyon Creek Dam	0.00	1918											
11-Mountain 5	Domestic, Stockwater, Irrigation	204	Upper Canyon Creek Dam	0.05	2778											
Subtotal: Additional Special Dam Damages, Middle Fork Group				1.05	7739											
Additional Special Dam Damages - Middle Fork Group																
1000-Magnum	Domestic, Stockwater, Irrigation		Palmer Tank and Spring Dam	0.01	951											
Subtotal: Additional Special Dam Damages, Middle Fork Group				0.01	951											
Additional Special Dam Damages - Middle Fork Feather River Group																
1000-Ford	Domestic, Stockwater, Irrigation	121, 122, 123	Arbuckle Dam	1.11	1,081											
1000-Fisher and Nevada Dam	Domestic, Stockwater, Irrigation		Arbuckle Dam	2.00	1,928											
1000-Bell	Domestic, Stockwater, Irrigation	123, 124, 125	Arbuckle Dam	1.00	9,821											
1000-Allen & Children Dam	Domestic, Stockwater, Irrigation		Allen Dam	0.01	1,000											
1000-Herrick and V. Herring	Domestic, Stockwater, Irrigation	127, 128	Gangall Springs Dam	0.01	1,578											
1000-Carmichael	Domestic, Stockwater, Irrigation	201, 202	Hayden Reservoir Dam	1.00	1,621											
1000-Hall	Domestic, Stockwater, Irrigation	201	Hall Dam	1.00	1,110											
1000-Rick and R. Rick	Domestic, Stockwater, Irrigation	201	Rick Dam	1.00	1,110											

No comments

- n/a -

Middle Fork Feather River (and its Tributaries Above Beckwith) Basin
County of Plumas, Case No. 2014

Season of Use
 Continuous, 10/1/01 to 9/30/11
 Year 1 (10/01-09/30/11)
 Year 2 (10/01-09/30/11)

Name of Claimant	Acreage to be irrigated	Diversion No. or Diversion System	Type of Diversion System	Allotments											Total Allotments (AF)	Check, 1984 CFS	
				First Priority Class (AF)	Second Priority Class (AF)	Third Priority Class (AF)	Fourth Priority Class (AF)	Fifth Priority Class (AF)	Sixth Priority Class (AF)	Seventh Priority Class (AF)	Eighth Priority Class (AF)	Ninth Priority Class (AF)	Tenth Priority Class (AF)				
Western Company	Domestic Stockwater Springs	268		1.62	1,024.0	Common											
Western Company	Domestic Stockwater Springs	Unlimited	Unlimited	0.00	1.62	Common											
Unimproved Private Land	Domestic Stockwater Springs	275,292		1.90	88.8	Common											
Private Land	Domestic Stockwater Springs	241,250		0.90	1,143.0	Common											
Private Land	Domestic Stockwater Springs	Unlimited	Unlimited	0.60	538.0	Common											
SUBTOTAL - Additional Special Class Claimants - Middle Fork Feather River				29.91	17,259.28												
Additional Supply Class Claimants - Middle Fork Feather River																	
Area 6 (SR)	Domestic Stockwater Springs	111	Area 6 SR	0.85	1,820.0	Highwater											
Western Company	Domestic Stockwater Springs	241,244,241	Area 6 SR	2.80	1,020.0	Highwater											
Western Company	Domestic Stockwater Springs	281	Area 6 SR	0.00													
Frank Corporation	Domestic Stockwater Springs	Unlimited	Area 6 SR	0.00													
SUBTOTAL - Additional Supply Class Claimants - Middle Fork Feather River Basin				3.65	2,790.00												

No comments
 - n/a -

Summary of Pit River Decreases

Pit River Decreases	Face Amount
Ash Creek	66,518.40
Burney Creek	11,308.76
Big Valley of Pit River	102,467.90
Franklin Creek	4,230.48
Hat Creek	93,210.83
Rattlesnake Creek	37,023.47
North Fork Pit River	46,856.17
South Fork Pit River	68,097.30
Roaring Creek	5,289.43
Willow Creek	552.02
Total Pit River Decreases	435,554.75

No comments

- n/a -

Madoc County Judgment and Decree No. 3670

Seasons of Use	Acres to be supplied	Deversion No. as per DWR Map	Name of Diversion System
October, November (1 month)	365.25	349	
April through October (7)	396.00	349	
March through October (8)	229.00	349	

Name of Claimant	Acres to be supplied	Deversion No. as per DWR Map	Name of Diversion System	Allotments					Total (ds)	Total (AF)			
				First Priority Class (ds)	First Priority Face Value (AF)	Second Priority Class (ds)	Second Priority Face Value (AF)	Third Priority Class (ds)			Third Priority Face Value (AF)	Fourth Priority Class (ds)	Fourth Priority Face Value (AF)
Rush Creek Group (Schedule 3)													
Joe T Walker and Earl D Walker	7.00	61, 62	Walker Upper, Walker Lower	0.18	70.69							0.18	70.69
Thomas J McClure	5.00	63	Hoppe	0.12	47.13							0.12	47.13
C L Hilde and Neil Hilde	35.80	64	Hoppe	0.60	235.64							0.60	235.64
Audrey Rose	62.80	64, 65	Audrey Rose, T 1 Dam	1.05	412.36							1.05	412.36
Erma Hampton, Chas Roy, Myrle West, Red Ann, Calmar Rob, Myrle Ann, and Rose Marie	11.00	65	T 1 Dam	0.25	96.18							0.25	96.18
A N Wittke and Leuk Krejci	49.50	66, 67	Krejci-Hoppe, Krejci Dam	0.85	333.82							0.85	333.82
Jakub J Krehov, Evon E Duplek, Richard Duplek, and Grant Gordon	141.40	66, 68, 69, 70, 71	Krejci-Hoppe, Hoppe-Berrows, Hoppe-Lee Dam, Krehov West, Krehov Lower	2.20	864.00							2.20	864.00
Subtotal, Rush Creek Group	355.70			5.25	2,061.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Butte Creek Group (Schedule 4)													
Herbert S Bell and Arnie Bell	52.50	72, 73	H S Bell Upper, H S Bell Lower, Neal Upper, Neal Lower, Wink Middle, Meadow, West Lower, Meadow Dam	0.40	157.09							0.40	157.09
S J Niles and Myrtle Niles	106.50	73, 74, 75, 76 to 83	Niles and Audley, Audley Upper, Audley Lower	1.60	628.36							1.60	628.36
J M Auld and Ivy Auld	56.48	75, 77, 78	Niles and Audley, Audley Upper, Audley Lower	0.40	157.09							0.40	157.09
J J Schmitz and Erma B Schmitz	71.20	84	Dam	0.10	39.27	0.90	353.43					1.00	392.70
Subtotal, Butte Creek Group	291.68			2.50	981.82	0.90	353.43	0.00	0.00	0.00	0.00	0.00	3.40
Willow Creek Group (Schedule 5)													
John P Wells, David Arnie Denny-Totten, and D Dwyer	15.00	85	Arnie Upper Spring						0.15	58.91		0.15	58.91
E V Ward	105.20	86, 89	Arnie West Dam, Arnie East Side Dam						0.85	333.82		0.85	333.82
Alta Gray	94.50	90A	Arnie						0.80	316.38		0.80	316.38
J B Armstrong and Wilhelmina R Armstrong	70.00	91	Armstrong						0.50	196.36		0.50	196.36
Royal E Walker	71.20	92	Knight	0.07	30.71	0.67	247.42					0.70	278.13
J E Abaugl	356.00	93	Knight	0.32	123.83	2.88	1,131.05					3.20	1,254.88
Frank Stubbly and Esther Stubbly	355.80	93	Stubbly Johnson	0.42	161.83	2.88	1,131.05					3.30	1,292.88
R J Holmes and M J Holmes	210.00	93	Stubbly Johnson	0.18	71.91	1.44	565.53					1.60	637.44
Koson Weigand and Tess Weigand	153.10	94, 95	Weigand Upper Dam, Weigand Lower Dam	0.10	37.45			1.50	589.09			1.60	626.54
Subtotal, Willow Creek Group	1,432.70			0.97	702.73	7.83	3,075.05	1.50	589.09	2.30	903.27	0.00	0.00
Ark Creek Group (Schedule 6)													
John T Bell, Alva B Walker, Corne F Stone	176.60	1, 8	Bell Dam, Ark North Springs	1.85	765.82							1.85	765.82
Robert Fleming and Op Lee Fleming	131.20	8	Fleming Springs	3.00	785.45							3.00	785.45
John T Bell, Alva B Walker, Corne F Stone	219.10	10	Bell (West Side)	3.30	1,296.00							3.30	1,296.00
John T Bell, Alva B Walker, Corne F Stone	133.00	10	Bell	0.20	78.55							0.20	78.55
John T Bell, Alva B Walker, Corne F Stone, Robert Fleming, May Fleming, and Ora Lee Fleming	142.00	10, 10B	Bell, Bell North	2.20	864.00							2.20	864.00
G H Atkins and Edna A Atkins	363.30	11, 12	Peck Springs, Pecking	3.90	1,537.84							3.90	1,537.84
T A Bennett and Lou M Bennett	305.10	13, 13A, 14, 15A	Bennett Lower, Bennett Dam #2, Bennett Springs, Bennett Upper Dam	6.70	1,845.82							6.70	1,845.82
John A Krejci and May E Krejci	28.00	19	John A Krejci Dam	0.45	176.77							0.45	176.77
R D Clark and Donald Clark	23.90	None	Subirrigation	0.15	58.96							0.15	58.96

No comments

- n/a -

No comments

- n/a -

Madoc County Judgment and Decree No. 3670

Seasons of Use

October, regardless of amount	95.25	day
April through October (1)	396.00	day
March through October (1)	229.00	day

Name of Claimant	Acreage to be supplied	Deverion No. as per DWR Map	Name of Diversion System	Allotments										Total (dcs)	Total (AF)		
				First Priority Class (dcs)	First Priority Face Value (AF)	Second Priority Class (dcs)	Second Priority Face Value (AF)	Third Priority Class (dcs)	Third Priority Face Value (AF)	Fourth Priority Class (dcs)	Fourth Priority Face Value (AF)	Fifth Priority Class (dcs)	Fifth Priority Face Value (AF)				
J.J. Powell, Anne Powell, F.F. Thoms and Dorothy Thoms	24.50	17	Veg	0.35	108.98										0.35	108.98	
Walter Vigil and John Vigil	772.50	11, 16	Vig, Vig Lower Dam	3.45	2,475.47										3.45	2,475.47	
W.H. Hunt (State Co.)	279.30	19	Clarks Co Upper Support Dams, New Galis Swain Head	6.80	3,997.09									0.95	131.50	6.25	4,426.66
A.J. Winkler and Mary A. Winkler	93.20	19	Clarks Co Upper Support Dams						1.45	638.60					1.45	638.60	
J.F. Ladd and Bill Ladd	278.20	20, 21, 22, 28	North Souds, New Canal Swain Head, Cannon Box, Line Dam				1.00	454.21					1.10	199.64	2.10	953.85	
A.C. Cannon	110.00	22	South Dam				1.40	635.96							1.40	635.96	
John A. Johnson	61.80	22	Cannon Box				0.80	363.17							0.80	363.17	
W.H. Hunt (State Co.)	1,997.90	21, 22, 23, 24, 46, 47, 48, 49, 50, 51	New Canal Swain Head, Cannon Box, Jenkins-Cannon, Death Slough Head Box, North Branch South Channel Lower, Blind Top, L2m, Death Slough Dams, Death Slough, Death Slough South Nyalas, Decker Slough North					33.00	11,325.37					0.10	45.42	25.10	11,400.79
W.H. Hunt (State Co.)	88.00	21	Jenkins-Cannon	0.60	362.23		0.60	272.53							1.20	634.76	
A.J. Cannon	88.00	22, 23	Cannon Box, Jenkins-Cannon	0.60	362.23		0.60	272.53							1.20	634.76	
Winkler and Richard A. Winkler	25.00	22, 23	Cannon Box, Jenkins-Cannon							0.30	136.26				0.30	136.26	
W.H. Hunt (State Co.)	1,855.00	25, 26, 27, 28, 29, 30, 35, 37, 38, 42, 43, 44, 45	South Channel Head Box, Big Valley Drainage Canal, North Branch South Channel, Middle Branch South Channel, Chatham Upper Dam, Wayman Support Dam, E.W. Clark Co Upper South Channel Dam, C.W. Clark Co Middle South Channel Dam, C.W. Clark Co Lower South Channel Dam, Wejaco-Cong Dam, Gony, Swamp Dam, South Branch South Channel Dam, Middle Branch South Channel Dam					11.00	18,527.74						23.00	18,530.74	
W.H. Hunt	28.90	25, 29, 30	South Channel Head Box, Chatham Upper Dam, Chatham Lower Dam				0.50	227.11							0.50	227.11	
A.D. Wayman and Alice H. Wayman	227.00	25, 26, 31, 32, 33	South Channel Head Box, Big Valley Drainage Canal, Wayman Upper Dam, Wayman Support Dam, Wayman Lower Dam					7.90	1,877.22						7.90	1,877.22	
R.J. Wilson and Mary Wilson	44.00	25, 34, 35	South Channel Head Box, Holmes Upper Dam, Holmes Lower Dam					1.20	545.06						1.20	545.06	
J.P. Miller and Edna Miller	172.40	25, 39, 40, 41	South Channel Head Box, Miller Upper Dam, Miller Middle Dam, Miller Lower Dam					2.15	976.36						2.15	976.36	
Walter Wejaco and Tilla Wejaco	141.20	25, 42	South Channel Head Box, Wejaco-Cong Dam					1.75	794.88						1.75	794.88	
Charles A. Gony	200.70	25, 43, 43	South Channel Head Box, Wejaco-Cong Dam, Blind Swain Dam					1.80	1,135.91						1.80	1,135.91	
W.H. Hunt (State Co.)	97.90	26	Big Valley Drainage Canal							1.25	567.77				1.25	567.77	
W.H. Hunt (State Co.)	36.00	31, 33	Gony North of Ant Creek							0.20	90.64				0.20	90.64	
James A. Mitchell and John H. Mitchell	207.00	32, 34, 35	Gony, Wejaco, Waterback Swain							1.15	522.25				1.15	522.25	
Arthur Mitchell and John Mitchell	12.00	32, 34	Gony, Wejaco							0.07	31.80				0.07	31.80	
And. Mitchell	91.00	32, 34	Gony, Wejaco							0.36	227.11				0.36	227.11	

Ash Creek Debris Prioritized

Madoc County Judgment and Decree No. 3670

Seasons of Use	Days
October, regardless of year	30
April through October 15	30
None (through October 15)	30

Name of Claimant	Acreage to be supplied	Deversion No. as per DWR Map	Name of Diversion System	Allotments					Total (ds)	Total (AF)					
				First Priority Class (ds)	First Priority Face Value (AF)	Second Priority Class (ds)	Second Priority Face Value (AF)	Third Priority Class (ds)			Third Priority Face Value (AF)	Fourth Priority Class (ds)	Fourth Priority Face Value (AF)	Fifth Priority (ds)	Fifth Priority (AF)
JERICHO BIRCH AND PATRICK B. BIRCH	759.00	52, 54	Gully, Wetland					5.45	658.81	5.45	658.81				
DORIS E. BIRCH	4.00	52, 54	Gully, Wetland					0.03	116.3	0.03	116.3				
MARIE M. BIRCH AND PATRICK B. BIRCH	32.40	52, 54	Gully, Wetland					0.10	40.81	0.10	40.81				
Subtotal Ash Creek Group Special Class Claimants on Ash Creek (Schedule 7)	835.40			35.05	14,134.51	1.00	724.46	63.60	20,899.07	6.00	2,997.82	2.15	976.56	107.00	47,721.42
ROBERT MCNEAVE AND SHIRLEY MCNEAVE	28.60	96, 97	Snake Upper Snake Lanes	0.00	235.64					0.00	235.64				
ROBERT MCNEAVE AND SHIRLEY MCNEAVE	21.20	96, 99, 60	Snake Upper Snake Lanes	0.00	157.09					0.00	157.09				
ADRIAN GIBB	4.00	96	Snake Upper Snake Lanes	0.00	36.22					0.00	36.22				
ALICE GIBB	94.50	90	Snake Upper Snake Lanes	0.00	678.17					0.00	678.17				
ROBERT DENING AND DORA DENING	818.00	1, 2, 3	Jamieson West Springs, Milling Dam Springs, Dammed Springs, Dams	9.25	3,993.45					9.25	3,993.45				
JAMES T. BIRCH AND J. WANDA CLARK F. SHUB	589.90	4, 5, 6, 8	Snake, Mill Spring, Mill Spring, Mill Spring, Mill Spring	0.00	1,729.45					0.00	1,729.45				
JAMES T. BIRCH AND J. WANDA CLARK F. SHUB	86.70	None	Mill Spring	0.00	0.00					0.00	0.00				
T. A. BIRCH AND LUCY M. BIRCH	37.30	100, 101	Snake, Snake Creek	0.00	362.23					0.00	362.23				
T. A. BIRCH AND LUCY M. BIRCH	20.00	100	Snake	0.00	362.23					0.00	362.23				
T. A. BIRCH AND LUCY M. BIRCH	6.00	96	Snake	0.00	39.27					0.00	39.27				
ALICE J. WILSON AND DORIS G. SMITH	75.00	90	Snake	1.00	454.21					1.00	454.21				
JOHN A. KEENE AND MARY A. KEENE	178.50	99, 100, 101	Snake, Snake Springs, Snake Springs, Snake Springs	1.00	649.62					1.00	649.62				
JOHN A. KEENE AND MARY A. KEENE	2.00	102	Snake Springs	0.15	106.87					0.15	106.87				
J. E. WILSON, ANNE WILSON, F. E. WILSON AND DORIS GIBB	65.00	100	Snake Springs	1.00	412.36					1.00	412.36				
J. A. CLARK, W. E. CLARK AND DORIS GIBB	30.00	105	Snake Springs	0.00	157.27					0.00	157.27				
W. F. BIRCH (BIRCH CO.)	1,263.50	None	Snake Springs	0.00	0.00					0.00	0.00				
R. C. WILSON AND MARY WILSON	367.50	None	Snake Springs	0.00	0.00					0.00	0.00				
R. C. WILSON AND MARY WILSON, R. D. WILSON AND ALICE M. WILSON	125.80	104	Snake Springs	0.00	362.23					0.00	362.23				
J. C. LINDSEY AND LUCY LINDSEY	92.00	109	Snake Springs	0.00	0.00					0.00	0.00				
Subtotal, Special Class (Schedule 7)	3,645.60			23.53	10,126.74					23.53	10,126.74				

Summary of Ash Creek Debris	First Priority Face Value (AF)	Second Priority Face Value (AF)	Third Priority Face Value (AF)	Fourth Priority Face Value (AF)	Fifth Priority Face Value (AF)	Total Face Amount (AF)
Birch Creek Group	2,061.62	0.00	0.00	0.00	0.00	2,061.62
Birch Creek Group	961.80	351.45	0.00	0.00	0.00	1,313.25
Wilson Creek Group	902.73	3,075.05	985.00	403.27	0.00	5,276.15
Ash Creek Group	14,134.51	724.46	20,899.07	2,997.82	976.56	47,721.42
Special Class (Schedule 7)	10,126.74	0.00	0.00	0.00	0.00	10,126.74
Total	28,019.61	4,152.97	29,477.16	3,991.99	976.56	66,518.40

No comments

- n/a -

No comments

- n/a -

**Big Valley RR River Decree - Between Canby
Bridge to Muck Valley
Hood County Decree No. 6395**

Seasons of Use

Continuously, regardless of season	365.25	100%
April 1 through September 30	183.10	50%
		100%

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments								Total (cfs)	Total (AF)	
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)			
Tributary Group														
R M Bulley	14.00	44	Washburn Canal	0.05	18.15								0.05	18.15
Walter Kennedy and Vera Kennedy	10.00	5, 6	Upper Linn Creek	0.72	261.34								0.72	261.34
J W Caldwell and Rose Marie Caldwell	49.00	41	Mullen Creek	0.86	312.16								0.86	312.16
Robert Sherr and A F Gerd	80.00	178	Stone Coal Creek	1.15	417.82								1.15	417.82
W O Gwyer	0.00	11	Stone Coal Creek										0.00	0.00
Robert Stearn and A F Gerd	96.00	101	Trill Debris Creek	1.36	481.63								1.36	481.63
Gayla Troy	0.00	142	Iron Creek			0.07	25.41						0.07	25.41
H S Coetz and Ross Richards, Patricia	5.00	147	Iron Creek	0.07	25.41								0.07	25.41
George W Hines, Marvin A Hines, and Mason Hines	80.00	149	Iron Creek					1.14	413.79				1.14	413.79
J H Dutton and Marvin Dutton	40.00	144	Iron Creek					0.57	206.90				0.57	206.90
Gayla Troy	160.00	151	Linn Linn Creek	3.28	127.56								3.28	127.56
George W Hines, Marvin A Hines, and Mason Hines	40.00	150	Linn Linn Creek	0.57	206.90								0.57	206.90
J L Auldrey, J L Pitzer, L J Pitzer, and Lowell D Pitzer	100.00	299	Big Lake South-Taylor Creek	1.29	477.58								1.29	477.58
Abbie W Anderson, Leah R Jones	23.00	289	Big Lake South-Taylor Creek	0.33	118.78								0.33	118.78
R F Ribbs, Lisa J Ribbs, L J Jones, and Forrest D Jones	85.00	291	Big Lake South-Taylor Creek					1.22	437.83				1.22	437.83
J W Green	140.00	291	Big Lake South-Taylor Creek					1.86	675.17				1.86	675.17
Ernest and Kenneth A Jones	204.00	46, 43a	Big Lake South-Taylor Creek							2.92	1,059.89		2.92	1,059.89
Robert Johnson and Kathleen J	400.00	89, 91, 93, 94, 95	White Valley Creek	5.72	2,076.22								5.72	2,076.22
W Jones	4.00	91	White Valley Creek	0.06	21.78								0.06	21.78
W Kuttler	200.00	94	White Valley Creek					3.86	1,338.11				3.86	1,338.11
J W Kuttler	1,075.00	91, 94	White Valley Creek			15.80	5,389.82						15.80	5,389.82
W L Gray	1.00	471	Kinn Springs	0.02	7.28								0.02	7.28
W L Gray	0.00	471	Kinn Springs										0.01	3.63
David G Packwood	76.00	53	Roemer Hill Springs	1.06	392.81								1.06	392.81
Charles A Giff and W L Gray	20.00	53a, 53	Roemer Hill Springs					0.40	145.19				0.40	145.19
Norris Giff	133.00	28, 43	Bull Run Slough	1.90	669.65								1.90	669.65
Alvin E Watson and Mary V Watson	180.00	54	Bull Run Slough			2.28	827.38						2.28	827.38
Alvin C Abbott and Dorothy J Abbott	186.00	72	Bull Run Slough					2.80	971.14				2.80	971.14
S T Thompson	40.00	54	Bull Run Slough							0.57	206.90		0.57	206.90
Frank Wilson	372.00	62	Wagon Poles	5.33	1,833.66								5.33	1,833.66
Subtotal, Tributary Group	3,971.00			23.79	8,035.18	17.75	6,442.81	10.45	3,792.09	3.49	1,266.70		55.49	20,137.86
Big Valley RR River Group														
Kurt Miller	17.00	1				0.53	192.38						0.53	192.38
R M Bulley	132.00	1				2.17	787.66						2.17	787.66
Allen Ward	211.00	17				3.02	1,096.19						3.02	1,096.19
Robert Stearn and A F Gerd	100.00	124				1.43	5,190.05						1.43	5,190.05
C N Shaw and R Shaw	119.00	153				1.92	696.92						1.92	696.92
R A Lee	60.50	158				0.86	312.16						0.86	312.16
R D Wiley and Ardel J Wiley (Chas Beall)	110.00	131				1.37	509.87						1.37	509.87
R D Wiley and Ardel J Wiley (John Beall)	880.00	26, 42, 44				1.94	701.17			10.67	3,858.43		12.57	4,562.60
J H Dutton and Marvin Dutton	200.00	157				2.86	1,036.11						2.86	1,036.11
Winifred A Giff	84.00	154				1.20	435.57						1.20	435.57

No comments

- n/a -

**Big Valley Pitt River Decree - Between Canby Bridge to Muck Valley
Mud-Country Decree No. 6395**

Season of Use		
Continuously throughout season	35.25	100%
April through September	183.10	100%
		100%

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments								Total (cfs)	Total (AF)
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)		
George A. Hines, Minor A. Hines, and Minor Hines	306.00	13			7.26	2,635.20						7.26	2,635.20
GDCE Pitt	112.00	141			1.60	540.76						1.60	540.76
Robert Wilson and Joan B. Wilson (Jointly)	100.00	29c			2.28	827.58						2.28	827.58
Alan Wilson and Joan B. Wilson (Jointly)	263.00	17			3.76	1,364.79						3.76	1,364.79
Allen W. Wilson and Joan B. Wilson (Jointly)	66.00	18			0.94	331.20						0.94	331.20
Smoe C. Adams	178.00	24			0.77	662.47			0.77	379.69		2.34	921.96
J. H. Macdonald	121.00	22a			1.73	627.95						1.73	627.95
T. F. Koval	287.00	22b				0.00	6.10	1,088.20				6.10	1,088.20
H. M. Adams	229.00	22c			0.21	76.22	3.06	1,110.70				3.27	1,186.93
Cynthia Muth	69.00	25			3.83	1,390.20	3.84	1,030.85	2.03	736.64		9.70	3,157.69
D. J. Layman (County of Baker)	200.00	25			1.49	540.63	0.85	306.53	0.52	188.75		2.86	1,035.91
D. J. Layman (County of Baker)	140.00	25			1.00	362.98	1.00	362.98				2.00	725.95
Colin and Jeff	794.00	23			1.66	607.54	0.86	351.840				2.52	959.38
S. K. Brown and Julia A. Brown	331.00	33			0.59	214.36	3.83	1,497.45	0.29	105.26		4.71	1,717.07
J. E. Brown, J. L. Brown, J. M. Brown, J. R. Brown, J. T. Brown, J. W. Brown, J. X. Brown, J. Y. Brown, J. Z. Brown	714.00	27			4.50	1,633.39						4.50	1,633.39
C. R. Brown, A. E. Brown, and E. H. Brown	202.00	26			2.69	1,049.00						2.69	1,049.00
H. L. Brown, Jesse Brown, and Don Brown	337.00	23, 24			1.37	1,223.23	1.17	424.66	1.17	1,136.11		3.71	2,784.00
Delbert and Gertrude M. Gable	159.00	22			2.27	823.95						2.27	823.95
W. H. Smith (State Co.)	440.00	21			6.10	2,206.74						6.10	2,206.74
W. H. Smith	405.50	23, 28			2.70	980.03			1.60	602.54		4.30	1,582.57
J. W. Smith	649.50	20			5.24	1,901.99			1.91	1,419.23		7.15	2,321.22
J. J. Smith	61.00	20			0.87	315.79						0.87	315.79
James H. Smith and Wm. J. Smith	213.00	20			0.33	119.74						0.33	119.74
Wm. J. Smith (State Co.)	268.00	26, 43			3.61	1,300.20						3.61	1,300.20
Wm. J. Smith (State Co.)	379.00	25, 43, 29			4.66	1,691.46			0.18	65.34		4.84	1,756.80
T. V. Smith	146.00	20			2.08	756.96						2.08	756.96
Wm. J. Smith	27.00	26, 41			0.39	141.54						0.39	141.54
Alvin E. Smith and Mary V. Smith	15.00	25			0.21	76.22						0.21	76.22
Wm. J. Smith	11.00	20			0.44	159.71						0.44	159.71
James C. Black and Dora J. Black	12.00	26			0.17	61.71						0.17	61.71
Wm. J. Smith	208.00	42			2.23	809.43	2.33	809.43				4.56	1,618.87
Alvin E. Smith	97.00	42			0.81	294.01	0.81	294.01				1.62	588.02
J. H. Smith (State Co.)	407.00	20			5.62	2,132.52						5.62	2,132.52
J. H. Smith (State Co.)	160.00	45							2.28	827.98		2.28	827.98
Wm. J. Smith	42.50	48			0.47	170.60						0.47	170.60
Alvin E. Smith and Dora J. Smith	30.00	46			0.13	48.06						0.13	48.06
W. J. Smith	103.00	49			1.61	585.39			1.13	410.16		2.74	995.55
Mary M. Smith	176.00	49			2.41	911.07						2.41	911.07
Wm. J. Smith and Dora J. Smith	30.00	44			4.56	1,665.17						4.56	1,665.17
Alvin E. Smith	33.00	44			0.76	275.86						0.76	275.86
Wm. J. Smith	144.00	44			2.20	798.55						2.20	798.55
J. H. Smith	120.00	44			1.71	620.69						1.71	620.69
James C. Black and Dora J. Black	477.00	49			9.67	3,509.97						9.67	3,509.97
Wm. J. Smith and Dora J. Smith	150.00	51			3.20	1,173.58						3.20	1,173.58
James C. Black and Dora J. Black	81.00	41			5.44	1,978.68						5.44	1,978.68
Wm. J. Smith and Dora J. Smith	120.00	47			4.56	1,665.17						4.56	1,665.17
Wm. J. Smith and Dora J. Smith	480.00	46			7.38	2,735.35			1.14	418.27		8.52	3,153.62
J. H. Smith and Dora J. Smith	676.00	46, 40			11.23	4,076.21			1.27	460.96		12.50	4,537.17
W. J. Smith	120.00	71			1.20	461.61			0.91	336.06		2.11	797.67
S. J. Smith	801.00	70, 71							11.50	4,174.21		11.50	4,174.21

No comments

- n/a -

**Big Valley Pit River Decree - Between Canby
Bridge to Muck Valley
Hood County Decree No. 6395**

Seasons of Use

Continual, regardless of water	35.25	over
April 1 through September 30	183.10	over
		over

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments								Total (cfs)	Total (AF)	
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)			
S.T. Thompson & W.K. Thompson	30.00	44					2.21	1,166.19			1.11	418.36	4.34	1,584.55
Subtotal, Big Valley Pit River Group	15,819.00			15.00	5,444.63	194.23	55,991.67	29.59	10,740.44	43.00	15,607.92	241.82	82,330.04	
Surplus Water Claims (in order of priority)														
Anna W. Walker and User & Partner	0.01	25.00	Agri-166	Nov 1 - Apr 1										
Orin Blood, et W. Klofowicz, Richard B. Kline, Homer C. Tack	18.60	102.36	Agri-1	May 1 - May 15										
Orin Blood, et W. Klofowicz, Richard B. Kline, Homer C. Tack	11.89	1,000.00	Agri-11	May 15 - May 15										
Big Valley Muck Water Company	9.67	7,645.00	Agri-1	June 1 - June 1										
Big Valley Muck Water Company	8.33	100.00	Agri-1	June 1 - June 1										
Big Valley Muck Water Company	8.60	2,673.00	Agri-2	June 1 - June 1										
L.W. Krumm	6.25	2,276.00	Agri-7	July 1 - July 1										
L.W. Krumm	0.28	68.50	Agri-1	Apr 1 - Apr 1										
L.W. Krumm	0.04	27.80	Nov 1 - Apr 30											
Kenneth N. Baynes	500.000	0.56	Jan 1 - Dec 31											
James Stoney, Mose Nell House	1,600.000	2.02	Apr 1 - Nov 30											
James Stoney, Mose Nell House	600.000	0.73	May 1 - Oct 30											
Connelly Jeff	4.90	1,500.00	Nov 1 - May 31											
James Stoney, Mose Nell House	375.000	0.42	May 1 - Oct 30											
James Stoney, Mose Nell House	600.000	0.73	May 15 - Oct 15											
Clinton Robert and Don By Mose Nell House	0.61	100.00	Nov 1 - Apr 1											
George W. Hink, Mose Nell House and Mose Nell House	0.66	200.00	Oct 1 - May 1											
Robert Miller	0.68	182.00	Oct 1 - Apr 30											
James Stoney, DO, S.W.	0.01	2.21	Oct 1 - May 31											
James Stoney, DO, S.W.	0.08	9.21	Oct 1 - May 31											
California Dept. of Water Resources	363.79	60,000.00	Jan 1 - Dec 31											Surplus Water Allocation District
Prison Conservation District	252.00	76,000.00	Apr 1 - Apr 30											Water Allocation District
Total, Surplus Water Claims	588.67	171,140.62												
Summary	cfs	Acres-feet												
Priority Group	35.48	20,137.86												
Big Valley Pit River Group	241.82	82,330.04												
Total Surplus Water Claims	297.30	182,467.90												
Surplus Water Claims	368.67	171,140.62												
Total, Big Valley Pit River Decree Claims	665.97	273,608.52												

Burney Creek Decree

No comments

- n/a -

**Burney Creek Decree
Shasta County, Decree No.
3111**

Seasons of Use

Continuous, regardless of season	365.25	days
May 5 through November 1	181.00	days

Name of Claimant	Acres to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotment During Irrigation Period	Allotment Face Value (\$F)
West Side Users					
Richard W Haynes	376.00		Haynes or Creek Laterals	9.45	1,696.31
J C Erickson	21.00		Erickson	0.60	107.70
John Snooks	18.00		Snooks	0.50	89.75
Timothy Desmond	75.00		Cayton or Natural Channel of Burney Creek	1.88	337.47
Karl Eiling	314.00		Cayton or Eiling	7.85	1,409.11
Mary Ann Cornaz	150.00		Green-Cornaz or Natural Channel of Burney Creek	3.75	673.14
Ray Wedder	75.00		Green-Cornaz or Natural Channel of Burney Creek	1.87	335.67
Subtotal, West Side Users	1,029.00			25.90	4,649.16
East Side Users					
A R Haynes	50.00		A R Haynes	1.25	224.36
Fred Gruet	67.00		Green-Cornaz	2.50	446.76
Mary Ann Cornaz	137.00		Green-Cornaz	3.42	613.90
Rud River Lumber Co.	175.00		Green-Cornaz	4.33	777.25
Ednah M Black	320.00		Green-Cornaz	8.80	1,579.64
Karl Eiling	200.00		Cayton or Eiling	5.00	897.52
Subtotal, East Side Users	969.00			25.30	4,841.43
Surplus Water Users					
Karl Eiling	71.00		Cayton or Eiling	0.90	163.11
Timothy Desmond	6.00		Cayton or Natural Channel of Burney Creek	0.10	19.90
Fred Gruet	10.00		Green-Cornaz	0.12	43.08
Mary Ann Cornaz	32.00		Green-Cornaz or Natural Channel of Burney Creek	0.40	143.60
Rud River Lumber Co.	150.00		Green-Cornaz	1.88	674.94
Ednah M Black	137.00		Green-Cornaz	1.70	610.31
Ray Wedder	64.00		Green-Cornaz or Natural Channel of Burney Creek	0.60	287.21
Subtotal, Surplus Water Users	472.00			5.90	2,118.15
Total, Burney Creek Decree	2,470.00			31.50	11,308.76

No comments

- n/a -

Franklin Creek Decree
Hydro County Decree No. 3118

Seasons of Use

Continuous, regardless of season
(April 1 through September 30)

365.25 days
183.00 days-days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments				Total (cfs)	Total Face Value (AF)
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)		
Allotments from Franklin Creek									
Earl & Mary Emmen	15.20		Emmen	0.18	63.52			0.18	63.52
Ira A & Ida M Hanson	12.60		Hansen North, and/or Hanson Middle			0.16	58.08	0.16	58.08
P Indart	20.95		Indart Main and/or Indart Siskiyew			0.20	94.37	0.20	94.37
G R Stone	12.90		Stone	0.10	58.08			0.10	58.08
John & Fannie Morrison	20.80		Morrison North	0.26	94.37			0.26	94.37
Earl & Bernice Shene and Bank of America (TRSA)	8.00		Channel North			0.10	36.30	0.10	36.30
Raulina Lee	20.80		Channel North			0.20	94.37	0.20	94.37
J G & Mattie M Dawson	20.80		Channel North			0.20	94.37	0.20	94.37
P Indart	50.80		Channel North			0.63	238.67	0.63	238.67
Raulina Lee	52.00		Channel North			1.05	381.12	1.05	381.12
J G & Mattie M Dawson	83.90		Channel North			1.05	381.12	1.05	381.12
Ella M Shantei	10.30		Channel North			0.19	50.82	0.19	50.82
C E & Mary A Crowder	114.20		Channel North			1.43	519.05	1.43	519.05
G R Stone	21.60		Stone			0.28	104.63	0.28	104.63
John & Fannie Morrison	124.60		Morrison Middle and/or Hanson Lower				566.24		566.24
			Morrison Lower			1.50		1.50	566.24
Earl & Bernice Shene and Bank of America (TRSA)	8.00		Morrison Middle and/or Morrison Lower				36.30		36.30
						0.10		0.10	36.30

No comments

- n/a -

**Franklin Creek Decree
Hydro County Decree No. 3118**

Seasons of Use

Continuous, regardless of season
April 1 through September 31
365.25 days
183.00 days-days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments								Total (cfs)	Total Face Value (AF)	
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)			
Ing A & Ida M Hanson	9.60		Hanson North, Hanson Middle, and/or Hanson South						43.56					
P Indart	30.00		South Channel					0.12				0.12	43.90	
Raulina Lee	79.90		South Channel					0.40	145.19			0.40	145.19	
E L & Mary A Crowder	78.50		South Channel					0.85	308.53			0.85	308.53	
Ing A & Ida M Hanson	19.50		Hanson North, Hanson Middle, and/or Hanson South									90.74		
P Indart	15.60		Indart Main							0.25	22.60	0.25	90.74	
Raulina Lee	12.00		Lee Upper							0.20	54.45	0.20	54.45	
John & Fannie Morrison	22.50		Morrison Middle, Morrison North, Morrison									191.63		
Earl A Bemis, Sherril and Bank of America NTRSA	51.00		Morrison Middle, and/or Morrison Lower								0.28	0.38	191.63	
Total Franklin Creek Allotments	909.35			0.18	62.52	1.46	520.94	8.49	3,081.66	1.53	555.25	11.65	4,220.48	

No comments

- n/a -

Hat Creek Decree
Shasta County Decree No. 5724
Shasta County Decree No. 7858
Seasons of Use
 Continuous, regardless of season
 May 1 through October 27
 October 28 through April 30

Summer Season

Winter Season

365.25 days
 180.00 days
 185.25 days

Name of Claimant	Name of Diversion System	Allotment (cfs)	Allotment (AF)
Summer Season Decree No. 5724			
Upper Users, First Rotation - Schedule I			
Harvey W Wilcox	Harvey Wilcox Upper	2.13	379.34
Virt W Stevenson	Harvey Wilcox Lower	2.38	423.67
Carnie Kilst Hill (and W P Hill)	Stevenson	2.75	490.62
Alec Brown (Indian)	Alec Brown	0.50	89.26
Charles Hawkins	Hawkins	2.25	401.65
Charles Hawkins	Harry Wilcox Middle	1.88	334.71
Harry M Wilcox	Harry Wilcox Upper	5.63	1,004.13
Harry M Wilcox	Harry Wilcox Middle	8.25	1,472.73
R A Wilcox and Amy Wilcox	Harry Wilcox Lower	1.50	267.77
R A Wilcox and Amy Wilcox	Harry Wilcox Middle	13.00	2,320.66
R A Wilcox and Amy Wilcox	Harry Wilcox Lower	1.00	178.51
R A Wilcox and Amy Wilcox	Rube Wilcox	2.88	513.22
Felice Kelly Davis	Rube Wilcox - Davis	2.13	379.34
Holiday Brown (Indian)	Harry Wilcox Middle	1.13	200.83
William Valentine	Valentine Upper	1.13	200.83
William Valentine	Valentine Lower	0.50	89.26
Charles Henryford	Henryford Upper	1.50	267.77
Charles Henryford	Henryford Middle	0.50	89.26
Charles Henryford	Henryford Lower	1.50	267.77
Edith Snook (Indian)	Edith Snook	0.50	89.26
J S Rattledge	Rattledge-Henry Longquist	3.50	624.79
J S Rattledge	Rattledge-O'Dwyer-Forest Service	0.88	156.20
Olive O'Dwyer	Rattledge-O'Dwyer-Forest Service	5.88	1,046.76
Henry O'Dwyer, Percy O'Dwyer	O'Dwyer	11.88	2,119.83
Henry Longquist	Rattledge-Henry Longquist	1.68	304.71
H Morris	Morris Upper or Morris Lower	16.13	2,878.51
Iva Morris (Mrs A L Dohy, Iva Dohy)	Morris Upper or Morris Lower	6.13	1,093.39
Clare Brown, Fay Brown	Rieger	1.25	223.14
Charles Sweeney Gray	Gray	1.00	178.51
Subtotal, Schedule I, First Rotation		103.50	18,476.03
Upper Users, Second Rotation - Schedule II			
	Harvey Wilcox Upper	0.25	44.63
	Harvey Wilcox Lower	0.25	44.63
	Stevenson	0.25	44.63
	Gray	0.13	22.31
	Hill	0.50	89.26
	Alec Brown	0.13	22.31
	Hawkins	0.25	44.63
	Harry Wilcox Upper	0.75	133.88
	Harry Wilcox Middle	1.00	178.51
	Rube Wilcox - Davis	0.50	89.26
	Harry Wilcox Lower	0.25	44.63
	Valentine Upper	0.25	44.63
	Valentine Lower	0.25	44.63
	Henryford Upper	0.25	44.63
	Henryford Middle	0.25	44.63
	Henryford Lower	0.25	44.63
	Edith Snook	0.13	22.31
	Rattledge-Henry Longquist	0.75	133.88
	Rattledge-O'Dwyer-Forest Service	0.75	133.88
	O'Dwyer	1.00	178.51
	Morris Upper	0.75	133.88
	Morris Lower	0.75	133.88
	Rieger (Dr Claire and Fay Brown)	0.50	89.26
Subtotal, Schedule II, Second Rotation		10.13	1,807.44
Lower Users, First Rotation - Schedule III			
Vernon March	Morris Upper or Morris Lower	11.50	2,099.92
Harry A Longquist	Harry Longquist	0.75	133.88
Harry A Longquist	Rieger	3.75	669.52
Harry A Longquist	Harry Longquist-Reynolds Rowell	2.50	446.28
Harry A Longquist	Harry Longquist-Reynolds East Side	2.25	401.65
Harry A Longquist	Harry Longquist-Reynolds Middle	0.50	89.26
N Reynolds, A N Reynolds (F Allen)	Harry Longquist-Reynolds-East Side	1.25	223.14

No comments

- n/a -

Hat Creek Decree		Summer Season	
Shasta County Decree No. 5724		Winter Season	
Seasons of Use		Allotments	
Continuous, regardless of season		365.25	days
May 1 through October 27		180.00	days
October 28 through April 30		185.25	days
Name of Claimant	Name of Diversion System	Allotment (cfs)	Allotment (AF)
N Reynolds, A N Reynolds (F Allen)	Reynolds Canal	4.00	714.05
N Reynolds, A N Reynolds (F Allen)	Henry Longquist-Reynolds-Middle	2.50	446.28
N Reynolds, A N Reynolds (F Allen)	Henry Longquist-Reynolds-Bidwell	3.75	669.42
Henry Longquist	Henry Longquist	1.75	312.40
Henry Longquist	Tridylke	0.13	22.31
Henry Longquist	Henry & Fritz Longquist	4.50	803.31
Fritz Longquist	Upper or Henry & Fritz Longquist Lower		
	Henry & Fritz Longquist	2.88	513.22
	Upper or Henry & Fritz Longquist Lower		
R E Bidwell	Henry Longquist-Reynolds-Bidwell	8.75	1,561.96
Jeff Bone & Lee Bone (Indians)	Jeff Bone Upper	0.50	89.26
Jeff Bone & Lee Bone (Indians)	Jeff Bone Lower	0.50	89.26
Jeff Bone & Lee Bone (Indians)	Lee Bone	0.50	89.26
Sam Williams (Indian)	Lee Bone	0.50	89.26
Sam Williams (Indian)	Sam Williams	0.75	133.86
Julia Wilson (Indian)	Julia Wilson	2.00	357.02
Joe Wilson (Indian)	Joe Wilson	2.75	490.91
Harry Bob (Indian)	Julia Wilson	3.50	624.79
Ellen Brown (Alan Brown as successor)	Ellen Brown Lower	3.00	535.54
Ellen Brown (Alan Brown as successor)	Ellen Brown Lower	3.25	580.17
Ellen Brown (Alan Brown as successor)	Ellen Brown - W W Brown	4.00	714.05
Ellen Brown (Alan Brown as successor)	Hat Creek (no ditch)	2.00	357.02
W W Brown	Ellen Brown - W W Brown	7.50	1,336.84
W W Brown	Hat Creek (no ditch)	0.50	89.26
Charley Shoaks (Indian)	Charley Shoaks	0.50	89.26
David Doyel	Doyel	4.50	803.31
David Doyel	Hat Creek (no ditch)	0.50	89.26
David Doyel, Catherine Doyel, Effie May Doyel	Doyel	13.50	2,409.92
David Doyel, Catherine Doyel, Effie May Doyel	Hat Creek (no ditch)	5.75	1,026.45
Bertha Gieseler	Bertha Gieseler	19.25	3,459.75
Bertha Gieseler	Doyel	2.80	517.82
Otto Gieseler	Otto Gieseler or Hat Creek (No Ditch)	8.80	1,426.10
Subtotal, Schedule III, First Rotation		129.00	23,028.10
Lower Users, Second Rotation - Schedule IV			
	Henry Longquist	0.75	133.88
	Henry & Fritz Longquist Upper	0.36	66.94
	Henry & Fritz Longquist Lower	0.36	66.94
	Henry Longquist	0.25	44.63
	Henry Longquist-Reynolds-Bidwell	1.00	176.51
	Henry Longquist-Reynolds-East Side	0.75	133.88
	Henry Longquist-Reynolds-Middle	0.25	44.63
	Reynolds Canal	0.75	133.88
	Jeff Bone Upper	0.13	22.31
	Jeff Bone Lower	0.13	22.31
	Lee Bone	0.25	44.63
	Julia Wilson	0.25	44.63
	Sam Williams	0.25	44.63
	Joe Wilson	0.25	44.63
	Ellen Brown Upper	0.25	44.63
	Ellen Brown - W W Brown	1.00	176.51
	Ellen Brown Lower	0.25	44.63
	Charley Shoaks	0.13	22.31
	Doyel	1.00	176.51
	Bertha Gieseler	0.25	44.63
	Otto Gieseler	0.50	89.26
Subtotal, Schedule IV, Second Rotation		9.13	1,628.93
Schedule 2 - Decree No. 7858			
Harvey W Wilcox	Harvey Wilcox Upper, Harvey Wilcox Middle, and/or Harvey Wilcox Lower	1.06	1,124.36
Mint W Stevenson	Upper Ranch, Stevenson Channel and/or Stevenson Gully	5.20	1,910.68
Ruby F Herrell and Charles W Gray	Gray	0.75	275.58
Carrie Kitzhall and W P Hall	Hall	2.79	1,825.15

No comments

- n/a -

Hat Creek Decree Shasta County Decree No. 5724 Shasta County Decree No. 7858 Seasons of Use		Summer Season Winter Season	Days	Days
Continuous, regardless of season		365.25	Days	
May 1 through October 27		180.00	Days	
October 28 through April 30		185.25	Days	
Name of Claimant	Name of Diversion System	Allotments		
		Allotment (cfs)	Allotment (AF)	
Mag M H Shearin	Shearin Upper and/or Shearin Lower	0.96	352.74	
Alex Brown (Indian)	Alex Brown	0.25	91.86	
Estate of Gerry M Wilcox and Enima E Wilcox	Kawkins, Harry Wilcox Upper and/or Harry Wilcox Middle	9.40	3,453.92	
Cladya Cartruda Smith, Emily Ruberta Ward, Jila May Wilcox	Harry Wilcox Middle, Wilcox Lower and/or Wilcox Davis	10.34	3,872.80	
Holliday Brown (Indian)	Harry Wilcox Middle and/or Holliday Brown Wilcox Davis	0.56	205.77	
Dessie Snooker (Indian)	Valentine Upper and/or Valentine Lower	1.06	389.48	
William Valentine and Fred Valentine	Reverford Upper, Reverford Middle, and/or Reverford Lower	0.81	297.62	
Charles Reverford	Edith Snooks	1.25	463.02	
Edith Snooks (Indian)	Rattledge-Lonquist and/or Rattledge-O'Dwyke-Forest Service	0.25	91.86	
J S Rattledge and Sabilla J Rattledge	O'Dwyke and/or Rattledge-O'Dwyke-Forest Service	2.19	804.69	
Henry O'Dwyke	Rattledge-Lonquist, Henry Lonquist Upper and/or Henry Lonquist Lower	0.88	3,262.85	
Henry Lonquist	Morris Upper and/or Morris Lower	5.56	2,042.96	
Iva Dity and Ata J Dity	Reiger	11.12	4,085.91	
S E Reiger	Morris Upper and/or Morris Lower	1.63	596.92	
Wernon Mason	Henry Lonquist, Reiger, Lonquist-Reynolds-Bowell, and/or Lonquist-Reynolds	6.75	2,480.21	
Henry A Lonquist	Lonquist-Reynolds-Bowell and/or Reynolds Dam	6.88	2,793.10	
Sofia U Lonquist	Lonquist-Reynolds-Bowell and/or Reynolds Dam	5.75	2,112.77	
R E Bowell	Reiger	4.96	1,829.84	
L H Sullivan and Eva B Sullivan	Bone Upper and/or Bone Lower	2.30	843.11	
Jackson Bone (Indian)	Lee Bone and/or Williams	0.50	183.72	
Lee Bone (Indian)	Julia Wilson	0.50	183.72	
Sam Williams (Indian)	Julia Wilson	0.60	220.46	
Julia Wilson (Indian)	Joe Wilson	1.75	643.02	
Harry Bos (Indian)	Brown Upper, Brown Lower and/or Ellen Brown	1.38	507.06	
Lovena Wilson Mitchell, Atta Wilson Muller, Hattie Wilson, Flora Wilson, and Ira Wilson (Indians)	Ellen Brown, W W Brown	6.13	2,252.40	
Alan Brown	Charley Snooks	4.60	1,690.21	
W W Brown	Doyel and/or Doyel East	0.25	91.86	
Kobe Snooks, Girely Snooks, Cecilia Barnes, and Dessie Snooka (Indians)	Bertha Geissner and/or Doyel	12.12	4,453.35	
David Doyel, Catherine Doyel and Effie May Doyel	Otto Geissner	6.12	2,248.72	
Bertha Geissner	Jones	4.00	1,469.75	
Otto Geissner	Grant Upper and/or Grant Lower	0.50	183.72	
W E Durnwoody		0.50	183.72	
Clara Grant (Indian)				
Subtotal, Schedule 2, Decree No. 7858		131.37	48,270.33	
Summary			Allotment (AF)	
Upper Users, First Rotation - Schedule I	Summer Irrigation, Stockwater, Domestic	103.50	16,476.03	
Upper Users, Second Rotation - Schedule II		10.13	1,807.44	
Lower Users, First Rotation - Schedule III	Summer Irrigation, Stockwater, Domestic	129.00	23,028.10	
Lower Users, Second Rotation - Schedule IV		9.13	1,628.93	
Schedule 2 - Decree No. 7858	Winter Irrigation, Stockwater, Domestic	131.37	46,270.33	
Total, Hat Creek Decrees		383.12	93,210.83	

No comments
- n/a -

North Fork River (and all its tributaries except for Frank Creek)
Modoc County Decree No. 4674

Seasons of Use

Continuous, year-round season	365.25	days
April 1 to September 30	187.00	days
April 15 to September 30	169.00	days

Name of Claimant	Acreage to be supplied	Division No. as per DWR Map	Name of Division System	Allotments										Total cfs	Total AF	
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)	Fifth Priority Class (cfs)	Fifth Priority Face Value (AF)			
Linnville Creek and its Tributaries Claimants																
Good F. B. Baker	4.00	1	Crocker	0.10	72.45										0.10	72.45
J. W. Workshop and Orlin Wilkins	112.00	2, 3, 4, 5	Werkens Upper, Werkens Lower, Werkens Middle, Werkens Lower	1.00	1,199.14										1.00	1,199.14
C. C. Clark and Ben Clark	150.70	6, 7, 8, 9, 10	Clark Pond, Clark Upper, Clark Lower, Clark Lower	1.10	796.91	1.10	999.27								2.20	1,796.18
Alan S. Bennett	70.00	11, 12	Bennett House, Bennet-Bennett	1.01	731.71										1.01	731.71
Lake Forest Cattle Company	323.20	13, 14B, 14C, 150	Payle-Bennet, Payle Upper, Colman, Payle, Payle Lower, Colman	0.10	77.45	3.29	3,195.19								3.39	3,272.64
Subtotal, Linnville Creek Group	661.90			3.51	2,832.65	4.39	1,593.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.30	4,426.11
Joseph Creek and its Tributaries Claimants																
Harold Boyd and Luce Boyd	80.00	15, 15A, 15B, 16	Upper Springs Lower, Shinnick, South Coast, Upper Coast, Lower Coast	0.65	470.90					0.50	181.49				1.15	652.39
V. L. Jacobs and Cecelia Jacobs	39.10	18, 19	Jacobs Jacobs East Springs, Jacobs West Springs	0.40	289.79										0.40	289.79
Lyle G. Wilson	88.00	20, 21, 22	Wilson Upper, Wilson Middle, Wilson Lower, Wilson Lower	1.19	862.21					0.09	32.87				1.28	895.08
Jerry G. Block	21.60	23	Wilson River			0.40	145.19								0.40	145.19
Carl William Birt, Marie Sigora Block, Walter Vernon Block, Michael Block, Lyle G. Block and Cecelia Nunn Block	18.40	24	Wilson Creek	0.30	144.89	0.30	308.69								0.60	453.58
Walter Vernon Block, Michael Block, Lyle G. Block and Cecelia Nunn Block	28.20	25, 25	Wilson Creek, Lower Wilson	2.15	1,617.40					1.25	453.72				3.40	2,071.12
Harold Stephens Trust	62.00	26	R. L. Linnage			1.30	971.87								1.30	971.87
Carl William Birt, Marie Sigora Block, Walter Vernon Block, Michael Block, Lyle G. Block and Cecelia Nunn Block	253.20	27, 28, 29, 30	Southdown, Block Upper, Block Middle, Block Lower			1.31	471.87	1.70	617.06	0.57	199.64				3.58	1,288.56
Subtotal, Joseph Creek Group	796.00			4.59	3,325.23	3.30	1,197.82	1.70	617.06	2.39	867.51	0.00	0.00	0.00	11.99	6,007.67
Thomas Creek and its Tributaries Claimants																
Paul W. Robinson	7.40	31, 31A, 31B, 32	Wormian Jar Jar, Wormian 2nd Jar, Wormian 3rd Jar, Wormian Lower Jar	0.10	72.45										0.10	72.45
William Acty	9.00	36 to 40	Woolson Upper Jar, Woolson Lower Jar	0.20	144.89										0.20	144.89
Robert T. Jameson and Irene Mary Jameson	18.00	33, 34, 35, 36	Upper Upper Jar, Lower Upper Jar, Lower Lower Jar, Upper Lower Jar	0.10	72.45	0.16	127.30								0.26	199.82
Alfred DeWitt	60.10	41, 41A, 41B, 42	DeWitt Jar Jar, DeWitt Lower Jar	0.30	217.34	1.05	751.97								1.35	969.31
Clyde Hays and Ruth Hays	132.00	45, 47 to 50, 61	Hays Center Jar, Hays Middle Jar, Hays Jar	0.27	195.40	0.98	708.50								1.25	903.90
Howard Hays and Nellie Boyd	66.40	54, 55, 56	H. Hays Upper Jar, H. Hays Middle Jar, H. Hays Lower Jar	0.04	28.96	0.42	146.79								0.46	175.75
Carl Ray DeWitt and Wife DeWitt	5.00	54A	Witt Jar Jar			0.02	16.11								0.02	16.11

No comments

- n/a -

North Fork Pitt River (and all its tributaries except for Franklin Creek)
Modoc County Decree No. 4074

Seasons of Use

Continuous, year-round season	365.25	days
April 1 to September 30	183.00	days
April 15 to September 30	159.00	days

Name of Claimant	Acreage to be supplied	Division No. as per DWR Map	Name of Diversion System	Allotments										Total cfs	Total AF	
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)	Fifth Priority Class (cfs)	Fifth Priority Face Value (AF)			
J. M. Rippe	14.00	62, 63	Rippe Upper Tractor, Rippe Lower Tractor			0.19	33.52	0.15	30.28						0.25	83.90
Alfred Stone (Marta LA Stone and Howard Stone)	20.00	64, 65	Stone Upper Stone Lower					0.00	134.08						0.00	134.08
C. A. Scouffing and Ethel Scouffing	42.30	66 to 70	Scouffing					0.64	281.57						0.64	281.53
Rufus S. Carney, Charles M. Carney, George Carney, John M. Carney, Oliver W. Carney, Mrs. Jack Robertson and Mrs. T. A. Reed	21.50	68	Scouffing Lower North					0.30	100.56						0.30	100.56
The United and Bank of Berkeley	22.48	71, 72, 73	Baker Upper, Baker Lower, Baker Lower			0.05	16.76	0.00	201.12						0.05	217.88
W. F. Davis	7.30	74	Baker			0.10	33.52								0.10	33.52
Subtotal, Thoms Creek Group	104.70			1.01	731.71	3.14	1,052.55	2.29	707.62	0.00	0.00	0.00	0.00	0.00	6.44	2,551.88
Gleason Creek and its Tributaries Group																
W. S. Rabin	64.60	84, 85, 86	Rabin Upper, Rabin Middle, Rabin Lower	0.20	144.80							0.00	290.16	1.00	435.22	
George M. Lazen	132.00	87, 88, 89, 90, 91	Smith, Jones, Rabin, Jones Middle South, Jones Lower South			0.20	144.80	1.00							2.00	144.80
J. B. Fowler	10.00	86A, 86B, 86C	Fowler Upper, Fowler Middle, Fowler Lower							0.20	72.00				0.20	72.00
United States Trust	94.30	92	Morris, Fowler Upper, X, Gibson	0.20	144.80	0.40	289.79	1.00	0.00	3.15	417.12			3.35	562.31	
Subtotal, Gleason Creek Group	301.00			0.20	144.80	0.40	289.79	1.00	0.00	1.35	490.02	0.00	290.16	0.55	1,215.07	
Parker Creek and its Tributaries Claimants																
T. D. McDowell and L. Daryl McDowell	155.00	93, 95, 96, 98	McDowell-McDowell, McDowell Upper, McDowell Lower, McDowell	0.21	152.14	1.85	866.02			0.15	164.65				2.25	892.61
Walter E. Rappaport and Nellie J. Rappaport	46.50	91, 100, 100A, 100B	Rappaport McDowell, Rappaport Upper, Rappaport Lower, Rappaport Middle	0.07	50.71	0.63	226.67								0.70	276.99
W. S. Turton	111.80	101, 102, 103, 110	Turton Upper Shasta, Turton Upper Shasta, Turton Upper (Big), Turton Lower (Big)	0.20	144.80	1.50	544.44								1.70	689.34
W. S. Turton	12.40	111, 112	Rippe Upper, Rippe Lower			0.20	72.00								0.20	72.00
Marta E. Rippe	132.30	111, 112	Rippe Upper, Rippe Lower	0.20	144.80	1.70	617.86								1.90	762.95
Nyrie P. Spaulter	15.00	111, 112	Rippe Upper, Rippe Lower			0.20	72.00								0.20	72.00
Marta E. Rippe	23.00	100, 123	Rappaport Upper, Rappaport Lower, Rappaport							0.25	90.24				0.25	90.24
Edward Charles Rippe, Floyd J. Bill Rippe, and Darius Wills Rippe	65.00	124	Rippe Creek							0.30	181.89				0.30	181.89
James C. Price, Cary Smith and Carmen Wente	40.00	154	Nelson	0.10	72.05					0.60	326.66				0.70	399.12
State of California	72.00	158	Cookin							0.63	276.67				0.63	276.67
C. B. Quinn	129.00	104, 105, 106	Price Upper, Price Lower, Price Lower	0.20	144.80					0.10	388.25				0.30	725.65

No comments

- n/a -

North Fork River (and all its tributaries except for Franklin Creek)
Modoc County Decree No. 4074

Seasons of Use

Continuous, year-round	365.25	days
April 1 to September 30	183.00	days
April 15 to September 30	169.00	days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments										Total cfs	Total AF	
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)	Fifth Priority Class (cfs)	Fifth Priority Face Value (AF)			
W & Thomas	100.00	105, 107, 108, 109	Phoebe Nicks, Trained Squid Runway, Turbidity North Fork, Station 1					1.30	471.67						1.30	471.67
Myra D. Sorenson	110.00	109	Station 1	0.20	164.80			1.40	508.12						1.60	653.06
Jacobs Property	105.00	117	Roberts-Parker	0.10	144.80			1.25	451.72						1.35	506.61
Martha E. Pugh	24.00	114	Fishery Layer					0.10	127.04						0.10	127.04
Jackie Houtley	18.00	115	Fishery Layer					0.15	54.45						0.15	54.45
Liberal Christie-Holmes, Royal Edwin Holmes, 142 Dickey Williams Drive	153.00	116, 117, 118, 120, 123, 124	Alma Baker Mill, Alice Porter Local North, Alice Porter Lower North, Perkins Pond Works, Alice Porter Slough	0.20	144.80			1.18	406.10	0.20	126.60				2.18	863.58
David E. Gibson, Julie C. Gibson	159.00	113, 121, 122	Robert Parker, Porter Layer	0.20	144.80			0.63	228.67	0.29	105.26				1.12	478.83
Wendy E. Gibson and C. Gibson	45.00	120	Bridge					0.30	101.49						0.30	101.49
James C. Parker, 440 Prince of Wales & Porter Street, Salmon Falls	66.00	120	Bridge	0.40	289.28			0.49	174.83						1.15	434.61
James C. Parker, 440 Prince of Wales & Porter Street, Salmon Falls	168.00	119, 118A, 118B	X-1, Parker	0.20	144.80			2.72	1,005.44						2.92	1,150.33
Wendy E. Gibson and C. Gibson	41.50	125, 126	Arnold P & J Home Bridge					0.65	235.93						0.65	235.93
James C. Parker, 440 Prince of Wales & Porter Street, Salmon Falls	67.50	127, 129A, 129B, 130	West Ditch, Baker Mill	0.20	144.80			0.95	344.83						1.15	409.72
James C. Parker	81.00	131, 131A, 131B	Porter West, X-1, Baker, J & Baker Lower					1.30	471.67						1.30	471.67
Subtotal, Parker Creek Group	1,935.10			2.50	1,009.11	0.12	2,221.41	15.58	5,655.15	2.92	1,059.89	0.00	0.00	27.20	10,805.56	
North Fork of Pit River Claimants																
R & Wooty	19.50	14	Wooty	0.25	253.56										0.25	253.56
United States of Fruit	423.00	119, 119A	X-1, Upper Liberty, Lower X-1, Wooty, X-1, Lower	7.00	5,071.24										7.00	5,071.24
C. J. Chase Co.	18.30	137, 138	X-1, Upper Liberty, Lower X-1, Wooty, X-1, Lower	0.20	144.80										0.20	144.80
Frank Robertson	65.20	136	Liberty							1.51	1,170.30				1.51	1,170.30
Kimberly B. Johnson and George B. Johnson	54.70	139	North Fork			2.00	725.95					0.30	108.89	2.30	834.84	
Helen A. Mason, 404 Highway 10, Hamilton	184.20	128	North Fork	0.20	144.80			2.00	1,088.93			0.30	108.89	2.50	1,342.71	
A. William and A. Keller	35.20	128	North Fork					0.80	290.76				0.80	108.89	1.10	399.72
Stuart Lamb, Edith Lamb, James R. Lamb	146.90	129	North Fork	0.20	144.80			1.12	369.93			0.30	108.89	2.62	1,023.25	
James C. Parker, 440 Prince of Wales & Porter Street, Salmon Falls	350.70	129	North Fork	0.20	144.80			3.88	1,443.01			1.31	473.50	6.39	2,464.39	
C.A. Baker	130.50	128	North Fork			2.00	725.95							2.00	725.95	
A. William and A. Keller	236.70	141, 142	Golden Nugget					4.00	1,451.90					4.00	1,451.90	
John C. Kiser	10.00	141, 142	Golden Nugget					0.16	58.08					0.16	58.08	
M. J. Joseph and Ann C. Joseph	68.30	141, 142, 143, 144	Golden Nugget, West Fork, West & Center					2.00	725.95					2.00	725.95	
Wendy E. Gibson and James C. Parker	65.80	141, 142, 143, 144	Golden Nugget, West Fork, West & Center					1.44	522.68					1.44	522.68	
Ken Williams	5.00	141, 142, 143, 144	Golden Nugget, West Fork, West & Center					0.66	185.19					0.66	185.19	
P.S. Davis	1,865.90	142	Hughes							6.33	2,297.63			6.33	2,297.63	
C. B. Davis and Merj. R. Davis	1,826.20	142	Hughes							6.13	2,297.63			6.33	2,297.63	
W.F. Minard	26.50	142	Harris							0.30	108.89			0.30	108.89	
W.D. Joseph and Thelma Joseph	12.30	146	Kellogg							0.21	76.49			0.21	76.49	
Subtotal, North Fork of Pit River Group	6,378.90			0.15	5,404.37	16.20	5,880.20	0.00	2,903.80	16.79	6,094.35	2.94	1,067.15	52.08	21,949.87	
Special Class Continuous Usage																
C.T. Wilson	2.50	1,817.18														

No comments
- n/a -

North Fork FR River (and all its tributaries except for Franklin Creek)
Hodge County Decree No. 4074

Seasons of Use	Acres	Value
Continuous, year-round stream	304.79	1800
April 15 - September 30	180.00	0
April 15 - September 30	159.00	0

Name of Claimant	Acres to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments										Total cfs	Total AF	
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)	Fifth Priority Class (cfs)	Fifth Priority Face Value (AF)			
Casey E. Berman	0.01				21.73											
Delta Property	1.00				724.46											
United States of Amer	0.18				72.45											
Subtotal, Special Class Continuous	1.19				2,066.62											
Sumner Clark (Apr 15 - Sep 30)																
James C. Pringle	1.15				417.42											
Subtotal, Surplus Class Special Class (Apr 15 - Sep 30)	1.15				417.42											
J. S. Gier	7.40				886.30											
J. W. Karp and A. H. Karp	0.28				62.04											
T. L. Wenzel and One W. Wenzel	2.40				886.30											
Subtotal, Special Class Apr 15 - Sep 30	5.00				1,876.02											

No comments

- n/a -

**North Fork River (and all its tributaries except for Franklin Creek)
Modoc County Decree No. 4674**

Seasons of Use

Continuous, year-round	365.25	Other
April 1 to September 30	180.00	Open
April 15 to September 30	159.00	Open

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments										Total cfs	Total AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)	Fifth Priority Class (cfs)	Fifth Priority Face Value (AF)		
Summary	Total cfs	Total AF													
Utter Creek Group	6.30	8,526.11													
North Creek Group	11.96	8,807.61													
French Creek Group	6.44	2,551.86													
Gilman Drain Group	4.93	121,910													
Reyer Creek Group	27.20	10,885.56													
North Fork #1 River Group	52.06	21,869.87													
Spokane-Gilman Confluence Group	3.68	2,694.02													
Santa Ana Group	1.15	417.42													
Special Class Adj. (3,580.00 cfs)	3.00	1,676.01													
Total, All Groups	110.55	46,956.17													

No comments

- n/a -

**Rattlesnake Creek Decree (Pit River in Hot Springs Valley)
Modoc County Decree Recorded in Book 17, page 171**

Seasons of Use

Continuous, regardless of season	365.25	days
April 1 through September 30	183.00	days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments	
				Allotment (cfs)	Allotment (AF)
Schedule 2, Allotments from Rattlesnake Creek and Pit River					
Spicer Corporation	399.00		Rattlesnake	2.00	725.95
P S Dorris and Bank of Modoc County (Hoy & Christen)	167.00		Butcher	1.15	417.42
Emma Godfrey	71.00		Barnes	0.90	326.68
Emma Godfrey, Estate of J W Cummins, A H Layton, John Strawn	124.00		Cummins	0.20	72.60
Hot Spring Valley Irrigation District, Estate of McBrien and McConnell, John Lybarger	225.00		McBrien	2.45	889.29
James M Edwards, Estate of G C Lindauer, Hot Spring Valley Irrigation District (Lindauer)	521.00		Lindauer Upper	0.80	390.38
Estate of G C Lindauer, Hot Spring Valley Irrigation District	242.00		Lindauer Lower	0.55	199.64
Estate of G C Lindauer, Frank McArthur, John Kelley, C S Baldwin, Hot Springs Valley Irrigation District	492.00		McArthur Upper	0.60	217.79
Frank McArthur	140.00		McArthur Lower	0.45	163.34
Frank McArthur, Bank of Modoc County (Claussen), Federal Land Bank of Berkeley	253.00		Claussen	0.40	145.19
Bank of Modoc County (Claussen), Ira Hulbert, Bank of Modoc County (Connely), George Fellenzer, Katherine E Hazleton, California Joint Stock Land Bank (Fitzhugh)	538.00		Fellenzer	0.20	72.60
California Joint Stock Land Bank (Fitzhugh), Bank of Modoc County (Connely)	273.00		Fitzhugh	0.65	235.93
California Joint Stock Land Bank (Fitzhugh), Bank of Modoc County (Connely), George Fellenzer, Estate of G L Kramer	220.00		Marie Caldwell Upper	0.40	145.19
Estate of G L Kramer	100.00		Marie Caldwell Lower	0.55	199.64
G B Wilcox	166.00		Warren Caldwell	1.10	399.27
G B Wilcox	99.00		Hughes	0.40	145.19
Federal Land Bank of Berkeley	28.00		Howe	0.80	390.38
Federal Land Bank of Berkeley (Howe), Lizzie D Pope	69.00		Lizzie Pope	0.40	145.19
Hot Spring Valley Irrigation District (Shelton)	0.00		No Dam	0.00	0.00
Hot Spring Valley Irrigation District (Anklin)	0.00		No Dam	0.00	0.00
Hot Spring Valley Irrigation District (Mohr)	0.00		No Dam	0.00	0.00
Mary L Elledge	0.00		No Dam	0.00	0.00
Dora H Kelley	0.00		No Dam	0.00	0.00
Subtotal, Schedule 2	4,147.00			14.00	5,081.65
Schedule 3 Allotments from Pit River and Rattlesnake Creek					
Estate of J M Clark	22.00		Kelley Ditch	0.44	159.71
Emma Godfrey	3.00		Kelley Ditch	0.06	21.78
Estate of J W Cummins	37.00		Kelley Ditch	0.74	268.60
S B and B L Kelley	43.00		Kelley Ditch	0.86	312.16
S B Kelley	4.00		Kelley Ditch	0.08	29.04
Dora B Kelley	82.00		Kelley Ditch	1.64	595.28
A H Layton	1.00		Kelley Ditch	0.02	7.26
T W Lush	15.00		Kelley Ditch	0.30	108.89
Spicer Corporation	35.00		Rattlesnake Canal	0.70	254.08
Pickering Lumber Company	39.00		Rattlesnake Canal	0.78	283.12
Spicer Corporation	364.00		Rattlesnake Creek and/or Rattlesnake Canal	7.28	2,642.46
Bank of Modoc County	4.00		Rattlesnake Creek and/or Rattlesnake Canal	0.08	29.04
P S Dorris	39.00		Butcher Dam	0.78	283.12
Bank of Modoc County	128.00		Butcher Dam	2.56	929.22
Emma Godfrey	71.00		Barnes Dam	1.42	515.42
Estate of J W Cummins	35.00		Barnes Dam, Cummins Dam, and/or Kelley Ditch	0.70	254.08

No comments

- n/a -

**Rattlesnake Creek Decree (Pit River in Hot Springs Valley)
Modoc County Decree Recorded in Book 17, page 171**

Seasons of Use

Continuous, regardless of season	365.25	days
April 1 through September 30	183.00	days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments	
				Allotment (cfs)	Allotment (AF)
A H Layton	32.00		Barnes Dam, Cummins Dam, and/or Kelley Ditch	0.64	232.30
Emma Godfrey	57.00		Barnes Dam, Cummins Dam, and/or Kelley Ditch	1.14	413.79
John Strawn	3.00		Barnes Dam, Cummins Dam, and/or Kelley Ditch	0.06	21.78
Hot Spring Valley Irrigation District	179.00		McBrien Dam	3.58	1,299.45
Estates of McBrien and McConnell	30.00		McBrien Dam	0.60	217.79
John Lybarger	16.00		McBrien Dam	0.32	116.15
James M Edwards	44.00		Lindauer Upper Dam	0.88	319.42
Estate of G C Lindauer	136.00		Lindauer Upper Dam	2.72	987.29
Hot Spring Valley Irrigation District	83.00		Lindauer Upper Dam	1.66	602.54
Estate of G C Lindauer	59.00		Lindauer Upper and/or Lower Dam	1.18	428.31
Hot Spring Valley Irrigation District	441.00		Lindauer Upper and/or Lower Dam	8.82	3,201.44
Estate of G C Lindauer	20.00		Lindauer Upper Dam, Lindauer Lower Dam, and/or McArthur Upper Dam	0.40	145.19
Frank McArthur	542.00		McArthur Upper and/or Lower Dam	10.84	3,934.65
John Kelley	12.00		McArthur Upper and/or Lower Dam	0.24	87.11
C S Baldwin	47.00		McArthur Upper and/or Lower Dam	0.94	341.20
Hot Spring Valley Irrigation District	65.00		McArthur Upper and/or Lower Dam	1.30	471.87
Frank McArthur	122.00		McArthur Upper Dam, McArthur Lower Dam, and/or Claussen Dam	2.44	885.66
Federal Land Bank of Berkeley	37.00		Claussen Dam	0.74	268.60
Bank of Modoc County	65.00		Claussen Dam, and/or Fellenecer Dam	1.30	471.87
Katherine E Hazelton	94.00		Fellenecer Dam	1.88	682.39
George Fellenecer	259.00		Fellenecer Dam	5.18	1,880.21
Bank of Modoc County	107.00		Fellenecer Dam	2.14	776.77
Ira Hulbert	23.00		Fellenecer Dam	0.46	166.97
California Joint Stock Land Bank	50.00		Fellenecer Dam and/or Fitzhugh Dam	1.00	362.98
California Joint Stock Land Bank	228.00		Fitzhugh Dam	4.56	1,655.17
Bank of Modoc County	25.00		Fitzhugh Dam	0.50	181.49
California Joint Stock Land Bank	4.00		Marie Caldwell Upper Dam	0.08	29.04
Bank of Modoc County	73.00		Marie Caldwell Upper Dam	1.46	529.94
George Fellenecer	54.00		Marie Caldwell Upper Dam	1.08	392.01
Estate of G L Kramer	89.00		Marie Caldwell Upper Dam	1.78	646.10
Estate of G L Kramer	100.00		Marie Caldwell Lower Dam	2.00	725.95
G B Wilcox	166.00		Warren Caldwell Dam	3.32	1,205.08
G B Wilcox	10.00		Hughes Dam	0.20	72.60
Annie Hughes	89.00		Hughes Dam	1.78	646.10
Federal Land Bank of Berkeley	28.00		Howe Dam	0.56	203.27
Federal Land Bank of Berkeley	25.00		Lizzie Pope Dam	0.50	181.49
Lizzie D Pope	64.00		Lizzie Pope Dam	1.28	464.61
Subtotal Schedule 3	4,400.00			88.00	31,941.82
Summary		Allotment (cfs)	Allotment (AF)		
Schedule 2		14.00	5,081.65		

Rattlesnake Creek Decree (Pit River In Hot Springs Valley)
Modoc County Decree Recorded in Book 17, page 171

Seasons of Use

Continuous, regardless of season	365.25	days
April 1 through September 30	183.00	days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments	
				Allotment (cfs)	Allotment (AF)
Schedule 3	88.00	31,941.82			
Total	102.00	37,023.47			

No comments

- n/a -

Roaring Creek Stream System Adjustment / Shasta County (Form No. 8/07)

Roaring Creek Decree
Shasta County, Decree No.
83725

Seasons of Use	Days	Days
Continuous, regardless of season	365.25	days
April 1 through November 1	215.00	days
November 1 through April 1	150.25	days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments				Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)	Total cfs	Total AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)				
Schedule 3, Roaring Creek Claimants											
Irish, Walter H and Annabel	10.00	3						0.75	319.81	0.75	319.83
Wood, Frank	10.00	3						0.47	200.43	0.47	200.43
Thurton, Eugene and Linda et al	19.00	3						0.89	379.54	0.89	379.54
Eggenon, Ronald T and Theresa M	4.00	3						0.19	81.04	0.19	81.04
Harris, Lynn and Christine C	15.00	5		0.75	319.81					0.75	319.83
Carrall, Jerry T and Charlene C	25.00	5		1.00	537.32					1.00	537.32
Miller, Jack O and Helen	2.00	6						0.12	51.17	0.12	51.17
Laurigan, Vernon J and Luana J	10.00	6						0.60	255.87	0.60	255.87
Callaway, F B III and Eston, R B	5.00	6						0.30	127.93	0.30	127.93
Easton, Robert B and Costance C	3.00	6						0.18	76.76	0.18	76.76
Castrell, Greta	2.00	6						0.12	51.17	0.12	51.17
Boy Hydrology Service	2.00	6						0.12	51.17	0.12	51.17
Neider, Chester and Mary J	Domestic	6						0.36	153.50	0.36	153.50
Tom, Eugene F and Martha P	Domestic	6						0.01	7.24	0.01	7.24
Van Steens, Jack L and Doris A	Domestic	6						0.01	7.24	0.01	7.24
Reppin, Jack J and Grace M	Domestic	6						0.01	7.24	0.01	7.24
Huddick, Arthur C and Sally	Domestic	6						0.01	7.24	0.01	7.24
Stavin, Susan Marie Wainble	Domestic	6						0.01	7.24	0.01	7.24
Garnett, Bernard E and Ruth M	Domestic	6						0.01	7.24	0.01	7.24
Claw, James and Lucille	1.00	3						0.08	25.99	0.08	25.99
Wilson, Thomas Earl and Gayle A	Domestic	6						0.01	7.24	0.01	7.24
Richard, Charles L and Evelyn A	3.00	3						0.18	76.76	0.18	76.76
Rodrick, James C and Deborah J	0.00	5					0.19	83.97		0.19	83.97
Subtotal, Schedule 3, Roaring Creek Claimants	122.00			2.01	857.16	0.00	0.00	0.15	63.97	4.41	1,901.49
Schedule 4, Jake Creek Claimants											
Irish, Walter H and Annabel	10.00	4				0.75	319.83			0.75	319.83
Wood, Frank	10.00	4				0.47	200.43			0.47	200.43
Thurton, Eugene and Linda et al	19.00	4				0.89	379.54			0.89	379.54
Eggenon, Ronald T and Theresa M	4.00	4				0.19	81.04			0.19	81.04
Subtotal, Schedule 4, Jake Creek Claimants	53.00			0.00	0.00	2.30	980.87	0.00	0.00	0.00	2.30
Schedule 5, Browns Creek Claimants											
Thurton, Eugene and Linda et al	19.00					0.89	379.54			0.89	379.54
Eggenon, Ronald T and Theresa M	4.00					0.19	81.04			0.19	81.04
Thurton, Eugene and Linda et al	2.00							0.04	17.06		17.06
Harris, Lynn and Christine C	15.00			0.75	319.83			0.04	17.06	0.75	319.83
Carrall, Jerry T and Charlene C	25.00			1.00	537.32			1.26	537.32	1.26	537.32
Subtotal, Schedule 5, Browns Creek Claimants	65.00			0.75	319.83	1.00	460.56	0.04	17.06	1.26	1,334.78
Schedule 6, Miscellaneous Claimants											
U.S. Forest Service				1.00	400					0.00	0.00

No comments

- n/a -

No comments

- n/a -

**Roaring Creek Decree
Shasta County, Decree No.
83723**

Season of Use	Days
Continuous, regardless of season	365.25
April 1 through November 1	215.70
November 1 through April 1	150.25

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments								Total cfs	Total AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)		
U.S. Forest Service				0.00	42.47							0.00	11.17
Bonabere Lumber Co.				0.05	36.22							0.05	30.22
Subtotal, Schedule 6,	0.00			0.11	79.69	0.00	0.00	0.00	0.00	0.00	0.00	0.11	79.69

Paragraph 19: Winter Season Domestic and Stockwater Entitlement

Schedule 3, Roaring Creek

Name of Claimant	Acreage	Diversion No.	System	First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)	Total cfs	Total AF
Booth, Walter H and Annabel	18.00	3		0.01	2.98								
Voigt, Frank	10.00	3		0.04	2.98								
Parham, Virginia and Linda H. et al.	19.00	3		0.01	2.98								
Epperson, Ronald T. and Theresa H.	4.00	3		0.02	2.98								
Harty, Lynn and Christine	13.00	5		0.01	2.98								
Garnik, Jerry T and Charlene C.	25.00	5		0.01	2.98								
White, Jack O and Helen	2.00	6		0.01	2.98								
Leonard, James T and Luana L.	10.00	6		0.01	2.98								
Callaway, F B III and Lucian, K.H.	5.00	6		0.01	2.98								
Estes, Robert B and Costance L.	4.00	6		0.01	2.98								
Castro, Gabe	2.00	6		0.01	2.98								
Ray, Mcdougall Gerald	2.00	2		0.01	2.98								
Meadley, Chester and Mary J.	Domestic	6											
Terry, Eugene F and Martha P.	Domestic												
Vat, Steven, Jack L and Doris A.	Domestic												
Nigro, Jack J and Grace H.	Domestic												
Hubbick, Arthur C and Sally	Domestic												
Swain, Susan Marie Webber	Domestic												
Garnik, Bernard F and Ruth M.	Domestic												
Olson, James and Lucille	1.00	1		0.01	2.98								
Wilson, Thomas E. and Gayle A.	Domestic												
Richard, Charles L and Evelyn A.	3.00	3		0.01	2.98								
Brodbeck, James C and Dolores J.	5.00	5		0.01	2.98								
Subtotal, Schedule 3, Roaring Creek Claimants	122.00			0.15	44.70								

Schedule 4, Jake Creek

Name of Claimant	Acreage	Diversion No.	System	First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)	Total cfs	Total AF
Booth, Walter H and Annabel	10.00	4		0.01	2.98								
Voigt, Frank	10.00	4		0.01	2.98								
Parham, Virginia and Linda H. et al.	19.00	4		0.01	2.98								
Epperson, Ronald T. and Theresa H.	4.00	4		0.01	2.98								
Subtotal, Schedule 4, Jake Creek Claimants	49.00			0.04	11.92								

Schedule 5, Browns Creek

Name of Claimant	Acreage	Diversion No.	System	First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)	Third Priority Class (cfs)	Third Priority Face Value (AF)	Fourth Priority Class (cfs)	Fourth Priority Face Value (AF)	Total cfs	Total AF
Parham, Virginia and Linda H. et al.	19.00			0.01	2.98								
Epperson, Ronald T. and Theresa H.	4.00			0.01	2.98								
Parham, Virginia and Linda H. et al.	4.00			0.01	2.98								
Harty, Lynn and Christine	16.00			0.01	2.98								
Garnik, Jerry T and Charlene C.	25.00			0.01	2.98								

Roaring Creek Stream System Adjudication / Shasta County (Form No. 10/07)

Roaring Creek Decree
Shasta County, Decree No.
83723

Seasons of Use	Days
Creditless, regardless of season	365.25 days
April 1 through November 1	215.00 days
November 1 through April 1	150.25 days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments				Total cfs	Total AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)		
Subtotal, Schedule 3, Browns Creek Claimants	65.00			0.05	14.90				
Subtotal, Winter Season Domestic & Stockwater Allotments	236.00			0.24	71.52				
Summary	Total cfs	Total AF							
Subtotal, Schedule 3, Roaring Creek Claimants	6.57	2,822.01							
Subtotal, Schedule 4, Jake Creek Claimants	2.50	990.83							
Subtotal, Schedule 5, Browns Creek Claimants	5.17	1,334.08							
Subtotal, Schedule 6, Miscellaneous Claimants	0.11	79.80							
Subtotal, Winter Season Domestic & Stockwater Allotments	0.24	71.52							
Total, Roaring Creek Stream System Decree Claims	12.38	5,288.43							

No comments

- n/a -

No comments

- n/a -

South Fork Pitt River Decree
Meade County Decree No. 3273

Seasons of Use

Continuous, regardless of season	365.25	days
April 1 to June 30	91.00	days
April 1 to October 15	198.00	days
July 1 to July 31	31.00	days
July 22 to August 11	21.00	days
August 12 to October 15	65.00	days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments				Total cfs	Total AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)		
Schedule 2, Fitzhugh Creek and Its Tributaries Claimants									
John Blevins, Cecil Blevins, and Willetta L Blevins (Bowman)	67.50	124	North Fitzhugh Creek	0.60	235.64			0.60	235.64
Conelia A Horshov, Davidella Horshov, Grace H Horshov, D W Horshov, and Florence F Horshov	104.50	125	North Fitzhugh Creek	1.00	392.73	0.60	235.64	1.60	628.36
Minnie Darvian	20.10	126, 127	North Fitzhugh Creek	0.50	362.23			0.50	362.23
Walter Cantrall, Elsie A Cantrall, A E Sweeney, and Francis E Sweeney	77.40	128 to 131	Middle and South Fitzhugh Creeks	0.90	362.23	0.70	274.91	1.20	637.14
Minnie Darvian	46.50	132 to 135	South Fitzhugh Creek			0.70	274.91	0.70	274.91
George M Clark and J E Clark	322.00	137 to 141	Fitzhugh Creek	0.60	436.68	4.40	1,728.00	5.00	2,162.60
Frank McArthur and Ethel M McArthur	316.50	142	Fitzhugh Creek	0.20	144.89	4.70	1,845.82	4.90	1,990.71
W E Armstrong	30.00	142	Fitzhugh Creek	0.20	144.89	0.30	117.82	0.50	262.71
Subtotal, Schedule 2, Fitzhugh Creek Claimants	984.50			3.60	2,077.29	11.40	4,477.09	15.00	6,554.38

No comments

- n/a -

South Fork Pit River Decree
Modoc County Decree No. 3273

Seasons of Use

Continuous, regardless of season	365.25	days
April 1 to June 30	91.00	days
April 1 to October 15	198.00	days
July 1 to July 31	31.00	days
July 22 to August 11	21.00	days
August 12 to October 15	65.00	days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments			Total cfs	Total AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)		
Schedule 3, South Fork of Pit River and Its Tributaries Claimants								
John McGarva, Peter & McGarva, and Phyllis McGarva	121.80	40 to 46	North and South Forks of Parsnip Creek	0.85	615.79	0.90	162.45	1.75 278.24
J C Van Loan	572.20	47, 48, 49	West Valley Creek	3.65	2,644.20	4.50	817.23	8.15 3,456.52
Frank McArthur and Ethel M McArthur	293.30	1	Mill Creek	1.90	746.18			1.90 746.18
John Blewins, Cecil Blewins, and Willetta L Blewins			Mill Creek	0.44	318.76			0.44 316.76
A J Cantrall and Ida Cantrall	152.30	5, 6, 7, 9	Mill Creek	0.85	615.79	1.65	297.62	2.50 913.61
W S Brooks and Ada H Brooks	23.00	5, 6, 7, 9	Mill Creek					0.00 0.00
Walker Cantrall, Elsie A Cantrall	176.50	2, 3, 4, 7, 8, 9	Mill Creek	0.85	615.79	1.65	333.92	2.70 949.71
W S Brooks and Ada H Brooks	19.50	2, 3, 4, 7, 8, 9	Mill Creek					0.00 0.00
W S Brooks and Ada H Brooks	114.20	10 to 13	Mill Creek	0.85	615.79	1.15	207.57	2.00 823.36
Bessie Whitman and Della Johnson	24.20	21, 22	Scop Creek					0.00 0.00
Arthur Flounoy	91.90	4	Mill Creek	0.85	615.79	1.15	207.57	2.00 823.36
Bessie Whitman and Della Johnson	48.60	4	Mill Creek					0.00 0.00
Felice Lemm	146.00	2, 3, 4	Mill Creek	0.85	615.79	1.25	225.63	2.10 841.41
Bessie Whitman and Della Johnson	10.20	14	Mill Creek			0.15	27.07	0.15 27.07
Arthur Flounoy	178.10	23, 24	Mill Creek			2.80	505.39	2.80 505.39
Bessie Whitman and Della Johnson	19.30	23, 24	Mill Creek					0.00 0.00
George Campbell	52.40	27 to 32	East Creek	0.85	615.79	0.25	45.12	1.10 660.92
Arthur Flounoy	23.70	27 to 32	East Creek					0.00 0.00
Arthur Flounoy	1,736.50	27, 30, 33 to 39	East Creek	5.00	3,622.31	19.80	3,573.82	24.80 7,196.13
Verdi Lumber Company	73.00	50	South Fork of Pit River	0.25	181.12	1.53	276.16	1.78 457.27
Royal E Williams, Marion G Williams and Ann Eliza Duke	156.00	50	South Fork of Pit River			0.70	126.35	0.70 136.35
Arthur Flounoy	56.70	50	South Fork of Pit River	0.40	289.79			0.40 289.79
Arthur Flounoy	89.00	50	South Fork of Pit River	0.33	239.07	1.27	229.23	1.60 468.30
A T Coffman and Eppie W Coffman	171.70	50	South Fork of Pit River	0.16	130.40	1.90	342.94	2.06 473.35
A L Stinson, and Mary E Stinson	7.00	50	South Fork of Pit River	0.88	57.96			0.88 57.96
Douglas McGarva and Margaret McGarva	33.00	50	South Fork of Pit River	0.50	362.33			0.50 362.33
Town of Ukely	50	50	South Fork of Pit River	0.06	43.47			0.06 43.47
Verdi Lumber Company	97.00	51	South Fork of Pit River	0.40	289.79	0.80	144.40	1.20 434.18
Harmer Blewins	93.00	51	South Fork of Pit River	0.40	289.79	0.80	144.40	1.20 434.18
John Blewins, Cecil Blewins, and Willetta L Blewins	101.20	51	South Fork of Pit River	0.40	289.79	0.80	144.40	1.20 434.18

No comments

- n/a -

South Fork Pitt River Decree
Modoc County Decree No. 3273

Seasons of Use	Days
Continuous, regardless of season	365.25
April 1 to June 30	91.00
April 1 to October 15	198.00
July 1 to July 31	31.00
July 22 to August 11	21.00
August 12 to October 15	65.00

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments				Total cfs	Total AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)		
Delph E Van Loan and Eva Van Loan	1.00	51	South Fork of Pitt River					0.00	0.00
W H Flournoy and Gladys W Flournoy	160.50	52	South Fork of Pitt River	0.17	123.16	1.29	231.03	1.45	354.19
Gary Williams and Theresa Williams	286.30		South Fork of Pitt River	0.51	369.48	3.84	693.10	4.35	1,062.58
J R Hughes and Wilma W Hughes	426.60		South Fork of Pitt River	0.68	492.63	5.12	924.14	5.80	1,416.77
Frank McArthur and Ethel M McArthur	515.50		South Fork of Pitt River	0.68	492.63	5.12	924.14	5.80	1,416.77
Delph E Van Loan and Eva Van Loan	111.00	53	South Fork of Pitt River	0.29	151.12	1.38	243.67	1.60	424.79
Delph E Van Loan and Eva Van Loan	345.00		South Fork of Pitt River	0.75	543.35	4.05	731.01	4.80	1,274.26
W H Flournoy and Gladys W Flournoy	294.10		South Fork of Pitt River	0.50	362.23	3.70	487.34	3.70	849.57
Arthur Flournoy	10.00		South Fork of Pitt River					0.00	0.00
Arthur Flournoy	400.00	54	South Fork of Pitt River	1.50	1,086.69	3.90	631.74	5.00	1,718.43
F E Humphrey, V F Christensen and Charlotte E Christensen	400.00		South Fork of Pitt River			5.00	902.48	5.00	902.48
Gary Williams and Theresa Williams	170.10	55	South Fork of Pitt River			2.15	368.07	2.15	368.07
Frank McArthur and Ethel M McArthur	3,414.60	56, 58, 59, 61 to 77, 67 to 91	East Side Canal	1.25	605.56	43.55	7,660.60	44.80	8,766.17
Frank McArthur and Ethel M McArthur	230.60	92 to 96, 98	East Side Canal			3.00	541.49	3.00	541.49
S J Vaughan	17.30	92 to 96, 98	East Side Canal			0.25	45.12	0.25	45.12
Delph E Van Loan and Eva Van Loan	489.00	57	East Side Canal	0.25	181.12	6.05	1,092.00	6.30	1,273.12
Mrs Katie H Nelson	526.30	60	East Side Canal	0.25	181.12	6.65	1,200.30	6.90	1,381.41
W E Armstrong	206.00	78 to 86	East Side Canal	0.25	181.12	2.45	442.21	2.70	623.33
W E Armstrong	144.60	97	East Side Canal			1.90	342.94	1.90	342.94
F E Humphrey, V F Christensen and Charlotte E Christensen	122.30	99	West Side Canal	0.10	72.45	1.45	261.72	1.55	324.17
Delph E Van Loan and Eva Van Loan	140.00	89	West Side Canal	0.10	72.45	1.65	297.62	1.75	370.26
Frank McArthur and Ethel M McArthur	161.80	99	West Side Canal	0.10	72.45	1.95	351.97	2.05	424.41
F E Humphrey, V F Christensen and Charlotte E Christensen	1,251.10	100 to 104	West Side Canal	0.90	632.02	14.95	2,698.41	15.85	3,330.43
John McGarva, Peter B McGarva, and Phyllis McGarva	219.50	105	West Side Canal	0.15	106.67	2.63	478.31	2.80	586.98
R J Gaustad and Hulle Gaustad	175.00	106, 107	West Side Canal	0.15	106.67	3.05	570.02	3.20	478.69
R O Gaustad	77.00	106, 107	West Side Canal	0.05	36.22	0.95	171.47	1.00	207.69
R O Gaustad	75.00	106	West Side Canal	0.05	36.22	0.90	162.45	0.95	198.67
Raymond Stepp Bertha L Stepp, Lena Graham and Herbie Graham	90.00	108	West Side Canal	0.10	72.45	1.05	189.52	1.15	261.97
Frank McArthur and Ethel M McArthur	1,161.20	109 to 123	West Side Canal	0.60	579.57	13.90	2,808.89	14.70	3,080.46
Subtotal, Schedule 3, South Fork Pitt River and Tributaries Claimants	16,271.10			29.48	20,074.85	182.71	30,279.99	196.34	50,354.84

Schedule 3, Surplus Rotational Allotments for Second Priority Class Claimants, July 1 through July 21

No comments

- n/a -

South Fork Pitt River Decree
Mason County Decree No. 3273

Seasons of Use

Continuous, regardless of season	365.25	days
April 1 to June 30	91.00	days
April 1 to October 15	198.00	days
July 1 to July 31	31.00	days
July 22 to August 11	21.00	days
August 12 to October 15	65.00	days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments		Total cfs	Total AF
				First Priority Class (cfs)	Second Priority Class (cfs)		
John McGarva, Peter B McGarva, and Phyllis McGarva	171.80	40 to 46	North and South Forks of Parang Creek		0.90	37.49	
J C Van Loan	872.20	47, 48, 49	West Valley Creek		4.50	187.44	
Frank McArthur and Ethel H McArthur	203.90	1	Mill Creek				
John Blewins, Cecil Blewins, and Willette L Blewins			Mill Creek				
A J Cantrell and Ida Cantrell	152.30	5, 6, 7, 9	Mill Creek	1.65		68.73	
W S Brooks and Ada H Brooks	22.00	5, 6, 7, 9	Mill Creek				
Walter Cantrell, Elsie A Cantrell	176.50	2, 3, 4, 7, 8, 9	Mill Creek	1.85		77.06	
W S Brooks and Ada H Brooks	10.50	2, 3, 4, 7, 8, 9	Mill Creek				
W S Brooks and Ada H Brooks	114.20	10 to 13	Mill Creek		1.15	47.90	
Bessie Whitman and Della Johnson	24.20	21, 22	Soup Creek				
Arthur Flournoy	91.90	4	Mill Creek		1.15	47.90	
Bessie Whitman and Della Johnson	48.80	4	Mill Creek				
Felice Leoni	146.00	2, 3, 4	Mill Creek	1.25		52.07	
Bessie Whitman and Della Johnson	10.20	14	Mill Creek	0.15		6.25	
Arthur Flournoy	178.10	23, 24	Mill Creek	2.80		116.63	
Bessie Whitman and Della Johnson	19.30	23, 24	Mill Creek				
George Campbell	52.40	27 to 32	East Creek	0.25		10.41	
Arthur Flournoy	23.70	27 to 32	East Creek				
Arthur Flournoy	1,736.50	37, 30, 33 to 39	East Creek	19.80		824.73	
Subtotal, July 1 to 21 Surplus Rotational Claimants Schedule 3, Surplus Rotational Allotments for Second Priority Class Claimants, July 22 through August 11	3,795.90			35.45	1,476.60		
Verdi Lumber Company	73.00	50	South Fork of Pitt River		1.53	63.73	
Kayal E Williams, Marion G Williams and Ann Eliza Duke	150.00	50	South Fork of Pitt River		0.70	29.16	
Arthur Flournoy	56.70	50	South Fork of Pitt River				
Arthur Flournoy	60.00	50	South Fork of Pitt River	1.27		52.90	
A T Coffman and Emma W Coffman	171.70	50	South Fork of Pitt River	1.90		79.14	
A L Stinson, and Mary E Stinson	7.00	50	South Fork of Pitt River				
Douglas McGarva and Margaret McGarva	33.00	50	South Fork of Pitt River				
Town of Liberty		50	South Fork of Pitt River				
Verdi Lumber Company	97.00	51	South Fork of Pitt River	0.60		33.32	
Harner Blewins	93.00	51	South Fork of Pitt River	0.80		33.32	

No comments

- n/a -

**South Fork Pit River Decree
Madoc County Decree No. 3273**

Seasons of Use

Continuous, regardless of season	365.25	days
April 1 to June 30	91.00	days
April 1 to October 15	198.00	days
July 1 to July 31	31.00	days
July 22 to August 11	21.00	days
August 12 to October 15	65.00	days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments		Total cfs	Total AF
				First Priority Class (cfs)	Second Priority Class (cfs)		
John Blavins, Cecil Blavins, and Willetta L Blavins	101.20	51	South Fork of Pit River		0.80	33.32	
Dolph E Van Loan and Eva Van Loan	1.00	51	South Fork of Pit River				
W H Flournoy and Gladys W Flournoy	160.50	52	South Fork of Pit River		1.28	53.32	
Gary Williams and Thirava Williams	286.30		South Fork of Pit River		3.84	159.95	
J.A. Hughes and Wilkie W Hughes	426.60		South Fork of Pit River		5.12	213.26	
Frank McArthur and Ethel M McArthur	515.50		South Fork of Pit River		5.12	213.26	
Dolph E Van Loan and Eva Van Loan	111.00	53	South Fork of Pit River		1.35	56.23	
Dolph E Van Loan and Eva Van Loan	345.00		South Fork of Pit River		4.05	168.69	
W H Flournoy and Gladys W Flournoy	294.10		South Fork of Pit River		3.70	113.46	
Arthur Flournoy	10.00		South Fork of Pit River				
Arthur Flournoy	400.00	54	South Fork of Pit River		3.50	145.79	
F E Humphrey, V F Christensen and Charlotte E Christensen	400.00		South Fork of Pit River		5.00	208.26	
Gary Williams and Thirava Williams	170.10	55	South Fork of Pit River		2.15	89.55	
Frank McArthur and Ethel M McArthur	3,414.50	56, 58, 59, 61 to 77, 87 to 91	East Side Canal		43.55	1,813.98	
Frank McArthur and Ethel M McArthur	230.60	92 to 96, 98	East Side Canal		3.00	124.96	
S J Vaughan	17.30	92 to 96, 98	East Side Canal		0.25	10.41	
Dolph E Van Loan and Eva Van Loan	480.00	57	East Side Canal		6.05	252.00	
Mrs Katie H Nelson	576.30	60	East Side Canal		6.65	276.99	
W E Armstrong	206.00	78 to 86	East Side Canal		2.45	102.05	
W E Armstrong	144.60	97	East Side Canal		1.90	79.14	
F E Humphrey, V F Christensen and Charlotte E Christensen	122.30	89	West Side Canal		1.45	60.40	
Dolph E Van Loan and Eva Van Loan	140.00	99	West Side Canal		1.65	68.73	
Frank McArthur and Ethel M McArthur	161.80	90	West Side Canal		1.95	81.22	
F E Humphrey, V F Christensen and Charlotte E Christensen	1,251.10	100 to 104	West Side Canal		14.99	622.71	
John McGarva, Neta B McGarva, and Phyllis McGarva	219.50	105	West Side Canal		2.65	110.36	
R J Gaustad and Willie Gaustad	175.00	106, 107	West Side Canal		2.05	85.39	
R O Gaustad	77.00	106, 107	West Side Canal		0.95	39.57	
R O Gaustad	75.00	106	West Side Canal		0.90	37.49	

No comments
- n/a -

**South Fork PI River Decree
Meigs County Decree No. 3273**

Seasons of Use

Continuous, regardless of season	365.25	days
April 1 to June 30	91.00	days
April 1 to October 15	198.00	days
July 1 to July 31	31.00	days
July 22 to August 11	21.00	days
August 12 to October 15	85.00	days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments			Total cfs	Total AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)		
Raymond Stupp, Bertha L. Stupp, Lena Graham and Helene Graham	99.00	108	West Side Canal			7.05	43.74	
Frank McArthur and Ethel H. McArthur	1,161.20	109 to 122	West Side Canal			13.90	578.94	
Subtotal, July 22 to August 11, Rotations Claimants	12,475.20					147.26	6,133.80	

Surplus Class Claimants, South Fork PI River and Tributaries - Rotation Schedule from Paragraph 38 from August 12 to October 15

	Cubic Feet per Second	Acre-Feet
Mill Creek Ditches	3.00	386.78
East Creek Ditches	3.20	417.56
Parano Creek Ditches	0.50	64.46
West Valley Creek Ditches	1.35	174.05
Masters Ditch	2.00	257.88
Jackson Ditch	1.00	128.93
Corporation Ditch	4.00	515.70
Van Lusen Ditch	2.00	257.88
Pleurnay Ditch	2.00	257.88
Williams Ditch	0.70	90.25
East and West Side Canals	8.00	1,031.40
Subtotal, August 12 to October 15 Rotations Claimants	27.75	3,577.69

No comments
- n/a -

**South Fork PI River Decree
Madoc County Decree No. 3273**

Seasons of Use

Continuous, regardless of season	365.25	days
April 1 to June 30	91.00	days
April 1 to October 15	198.00	days
July 1 to July 31	31.00	days
July 22 to August 11	21.00	days
August 12 to October 15	65.00	days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Name of Diversion System	Allotments				Total cfs	Total AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)		
Summary	Cubic Feet per Second	Acre-Feet							
Subtotal, Schedule 2, Fitzhugh Creek Claimants	15.00	6,858.38							
Subtotal, Schedule 3, South Fork PI River and Tributaries Claimants	196.34	80,354.84							
Subtotal, Basic South Fork Claimants Before Surplus Rotations	211.34	86,909.22							
Subtotal, July 1 to 21 Surplus Rotation Claimants	35.45	1,476.60							
Subtotal, July 22 to August 11 Rotations Claimants	147.26	6,133.80							
Subtotal, August 12 to October 15 Rotations Claimants	27.75	3,577.69							
Grand Total, All Claimants, Basic Plus Surplus Rotations	421.80	68,097.30							

No comments

- n/a -

**Willow Creek Decree
Shasta County, Decree No.
87524**

Seasons of Use
Continuous, regardless of season
April 1 through November 1

365.25 days
215.00 days
days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Use	Allotments				Total cfs	Total AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)	Second Priority Face Value (AF)		
Schedule 3, Willow Creek Claimants									
Buffington, John L. Jr		1	Domestic	Entire Flow of Spring					
Buffington, John L. Jr	8.00	2	Domestic, Irrigation	Entire Flow of Spring					
Buffington, John L. Jr		3	Domestic	Entire Flow of Spring					
Bull, Charles E	10.00	21	Domestic, Irrigation, Fire	Entire Flow of Spring					
Stanbro, Phillip W and Sharon A		5	Domestic, Stockwater	0.01	7.24		0.01	7.24	
Stanbro, Phillip W and Sharon A	6.00	5	Irrigation			0.13	55.44	0.13	55.44
Colbert, Louis E and Wilma C	15.00	6	Irrigation			0.15	63.97	0.15	63.97
Gates, Robert L and Marjorie S		7, 8	Domestic	0.01	7.24			0.01	7.24
Gates, Robert L and Marjorie S	6.00	9	Irrigation, Recreation			0.06	25.59	0.06	25.59
Gabriele, Julius and Linda		11	Domestic, Irrigation	0.01	7.24			0.01	7.24
Gabriele, Julius and Linda	30.00	11				0.30	127.93	0.30	127.93
Pacific Gas & Electric Co		22	Stockwater	350 gpd		0.39			0.39
Bertagna, Joseph and Marian L		12	Domestic	0.01	7.24			0.01	7.24
Bertagna, Joseph and Marian L	10.00		Irrigation, Stockwater			0.10	42.64	0.10	42.64
Herber, Virgil and Pauline	1.00	15	Domestic, Irrigation	0.01	7.24		4.26	0.01	4.26
Subtotal, Schedule 3 Willow Creek Claimants	88.00			0.05	36.62	0.75	319.83	0.80	356.45
Schedule 4, Minnow and Dunn Creeks Claimants									
Bertagna, Joseph and Marian L	10.00	13	Irrigation			0.10	42.64	0.10	42.64
Bertagna, Joseph and Marian L		14	Domestic	0.01	7.24			0.01	7.24
Bertagna, Joseph and Marian L	10.00	14	Irrigation			0.10	42.64	0.10	42.64
Bertagna, Paul J and Mary E	4.00	13	Irrigation			0.04	17.06	0.04	17.06
Webb, Joyce J		16	Domestic	0.01	7.24			0.01	7.24
Webb, Joyce J	2.00	16	Irrigation			0.02	8.53	0.02	8.53
Subtotal, Schedule 4 Minnow and Dunn Creeks Claimants	26.00			0.02	14.49	0.26	110.88	0.28	125.37
Schedule 5, Post-1914 Appropriative Water Rights									
Puhman, Albert E and Carol J		4	Stockwater			2.00			

No comments
- n/a -

**Willow Creek Decree
Shasta County, Decree No.
87524**

Seasons of Use
Continuous, regardless of season
April 1 through November 1

365.25 days
215.00 days
days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Use	Allotments			Total cfs	Total AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)		
Gates, Robert L and Marjorie S	2.00		Irrigation, Domestic, Stockwater		10.00			
Lincoln, Richard G and Michale L	10.00		Irrigation, Domestic, Stockwater		20.00			
Gabinski, Julius and Linda	30.00		Irrigation, Domestic, Stockwater		14.40			
Wheeler, Ernest L			Stockwater		10.00			
Shaw, Waldon et al			Stockwater		10.00			
Klein, Frederick B Phyllis	3.00		Irrigation, Domestic		3.00			
Truman, John C and Helen G			Recreation, Fish		0.50			
Subtotal, Post-1914 Appropriative Water Rights Summary	45.00			0.00	70.20			
Total cfs		Total AF						
Subtotal, Schedule 3 Willow Creek Claimants	0.80	356.45						
Subtotal, Schedule 4 Minnow and Dunn Creeks Claimants	0.26	125.37						
Subtotal, Post-1914 Appropriative Water Rights		70.20						
Total, Willow Creek Decree Claimants	1.08	552.02						

No comments
- n/a -

**Willow Creek Decree
Shasta County, Decree No. 87524**

Seasons of Use

Continuous, regardless of season	365.25	days
April 1 through November 1	215.00	days
		days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Use	Allotments			Total cfs	Total AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)		
Schedule 3, Willow Creek Claimants								
Buffington, John L Jr		1	Domestic	Entire Flow of Spring				
Buffington, John L Jr	8.00	2	Domestic, Irrigation	Entire Flow of Spring				
Buffington, John L Jr		3	Domestic	Entire Flow of Spring				
Bull, Charles E	10.00	21	Domestic, Irrigation, Fire	Entire Flow of Spring				
Standro, Phillip W and Sharon A		5	Domestic, Stockwater	0.01	7.24		0.01	7.24
Standro, Phillip W and Sharon A	8.00	5	Irrigation			0.13	55.44	0.13
Colbert, Louis E and Wilma C	15.00	6	Irrigation			0.15	63.97	0.15
Gates, Robert Land Marjorie S		7, 8	Domestic	0.01	7.24		0.01	7.24
Gates, Robert L and Marjorie S	6.00	9	Irrigation, Recreation			0.06	29.59	0.06
Gabrieli, Julius and Linda		11	Domestic, Irrigation	0.01	7.24		0.01	7.24
Gabrieli, Julius and Linda	30.00	11				0.30	127.93	0.30
Pacific Gas & Electric Co		22	Stockwater	350 gpd	0.39			0.39
Bertagna, Joseph and Marian L		17	Domestic	0.01	7.24		0.01	7.24
Bertagna, Joseph and Marian L	10.00		Irrigation, Stockwater			0.10	42.64	0.10
Harbo, Virgil and Pauline		15	Domestic	0.01	7.24		0.01	7.24
	1.00		Irrigation			0.01	4.26	0.01
Subtotal, Schedule 3 Willow Creek Claimants	88.00			0.05	36.62	0.75	319.83	0.80
Schedule 4, Minnow and Dunn Creeks Claimants								
Bertagna, Joseph and Marian L	10.00	13	Irrigation			0.10	42.64	0.10
Bertagna, Joseph and Marian L		14	Domestic	0.01	7.24		0.01	7.24
Bertagna, Joseph and Marian L	10.00	14	Irrigation			0.10	42.64	0.10
Bertagna, Paul J and Mary E	4.00	13	Irrigation			0.04	17.06	0.04
Webb, Joyce J		16	Domestic	0.01	7.24		0.01	7.24
Webb, Joyce J	2.00	16	Irrigation			0.02	8.53	0.02
Subtotal, Schedule 4 Minnow and Dunn Creeks Claimants	26.00			0.02	14.49	0.26	110.88	0.28
Schedule 5, Post-1914 Appropriative Water Rights								
Pulkman, Albert E and Carol J		4	Stockwater		7.30			
Gates, Robert L and Marjorie S	3.00		Irrigation, Domestic, Stockwater		10.00			
Lincoln, Richard G and Michale L	10.00		Irrigation, Domestic, Stockwater		30.00			
Gabrieli, Julius and Linda	30.00		Irrigation, Domestic, Stockwater		14.40			
Whitlani, Ernest L			Stockwater		10.00			
Shaw, Veldon et al			Stockwater		10.00			
Klein, Frederick & Phyllis	3.00		Irrigation, Domestic		3.00			
Truman, John C and Helen G			Recreation, Fire		0.50			
Subtotal, Post-1914 Appropriative Water Rights	45.00			0.00	70.20			

**Willow Creek Decree
Shasta County, Decree No. 87524**

Seasons of Use

Continuous, regardless of season	365.25	days
April 1 through November 1	215.00	days
		days

Name of Claimant	Acreage to be supplied	Diversion No. as per DWR Map	Use	Allotments			Total cfs	Total AF
				First Priority Class (cfs)	First Priority Face Value (AF)	Second Priority Class (cfs)		
Summary	Total cfs	Total AF						
Subtotal, Schedule 3 Willow Creek Claimants	0.80	356.45						
Subtotal, Schedule 4 Minnow and Dunn Creeks Claimants	0.28	125.37						
Subtotal, Post-1914 Appropriative Water Rights		70.20						
Total Willow Creek Decree Claimants	1.08	552.02						

No comments
- n/a -

Deer Creek Decree
Tehama County Suit No. 2449
Stanford Vina Ranch, plaintiff

	Cubic Feet Per Second	Acre-feet	Source
Total Diversions in Decree	150	108,669	Deer Creek, thence Sacramento River

These rights were subsequently deeded over to Deer Creek Irrigation District in the late 1920s.

No comments

- n/a -

No comments

- n/a -

Appendix D

**Section D.4
Consumptive Statements of Diversion and Use**

Trinity River Watershed - Cumulative Statements of Diversion and Use

No comments
- n/a -

Application ID	Holder Name	Highest Amount Claimed	Water Right Type Claimed	Year of First Use	Season	Purpose of Use	County	Source
S012967	Dept of Fish and Game	109,500.00	Riparian	1963	All	Fish Culture	Trinity	TRINITY RIVER
	Dept of Fish and Game Total	109,500.00						
S013092	EDGAR MURRISON	724.46	Pre-14	1900	All	Irrigation, Stockwater	Trinity	BIG CREEK
S013093	EDGAR MURRISON	1,224.00	Pre-14	1900	All	Irrigation, Stockwater	Trinity	BIG CREEK
S013094	EDGAR MURRISON	2,408.00	Pre-14	1900	All	Irrigation, Stockwater, Hydropower	Trinity	BIG CREEK
	EDGAR MURRISON Total	4,356.46						
S002526	KEITH L GROVES	2,400.00	Pre-14	1866	All	Irrigation, Stockwater, Domestic	Trinity	HALLS GULCH
	KEITH L GROVES Total	2,400.00						
S010724	ROGER P ECKART	2,062.00	Riparian	1875	All	Irrigation, Stockwater, Domestic, Hydropower	Trinity	DYER CREEK
S010725	ROGER P ECKART	12,000.00	Riparian/Pre-14	1875	All	Irrigation, Stockwater, Domestic, Hydropower	Trinity	BELL CREEK
S010726	ROGER P ECKART	263.00	Riparian	1875	All	Irrigation, Stockwater, Domestic, Hydropower	Trinity	UNST AKA GOODWIN CREEK
S012609	ROGER P ECKART	270.00	Riparian	1875	All	Irrigation, Stockwater, Domestic, Hydropower	Trinity	ROBARDS CREEK
S013923	ROGER P ECKART	1,700.00	Pre-14	1875	All	Irrigation, Stockwater, Domestic, Hydropower	Trinity	DIXIE CREEK
	ROGER P ECKART Total	16,297.00						
S000327	WEAVERVILLE COMMUNITY SERVICES DISTRICT	777.29	Pre-14	1891	All	Irrigation, Stockwater, Domestic	Trinity	WEST WEAVER CREEK
S000361	WEAVERVILLE COMMUNITY SERVICES DISTRICT	753.72	Pre-14	1852	All	Domestic	Trinity	EAST WEAVER CREEK
	WEAVERVILLE COMMUNITY SERVICES DISTRICT Total	1,531.01						
	Grand Total	134,088.47						

No comments

- n/a -

Application ID	Holder Name	Highest Claimed Amt	Claim Type	Year of First Use	Season	Purpose of Use	County	Source
SD01453	ALBERT E PUHLMAN JR	466.00	Pre-14	1884	All	Irrigation, Stockwatering, Domestic	Shasta	NORTH FORK MONTGOMERY CREEK
SD01454	ALBERT E PUHLMAN JR	466.00	Pre-14	1884	All	Irrigation, Stockwatering, Domestic	Shasta	SDUTH FORK MONTGOMERY CREEK
SD01455	ALBERT E PUHLMAN JR	466.00	Pre-14	1884	All	Irrigation, Stockwatering, Domestic	Shasta	SAWDUST CREEK
ALBERT E PUHLMAN JR Total		1,398.00						
SD02265	CLIFFORD K OILAR	490.00	Riparian/Pre-14	1873	All	Irrigation, Stockwatering	Hood	OILAR SPRINGS
SD02266	CLIFFORD K OILAR	493.00	Riparian/Pre-14	1873	All	Irrigation, Stockwatering, Domestic	Hood	UNST
SD10796	CLIFFORD K OILAR	470.00	Riparian/Pre-14	1873	All	Irrigation, Stockwatering, Domestic	Hood	UNSP
SD10814	CLIFFORD K OILAR	490.00	Riparian/Pre-14	1873	All	Irrigation, Stockwatering	Hood	OILAR SPRINGS
SD10815	CLIFFORD K OILAR	100.00	Riparian/Pre-14	1957	May-Dec	Irrigation, Stockwatering	Hood	UNST
SD10816	CLIFFORD K OILAR	200.00	Riparian/Pre-14	1940	May-Oct	Irrigation, Stockwatering, Domestic	Hood	WHIPPLE SPRINGS
CLIFFORD K OILAR Total		2,243.00						
SD06735	CRAIG MCARTHUR	19,528.00	Riparian/Pre-14	1875	All	Irrigation, Stockwatering, Domestic	Shasta	TULE RIVER
SD06912	CRAIG MCARTHUR	1,130.00	Riparian/Pre-14	1875	All	Irrigation, Stockwatering, Domestic	Shasta	PEACOCK CREEK
SD15104	CRAIG MCARTHUR	7,242.00	Pre-14	1911	All	Irrigation, Stockwatering, Domestic	Shasta	LEE DRAIN CAJAL
CRAIG MCARTHUR Total		27,900.00						
SD14558	Dennis Hoffman	1,135.49	Riparian	1995	Mar-Oct	Irrigation	Lassen	PIT RIVER
SD14731	Dennis Hoffman	1,130.83	Riparian	2003	Apr-Sept	Irrigation	Shasta	PIT RIVER
Dennis Hoffman Total		2,266.32						
SD04691	Dept of Fish and Game	1,464.00	Pre-14	1904	All	Fish Culture, Domestic	Hood	PINE CREEK
SD12964	Dept of Fish and Game	36,133.00	Riparian	1965	All	Recreation, Fishing	Shasta	ROCK CREEK SPRINGS
Dept of Fish and Game Total		37,597.00						
SD09112	DIXIE VALLEY RANCH	4,000.00	Riparian	1873	All	Irrigation, Stockwatering	Lassen	DAVIS CREEK
SD09113	DIXIE VALLEY RANCH	5,000.00	Riparian/Pre-14	1873	All	Irrigation, Stockwatering	Lassen	INDIAN CREEK
SD09114	DIXIE VALLEY RANCH	4,000.00	Riparian	1977	All	Irrigation, Stockwatering	Lassen	UNST
SD09115	DIXIE VALLEY RANCH	2,000.00	Riparian/Pre-14	1873	All	Irrigation, Stockwatering	Lassen	LITTLE DAVIS CREEK
SD09116	DIXIE VALLEY RANCH	2,000.00	Riparian/Pre-14	1873	All	Irrigation, Stockwatering	Lassen	RUSSEL DAIRY SPRING
SD09133	DIXIE VALLEY RANCH	5,000.00	Riparian/Pre-14	1873	All	Irrigation, Stockwatering	Lassen	BIG JACK LAKE
SD09138	DIXIE VALLEY RANCH	2,173.39	Riparian/Pre-14	1873	All	Irrigation, Stockwatering	Lassen	BIG SPRING
DIXIE VALLEY RANCH Total		24,173.39						
SD06053	ED DEVAUL	1,620.00	Riparian	1949	All	Irrigation, Stockwatering, Domestic	Shasta	UNST
ED DEVAUL Total		1,620.00						
SD13170	EDWARD A BOSWORTH JR	0.00	Pre-14	1885	All	Irrigation, Stockwatering	Shasta	CAYTON CREEK
SD13171	EDWARD A BOSWORTH JR	2,421.17	Pre-14	1885	All	Irrigation, Stockwatering, Domestic	Shasta	NORTH FORK CLARK CREEK
SD13172	EDWARD A BOSWORTH JR	4,824.34	Pre-14	1885	All	Irrigation, Stockwatering, Domestic	Shasta	CLARK CREEK
EDWARD A BOSWORTH JR Total		7,245.51						
SD00798	ELLEN E TAYLOR	1,451.90	Pre-14	1913	Apr-Nov	Irrigation, Stockwatering	Shasta	LDST CREEK
ELLEN E TAYLOR Total		1,451.90						

No comments

- n/a -

Application ID	Holder Name	Highest Claimed Amt	Claim Type	Year of First Use	Season	Purpose of Use	County	Source
SD14380	Glenn A Nader	2,279.00	Riparian	1876	Apr-Sept	Irrigation, Stockwatering	Modoc	WITCHER CREEK
SD14381	Glenn A Nader	1,505.00	Pre-14	1873	Jun-Oct	Irrigation, Stockwatering	Modoc	WITCHER CREEK
SD14382	Glenn A Nader	2,334.00	Riparian/Pre-14	1876	Mar-Oct	Irrigation, Stockwatering	Modoc	WITCHER CREEK
SD14383	Glenn A Nader	420.00	Riparian	1876	Apr-Oct	Irrigation, Stockwatering	Modoc	WITCHER CREEK
SD14384	Glenn A Nader	1,021.00	Pre-14	1876	Nov-Mar	Irrigation, Stockwatering	Modoc	WITCHER CREEK
	Glenn A Nader Total	7,559.00						
SD13765	JOSEPH SCOTT VERMILYEA	6,789.00	Riparian	1983	All	Irrigation, Domestic	Shasta	BAKER CREEK
SD13766	JOSEPH SCOTT VERMILYEA	7,076.00	Pre-14	1914	Mar-July	Irrigation, Stockwatering, Domestic	Shasta	STUMP CREEK
SD13767	JOSEPH SCOTT VERMILYEA	730.00	Pre-14	1914	All	Irrigation, Stockwatering, Domestic	Shasta	LITTLE SHOTGUN CREEK
	JOSEPH SCOTT VERMILYEA Total	11,595.00						
SD01050	KNOCH INC	19,560.00	Riparian/Pre-14	1909	All	Irrigation, Stockwatering	Shasta	FALL RIVER
	KNOCH INC Total	19,560.00						
SD08540	LOWELL L NOVY	0.00	Riparian/Pre-14	1890	All	Irrigation, Stockwatering	Lassen	TULE LAKE RESERVOIR AKA MOON LAKE
SD12914	LOWELL L NOVY	2,970.00	Riparian/Pre-14	1908	All	Irrigation, Stockwatering	Lassen	CEDAR CREEK
	LOWELL L NOVY Total	2,970.00						
SD08627	MILANO LAND AND CATTLE CO LLC	2,500.00	Pre-14	1902	May-Oct	Irrigation, Stockwatering	Modoc	DUNCAN RESERVOIR
	MILANO LAND AND CATTLE CO LLC Total	2,500.00						
SD14308	Outfitter Properties LLC-Oasis Springs	650.00	Riparian	1890	Apr-Sept	Irrigation, Stockwatering	Tehama	UNEP
SD14309	Outfitter Properties LLC-Oasis Springs	195.00	Riparian	1900	Apr-Oct	Irrigation	Shasta	SPRING CREEK
SD14310	Outfitter Properties LLC-Oasis Springs	500.00	Riparian	1900	Apr-Oct	Irrigation	Shasta	SPRING CREEK
SD14311	Outfitter Properties LLC-Oasis Springs	1,700.00	Riparian	1875	Apr-Oct	Irrigation	Shasta	UNEP (AKA VINEYARD SPRING)
	Outfitter Properties LLC-Oasis Springs Total	3,245.00						
SD02509	R HAMBY	1,600.00	Pre-14	1898	All	Irrigation, Stockwatering, Domestic	Shasta	EAST FORK NELSON CREEK
	R HAMBY Total	1,600.00						
SD16096	Raymond J Paige	1,000.00	Riparian/Pre-14	1896	Mar-Oct	Irrigation	Shasta	LITTLE TULE RIVER TO FALL RIVER
SD16097	Raymond J Paige	600.00	Riparian/Pre-14	1896	Mar-Oct	Irrigation	Shasta	LITTLE TULE RIVER TO FALL RIVER
	Raymond J Paige Total	1,600.00						
SD14760	RICHARD L JENNINGS	5,250.00	Riparian/Pre-14	1885	Apr-Oct	Irrigation, Stockwatering	Modoc	PIT RIVER
SD14761	RICHARD L JENNINGS	5,250.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Stockwatering	Modoc	PIT RIVER
SD14762	RICHARD L JENNINGS	2,800.00	Riparian/Pre-14	1870	Apr-Oct	Irrigation, Stockwatering	Modoc	RALSTON GULCH
SD14763	RICHARD L JENNINGS	4,500.00	Riparian/Pre-14	1912	Apr-Oct	Irrigation, Stockwatering	Modoc	CANYON CREEK
SD14764	RICHARD L JENNINGS	4,500.00	Riparian/Pre-14	1900	Apr-Sept	Irrigation, Stockwatering	Modoc	PIT RIVER
	RICHARD L JENNINGS Total	22,300.00						
SD14913	Western Agricultural Services (River Butte Ranch)	190.00	Riparian	1965	Apr-Sept	Irrigation	Shasta	FALL RIVER
SD14914	Western Agricultural Services (River Butte Ranch)	400.00	Riparian	1965	Apr-Sept	Irrigation	Shasta	FALL RIVER
	Western Agricultural Services (River Butte Ranch) Total	590.00						
SD14193	Western Agricultural Services (Fall River Ranch)	375.00	Riparian	1900	Apr-Oct	Irrigation, Stockwatering	Shasta	FALL RIVER
SD14194	Western Agricultural Services (Fall River Ranch)	60.00	Riparian	1900	Apr-Oct	Irrigation, Stockwatering	Shasta	FALL RIVER
	Western Agricultural Services (Fall River Ranch) Total	435.00						
SD14927	Western Agricultural Services (River Ranch L P)	485.00	Riparian	1930	Apr-Oct	Irrigation	Shasta	FALL RIVER

No comments

- n/a -

Application ID	Holder Name	Highest Claimed Amt	Claim Type	Year of First Use	Season	Purpose of Use	County	Source
SD14938	Western Agricultural Services (River Ranch L P)	15.00	Riparian	1872	All	Stockwatering, Domestic	Shasta	FALL RIVER
SD14939	Western Agricultural Services (River Ranch L P)	550.00	Riparian	1920	Apr-Oct	Irrigation	Shasta	FALL RIVER
SD14940	Western Agricultural Services (River Ranch L P)	75.00	Riparian	1950	Apr-Supt	Irrigation	Shasta	FALL RIVER
SD14941	Western Agricultural Services (River Ranch L P)	15.00	Riparian	1900	All	Stockwatering, Domestic	Shasta	FALL RIVER
SD14942	Western Agricultural Services (River Ranch L P)	15.00	Riparian	1870	All	Stockwatering	Shasta	FALL RIVER
SD14943	Western Agricultural Services (River Ranch L P)	425.00	Riparian	1920	Apr-Oct	Irrigation, Stockwatering	Shasta	FALL RIVER
SD14944	Western Agricultural Services (River Ranch L P)	70.00	Riparian	1950	Apr-Oct	Irrigation	Shasta	FALL RIVER
SD14945	Western Agricultural Services (River Ranch L P)	1,200.00	Riparian	1870	Apr-Oct	Irrigation, Stockwatering	Shasta	FALL RIVER
	Western Agricultural Services (River Ranch L P) Total	2,850.00						
SD12933	ROBERT G BAIRD	1,149.00	Pre-14	1872	Apr-Nov	Irrigation, Stockwatering	Modoc	TOMS CREEK
	ROBERT G BAIRD Total	1,149.00						
SD12446	ROBERT H MACKEY & SONS INC	570.00	Riparian	1871	Apr-Oct	Irrigation, Stockwatering	Modoc	CANYON CREEK
SD12447	ROBERT H MACKEY & SONS INC	570.00	Riparian	1890	Apr-Oct	Irrigation, Stockwatering	Modoc	CANYON CREEK
SD14303	ROBERT H MACKEY & SONS INC	720.00	Riparian	1880	All	Irrigation, Stockwatering, Domestic	Modoc	JUNIP
	ROBERT H MACKEY & SONS INC Total	1,860.00						
SD04672	RONALD L SCHLUTER	1,500.00	Pre-14	1906	May-Oct	Irrigation, Stockwatering	Modoc	BIG DOBIE SOUTH
SD04673	RONALD L SCHLUTER	900.00	Pre-14	1906	Apr-Supt	Irrigation	Modoc	BIG DOBIE NORTH
	RONALD L SCHLUTER Total	2,400.00						
SD00108	S X RANCH INC	1,000.00	Riparian	1947	Apr-Supt	Irrigation	Lassen	PIT RIVER
SD00107	S X RANCH INC	340.00	Riparian	1947	Apr-Oct	Irrigation, Stockwatering	Lassen	PIT RIVER
	S X RANCH INC Total	1,340.00						
SD15534	SX Lowry Ranch	2,000.00	Pre-14	1897	Nov-Apr	Irrigation, Stockwatering	Modoc	SALISBURY GULCH/KA UNIST
	SX Lowry Ranch Total	2,000.00						
SD02877	WILLIAM K HAGGE	525.00	Riparian	1964	May-Supt	Irrigation, Stockwatering	Modoc	PIT RIVER
SD02879	WILLIAM K HAGGE	150.00	Riparian	1947	May-Supt	Irrigation, Stockwatering	Modoc	PIT RIVER
SD02880	WILLIAM K HAGGE	1,140.00	Riparian/Pre-14	1880	May-Supt	Irrigation, Stockwatering	Modoc	PIT RIVER
SD14183	WILLIAM K HAGGE	360.00	Riparian	1945	May-Supt	Irrigation, Stockwatering	Modoc	PIT RIVER
	WILLIAM K HAGGE Total	2,175.00						
	Grand Total	193,565.13						

No comments

- n/a -

Application ID	Holder Name	Highest Claim Amt	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S013390	A L HANSEN	2,800.00	Pre-14	1860	Apr-Nov	Irrigation	Plumas	GREENHORN CREEK
	A L HANSEN Total	2,800.00						
S000267	ALBANO P BRESCIANI	700.00	Riparian/Pre-14	1857	All	Stockwater	Plumas	CLEAR STREAM
	ALBANO P BRESCIANI Total	700.00						
S001884	Phillip A Bresciani	300.00	Pre-14	1904	May-Sep	Irrigation, Stockwater	Plumas	SPANISH CREEK
	Phillip A Bresciani Total	300.00						
S001885	ALBANO P BRESCIANI	360.00	Riparian/Pre-14	1878	May-Sep	Stockwater	Plumas	MILL CREEK
S001886	ALBANO P BRESCIANI	300.00	Riparian/Pre-14	1878	Apr-Sep	Stockwater	Plumas	MILL CREEK
S002099	ALBANO P BRESCIANI	350.00	Riparian/Pre-14	1872	Apr-Oct	Stockwater	Plumas	GREENHORN CREEK
S002100	ALBANO P BRESCIANI	540.00	Riparian/Pre-14	1877	May-Oct	Stockwater	Plumas	SPANISH CREEK
S002101	ALBANO P BRESCIANI	150.00	Riparian/Pre-14	1873	May-Sep	Stockwater	Plumas	HAUN CREEK
S002102	ALBANO P BRESCIANI	250.00	Riparian/Pre-14	1877	Apr-Aug	Stockwater	Plumas	MILL CREEK
S002103	ALBANO P BRESCIANI	70.00	Riparian/Pre-14	1877	Apr-Oct	Stockwater	Plumas	MILL CREEK
S002104	ALBANO P BRESCIANI	182.00	Riparian/Pre-14	1877	Apr-Oct	Stockwater	Plumas	MILL CREEK
	ALBANO P BRESCIANI Total	2,202.00						
S010594	BERRY CREEK WATER USERS INCORPORATED	2,477.66	Pre-14	1852	All	Irrigation, Stockwater	Butte	BERRY CREEK
	BERRY CREEK WATER USERS INCORPORATED Total	2,477.66						
S002956	BROOKS WALKER ET AL	60.00	Riparian/Pre-14	1900	May-Jun	Irrigation, Stockwater	Lassen	UNNAMED STREAM
S002957	BROOKS WALKER ET AL	90.00	Riparian/Pre-14	1900	May-Jul	Irrigation, Stockwater	Lassen	HOMER CREEK
S002958	BROOKS WALKER ET AL	30.00	Riparian/Pre-14	1900	May-Jun	Irrigation, Stockwater	Lassen	UNNAMED STREAM
S002960	BROOKS WALKER ET AL	30.00	Riparian/Pre-14	1900	May-Jun	Irrigation, Stockwater	Lassen	UNNAMED STREAM
S002962	BROOKS WALKER ET AL	9,306.00	Riparian/Pre-14	1900	May-Oct	Irrigation, Stockwater	Lassen	GOODRICH CREEK
S002963	BROOKS WALKER ET AL	7,865.00	Riparian/Pre-14	1900	May-Oct	Irrigation, Stockwater	Lassen	GOODRICH CREEK
	BROOKS WALKER ET AL Total	17,382.00						
S002315	DEAN PANFILI	225.00	Riparian/Pre-14	1957	Apr-Sep	Irrigation, Stockwater, Domestic	Plumas	LONG VALLEY CREEK
S002316	DEAN PANFILI	175.00	Riparian/Pre-14	1870	May-Sep	Irrigation	Plumas	LONG VALLEY CREEK
S002317	DEAN PANFILI	0.00	Riparian/Pre-14	1856	Apr-Sep	Irrigation, Stockwater	Plumas	LONG VALLEY CREEK

No comments

- n/a -

Application ID	Holder Name	Highest Claim Amt	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S002318	DEAN PANFILI	613.78	Riparian/Pre-14	1870	Mar-Sep	Irrigation, Stockwater, Domestic	Plumas	LITTLE LONG VALLEY CREEK
	DEAN PANFILI Total	1,013.78						
S015506	GRAEAGLE LAND & WATER COMPANY	1,279.11	Pre-14	1820	Mar-Oct	Irrigation, Stockwater	Plumas	MOHAWK CREEK
S015913	GRAEAGLE LAND & WATER COMPANY	1,400.64	Pre-14	1820	All	Irrigation, Stockwater, Domestic	Plumas	MOHAWK CREEK
S015914	GRAEAGLE LAND & WATER COMPANY	607.64	Pre-14	1820	Mar-Oct	Irrigation, Stockwater	Plumas	MOHAWK CREEK
	GRAEAGLE LAND & WATER COMPANY Total	3,287.39						
S008734	GRAEAGLE WATER COMPANY A CALIF CORP	990.71	Riparian	1941	All	Irrigation, Stockwater, Domestic	Plumas	GRAY EAGLE CREEK
	GRAEAGLE WATER COMPANY A CALIF CORP Total	990.71						
S013351	MOHAWK VALLEY RANCH, INC	485.80	Pre-14	1880	Mar-Oct	Irrigation, Domestic	Plumas	UNST
S013352	MOHAWK VALLEY RANCH, INC	1,457.72	Riparian	1950	Mar-Oct	Golf Course Irrigation	Plumas	SULPHUR CREEK
S013353	MOHAWK VALLEY RANCH, INC	2,171.85	Riparian	1950	All	Golf Course Irrigation	Plumas	BOULDER CREEK
S013354	MOHAWK VALLEY RANCH, INC	485.96	Pre-14	1880	Mar-Oct	Irrigation	Plumas	BOULDER CREEK
S013355	MOHAWK VALLEY RANCH, INC	485.96	Pre-14	1880	Mar-Oct	Irrigation	Sierra	BOULDER CREEK
S013356	MOHAWK VALLEY RANCH, INC	723.95	Pre-14	1880	All	Golf Course Irrigation	Plumas	UNST
S013357	MOHAWK VALLEY RANCH, INC	1,447.90	Pre-14	1880	All	Golf Course Irrigation	Plumas	UNST
	MOHAWK VALLEY RANCH, INC Total	7,259.15						
S009189	PLUMAS PINES GOLF RESORT	10,700.00	Pre-14	1877	May-Oct	Irrigation	Plumas	JAMISON CREEK
	PLUMAS PINES GOLF RESORT Total	10,700.00						
S002953	RED RIVER FORESTS PARTNERSHIP	894.00	Riparian/Pre-14	1900	May-Oct	Irrigation, Stockwater	Lassen	MOUNTAIN MEADOWS CREEK
S002954	RED RIVER FORESTS PARTNERSHIP	5,660.00	Riparian/Pre-14	1900	May-Oct	Irrigation, Stockwater	Lassen	COTTONWOOD CREEK
	RED RIVER FORESTS PARTNERSHIP Total	6,554.00						

Feather River Watershed - Consumptive Statements of Diversion and Use

No comments

- n/a -

Application ID	Holder Name	Highest Claim Amt	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S000262	REID LAND & CATTLE COMPANY	4,346.00	Pre-14	1857	May-Nov	Irrigation, Stockwater	Plumas	GREENHORN CREEK
S000263	REID LAND & CATTLE COMPANY	1,336.00	Pre-14	1857	All	Irrigation, Stockwater, Domestic	Plumas	CHANDLER CREEK
S000264	REID LAND & CATTLE COMPANY	1,217.00	Pre-14	1857	Jun-Nov	Irrigation, Stockwater	Plumas	TAYLOR CREEK
REID LAND & CATTLE COMPANY Total		6,899.00						
S000544	RICHARD D FRIPP II	0.56	Pre-14	1876	All	Irrigation, Stockwater, Domestic	Plumas	COGSWELL RAVINE
S000545	RICHARD D FRIPP II	1,086.69	Pre-14	1856	All	Irrigation, Stockwater, Domestic	Plumas	LONG VALLEY CREEK
RICHARD D FRIPP II Total		1,087.25						
S000266	RICHARD D LEONHARDT	970.00	Pre-14	1857	All	Irrigation, Stockwater	Plumas	MILL CREEK
S000268	RICHARD D LEONHARDT	1,200.00	Pre-14	1857	Apr-Oct	Irrigation, Stockwater	Plumas	SPANISH CREEK
S000269	RICHARD D LEONHARDT	240.00	Pre-14	1857	May-Oct	Irrigation, Stockwater	Plumas	FOUR LETTER CREEK
RICHARD D LEONHARDT Total		2,410.00						
S000378	RICHVALE IRRIGATION DISTRICT	7,560.00	Pre-14	1914	Apr-Sep	Irrigation	Butte	CHEROKEE CANAL
S000379	RICHVALE IRRIGATION DISTRICT	6,000.00	Riparian	1947	Mar-Jan	Irrigation	Butte	LITTLE DRY CREEK
RICHVALE IRRIGATION DISTRICT Total		13,560.00						
S000925	WESTERN CANAL WATER DISTRICT	348,469.00	Pre-14	1902	Apr-Jan	irrigation	Butte	FEATHER RIVER
WESTERN CANAL WATER DISTRICT Total		348,469.00						
S006764	WESTWOOD COMMUNITY SERVICES DISTRICT	0.00	Pre-14	1913	All	Domestic	Lassen	DUCK LAKE
S010000	WESTWOOD COMMUNITY SERVICES DISTRICT	1,053.00	Prescriptive	1924	All	Domestic	Lassen	WALKER SPRINGS
WESTWOOD COMMUNITY SERVICES DISTRICT Total		1,053.00						
S015240	WILLIAM S KEELER TRUST	1,750.00	Riparian/Pre-14	1900	May-Sep	Irrigation, Stockwater	Lassen	GOODRICH CREEK
WILLIAM S KEELER TRUST Total		1,750.00						
S013159	WILLIARD H WATTENBURG	0.00					Plumas	UNNAMED SPRING
WILLIARD H WATTENBURG Total		0.00						
Grand Total		430,894.94						

No comments

- n/a -

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S017333	City of Folsom	50,712.40	Pre-14	1851	All	Municipal, Industrial	Sacramento	SOUTH FORK OF THE AMERICAN RIVER
S017326	City of Folsom	5,000.00	Pre-14	1851	All	Municipal, Industrial	Sacramento	SOUTH FORK OF THE AMERICAN RIVER
S017490	City of Folsom	22,000.00	Pre-14	1851	All	Municipal, Industrial	Sacramento	SOUTH FORK OF THE AMERICAN RIVER
S017491	City of Folsom	22,000.00	Pre-14	1851	All	Municipal, Industrial	Sacramento	SOUTH FORK OF THE AMERICAN RIVER
S000388	COLDWATER LOTUS RANCH DITCH USERS ASSOC	10,000.00	Pre-14	1883	Apr-Nov	Irrigation, Stockwater, Domestic	El Dorado	SOUTH FORK AMERICAN RIVER
S010717	EL DORADO IRRIGATION DISTRICT	60.75	Pre-14	1875	All	Irrigation, Municipal	El Dorado	SOUTH FORK AMERICAN RIVER
S000972	EL DORADO IRRIGATION DISTRICT	19.80	Pre-14	1856	Dec	Irrigation, Municipal, Industrial, Hydropower	El Dorado	CARPENTER CREEK
S000973	EL DORADO IRRIGATION DISTRICT	95.60	Pre-14	1873	Feb-May	Irrigation, Municipal, Industrial, Hydropower	El Dorado	UNST
S000974	EL DORADO IRRIGATION DISTRICT	678.00	Pre-14	1873	Apr-Oct	Irrigation, Municipal, Industrial, Hydropower	El Dorado	MILL CREEK
S000975	EL DORADO IRRIGATION DISTRICT	232.00	Pre-14	1873	Jan-Jun	Irrigation, Municipal, Industrial, Hydropower	El Dorado	BRYANT CREEK
S000976	EL DORADO IRRIGATION DISTRICT	132.90	Pre-14	1873	Jan-Jun	Irrigation, Municipal, Industrial, Hydropower	El Dorado	ESHERELDA CREEK
S004708	EL DORADO IRRIGATION DISTRICT	5,400.00	Pre-14	1876	Jul-Dec	Irrigation, Municipal, Industrial, Hydropower	Amador	SILVER FORK OF SOUTH FORK AMERICAN RIVER
S008034	EL DORADO IRRIGATION DISTRICT	40,373.00	Pre-14	1873	all	Irrigation, Municipal, Industrial, Hydropower	El Dorado	SOUTH FORK AMERICAN RIVER
S009035	EL DORADO IRRIGATION DISTRICT	360.00	Pre-14	1875	May-Aug	Irrigation, Municipal, Industrial, Hydropower	El Dorado	PYRAMID CREEK
S014323	EL DORADO IRRIGATION DISTRICT	3,968.00	Pre-14	1889	Apr-Oct	Irrigation, Municipal, Industrial, Hydropower	El Dorado	SLAB CREEK
S014986	EL DORADO IRRIGATION DISTRICT	3,373.00	Pre-14	1855	All	Irrigation, Municipal, Industrial, Hydropower	El Dorado	WEBER CREEK
S015937	EL DORADO IRRIGATION DISTRICT	1.85	Pre-14	1872	April	Irrigation, Municipal, Industrial, Hydropower	El Dorado	UNNAMED STREAM
S015938	EL DORADO IRRIGATION DISTRICT	150.60	Pre-14	1872	Dec-Apr	Irrigation, Municipal, Industrial, Hydropower	El Dorado	UNNAMED STREAM
S015939	EL DORADO IRRIGATION DISTRICT	41.64	Pre-14	1872	All	Irrigation, Municipal, Industrial, Hydropower	El Dorado	Stream at Spillway 6
S015940	EL DORADO IRRIGATION DISTRICT	15.20	Pre-14	1872	Feb-May	Irrigation, Municipal, Industrial, Hydropower	El Dorado	BULL CREEK
S018941	EL DORADO IRRIGATION DISTRICT	8,000.00	Pre-14	1872	Jul-Feb	Irrigation, Municipal, Industrial, Hydropower	Alpine	CAPLES LAKE
S014967	EL DORADO IRRIGATION DISTRICT	1,216.00	Pre-14	1852	Apr-Oct	Municipal, Industrial	El Dorado	HANGTOWN CREEK
S014597	GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT	2,404.00	Pre-14	1850	All	Irrigation, Domestic	El Dorado	MUTTON CANYON

American River Watershed - Statements of Diversion and Use

No comments
- n/a -

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S014598	GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT	2,165.00	Pre-14	1850	All	Irrigation, Domestic	El Dorado	BACON CANYON
S014599	GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT	850.00	Pre-14	1850	All	Irrigation, Domestic	El Dorado	UNST
S014600	GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT	1,295.00	Pre-14	1850	All	Irrigation, Domestic	El Dorado	DEEP CANYON
S014601	GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT	9,552.00	Pre-14	1850	Dec-Oct	Irrigation, Domestic	El Dorado	PILOT CREEK
S010794	NEVADA IRRIGATION DISTRICT	21,085.00	Pre-14	1880	All	Irrigation, Stockwater, Domestic	Placer	COON CREEK, ORR CREEK
S013791	NEVADA IRRIGATION DISTRICT	24,374.00	Pre-14	1883	All	Irrigation, Stockwater, Domestic, Mining	Placer	AUBURN RAVINE
S013790	NEVADA IRRIGATION DISTRICT	7,800.00	Pre-14	1853	Apr-Oct	Irrigation, Stockwater, Mining	Placer	AUBURN RAVINE
S000966	PACIFIC GAS AND ELECTRIC COMPANY	1,220.00	Prescriptive	1917	All	Irrigation, Domestic	Placer	ROCK CREEK
S000969	PACIFIC GAS AND ELECTRIC COMPANY	2,042.00	Prescriptive	1917	All	Irrigation, Domestic	Placer	DRY CREEK
S000959	PLACER COUNTY WATER AGENCY	5,422.00	Pre-14	1964	All	Irrigation, Domestic	Placer	CANYON CREEK
S000967	PLACER COUNTY WATER AGENCY	0.00	Pre-14	1804	All	Irrigation, Domestic	Placer	UNST
S010397	PLACER COUNTY WATER AGENCY	0.00	Pre-14	1896	All	Irrigation, Domestic	Placer	SOUTH FORK DRY CREEK
S010398	PLACER COUNTY WATER AGENCY	0.00	Pre-14	1908	All	Irrigation, Domestic	Placer	NORTH FORK DRY CREEK
S000656	San Juan Water District	33,000.00	Pre-14	1852	All	Domestic	Placer	FOLSOM LAKE
		265,939.44						

No comments

- n/a -

Application ID	Holder Name	Highest Claimed Amt	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S000645	BIG LAND DEVELOPMENT CORP	2,730.00	Riparian/Pre-14	1886	Apr-Oct	Irrigation, Stockwater	Butte	SOUTH HONCUT CREEK
	BIG LAND DEVELOPMENT CORP Total	2,730.00						
S010014	CITY OF NEVADA CITY	1,859.80	Pre-14	1910	All	Domestic	Nevada	LITTLE DEER CREEK
	CITY OF NEVADA CITY Total	1,859.80						
S016332	Hillwood Irrigation Company	69,798.00	Pre-14	1909	All	Irrigation	Yuba	Yuba River
	Hillwood Irrigation Company Total	69,798.00						
S001241	LAKE WILDWOOD ASSOCIATION	1,811.16	Pre-14	1861	All	Irrigation	Nevada	HIGGER CREEK
	LAKE WILDWOOD ASSOCIATION Total	1,811.16						
S004716	NEVADA IRRIGATION DISTRICT	94,346.00	Pre-14	1873	All	Hydropower, Irrigation, Domestic, Recreation	Nevada	CANYON CREEK
S004717	NEVADA IRRIGATION DISTRICT	27,007.00	Pre-14	1859	All	Hydropower, Irrigation, Domestic, Recreation	Nevada	CANYON CREEK
S010291	NEVADA IRRIGATION DISTRICT	3.20	Riparian	1967	May-Oct	Recreation	Nevada	DAMP LINE SPRING
S010292	NEVADA IRRIGATION DISTRICT	3.20	Riparian	1967	May-Oct	Recreation	Sierra	UNST
S012949	NEVADA IRRIGATION DISTRICT	551.00	Pre-14	1851	Apr-Oct	Irrigation	Nevada	DEER CREEK
S012950	NEVADA IRRIGATION DISTRICT	13,500.00	Pre-14	1851	All	Irrigation, Stockwater, Domestic	Nevada	DEER CREEK
S012951	NEVADA IRRIGATION DISTRICT	7,900.00	Pre-14	1851	All	Irrigation, Domestic, Fire Protection, Recreation	Nevada	DEER CREEK
S012952	NEVADA IRRIGATION DISTRICT	34,300.00	Pre-14	1851	All	Irrigation, Domestic, Fire Protection, Recreation	Nevada	DEER CREEK
S012953	NEVADA IRRIGATION DISTRICT	30,645.00	Pre-14	1857	All	Irrigation, Domestic, Fire Protection, Recreation	Nevada	SOUTH FORK DEER CREEK
S013330	NEVADA IRRIGATION DISTRICT	83,639.00	Pre-14	1854	All	Protection, Recreation, Mining, Hydropower	Sierra	MIDDLE YUBA RIVER
S013380	NEVADA IRRIGATION DISTRICT	117,023.50	Pre-14	1872	All	Irrigation, Domestic, Fire Protection, Recreation, Mining, Hydropower	Nevada	CANYON CREEK
S013801	NEVADA IRRIGATION DISTRICT	47,986.00	Pre-14	1892	All	Irrigation, Domestic, Fire Protection, Recreation, Mining, Hydropower	Nevada	CANYON CREEK
S013927	NEVADA IRRIGATION DISTRICT	61,487.00	Pre-14	1874	All	Protection, Recreation, Mining, Hydropower	Nevada	SOUTH YUBA RIVER
S013928	NEVADA IRRIGATION DISTRICT	483,867.00	Pre-14	1874	All	Irrigation, Domestic, Fire Protection, Recreation, Mining, Hydropower	Nevada	SOUTH YUBA RIVER
S014393	NEVADA IRRIGATION DISTRICT	47,789.00	Riparian/Pre-14	1851	All	Irrigation, Domestic, Fire Protection, Recreation, Mining, Hydropower	Nevada	DEER CREEK
S016092	NEVADA IRRIGATION DISTRICT	1,279.00	Pre-14	1859	All	Irrigation, Domestic, Fire Protection, Recreation, Mining, Hydropower	Nevada	JACKSON CREEK
	NEVADA IRRIGATION DISTRICT Total	1,051,334.90						
	Grand Total	1,127,533.88						

Bear River Watershed - Consumptive Statements of Diversion and Use

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S013809	NEVADA IRRIGATION DISTRICT	69,433.00	Pre-14	1853	All	Irrigation, Domestic	Nevada	BEAR RIVER
S013926	NEVADA IRRIGATION DISTRICT	22,675.00	Pre-14	1859	All	Irrigation, Mining	Nevada	WOLF CREEK
		92,108.00						

No comments

- n/a -

No comments

- n/a -

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
5001115	1990 Johannessen Family Trust	453.72	Pre-14	1880	Apr-Sep	Irrigation, Stockwater	Shasta	DEER CREEK
5013144	1990 JOHANNESSEN FAMILY TRUST	2,759.01	Pre-14	1880	Apr-Oct	Irrigation, Stockwater	Shasta	DEER CREEK
	1990 Johannessen Family Trust Total	3,212.73						
5012313	BATTLE CREEK MEADOWS RANCH INC	350.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Stockwater	Tehama	MARTIN CREEK
5012314	BATTLE CREEK MEADOWS RANCH INC	350.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Stockwater	Tehama	MARTIN CREEK
5012315	BATTLE CREEK MEADOWS RANCH INC	350.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Stockwater	Tehama	MARTIN CREEK
5012316	BATTLE CREEK MEADOWS RANCH INC	350.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Stockwater	Tehama	SOUTH FORK BATTLE CREEK
5012318	BATTLE CREEK MEADOWS RANCH INC	350.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Stockwater	Tehama	UNST
5012319	BATTLE CREEK MEADOWS RANCH INC	350.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Stockwater	Tehama	UNST
5012320	BATTLE CREEK MEADOWS RANCH INC	350.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Stockwater	Tehama	UNST
5012321	BATTLE CREEK MEADOWS RANCH INC	350.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Stockwater	Tehama	UNST
5012322	BATTLE CREEK MEADOWS RANCH INC	350.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Stockwater	Tehama	UNST
5012323	BATTLE CREEK MEADOWS RANCH INC	350.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Stockwater	Tehama	UNST
	BATTLE CREEK MEADOWS RANCH INC Total	3,500.00						
5000580	BUTTE SINK WATERFOWL ASSOCIATION	43,800.00	Riparian/Pre-14	1900	All	Irrigation, Habitat	Butte	BUTTE CREEK
	BUTTE SINK WATERFOWL ASSOCIATION Total	43,800.00						
5002387	CLINE C SOULE	3,200.00	Riparian/Pre-14	1885	Apr - Oct	Irrigation, Stockwater	Siskiyou	BUTTE CREEK
	CLINE C SOULE Total	3,200.00						
5000731	DEER CREEK IRRIGATION DISTRICT	20,400.00	Adjudication	1923	Feb-Nov	Irrigation	Tehama	DEER CREEK
	DEER CREEK IRRIGATION DISTRICT Total	20,400.00						
5010988	DOUGLAS H BOSCO	189.17	Pre-14	1900	Apr-Oct	Irrigation, Stockwater	Shasta	NORTH FORK BATTLE CREEK
5010989	DOUGLAS H BOSCO	848.93	Pre-14	1900	Apr-Oct	Irrigation, Stockwater	Shasta	NORTH FORK BATTLE CREEK
5010990	DOUGLAS H BOSCO	189.17	Pre-14	1900	Apr-Oct	Irrigation, Stockwater	Shasta	NORTH FORK BATTLE CREEK
	DOUGLAS H BOSCO Total	1,167.27						
5000736	E J LOUIE & SONS	1,545.60	Pre-14	1872	Apr-Oct	Irrigation	Siskiyou	BUTTE CREEK
5000739	E J LOUIE & SONS	1,332.00	Pre-14	1872	Apr-Oct	Irrigation	Siskiyou	BUTTE CREEK
5000740	E J LOUIE & SONS	1,200.00	Pre-14	1872	Apr-Oct	Irrigation	Siskiyou	BUTTE CREEK
5000748	E J LOUIE & SONS	386.40	Pre-14	1872	Apr-Oct	Irrigation	Siskiyou	BUTTE CREEK
	E J LOUIE & SONS Total	5,064.00						
5009605	MAURICE JOHANNESSEN	2,759.01	Pre-14	1880	Apr-Oct	Irrigation, Stockwater	Shasta	DEER CREEK
	MAURICE JOHANNESSEN Total	2,759.01						
5008459	Paradise Irrigation District	9,251.00	Pre-14	1916	All	Domestic	Butte	LITTLE BUTTE CREEK
	Paradise Irrigation District Total	9,251.00						
5000729	STANFORD VINA RANCH IRRIGATION CO	9,676.80	Riparian/Pre-14	1900	May-Oct	Irrigation, Stockwater	Tehama	DEER CREEK
5000730	STANFORD VINA RANCH IRRIGATION CO	9,676.80	Riparian/Pre-14	1900	May-Oct	Irrigation, Stockwater	Tehama	DEER CREEK
	STANFORD VINA RANCH IRRIGATION CO Total	19,353.60						
5000722	U S BUREAU OF LAND MANAGEMENT	11,615.21	Pre-14	1870	Apr-Nov	Irrigation, Stockwater, Habitat	Tehama	BATTLE CREEK
	U S BUREAU OF LAND MANAGEMENT Total	11,615.21						

East Creeks Water Rights - Statements of Diversion and Use

No comments
 - n/a -

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S009976	WESTERN CANAL WATER DISTRICT	5,045.00	Pre-14	1916	Apr-Jun	Irrigation	Butte	BUTTE CREEK
	WESTERN CANAL WATER DISTRICT Total	5,045.00						
	Grand Total	128,367.21						

West Creek (Cache and Stony) - Statements of Diversion and Use

No comments

- n/a -

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S015943	PAYNE FARMS - WA PAYNE PAYNE FARMS - WA PAYNE	1,800.00 1,800.00	Riparian	1990	May-Aug	Irrigation	Yolo	CACHE CREEK
S000608	YOLO COUNTY F C & W C DISTRICT	21,006.00	Riparian/Pre-14	1856	Mar-Dec	Irrigation, Domestic, Hydropower	Yolo	CACHE CREEK
S000609	YOLO COUNTY F C & W C DISTRICT	237,206.00	Riparian/Pre-14	1859	Mar-Dec	Irrigation, Domestic, Hydropower	Yolo	CACHE CREEK
S001063	YOLO COUNTY F C & W C DISTRICT	4,775.00	Riparian/Pre-14	1859	Apr-Oct	Irrigation, Domestic, Hydropower	Yolo	CACHE CREEK
S014980	YOLO COUNTY F C & W C DISTRICT YOLO COUNTY F C & W C	339,976.00 602,063.00	Riparian/Pre-14	1914	All	Irrigation, Municipal, Industrial, Recreation, Hydropower	Lake	CACHE CREEK
S000354	U.S. BUREAU OF RECLAMATION	114,300.00	Fed Adjudication	1910	Jan-Nov	Irrigation	Colusa	LITTLE STONY CREEK
S000353	U.S. BUREAU OF RECLAMATION U.S. BUREAU OF RECLAMATION	56,000.00 170,300.00	Fed Adjudication	1910	Oct-Mar	Irrigation	Colusa	STONY CREEK
	Grand Total	775,063.00						

No comments

- n/a -

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S012208	ANDERSON-COTTONWOOD IRRIGATION DISTRICT	162,788.00	Pre-14	1917	Apr-Oct	Irrigation, Stockwater	Shasta	SACRAMENTO RIVER
	ANDERSON-COTTONWOOD IRRIGATION DISTRICT Total	162,788.00						
S013880	CARTER MUTUAL WATER COMPANY	3,829.00	Riparian	1924	May-Feb	Irrigation, Stockwater, Domestic	Colusa	SACRAMENTO RIVER
	CARTER MUTUAL WATER COMPANY Total	3,829.00						
S005221	CHARLES W TUTTLE JR	1,550.00	Riparian	1968	Feb-Sep	Irrigation	Colusa	SACRAMENTO RIVER
S005222	CHARLES W TUTTLE JR	6,050.00	Riparian/Pre-14	1912	Mar-Jan	Irrigation	Colusa	SACRAMENTO RIVER
	CHARLES W TUTTLE JR Total	7,600.00						
S014831	CITY OF SACRAMENTO	74,036.91	Pre-14	1898	All	Municipal	Sacramento	SACRAMENTO RIVER
	CITY OF SACRAMENTO Total	74,036.91						
S017223	Dead Horse LP	348.80	Riparian/Pre-14	1896	All	Irrigation	Yuba	SACRAMENTO RIVER
S017224	Dead Horse LP	174.40	Riparian/Pre-14	1896	All	Irrigation	Yuba	SACRAMENTO RIVER
	Dead Horse LP Total	523.20						
S016908	Deadhorse LP	174.40	Riparian/Pre-14	1896	All	Irrigation	Yuba	SACRAMENTO RIVER
S018494	Deadhorse LP	348.80	Riparian/Pre-14	1896	All	Irrigation	Yuba	Sacramento River
	Deadhorse LP Total	523.20						
S020061	Edward McDowell	605.00	Riparian/Pre-14	1896	Apr-Oct	Irrigation	Sacramento	Sacramento River
S020612	Edward McDowell	605.00	Riparian/Pre-14	1896	Apr-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
S020616	Edward McDowell	605.00	Riparian/Pre-14	1896	Apr-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
	Edward McDowell Total	1,815.00						
S017096	Eliot Delta Orchards, LLC	376.00	Riparian/Pre-14	1896	Apr-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
S018886	Eliot Delta Orchards, LLC	444.00	Riparian/Pre-14	1896	Apr-Oct	Irrigation	Sacramento	Sacramento River
	Eliot Delta Orchards, LLC Total	820.00						
S017093	Eliot Family Co., LLC	200.00	Riparian/Pre-14	1896	Apr-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
S017383	Eliot Family Co., LLC	352.00	Riparian/Pre-14	1896	Apr-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
S019707	Eliot Family Co., LLC	300.00	Riparian/Pre-14	1896	Apr-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
	Eliot Family Co., LLC Total	852.00						
S016915	Eliot Family Revocable Trust	821.00	Riparian/Pre-14	1896	Apr-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
S018859	Eliot Family Revocable Trust	394.00	Riparian/Pre-14	1896	Apr-Oct	Irrigation	Sacramento	Sacramento River
	Eliot Family Revocable Trust Total	1,215.00						
S018613	Farmstead Reserve, Inc.	1,890.00	Riparian	1998	Apr-Oct	Irrigation	Butte	SACRAMENTO RIVER
	Farmstead Reserve, Inc. Total	1,890.00						
S018602	Faye Properties, Inc.	3,200.00	Riparian	1896	Mar-Sep	Irrigation	Yuba	SACRAMENTO RIVER
	Faye Properties, Inc. Total	3,200.00						
S007367	GLENH-COLUSA IRRIGATION DISTRICT	925,209.00	Pre-14	1918	All	Irrigation	Glenn	SACRAMENTO RIVER

Sacramento River - Statements of Diversion and Use

No comments

- n/a -

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
GLENN-COLUSA IRRIGATION DISTRICT Total								
5018956	Greene & Hemly - Merritt Island Ranch- Greene & Hemly, Inc	137.05	Riparian/Pre-14	1850	Mar-Oct	Irrigation	Yuba	SACRAMENTO RIVER
5018959	Greene & Hemly - Merritt Island Ranch- Greene & Hemly, Inc	589.32	Riparian/Pre-14	1850	Mar-Oct	Irrigation	Yuba	SACRAMENTO RIVER
5020804	Greene & Hemly - Merritt Island Ranch- Greene & Hemly, Inc	370.04	Riparian/Pre-14	1850	Mar-Oct	Irrigation	Yuba	Sacramento River
Greene & Hemly - Merritt Island Ranch- Greene & Hemly, Inc Total		1,096.41						
5017190	Greene & Hemly - Randall Ranch Greene & Hemly, Inc	354.05	Riparian/Pre-14	1850	Mar-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
5017191	Greene & Hemly - Randall Ranch Greene & Hemly, Inc	5.00	Riparian/Pre-14	1850	Mar-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
Greene & Hemly - Randall Ranch Greene & Hemly, Inc Total		359.05						
5017192	Greene & Hemly - Wheeler Ranch Greene & Hemly, Inc	753.73	Riparian/Pre-14	1850	Mar-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
Greene & Hemly - Wheeler Ranch Greene & Hemly, Inc Total		753.73						
5013264	HAROLD ARMSTRONG	2,200.00	Riparian	1895	Feb-Oct	Irrigation	Colusa	SACRAMENTO RIVER
HAROLD ARMSTRONG Total		2,200.00						
5013717	JOSEPH BORGES RANCHES	1,400.00	Riparian	1922	Apr-Sep	Irrigation	Sacramento	SACRAMENTO RIVER
JOSEPH BORGES RANCHES Total		1,400.00						
5017264	Joseph T Sanchez	760.00	Riparian/Pre-14	1800s	All	Irrigation	Sacramento	SACRAMENTO RIVER
5019834	Joseph T Sanchez	600.00	Riparian/Pre-14	1800s	All	Irrigation	Sacramento	SACRAMENTO RIVER
Joseph T Sanchez Total		1,360.00						
5010294	LAUTRUP INVESTMENT PARTNERSHIP	1,000.00	Riparian	1965	Apr-Oct	Irrigation	Yuba	SACRAMENTO RIVER
LAUTRUP INVESTMENT PARTNERSHIP Total		1,000.00						
5019840	Leary - Dennis Leary Trust 11/19/1990	0.00	Riparian	1800s	All	Irrigation	Sacramento	SACRAMENTO RIVER
Leary - Dennis Leary Trust 11/19/1990 Total		0.00						
5018189	Leary - H G	349.00	Riparian/Pre-14	1800s	Apr-Nov	Irrigation	Sacramento	SACRAMENTO RIVER
Leary - H G Total		349.00						
5018186	Leary (Dennis)	582.80	Riparian/Pre-14	1800s	Apr-Nov	Irrigation	Sacramento	SACRAMENTO RIVER
Leary (Dennis) Total		582.80						
5019868	Leary et al	600.00	Riparian/Pre-14	1800s	All	Irrigation	Sacramento	SACRAMENTO RIVER
Leary et al Total		600.00						
5018146	MARY CRANE	1,055.66	Riparian	1907	Apr-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
MARY CRANE Total		1,055.66						
5018012	MCCORMACK WILLIAMSON COMPANY	4,000.00	Riparian	1930	Apr-Sep	Irrigation	Sacramento	Sacramento River
5018018	MCCORMACK WILLIAMSON COMPANY	2,000.00	Riparian	1930	Apr-Sep	Irrigation	Sacramento	Sacramento River
5018021	MCCORMACK WILLIAMSON COMPANY	1,000.00	Riparian	1930	May-Aug	Irrigation	Sacramento	Sacramento River
MCCORMACK WILLIAMSON COMPANY Total		7,000.00						
5018614	MYERS LAND COMPANY LLP	938.00	Riparian	1903	Apr-Sep	Irrigation	Yuba	SACRAMENTO RIVER
5018617	MYERS LAND COMPANY LLP	131.00	Riparian	1950	Apr-Sep	Irrigation	Yuba	SACRAMENTO RIVER
MYERS LAND COMPANY LLP Total		1,069.00						
5002069	PACIFIC FRUIT FARMS	356.80	Riparian	1929	All	Irrigation	Sacramento	SACRAMENTO RIVER
5002065	PACIFIC FRUIT FARMS	356.80	Riparian	1929	All	Irrigation	Sacramento	SACRAMENTO RIVER
5002096	PACIFIC FRUIT FARMS	356.80	Riparian	1929	All	Irrigation	Sacramento	SACRAMENTO RIVER
5008159	PACIFIC FRUIT FARMS	356.80	Riparian	1929	All	Irrigation	Sacramento	SACRAMENTO RIVER
5019372	PACIFIC FRUIT FARMS	436.00	Riparian	1929	All	Irrigation	Sacramento	SACRAMENTO RIVER

No comments

- n/a -

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S019375	PACIFIC FRUIT FARMS	85.02	Riparian	1929	All	Irrigation	Sacramento	SACRAMENTO RIVER
S019464	PACIFIC FRUIT FARMS	85.02	Riparian	1929	All	Irrigation	Sacramento	Sacramento River
	PACIFIC FRUIT FARMS Total	2,033.24						
S002896	PARROTT INVESTMENT COMPANY	8,805.67	Riparian	1971	Apr-Oct	Irrigation	Butte	SACRAMENTO RIVER
S002897	PARROTT INVESTMENT COMPANY	8,805.67	Riparian	1918	Apr-Oct	Irrigation	Butte	SACRAMENTO RIVER
S002898	PARROTT INVESTMENT COMPANY	8,805.67	Riparian	1979	Apr-Oct	Irrigation	Butte	SACRAMENTO RIVER
	PARROTT INVESTMENT COMPANY Total	26,417.00						
S011905	Pylman - A & H PYLMAN FARMS	945.71	Riparian	1915	Apr-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
S011908	Pylman - A & H PYLMAN FARMS	1,438.66	Riparian	1915	Mar-Sep	Irrigation	Sacramento	SACRAMENTO RIVER
S011909	Pylman - A & H PYLMAN FARMS	945.71	Riparian	1915	Mar-Sep	Irrigation	Sacramento	SACRAMENTO RIVER
	Pylman - A & H PYLMAN FARMS Total	3,329.98						
S001237	PYLMAN VINEYARDS LLC	328.07	Riparian/Pre-14	1910	Apr-Oct	Irrigation	Yuba	SACRAMENTO RIVER
S001867	PYLMAN VINEYARDS LLC	328.07	Riparian/Pre-14	1910	Apr-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
S020149	PYLMAN VINEYARDS LLC	960.00	Riparian/Pre-14	1910	Apr-Oct	Irrigation	Yuba	Sacramento River
S020153	PYLMAN VINEYARDS LLC	610.00	Riparian/Pre-14	1910	Apr-Oct	Irrigation	Yuba	Sacramento River
S020127	PYLMAN VINEYARDS LLC	1,000.00	Riparian/Pre-14	1910	Apr-Oct	Irrigation	Yuba	Sacramento River
	PYLMAN VINEYARDS LLC Total	3,246.14						
S020641	RECLAMATION DISTRICT #108	40,185.00	Riparian	1890s	Apr-Dec	Irrigation	Colusa	SACRAMENTO RIVER
S020645	RECLAMATION DISTRICT #108	118,058.00	Riparian	1899s	Apr-Dec	Irrigation	Colusa	SACRAMENTO RIVER
S020649	RECLAMATION DISTRICT #108	487.00	Riparian	1890s	Apr-Oct	Irrigation	Colusa	SACRAMENTO RIVER
S020653	RECLAMATION DISTRICT #108	169.00	Riparian	1890s	Apr-Oct	Irrigation	Colusa	SACRAMENTO RIVER
S020657	RECLAMATION DISTRICT #108	2,885.00	Riparian	1890s	May-Sep	Irrigation	Colusa	SACRAMENTO RIVER
S020661	RECLAMATION DISTRICT #108	10,414.00	Riparian	1890s	Apr-Jul	Irrigation	Yuba	SACRAMENTO RIVER
	RECLAMATION DISTRICT #108 Total	172,198.00						
S018031	RIVER GARDEN FARMS COMPANY	356.00	Riparian	1958	Mar-Sep	Irrigation	Yuba	SACRAMENTO RIVER
	RIVER GARDEN FARMS COMPANY Total	356.00						
S017210	Rivermaid Land Company	550.00	Riparian/Pre-14	1800s	All	Irrigation	Sacramento	SACRAMENTO RIVER
S017213	Rivermaid Land Company	330.00	Riparian/Pre-14	1800s	All	Irrigation	Sacramento	SACRAMENTO RIVER
S017222	Rivermaid Land Company	260.00	Riparian/Pre-14	1800s	All	Irrigation	Sacramento	SACRAMENTO RIVER
S017225	Rivermaid Land Company	176.00	Riparian/Pre-14	1800s	All	Irrigation	Sacramento	SACRAMENTO RIVER
S017226	Rivermaid Land Company	234.00	Riparian/Pre-14	1800s	All	Irrigation	Sacramento	SACRAMENTO RIVER
S017228	Rivermaid Land Company	1,300.00	Riparian/Pre-14	1800s	All	Irrigation	Sacramento	SACRAMENTO RIVER

Sacramento River - Statements of Division and Use

No comments

- n/a -

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
5019320	Rivermaid Land Company	171.40	Riparian/Pre-14	1888	All	Irrigation	Sacramento	SACRAMENTO RIVER
5019360	Rivermaid Land Company	174.40	Riparian/Pre-14	1888	All	Irrigation	Sacramento	SACRAMENTO RIVER
5019377	Rivermaid Land Company	174.90	Riparian/Pre-14	1888	All	Irrigation	Sacramento	SACRAMENTO RIVER
5019606	Rivermaid Land Company	261.60	Riparian/Pre-14	1888	All	Irrigation	Sacramento	Sacramento River
Rivermaid Land Company Total		3,336.74						
5009950	ROY HORRESCO JR	1,051.00	Riparian	1920	Apr-Jan	Irrigation	Sutter	SACRAMENTO RIVER
ROY HORRESCO JR Total		1,051.00						
5020145	SACRAMENTO RIVER RANCH II LLC	3,834.60	Riparian	11A	11A	Irrigation	Yuba	Sacramento River
SACRAMENTO RIVER RANCH II LLC Total		3,834.60						
5016992	Spinella (Art, Janelle)	269.20	Pre-14	1388	Apr-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
Spinella (Art, Janelle) Total		269.20						
5016983	Spinella (Frankie)	2,642.20	Pre-14	1910	Apr-Oct	Irrigation	Yuba	SACRAMENTO RIVER
5017329	Spinella (Frankie)	320.00	Pre-14	1910	Apr-Oct	Irrigation	Yuba	SACRAMENTO RIVER
Spinella (Frankie) Total		2,922.20						
5012828	THE ARCHES LTD	1,320.00	Riparian/Pre-14	1800s	May-Aug	Irrigation	Sacramento	SACRAMENTO RIVER
5012800	THE ARCHES LTD	1,000.00	Riparian/Pre-14	1800s	May-Aug	Irrigation	Sacramento	SACRAMENTO RIVER
THE ARCHES LTD Total		2,320.00						
5019793	TOWNE ENTERPRISES	942.00	Riparian	1986	Jan-Oct	Irrigation	Sacramento	SACRAMENTO RIVER
5019796	TOWNE ENTERPRISES	2,024.00	Riparian	1914	Jan-Sep	Irrigation	Sacramento	SACRAMENTO RIVER
5019790	TOWNE ENTERPRISES	0.00	Riparian	1918	All	Irrigation	Sacramento	SACRAMENTO RIVER
5019802	TOWNE ENTERPRISES	0.00	Riparian	1997	All	Irrigation	Sacramento	SACRAMENTO RIVER
5019808	TOWNE ENTERPRISES	5,942.00	Riparian	1914	Apr-Sep	Irrigation	Sacramento	SACRAMENTO RIVER
TOWNE ENTERPRISES Total		8,908.00						
Grand Total		1,433,668.01						

Stanislaus River Watershed - Statements of Diversion and Use

No comments

- n/a -

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S014003	R J Galle	6,000.00	Riparian	1940	All	Irrigation	Stanislaus	STANISLAUS RIVER
S009333	US Fish & Wildlife Service	2,040.00	Riparian	1950	All	Irrigation	Stanislaus	STANISLAUS RIVER
S004683	DAKDALE IRRIGATION DISTRICT	485,040.00	Pre-14	1913	All	Irrigation, Domestic	Calaveras	STANISLAUS RIVER
S010402	TUOLUMNE UTILITIES DISTRICT	3,668.00	Pre-14	1852	All	Irrigation, Domestic	Tuolumne	MORMON CREEK
S013888	JOSEPH J FRAQUERO	2,850.00	Pre-14	1884	All	Irrigation, Stockwater	Calaveras	ANGELS CREEK
		499,598.00						

Tuolumne River Watershed - Statements of Division and Use

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S002635	CITY AND COUNTY OF SAN FRANCISCO PUC AGM WATER ENTERPRISE	561,280.00	Pre-14	1922	All	Municipal/ Industrial, Hydropower, Fish & Wildlife, Recreation	Tuolumne	TUOLUMNE RIVER
S002637	CITY AND COUNTY OF SAN FRANCISCO PUC AGM WATER ENTERPRISE	541,652.00	Pre-14	1925	All	Municipal/ Industrial, Hydropower, Fish & Wildlife, Recreation	Tuolumne	TUOLUMNE RIVER
S014379	CITY AND COUNTY OF SAN FRANCISCO PUC AGM WATER ENTERPRISE	258,778.00	Pre-14	1918	All	Municipal/ Industrial, Hydropower, Fish & Wildlife, Recreation	Tuolumne	CHERRY CREEK
CITY AND COUNTY OF SAN FRANCISCO		1,381,710.00						
S014004	Gallo Vineyards Inc	268.22	Riparian	1960	Apr-Oct	Irrigation	Stanislaus	TUOLUMNE RIVER
Gallo Vineyards Inc Total		268.22						
S011103	James E Coleman	1,520.00	Riparian	1917	Apr-Oct	Irrigation	Stanislaus	TUOLUMNE RIVER
James E Coleman Total		1,520.00						
S009161	Joseph E Gallo	329.51	Riparian	1976	Mar-Oct	Irrigation	Stanislaus	TUOLUMNE RIVER
S011191	Joseph E Gallo	66.42	Riparian	1976	Mar-Oct	Irrigation	Stanislaus	TUOLUMNE RIVER
Joseph E Gallo Total		395.93						
S000996	TUOLUMNE UTILITIES DISTRICT	10,167.00	Pre-14	1851	All	Irrigation, Stockwater, Domestic	Tuolumne	SULLIVAN CREEK
S000997	TUOLUMNE UTILITIES DISTRICT	4,819.00	Pre-14	1852	All	Irrigation, Stockwater, Domestic	Tuolumne	SULLIVAN CREEK
S001006	TUOLUMNE UTILITIES DISTRICT	3,806.00	Pre-14	1852	All	Irrigation, Stockwater, Domestic	Tuolumne	UHST (AKA POWER CREEK)
S001007	TUOLUMNE UTILITIES DISTRICT	893.00	Pre-14	1852	All	Irrigation, Stockwater, Domestic	Tuolumne	CURTIS CREEK
S010403	TUOLUMNE UTILITIES DISTRICT	730.00	Pre-14	1852	All	Irrigation, Stockwater, Domestic	Tuolumne	CURTIS CREEK
TUOLUMNE UTILITIES DISTRICT Total		20,413.00						
S013448	TURLOCK IRRIGATION DISTRICT	1,196,100.00	Pre-14	1900	All	Irrigation, Domestic	Stanislaus	TUOLUMNE RIVER
TURLOCK IRRIGATION DISTRICT Total		1,196,100.00						
Grand Total		2,600,407.15						

No comments

- n/a -

Merced River Watershed - Statements of Division and Use

No comments

- n/a -

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
5007654	Gallo Vineyards Inc	360.00	Riparian	1910	Mar-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
5007655	Gallo Vineyards Inc	170.00	Riparian	1910	Apr-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
5007656	Gallo Vineyards Inc	1,275.00	Riparian	1910	Mar-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
5007657	Gallo Vineyards Inc	150.00	Riparian	1910	Mar-Dec	Irrigation, Frost Protection	Merced	MERCED RIVER
5007658	Gallo Vineyards Inc	135.00	Riparian	1910	Mar-Dec	Irrigation, Frost Protection	Merced	MERCED RIVER
5007661	Gallo Vineyards Inc	173.00	Riparian	1910	Mar-Dec	Irrigation, Frost Protection	Merced	MERCED RIVER
5007662	Gallo Vineyards Inc	155.00	Riparian	1910	Mar-Dec	Irrigation, Frost Protection	Merced	MERCED RIVER
5007663	Gallo Vineyards Inc	150.00	Riparian	1910	Mar-Dec	Irrigation, Frost Protection	Merced	MERCED RIVER
5007664	Gallo Vineyards Inc	230.00	Riparian	1910	Apr-Dec	Irrigation, Frost Protection	Merced	MERCED RIVER
5007665	Gallo Vineyards Inc	1,038.00	Riparian	1910	All	Irrigation, Frost Protection, Industrial	Merced	MERCED RIVER
5007666	Gallo Vineyards Inc	115.00	Riparian	1910	All	Irrigation, Frost Protection	Merced	MERCED RIVER
5007667	Gallo Vineyards Inc	180.00	Riparian	1910	Apr-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
5007668	Gallo Vineyards Inc	300.00	Riparian	1910	Apr-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
5007669	Gallo Vineyards Inc	200.00	Riparian	1910	Apr-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
5007670	Gallo Vineyards Inc	270.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
5007671	Gallo Vineyards Inc	210.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
5007672	Gallo Vineyards Inc	375.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
5007673	Gallo Vineyards Inc	210.00	Riparian/Pre-14	1900	Apr-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
5007710	Gallo Vineyards Inc	375.00	Riparian/Pre-14	1900	Mar-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
5007711	Gallo Vineyards Inc	5,800.00	Riparian/Pre-14	1900	Mar-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
5007712	Gallo Vineyards Inc	3,340.00	Riparian/Pre-14	1900	Mar-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
5007713	Gallo Vineyards Inc	1,050.00	Riparian/Pre-14	1900	Mar-Oct	Irrigation, Frost Protection	Merced	MERCED RIVER
Gallo Vineyards Inc Total		14,853.00						
5007674	Henry Te Velde	1,205.00	Riparian	1900	Mar-Sep	Irrigation	Merced	MERCED RIVER
Henry Te Velde Total		1,205.00						
5001496	Kelsey Ranch LP	5,496.00	Pre-14	1885	Apr-Oct	Irrigation, Stockwater, Domestic, Recreation	Merced	MERCED RIVER
5003055	Kelsey Ranch LP	2,649.00	Riparian/Pre-14	1885	All	Irrigation, Domestic	Merced	MERCED RIVER
Kelsey Ranch LP Total		8,145.00						
5012547	MADERA IRRIGATION DISTRICT	21,457.00	Pre-14	1875	All	Irrigation	Madera	BIG CREEK
MADERA IRRIGATION DISTRICT Total		21,457.00						
5004718	MERCED IRRIGATION DISTRICT	571,000.00	Pre-14	1911	All	Irrigation	Merced	MERCED RIVER
5004719	MERCED IRRIGATION DISTRICT	3,338.00	Riparian/Pre-14	1868	Apr-Oct	Irrigation	Merced	MERCED RIVER
MERCED IRRIGATION DISTRICT Total		574,338.00						
Grand Total		619,996.00						

No comments

- n/a -

Application ID	Holder Name	Highest Amount Claimed	Water Rights Claim Type	Year of First Use	Season	Purpose of Use	County	Source
S005469	ARNOLD SOUZA & SONS	1,742.00	Riparian	1963	Apr-Sep	Irrigation	Stanislaus	SAN JOAQUIN RIVER
	ARNOLD SOUZA & SONS Total	1,742.00						
S001073	COLUMBIA CANAL COMPANY	62,879.00	Pre-14	1872	Feb-DWC	Irrigation	Madera	SAN JOAQUIN RIVER
	COLUMBIA CANAL COMPANY Total	62,879.00						
S005005	COSTA VIEW FARMS #2, A CA GEN PARTNERSHIP	19,000.00	Riparian/Pre-14	1903	All	Irrigation, Stockwater	Madera	FRESNO RIVER
	COSTA VIEW FARMS #2, A CA GEN	19,000.00						
S010411	LONE TREE MUTUAL WATER COMPANY	16,376.00	Riparian	1995	All	Irrigation	Merced	SAN JOAQUIN RIVER
	LONE TREE MUTUAL WATER COMPANY Total	16,376.00						
S004978	MADERA IRRIGATION DISTRICT	51,741.00	Pre-14	1873	All	Irrigation	Madera	FRESNO RIVER
S014187	MADERA IRRIGATION DISTRICT	16,148.00	Pre-14	1873	Oct-Jul	Irrigation	Madera	NORTH FORK WILLOW CREEK
	MADERA IRRIGATION DISTRICT Total	67,889.00						
S001915	Mark D McKean	945.00	Riparian/Pre-14	1908	Apr-Oct	Irrigation	Fresno	FRESNO SLOUGH
S001916	Mark D McKean	770.00	Riparian	1904	Mar-Sep	Irrigation	Fresno	FRESNO SLOUGH
S001917	Mark D McKean	660.00	Riparian/Pre-14	1904	Feb-Oct	Irrigation	Fresno	FRESNO SLOUGH
	Mark D McKean Total	2,375.00						
S006296	HENEFFEE RIVER RANCH COMPANY	2,105.00	Riparian	1957	Mar-Oct	Irrigation	Merced	FRESNO RIVER
	HENEFFEE RIVER RANCH COMPANY Total	2,105.00						
S009320	PATTERSON IRRIGATION DISTRICT	60,200.00	Pre-14	1910	Mar-Sep	Irrigation	Stanislaus	SAN JOAQUIN RIVER
	PATTERSON IRRIGATION DISTRICT Total	60,200.00						
S015523	POINT HILLERTON RANCH LLC	2,100.00	Riparian/Pre-14	2002	All	Irrigation, Stockwater	Madera	FINE GOLD CREEK
	POINT HILLERTON RANCH LLC Total	2,100.00						
S014001	R J GALLO	5,304.00	Riparian	1980	All	Irrigation	Stanislaus	SAN JOAQUIN RIVER
S014002	R J GALLO	813.00	Riparian	1990	All	Irrigation, Stockwater	Stanislaus	SAN JOAQUIN RIVER
	R J GALLO Total	6,117.00						
S001116	ROBERT F FLYNN	4,200.00	Riparian	1976	All	Irrigation, Stockwater	Merced	DUCK SLOUGH
	ROBERT F FLYNN Total	4,200.00						
S009575	U S FISH & WILDLIFE SERVICE	12,976.00	Pre-14	1900	All	Irrigation, Wildlife Management	Merced	DEADMAN CREEK
	U S FISH & WILDLIFE SERVICE Total	12,976.00						
	Grand Total	201,659.00						

No comments

- n/a -

Appendix D

**Section D.5
Other Pre-1914 Consumptive Water Rights Claims**

No comments

- n/a -

1) South Feather Water & Power Agency (Formerly Oroville-Wyandotte Irrigation District) Claims:

Notice Date	Priority Date	Miners' Inches	Cubic Feet Per Second	Acre-feet	Source
9/25/1852					South Fork Feather River
4/19/1854					South Fork Feather River
11/29/1854					South Fork Feather River
6/21/1862	240		5	3,477	South Fork Feather River
8/15/1889	3,000		60	43,468	South Fork Feather River at LG Valley
11/23/1908	5,000		100	72,446	Lost Creek
11/23/1908	1,000		20	14,489	Lost Creek
9/10/1910	10,000		200	144,893	South Fork Feather River at LG Valley
9/10/1910	10,000		200	144,893	South Fork Feather River at LG Valley
9/10/1910	10,000		200	144,893	South Fork Feather River at US Valley
9/29/1910	10,000		200	144,893	South Fork Feather River at LG Valley
9/29/1910	10,000		200	144,893	South Fork Feather River at LG Valley
4/22/1911	100		2	1,449	McCabe Creek
4/22/1911	5,000		100	72,446	South Fork Feather River
10/22/1914	7,500		150	108,669	Near Rock Creek, South Fork Feather River
10/26/1914	5,000		100	72,446	Lower South Fork Feather River
Total Face Value					533,784

2) Western Canal Water District

County/Decree	Priority Date	Cubic Feet Per Second	Acre-feet	Source
Sutter No. 2360	12/15/1924		150,000	Year-round Feather River
			145,000	Below Centerville Powerhouse
Total Face Value				295,000

3) Joint Water Districts of Feather River

Priority Date	Miners' Inches	Cubic Feet Per Second	Acre-feet	Source
7/29/1902	100,000	2,000	1,448,926	Feather River
5/12/1903	100,000	2,000	1,448,926	Feather River
3/29/1904	100,000	2,000	1,448,926	Feather River
3/3/1909		500	362,231	Feather River
Total Face Value				1,811,157 (less redundant claims on Feather River)

Sutter Decree No. 2360, 12/15/1924

	Miners' Inches	Cubic Feet Per Second	Acre-feet	Source
Sutter Butte Canal Company first right		1,290	869,255	Feather River
Great Western Power Company (later PG&E) second right		300	217,339	Feather River
Above 1500 cfs, SBCC's second right is 2/3 of flow between 1500 and 2700 cfs (1200 cfs difference)		800	579,570	Feather River
Above 1500 cfs, Great Western's second right is 1/3 of flow between 1500 and 2700 cfs		400	289,785	Feather River
Above 2700 cfs, Great Western and Western Canal Company receive the next 500 cfs		500	362,231	Feather River
Above 3200 cfs, SBCC has right to divert the next 500 cfs, including all accretions, whatever the source.		500	362,231	Feather River

SBCC Total Face Value 1,811,157

Western Canal Company's total claims 869,355

Water Right Shares of Sutter Butte Canal Company's Decreed Water Rights allocated to Joint Water Districts

Biggs-West Gridley Water District	29.0%	525,236
Butte Water District	24.0%	434,678
Richvale Irrigation District	27.0%	489,012
Sutter Extension Water District	20.0%	362,231

Yuba River Pre-1914 Consumptive Water Rights

No comments

- n/a -

1) Browns Valley Irrigation District

Priority Date	Miners' Inches	Cubic Feet Per Second	Acre-feet	Source
3/21/1890	10,000	200	144,893	North Yuba River

2) Yuba County Water Agency

Priority Date	Miners' Inches	Cubic Feet Per Second	Acre-feet	Source
1890		50	36,223	Colgate Head Dam, year-round - North Yuba River and its tributaries
		200	144,893	Hydropower only - Colgate Head Dam on North Yuba River
		60	43,468	Hydropower only - Colgate Head Dam on North Yuba River
Total Face Value, Consumptive Rights			36,223	

Sacramento River Pre-1914 Consumptive Water Rights

No comments

- n/a -

1) Right Bank of Sacramento River at Wheel Ditch in Redding:

Shasta County Water Rights Book 2, p. 391, notice dated 11/21/1914
 Deeded by McCoy Fitzgerald to Anderson-Cottonwood Irrigation District, 12/30/1914

Notice Date	Priority Date	Miners' Inches	Cubic Feet Per Second	Acre-feet	Source
11/21/1914	11/21/1914	20,000	400	289,785	Wheel Ditch - Sacramento River

2) Glenn-Colusa Irrigation District

Notice Date	Priority Date	Miners' Inches	Cubic Feet Per Second	Acre-feet	Source
4/16/1903	4/15/1903	500,000	10,000	7,244,628	Sacramento River
2/26/1903	2/25/1903	150,000	3,000	2,173,388	Sacramento River
2/26/1903	2/25/1903	150,000	3,000	2,173,388	Sacramento River
12/7/1901	11/30/1901		5,000	3,622,314	Sacramento River
12/7/1901	11/30/1901		5,000	3,622,314	Sacramento River
12/21/1883	12/18/1883		5,000	3,622,314	Sacramento River
11/19/1903	11/13/1903		5,000	3,622,314	Sacramento River
				26,080,661	Sacramento River Total
8/1/1907	8/1/1907		5,000	3,622,314	Stony Creek
			5,000	3,622,314	Stony Creek
5/4/1905	4/26/1905		5,000	3,622,314	Stony Creek
				10,866,942	Stony Creek Total
11/23/1904	11/21/1904		2,000	1,448,926	Willow Creek
				1,448,926	Willow Creek Total
				38,396,529	Grand Total

3) City of Sacramento

Source: State Water Board Notice of Petitions for Extensions of Time to Complete Construction Under Permits 11358, 11359, 11360, and 11361, November 3, 1988

Notice Date	Priority Date	Miners' Inches	Cubic Feet Per Second	Acre-feet	Source
	1854		75	54,335	Sacramento River

Sources: Anderson-Cottonwood Irrigation District;

Glenn-Colusa Irrigation District;

City of Sacramento;

State Water Resources Control Board.

Water RightsOperation Model.xls

Sacramento River Pre-14 Notices

Turlock and Modesto Irrigation Districts' Pre-1914 Consumptive Water Rights

No comments

- n/a -

Holder Name	Date	Point of Diversion	Facility Name	Comment	Diversion	Diversion Units	Storage	Storage Units	Irrigation Season Face Amount, AF (246 days)	
Turlock and Modesto Irrigation Districts and La Grange	5/18/1871	La Grange Dam	La Grange Dam	Acquired from F. Green and A. D. Allen	66	cubic feet per second			66 cfs max	
Modesto Irrigation District	2/27/1913	La Grange Dam	La Grange Dam	Acquired from J.M. Finley	12,000	miner's inches			Not to exceed 250 cfs, among these water rights claims for a total of: 121,983.47	
Modesto Irrigation District	11/13/1913	La Grange Dam	La Grange Dam	Acquired from Waterford Irrigation District	16,000	miner's inches				
Turlock and Modesto Irrigation Districts	1/16/1855	La Grange Dam	La Grange Dam	Acquired from Franklin Water Company						
Turlock and Modesto Irrigation Districts	1/18/1862	La Grange Dam	La Grange Dam	Acquired from Elam Dye					The sum of these water rights may not exceed 4,500 cfs diversion; Franklin Water Co and Elam Dye have no diversion amounts; all rights associated with this limit are converted to acre-feet:	
Turlock and Modesto Irrigation Districts	5/18/1872	La Grange Dam	La Grange Dam	Acquired from John Burcham, M.A. Wheaton, and Charles Elliott	500,000	miner's inches				
Turlock Irrigation District	1/5/1889	La Grange Dam	La Grange Dam	Posted by TID	225,000	miner's inches				
Modesto Irrigation District	6/21/1890	La Grange Dam	La Grange Dam	Posted by MID	250,000	miner's inches				
Modesto Irrigation District	10/1/1908	La Grange Dam, Modesto Reservoir	La Grange Dam, Modesto Reservoir	Posted by MID	50,000	miner's inches	40,000	acre-feet		
Turlock Irrigation District	8/31/1911	La Grange Dam, Turlock Lake	La Grange Dam, Turlock Lake	Posted by TID	200,000	miner's inches	100,000	acre-feet		
Estimated Total Face Amount										3,282,066.12
Source: Letter from Kenneth Petruzzelli, O'Laughlin and Paris LLP attorneys for the Modesto Irrigation District, "Public Records Act Request for Pre-1914 Water Rights," dated January 14, 2011; California Water Impact Network. There are 50 miner's inches to 1 cubic foot per second.										

No comments

- n/a -

Appropriation ID	Date	Point of Diversion	Facility Name	Face Amt (cfs)	Source
151(6)	7/22/1902	Stanislaus National Forest, Cherry Valley Reservoir Site, NE 1/4 Section 5, T1N R19E MDB&M	Cherry Valley Reservoir Site	1,000.00	Cherry Creek
151(4)	7/20/1902	Junction Eleanor & Cherry Creek, Section 16, T1N R19E MDB&M	Cherry Valley Reservoir Site	240.00	Eleanor & Cherry Creek
158	2/27/1911	Stanislaus National Forest, just north of S 1/4 corner of Section 32, T2N R19E	Cherry Valley Reservoir Site	500.00	Cherry Creek
153(1)	10/24/1909	Stanislaus National Forest, just west of E 1/4 corner of Section 8, T2N R19E MDB&M	Cherry Valley Reservoir Site	1,000.00	Cherry Creek
151(21)	10/11/1909	Junction Eleanor & Cherry Creek, Section 16, T1N R19E MDB&M	Cherry Valley Reservoir Site	240.00	Eleanor & Cherry Creek
			Cherry Valley Reservoir Site Total	2,980.00	
160	2/18/1911	Yosemite National Park, NW 1/4 of Section 16, T1N R20E MDB&M	Hetch Hetchy Reservoir Site	500.00	Tuolumne River
155(2)	10/4/1908	Stanislaus National Forest near mouth of Jawbone Creek	Hetch Hetchy Reservoir Site	200.00	Tuolumne River
156(3)	9/29/1908	Yosemite National Park, NE 1/4 Section 17, T1N R20E MDB&M	Hetch Hetchy Reservoir Site	200.00	Tuolumne River
			Hetch Hetchy Reservoir Site Total	700.00	
154(6)	7/29/1901	Yosemite National Park, Lake Eleanor Reservoir Site (1/4 mile below Lake Eleanor) SE 1/4 Section 34, T2N R19E MDB&M NW 1/4 within SE 1/4.	Lake Eleanor Reservoir Site	1,000.00	Eleanor Creek
155(1)	7/29/1901	Yosemite National Park NW 1/4 Section 3, T1N R19E MDB&M	Lake Eleanor Reservoir Site	100.00	Eleanor Creek
159	2/27/1911	Yosemite National Park, NW 1/4 Section 3, T1N R19E MDB&M	Lake Eleanor Reservoir Site	All the waters of Eleanor Creek	Eleanor Creek
151(14)	11/17/1909	Stanislaus National Park, West Bank NE 1/4 of NE 1/4 Section 9 T1N R19E, MDB&M	Lake Eleanor Reservoir Site	100.00	Eleanor Creek
156(1)	10/1/1908	Yosemite National Park, NW 1/4 Section 3, T1N R19E	Lake Eleanor Reservoir Site	100.00	Eleanor Creek
			Lake Eleanor Reservoir Site Total	1,100.00	
162	2/28/1911	Stanislaus National Forest near mouth of Jawbone Creek	Tuolumne River at and Near Early Intake	500.00	Tuolumne River
161	2/21/1911	Stanislaus National Forest 1 1/4 miles upstream from Range Line between R18E and R19E	Tuolumne River at and Near Early Intake	500.00	Tuolumne River
162	2/20/1911	Stanislaus Forest near west line of now park boundary	Tuolumne River at and Near Early Intake	500.00	Tuolumne River
153(5)	10/15/1909	Stanislaus National Forest 1 1/4 miles upstream from Range Line between R18E and R19E	Tuolumne River at and Near Early Intake	1,000.00	Tuolumne River
151(22)	10/12/1909	Stanislaus National Forest, above junction with Cherry River	Tuolumne River at and Near Early Intake	240.00	Tuolumne River
156(2)	10/4/1908	Near mouth of Jawbone Creek	Tuolumne River at and Near Early Intake	300.00	Jawbone Creek Tuolumne River
			Tuolumne River at and Near Early Intake Total	3,040.00	
			Grand Total	7,820.00	
			Tuolumne River at and Near Early Intake Total in Acre-feet originally claimed	2,202,366.94	

Source: R.D. Hanson, San Francisco's *Water Rights on the Tuolumne River Watershed*, prepared under the direction of A.O. O'Leary, Manager and Chief Engineer, Hetch Hetchy Water Supply, River and Utilities Engineering Bureau, City and County of San Francisco Public Utilities Commission, July 1951. Available from the UC Riverside Water Resources Collections and Archives, Call No. G4794 H1.

Merced River Riparian Pre-1914 Consumptive Water Rights

Water Right Type	Status	Holder Name	Date	Point of Diversion	Comment	Face Amount, AF
Appropriative	Pre-1914	Farmer's Canal Company	1876	Originally that of the Robla Ditch	2500 cfs, with no apparent seasonal limitations.	1,811,157
Appropriative	Pre-1914	Crocker-Huffman Land & Water Company	1883	Crocker-Huffman Dam	2500 cfs; this right was originally filed by C.H. Huffman personally, acquired by Huffman and Crocker's Merced Canal & Irrigation Company, later taken over by Crocker Huffman Land & Water Company in late 1880s. This water right was acquired by Merced Irrigation District in 1919 after the District was formed.	1,811,157
Riparian		Upton et al	1895	Various - along Merced River below Crocker-Huffman Dam	Maximum diversion of 225 cfs pursuant to the Upton Decree of 1895	163,004
Riparian		Dale & Cook Ranch owners	1876	Various individuals associated with ownership of the Dale and Cook Ranch	24 cfs amount to a total diversion of 1,900 AF during diversion season	1,900
Riparian		J.J. Stevinson	1930	Merced ID's boundary intersecting with McCoy Spillway, Arena Spillway, or Bear Creek	Diversion season is from April 1 through September 30 with varying flow rates each month therein, according to the Stevinson Decree. Merced ID agreed with Stevinson to exchange delivery of water from Lake McClure up to 24,000 acre-feet annually, in exchange for an easement for the District to incorporate Stevinson's riparian water into District operations at Lake McClure. "The rights hereby conveyed by the Company to the District shall be an easement in all the right title, interest, estate, and claims of the Company in and to the lands...in which it has an interest, and as against any right which the Company may now have in and to the waters of said Merced River,"	24,000
Riparian		Parties to the Cowell Agreement	1926	Crocker-Huffman Dam	Merced Irrigation District is required to provide releases from New Exchequer Dam to meet riparian right holders requirements.	93,793
Pre-1914 and Riparian Water Rights, Merced River						3,905,012

No comments

- n/a -

San Joaquin River Riparian and Pre-1914 Consumptive Water Rights Claims

No comments

- n/a -

San Joaquin River Irrigation Uses	Estimated Face Amount	Point of Diversion	Other Description
USBR Purchase Rights from Miller & Lux Inc.	624,200	Friant Dam, redirected at Madera and Friant-Kern Canals	Subject of a water rights-purchase contract with US Bureau of Reclamation, and appraised at this quantity of water (Etcheverry, 1936; California Water Project Authority, 1936). Originally "cropland" and "uncontrolled" riparian flood flows. Grassland flows were pre-1914 appropriative rights of the Miller & Lux canal company; "uncontrolled" flows were riparian rights associated with lands adjacent to the San Joaquin River owned by Miller & Lux cattle business for grazing.
San Joaquin River Exchange Contractors Rights - exchange/casement on cropland water rights	840,000	USBR diverts these flows from the San Joaquin River into Madera and Friant-Kern Canals	Subject of a water rights exchange contract with US Bureau of Reclamation (Engle, Part Two, 1957). Originally "cropland" rights owned by Miller & Lux Inc. on which permanent and other crops were cultivated with highly reliable senior appropriative and riparian water rights. The Exchange Contractors having provided USBR with an easement for these rights receives in their place flows from Shasta Reservoir via Delta Mendota Canal.
Chowchilla Farms/Water District	49,300	Chowchilla Canal diversion from San Joaquin River upstream of Mendota Pool, east side of the river.	Subject of a water rights purchase contract with US Bureau of Reclamation for appropriative rights via Chowchilla Canal and under appropriative and riparian rights through the Blythe Canal, acquisition of which would be used in storage at Friant Dam and diversion into Madera Canal (California Water Project Authority, No. 6, 1937). The lands from which these rights were purchased lie between Fresno and Chowchilla rivers along the east bank of the San Joaquin River.
Lands Between Chowchilla Farms and Stevinson Colony	40,281	Between Chowchilla River and Merced River along east side of San Joaquin River.	Subject to water rights purchase contracts with US Bureau of Reclamation (including lands of Bloss, Hatfield, Crane, Turner, Errico and Hansen) (California Water Project Authority, No. 7, 1937). Includes lands formerly owned by Miller & Lux, Inc., conveyed with reservations of easements in and to use of water and upstream storage rights reserved to Miller & Lux. Estimate of water rights shown are for uncontrolled flood and riparian rights as described in 1936, subordinate only to prior appropriative, prescriptive and contractual rights held by Miller & Lux and associated companies.
Stevinson/East Side Canal	20,168	Pre-1914 appropriative and riparian diversions upstream on San Joaquin River from Merced River confluence.	Unclear whether US Bureau of Reclamation entered into a water rights purchase contract with Stevinson. Stevinson's diversion rights were considered subordinated to Edison Securities and Miller & Lux (California Water Project Authority, No. 8, 1939, 18), and Stevinson instead was able to arrange a supply of water for its lands via the Merced River from Merced Irrigation District under the Stevinson Contract. East Side Canal appropriation from the San Joaquin River was found to average 14,268 AF, while residual riparian rights to the San Joaquin averaged 5,900 AF.
Tranquillity & James Irrigation Districts - Fresno Slough	29,300	Riparian diversions along Fresno Slough upstream of Mendota Pool.	Diversions were subordinated to Miller & Lux rights and allowed only when San Joaquin River reached 1,350 cfs and then the districts could take just 12 percent up to a maximum of 140 cfs. Estimated face amount for these districts obtained from Table 5 of California Water Project Authority, 1936.
Edison Securities	33,127	Riparian diversions just upstream of Mendota Pool and Fresno Slough along left (south) bank of San Joaquin River	Subject of a water rights purchase contract with US Bureau of Reclamation for uncontrolled overflow riparian rights from the San Joaquin River and associated sloughs upstream of Mendota Pool, along south bank (California Water Project Authority, No. 8, 1938). Edison Securities purchased these riparian lands from the Herminghaus Estate in January 1928.
Friant to Gravelly Ford right holders	116,741	As many as 198 diversions and/or pumps of water from lands adjacent to the San Joaquin River	Rights of most of these landowners were acquired by USBR, but some of those not immediately acquired by 1939 became plaintiffs in Rank v. Krug, a suit by water right holders and groundwater pumps in this area against Friant Dam. Case decided by U.S. Supreme Court in 1957. The court determined that these water right holders collectively used about 200,000 acre-feet per year in this area of the San Joaquin River. This was the section of the river that received releases from Friant under D-990, and below Gravelly Ford, the river dried up through to the confluence with the Merced River. San Joaquin River Restoration Program Settlement Agreement states that riparian releases are now 117,000 to 126,000 acre-feet per year, consistent with "Steiner declaration."
Total Pre-1914 and Riparian Water Rights, Upper San Joaquin River	1,753,117		

Sources: State of California Water Project Authority, 1936-1939; Rank v. Krug; San Joaquin River Settlement Agreement, 2006.

San Joaquin River Riparian and Pre-1914 Consumptive Water Rights Claims

Lands east of San Joaquin River, Between Chowchilla Farms and Stevinson Colony Assumed Riparian to that Stream or its Branch Channels	Area in Acres	Estimated Average Uncontrolled Diversions, based on 1.65 acre-feet per acre
A. J. Turner	158	261
George J. Hatfield	1,293	2,133
Charles S. Howard	5,514	9,098
Charles A. Crane	2,400	3,960
Ed P. Waltz	2,640	4,356
Fred A. Solari and J.A. Turner	861	1,421
Dan L. McNamee	1,236	2,039
Dan L. McNamee	957	1,579
Martin Erreca	520	858
Nell E. Hanson	527	870
Jessie S. Potter (1)	2,270	3,746
Jessie S. Potter (2)	6,037	9,961
Totals	24,413	40,281

Source: California Water Project Authority, 1937b, 1937c.

No comments

- n/a -

No comments

- n/a -

Appendix D

**Section D.6
Post-1914 Consumptive Water Rights Claims**

Trinity River Watershed - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A029129	20341		BLUE JAY WATER ASSOCIATION	10/19/1987	20.80	Trinity	TRINITY RIVER UNDERFLOW
			BLUE JAY WATER ASSOCIATION Total		20.80		
A027206	18568	12081	BRUCE G HANEY	2/5/1982	0.60	Trinity	TRINITY RIVER
			BRUCE G HANEY Total		0.60		
A021330	14347	10037	Chad Blevins	6/10/1963	5.20	Trinity	TRINITY RIVER
			Chad Blevins Total		5.20		
A017749	11255	5749	CHARLES HIGGS	7/31/1957	16.80	Trinity	TRINITY RIVER
			CHARLES HIGGS Total		16.80		
A027969	19275	12725	CHRISTOPHER T CROSS	2/3/1984	0.20	Trinity	TRINITY RIVER
			CHRISTOPHER T CROSS Total		0.20		
A010791	6398	4625	COVINGTON MUTUAL WATER COMPANY	3/24/1944	2,171.90	Trinity	EAST FORK STUART FORK TRINITY RIVER
			COVINGTON MUTUAL WATER COMPANY Total		2,171.90		
A017743	11178	6988	DAVID COVINGTON	1/28/1964	33.30	Trinity	TRINITY RIVER
			DAVID COVINGTON Total		33.30		
A026530	18389	12111	DAVID L SULLIVAN	9/24/1980	1.10	Trinity	TRINITY RIVER UNDERFLOW
			DAVID L SULLIVAN Total		1.10		
A026529A	18429	12935	GARTH R SUNDBERG	1/22/1982	0.50	Trinity	TRINITY RIVER UNDERFLOW
			GARTH R SUNDBERG Total		0.50		
A021142	14094	8656	GEORGE PAINTER	1/28/1963	0.30	Trinity	TRINITY RIVER
			GEORGE PAINTER Total		0.30		
A029111	20233	13386	GERARD A KAZ	9/16/1987	1.20	Trinity	TRINITY RIVER UNDERFLOW
			GERARD A KAZ Total		1.20		
A029183	20269	13322	HAZEL J SCHOTT	2/3/1988	2.30	Trinity	TRINITY RIVER
			HAZEL J SCHOTT Total		2.30		
A029336	20343	13616	James Lee and Billie Jo Bonk Revocable Trust	11/9/2005	0.30	Trinity	TRINITY RIVER
			James Lee and Billie Jo Bonk Revocable Trust Total		0.30		
A026660	18369	12082	JEFFREY J BUTLER	12/10/1980	0.60	Trinity	TRINITY RIVER
			JEFFREY J BUTLER Total		0.60		
A029302	20344	13485	KATHERINE L RIDENOUR	7/18/1988	1.80	Trinity	TRINITY RIVER UNDERFLOW
			KATHERINE L RIDENOUR Total		1.80		
A024059	16579	10904	KATHY WATSON	3/3/1972	1.40	Trinity	TRINITY RIVER UNDERFLOW
			KATHY WATSON Total		1.40		
A027867	19134	12721	Ken Tamplen	9/19/1983	1.10	Trinity	TRINITY RIVER UNDERFLOW
			Ken Tamplen Total		1.10		
A017669	11106	6566	Lewiston Community Service District	6/21/1957	543.00	Trinity	TRINITY RIVER
			Lewiston Community Service District Total		543.00		
A018177	11854	6612	LEWISTON PARK MUTUAL WATER COMPANY, INC	6/11/1958	311.30	Trinity	ALDER GULCH, TRINITY RIVER
			LEWISTON PARK MUTUAL WATER COMPANY, INC Total		311.30		
A027639	18898	12674	MADELINA CORONA	1/24/1987	0.30	Trinity	TRINITY RIVER
			MADELINA CORONA Total		0.30		

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A020923	13998	8410	MARCIA OSA COATES	9/4/1962	0.30	Humboldt	TRINITY RIVER
			MARCIA OSA COATES Total		0.30		
A023097	15783	10384	MARK GIBBERSON	7/25/1968	5.60	Trinity	TRINITY RIVER
			MARK GIBBERSON Total		5.60		
A028907	20081	13096	NOELLE ROGET	9/25/1986	2.00	Trinity	TRINITY RIVER
			NOELLE ROGET Total		2.00		
A015365	9527	5059	NORMAN EVANS	6/3/1953	0.80	Trinity	TRINITY RIVER
A015366	9528	5060	NORMAN EVANS	6/3/1953	0.30	Trinity	TRINITY RIVER
			NORMAN EVANS Total		1.10		
A027855	19198	12716	RALPH M MCCOMB	8/31/1983	0.50	Trinity	TRINITY RIVER UNDERFLOW
			RALPH M MCCOMB Total		0.50		
A020084	13120	7920	ROGER F KENDELL	4/13/1961	2.20	Trinity	TRINITY RIVER
			ROGER F KENDELL Total		2.20		
A016087	10146	5302	RONALD JURIN	10/13/1954	1,642.50	Humboldt	TRINITY RIVER
			RONALD JURIN Total		1,642.50		
A015227	9531	5145	RUSSELL H HAGEN JR	3/9/1953	2.30	Humboldt	TRINITY RIVER
			RUSSELL H HAGEN JR Total		2.30		
A026531	18390	12060	STAN POFF	9/24/1980	0.40	Trinity	TRINITY RIVER UNDERFLOW
			STAN POFF Total		0.40		
A022840	15541	10386	STEPHEN DUTTON	6/30/1967	3.40	Trinity	TRINITY RIVER
			STEPHEN DUTTON Total		3.40		
A021166	14149	8691	STEVEN B PETERSON	2/18/1963	7.60	Trinity	TRINITY RIVER
			STEVEN B PETERSON Total		7.60		
A024462	17650		TRINITY VILLAGE WATER COMPANY	9/19/1973	360.00	Trinity	TRINITY RIVER
			TRINITY VILLAGE WATER COMPANY Total		360.00		
A011927	7140	3513	U S SHASTA-TRINITY NATL FOREST	6/9/1947	852.90	Trinity	EAST FORK STUART FORK TRINITY RIVER
			U S SHASTA-TRINITY NATL FOREST Total		852.90		
A021019	14077	8386	U S SIX RIVERS NATL FOREST	11/16/1962	29.00	Trinity	TRINITY RIVER
			U S SIX RIVERS NATL FOREST Total		29.00		
A005628	11967		U.S. BUREAU OF RECLAMATION	7/30/2002	3,349,943.80	Contra Costa, Trinity	OLD RIVER, TRINITY RIVER
A015374	11968		U.S. BUREAU OF RECLAMATION	7/29/2002	417,193.30	Contra Costa, Trinity	OLD RIVER, TRINITY RIVER
A015375	11969		U.S. BUREAU OF RECLAMATION	9/16/1959	3,030,761.80	Contra Costa, Trinity	Old River, TRINITY RIVER
A016767	11971		U.S. BUREAU OF RECLAMATION	7/29/2002	700,000.00	Contra Costa, Trinity	TRINITY RIVER
A017374	11973		U.S. BUREAU OF RECLAMATION	7/29/2002	1,085,966.30	Contra Costa, Trinity	TRINITY RIVER
			U.S. BUREAU OF RECLAMATION Total		8,583,865.20		
A023882	16413	10803	WADE AMMON SR	10/1/1971	4.00	Trinity	SOUTH FORK, TRINITY RIVER
			WADE AMMON SR Total		4.00		

Trinity River Watershed - Post-1914 Appropriative Water Rights

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A029410	20757		WEAVERVILLE COMMUNITY SERVICES DISTRICT	2/14/1989	870.00	Trinity	TRINITY RIVER
			WEAVERVILLE COMMUNITY SERVICES DISTRICT Total		870.00		
A028537	19864	12946	WILLIAM E HOYER	8/14/1985	0.10	Trinity	TRINITY RIVER UNDERFLOW
			WILLIAM E HOYER Total		0.10		
			Grand Total		6,590,763.10		

No comments

- n/a -

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A001300	1360	2302	1994 ORAL BABCOCK LIVING TRUST	03/29/19	3,600.00	Lassen	EAST FORK JUNIPER CREEK
A001696	1361	2395	1994 ORAL BABCOCK LIVING TRUST	03/01/20	892.60	Lassen	DARK CANYON CREEK
			1994 ORAL BABCOCK LIVING TRUST Total		4,492.60		
A005549	2891	1266	AGENCY 5	06/28/27	282.40	Siskiyou	SOUTH FORK BEAR CREEK
			AGENCY 5 Total		282.40		
A004554	2316	1602	Alan K. Nelson	11/14/35	195.00	Modoc	DUTCH FLAT CREEK
			Alan K. Nelson Total		185.00		
A002383	1170	2169	ALTURAS RANCHES LLC	06/07/21	900.00	Modoc	JUNIPER GULCH
A010079	8453	4291	ALTURAS RANCHES LLC	12/05/40	745.00	Modoc	CROOKS CANYON
A011339	7970	6443	ALTURAS RANCHES LLC	09/07/49	470.00	Modoc	BIG JUNIPER CREEK
A013526	8456	4294	ALTURAS RANCHES LLC	12/29/49	113.80	Modoc	CROOKS CANYON
A014799	9219	6071	ALTURAS RANCHES LLC	04/17/52	99.50	Modoc	CROOKS CANYON
A018047	10304	6951	ALTURAS RANCHES LLC	09/15/54	204.00	Modoc	CROOKS CANYON
A018048	10306	6952	ALTURAS RANCHES LLC	09/15/54	204.00	Modoc	CROOKS CANYON
A021557	14924	9579	ALTURAS RANCHES LLC	11/27/63	1,370.00	Modoc	UNST, UNXX
			ALTURAS RANCHES LLC Total		4,100.30		
A020606	13624	8511	ANTHONY BOKARES	02/13/62	15.00	Lassen	UNST
A022408	15210	9918	ANTHONY BOKARES	02/28/66	14.00	Lassen	UNST, UNST (2)
			ANTHONY BOKARES Total		29.00		
A027640	18903	12948	AUGUSTINO DE MARIA	01/27/83	4.20	Modoc	UNST
			AUGUSTINO DE MARIA Total		4.20		
A021194	14258	9878	BECKETT TRUST	03/14/63	0.10	Siskiyou	LAVA CRACK SPRINGS
			BECKETT TRUST Total		0.10		
A011646	8075	4939	BETTY ANN CARROLL	12/04/46	750.00	Lassen	HOLBROOK CANYON STREAM
A015526	9636	4938	BETTY ANN CARROLL	09/03/53	215.00	Lassen	HOLBROOK CANYON STREAM
			BETTY ANN CARROLL Total		965.00		
A002093	872	4360	BIG VALLEY MUTUAL WATER COMPANY	11/22/20	2,635.00	Modoc	ANTELOPE FLAT DRAINAGE AREA
A010109	6084	4361	BIG VALLEY MUTUAL WATER COMPANY	02/05/41	100.00	Modoc	ANTELOPE FLAT DRAINAGE
A010407	6083	4362	BIG VALLEY MUTUAL WATER COMPANY	03/17/42	2,865.00	Modoc	LAST CHANCE CREEK, WHALEN CREEK
			BIG VALLEY MUTUAL WATER COMPANY Total		5,600.00		
A010866	6319	4442	Black Ranch, LLC	08/22/44	184.50	Shasta	BURNEY CREEK
			Black Ranch, LLC Total		184.50		
A014605	9028	4968	BO THORENFELT	12/18/51	200.00	Lassen	UNST
			BO THORENFELT Total		200.00		
A026030	17951	11911	BRIAN J VANVORIS	06/20/79	1.90	Shasta	UNST
			BRIAN J VANVORIS Total		1.90		
A014689	9035	5250	BRYON E GIBBONS	02/27/52	30.00	Modoc	NORTH FORK GLEASON CREEK
			BRYON E GIBBONS Total		30.00		
A012845	7485	4429	CALIF DEPT OF FORESTRY & FIRE PROTECTION	12/03/48	72.40	Shasta	HATCHET CREEK
			CALIF DEPT OF FORESTRY & FIRE PROTECTION Total		72.40		
A022921	13644	9980	CALIFORNIA PINES PROPERTY OWNERS' ASSOCIATION	10/09/67	16.00	Modoc	SOUTH FORK FITZHUGH CREEK
A022922	13645	9979	CALIFORNIA PINES PROPERTY OWNERS' ASSOCIATION	10/09/67	11.00	Modoc	MIDDLE FORK FITZHUGH CREEK
			CALIFORNIA PINES PROPERTY OWNERS' ASSOCIATION Total		27.00		
A013331	9762	7206	CHARLENE E STONE	05/04/53	393.50	Shasta	HALL CREEK

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A028440	20654		CHARLENE E STONE Total		343.50		
			CHARLES A ORWICK	03/17/89	49.00	Lassen	UNST
			CHARLES A ORWICK Total		49.00		
A011102	6482	3952	CLARK FRONTIN	07/09/45	325.80	Shasta	LITTLE ROARING CREEK
			CLARK FRONTIN Total		325.80		
A026069	18571		CLEO V HUNT	08/21/79	49.00	Lassen	WILLOW CREEK
			CLEO V HUNT Total		49.00		
A025835	18599	12335	CLIFFORD DE WITT	09/27/78	38.00	Modoc	UNST
			CLIFFORD DE WITT Total		38.00		
A020320	13198	8334	CORY BOSCHEE	07/24/61	5.00	Lassen	UNST
A025713	17569	12905	CORY BOSCHEE	04/07/78	9.00	Lassen	UNST
			CORY BOSCHEE Total		14.00		
A024694	20696		CRAIG HERMSMEYER	06/03/02	27.00	Lassen	UNSP
			CRAIG HERMSMEYER Total		27.00		
A014927	9196	3036	DANIEL TANKERSLEY	07/28/52	190.00	Lassen	UNST
			DANIEL TANKERSLEY Total		190.00		
A021750	14619	9048	DANIEL K DAVIS	04/21/64	25.00	Shasta	UNST
			DANIEL K DAVIS Total		25.00		
A016506	10376	9234	DARAN V MYERS	08/08/55	279.00	Lassen	UNST, WILLOW CREEK
			DARAN V MYERS Total		279.00		
A020366	13402	9254	DAVID CRAWFORD	08/22/61	49.00	Lassen	UNST
			DAVID CRAWFORD Total		49.00		
A021064	14089	8630	David Hunt	12/06/62	24.00	Lassen	UNST
			David Hunt Total		24.00		
A022637	15852	10320	David King	11/14/66	10.00	Lassen	UNST
			David King Total		10.00		
A022762	15472	9137	DAVID E LLOYD	04/06/67	3.00	Modoc	UNST
			DAVID E LLOYD Total		3.00		
A022887	15562	10015	DELBERT GOULD	08/22/67	12.00	Modoc	UNST
			DELBERT GOULD Total		12.00		
A028571	20220		DENNIS DAUGHERTY	10/02/85	1,237.50	Lassen	CEDAR CREEK
			DENNIS DAUGHERTY Total		1,237.50		
A025231	18834	13011	DIXIE VALLEY RANCH	01/04/77	49.90	Lassen	RUSSELL DAIRY CREEK, UNST
			DIXIE VALLEY RANCH Total		49.90		
A025522	17921	11827	DON A GORDON	10/11/77	6.60	Shasta	UNST
A026108	17978	11826	DON A GORDON	10/09/79	8.00	Shasta	UNST
			DON A GORDON Total		14.60		
A021057	14056	8335	DONALD B MCKERN	12/03/62	49.00	Lassen	UNST
			DONALD B MCKERN Total		49.00		
A001503	680	531	DONALD J MARTIN	04/29/26	158.80	Shasta	FALL RIVER
			DONALD J MARTIN Total		158.80		
A013095	8315	4236	EDWARD MOHR	05/10/49	22.10	Modoc	PIT RIVER
			EDWARD MOHR Total		22.10		
A018923	12202	8637	EDWARD F BRUCE	08/19/59	4.00	Shasta	UNST
			EDWARD F BRUCE Total		4.00		

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A022804	13612	9365	ELLEN E TAYLOR ELLEN E TAYLOR Total	06/06/67	228.00	Shasta	UNST
A026243	18995	13611	ELWOOD FORD ELWOOD FORD Total	09/13/05	3.80	Shasta	UNST
A017857	11414	6589	ERNEST W BRUCE ERNEST W BRUCE Total	10/23/57	135.00	Shasta	PIT RIVER
A020025	13599	10798	EUGENE M BREZNOCK	03/09/61	198.00	Lassen	UNST
A020085	13600	8348	EUGENE M BREZNOCK EUGENE M BREZNOCK Total	04/15/61	3.50	Lassen	UNST
A025806A	018103 A	13107	FRED A COLLINS FRED A COLLINS Total	07/29/91	3.80	Shasta	UNST
A013699	8943	6444	FREDRICK ANKLIN	03/29/50	840.00	Modoc	HILTON DAIRY CREEK
A014070	8975	9266	FREDRICK ANKLIN FREDRICK ANKLIN Total	11/22/50	22.50	Modoc	HILTON CREEK
A011557	7210	6446	FROSTY ACRES INCORPORATED	09/18/46	200.00	Lassen	UNST
A011736	7052	4435	FROSTY ACRES INCORPORATED	02/18/47	40.00	Lassen	UNST, WILLOW CREEK
A011737	7053	4436	FROSTY ACRES INCORPORATED	02/18/47	3.00	Lassen	UNST
A019491	13360	8102	FROSTY ACRES INCORPORATED	06/16/60	50.00	Lassen	UNST
A021478	14999	10108	FROSTY ACRES INCORPORATED FROSTY ACRES INCORPORATED Total	09/26/63	230.00	Lassen	WILLOW CREEK
A025856	20266		GENELLE VOORHEES GENELLE VOORHEES Total	10/16/78	14.40	Shasta	UNST, WILLOW CREEK
A022399	18231	9037	GEORGE SHEPHERD GEORGE SHEPHERD Total	02/21/66	15.00	Modoc	UNST
A023826	16602	10945	GEORGE R WRIGHT GEORGE R WRIGHT Total	07/27/71	17.00	Modoc	CROOKS CANYON, UNST
A000930	428	330	GERALDINE SILVA GERALDINE SILVA Total	02/18/18	142.00	Modoc	UNST
A023073	17557		GL JOHNS 2002 LIVING TRUST GL JOHNS 2002 LIVING TRUST Total	03/24/76	49.00	Lassen	UNST
A019145	12799	8943	GOOSE VALLEY RANCH GOOSE VALLEY RANCH Total	04/04/07	4,000.00	Shasta	GOOSE CREEK
A013524	8454	4292	GREEN VALLEY ENTERPRISES	12/29/49	227.50	Modoc	CROOKS CANYON
A014757	9217	4295	GREEN VALLEY ENTERPRISES	04/17/52	167.00	Modoc	CROOKS CANYON
A016046	10303	6950	GREEN VALLEY ENTERPRISES GREEN VALLEY ENTERPRISES Total	07/18/63	408.00	Modoc	CROOKS CANYON
A026116	17974	13640	GREGORY R CALDWELL GREGORY R CALDWELL Total	04/11/06	20.00	Shasta	UNST
A013339	9669	7237	HALCUMB CEMETERY DISTRICT	05/12/53	21.30	Shasta	MONTGOMERY CREEK
A021917	15596	10635	HALCUMB CEMETERY DISTRICT HALCUMB CEMETERY DISTRICT Total	08/25/64	22.00	Shasta	MONTGOMERY CREEK
A019724	12980	9231	HAROLD W SIEMER HAROLD W SIEMER Total	09/01/60	49.00	Lassen	UNCR
A029085	20238	13367	HARRY C BRAFF	08/10/87	1.10	Modoc	UNST

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
			HARRY C BRAFF Total		1.10		
A012256	10861	6858	HARRY J & MILI TURIELLO TRUST	08/27/96	13.50	Shasta	PEACOCK CREEK
A02452	19675	10435	HARRY J & MILI TURIELLO TRUST	04/25/86	36.00	Shasta	PEACOCK CREEK
			HARRY J & MILI TURIELLO TRUST Total		49.50		
A025783	17641	12731	Henrich 2002 Trust	07/13/78	14.50	Shasta	UNSP
A028219	19379	12733	Henrich 2002 Trust	08/15/84	3.60	Shasta	UNSP
A025784A	017842 A	12732	Henrich 2002 Trust	05/16/86	5.00	Shasta	UNST
			Henrich 2002 Trust Total		23.50		
A018783	12140	8414	WOMER J ROBERTS	06/11/99	85.00	Modoc	UNST
A021280	14409	8415	WOMER J ROBERTS	05/13/63	85.00	Modoc	UNST
			WOMER J ROBERTS Total		170.00		
A003353	1768	9722	HOT SPRINGS VALLEY IRRIGATION DISTRICT	04/12/23	48,400.00	Modoc	RATTLESNAKE CREEK
A02427	15227	9723	HOT SPRINGS VALLEY IRRIGATION DISTRICT	03/17/66	20,000.00	Modoc	RATTLESNAKE CREEK
			HOT SPRINGS VALLEY IRRIGATION DISTRICT Total		68,400.00		
A021252	14278	8912	J A CONNER LIVING TRUST	04/23/63	49.00	Lassen	UNST
			J A CONNER LIVING TRUST Total		49.00		
A008627	4736	2378	J SCOTT & ELEANOR J VERMILYEA REVOCABLE TRUST 2000	04/03/36	457.00	Shasta	SHOTGUN CREEK
A021240	14262	9047	J SCOTT & ELEANOR J VERMILYEA REVOCABLE TRUST 2000	04/15/63	42.30	Shasta	UNSP, UNST
			J SCOTT & ELEANOR J VERMILYEA REVOCABLE TRUST 2000 Total		499.30		
A029000	17278	11664	JAMES H BICKFORD	02/23/76	200.00	Lassen	BEAVER CREEK, UNST
			JAMES H BICKFORD Total		200.00		
A002878	2026	1196	JANET PERRY	04/27/32	232.70	Shasta	MAT CREEK
			JANET PERRY Total		232.70		
A009609	5445	4437	JOE RUSS	06/06/39	100.00	Modoc	FRANKLIN CREEK
A009610	5446	4438	JOE RUSS	06/06/39	400.00	Siskiyou	FRANKLIN CREEK
A012005	7349	5491	JOE RUSS	07/24/47	120.00	Modoc	DRY CREEK
A020109	13413	8895	JOE RUSS	05/04/61	110.00	Modoc	UNST
A020936	14192	8896	JOE RUSS	09/11/62	20.00	Modoc	UNST
A021454	14575	6985	JOE RUSS	09/06/63	619.00	Modoc	LINNVILLE CREEK
A024016	16809	12904	JOE RUSS	04/03/72	568.00	Modoc	LINNVILLE CREEK
			JOE RUSS Total		1,937.00		
A022761	15471	9136	JOHN KAHL	04/06/67	2.00	Modoc	UNST
			JOHN KAHL Total		2.00		
A022990	16457	10697	JOHN A YOUNGER	12/16/71	680.00	Modoc	UNDR
			JOHN A YOUNGER Total		680.00		
A018657	10677	5720	JOHN ASKEW	01/27/96	2.00	Lassen	UNST
A026194	18410	13346	JOHN ASKEW	02/01/80	0.80	Lassen	UNST
			JOHN ASKEW Total		2.80		
A002227	1893	4940	JOHN B CROOK	02/23/21	5,250.00	Lassen	COYOTE FLAT DRAINAGE AREA
			JOHN B CROOK Total		5,250.00		
A004700	2608	2083	JOHN F PARRISH	09/04/40	381.80	Shasta	MAT CREEK
			JOHN F PARRISH Total		381.80		
A029321	20792		JOHN W CAPIK	08/19/88	45.00	Modoc	LINNVILLE CREEK, UNST

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A030251	21250		JOHN W CAPIK Total		45.00		
			JOHNSON CREEK DITCH USER'S ASSOCIATION	10/19/09	181.00	Shasta	UNST
			JOHNSON CREEK DITCH USER'S ASSOCIATION Total		181.00		
A028931	18350	13252	JOSEPH LOUIS OSA	02/28/79	27.00	Shasta	UNST
			JOSEPH LOUIS OSA Total		27.00		
A009761	5494	3318	JUANITA C GARDNER TRUST	11/04/39	492.50	Modoc	UNST
			JUANITA C GARDNER TRUST Total		492.50		
A021664	14735	10181	JUNIPER ACRES WATER ASSOCIATION	03/02/64	2.60	Modoc	UNSP
			JUNIPER ACRES WATER ASSOCIATION Total		2.60		
A026244	18418	12315	KEITH MACDONALD	03/03/80	1.10	Shasta	UNST
			KEITH MACDONALD Total		1.10		
A009812	3592	2179	KRAMER RANCH LLC	01/28/28	2,563.40	Lassen, Modoc	WIDOW VALLEY CREEK
A017267	10726	5192	KRAMER RANCH LLC	09/07/56	27.80	Modoc	WIDOW VALLEY CREEK
			KRAMER RANCH LLC Total		2,591.20		
A000245	190	250	LARRY R WILLMORE	02/03/16	181.00	Shasta	CLARK CREEK
			LARRY R WILLMORE Total		181.00		
A026038	18018	11918	LASSEN GOLD MINING INC	06/29/79	55.00	Lassen	UNST
A027034	18637	11923	LASSEN GOLD MINING INC	10/05/81	20.00	Lassen	UNST
			LASSEN GOLD MINING INC Total		75.00		
A024977	17063	11560	LEON URRUTIA	01/20/76	49.00	Modoc	UNST
			LEON URRUTIA Total		49.00		
A013207	8000	5072	LOOKOUT RANCH & LODGE LP	07/05/49	1,500.00	Modoc	TAYLOR CREEK
			LOOKOUT RANCH & LODGE LP Total		1,500.00		
A038610	20217		LOWELL L NOVY	10/31/85	2,790.00	Lassen	CEDAR CREEK
			LOWELL L NOVY Total		2,790.00		
A010820	6290	4188	M D & N L MYERS FAMILY 1986 REVOCABLE TR	05/18/44	90.00	Lassen	CHACE VALLEY CREEK
A013504	8430	6663	M D & N L MYERS FAMILY 1986 REVOCABLE TR	12/09/49	50.00	Lassen	UNST
			M D & N L MYERS FAMILY 1986 REVOCABLE TR Total		140.00		
A022750	15460	9138	MANUEL SOUZA	04/06/67	3.00	Modoc	UNST
A022751	15461	9169	MANUEL SOUZA	04/06/67	3.00	Modoc	UNST
A022752	15462	9172	MANUEL SOUZA	04/06/67	2.50	Modoc	UNST
A022753	15463	9212	MANUEL SOUZA	04/06/67	2.00	Modoc	UNST
A022754	15464	9131	MANUEL SOUZA	04/06/67	1.50	Modoc	UNST
A022755	15465	9139	MANUEL SOUZA	04/06/67	1.70	Modoc	UNST
A022756	15466	9128	MANUEL SOUZA	04/06/67	0.60	Modoc	UNST
A022757	15467	9168	MANUEL SOUZA	04/06/67	2.40	Modoc	UNST
A022758	15468	9175	MANUEL SOUZA	04/06/67	1.00	Modoc	UNST
A022759	15469	9135	MANUEL SOUZA	04/06/67	1.40	Modoc	UNST
A022760	15470	9134	MANUEL SOUZA	04/06/67	1.60	Modoc	UNST
			MANUEL SOUZA Total		20.70		
A020398	13622	9332	MANUELA MORRIS	09/14/61	38.00	Modoc	KRESGE CANYON
			MANUELA MORRIS Total		38.00		
A006398	3672	1554	MAPES RANCH, INC	08/07/29	4.30	Lassen	UNST
A019286	12648	7936	MAPES RANCH, INC	03/07/60	1.00	Lassen	UNST
			MAPES RANCH, INC Total		5.30		

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A013525	8455	4293	MCGARVA RANCH	12/29/49	113.00	Modoc	CROOKS CANYON
A014758	9218	6070	MCGARVA RANCH	04/17/52	93.50	Modoc	CROOKS CANYON
			MCGARVA RANCH Total		207.30		
A019743	13039	10035	MELVIN D MYERS	09/19/60	142.00	Lassen	BLITTE CREEK
			MELVIN D MYERS Total		142.00		
A028518	20218		MERRILL DAUGHERTY	04/14/88	315.00	Lassen	CEDAR CREEK
			MERRILL DAUGHERTY Total		315.00		
A000772	384	67	MICHAEL L SPAETH	10/09/19	22.30	Shasta	BY GOMNY CREEK
			MICHAEL L SPAETH Total		22.30		
A026520	18999	13439	MILANO LAND AND CATTLE CO LLC	09/13/99	49.00	Modoc	BLACKS CANYON
A026521	19000	13440	MILANO LAND AND CATTLE CO LLC	09/13/99	142.00	Modoc	BLACKS CANYON
			MILANO LAND AND CATTLE CO LLC Total		191.00		
A021448	14429	10622	MONTGOMERY CREEK COMMUNITY CHURCH	09/03/63	0.20	Shasta	MONTGOMERY CREEK
			MONTGOMERY CREEK COMMUNITY CHURCH Total		0.20		
A016216	10191	3073	MORGAN RANCH COMPANY INC	01/24/55	200.00	Modoc	UNST
			MORGAN RANCH COMPANY INC Total		200.00		
A026197	18187	12069	NELLIE M DUNBAR	02/11/80	1.00	Shasta	UNST
			NELLIE M DUNBAR Total		1.00		
A015902	9988	3233	NELSON RANCHES	06/10/54	515.00	Modoc	JIM CREEK
A021318	14730	9346	NELSON RANCHES	05/31/63	215.00	Modoc	JIM CREEK
			NELSON RANCHES Total		730.00		
A016855	10715	9989	NOR CAL LAND & CATTLE CO	01/26/56	2.00	Lassen	UNST
			NOR CAL LAND & CATTLE CO Total		2.00		
A030720	20995		OAK RUN LUMBER CO LLC	06/23/98	3.00	Shasta	UNST
			OAK RUN LUMBER CO LLC Total		3.00		
A003866	1567	627	PARKS FAMILY 1995 REVOCABLE TRUST	08/04/23	3.00	Lassen	UNXX
			PARKS FAMILY 1995 REVOCABLE TRUST Total		3.00		
A008649	4793	2440	Patricia H Bushey	04/27/36	0.60	Modoc	UNSP
			Patricia H Bushey Total		0.60		
A027005	19072	12821	PAUL R JOLLY	09/15/81	3.90	Shasta	UNST
			PAUL R JOLLY Total		3.90		
A028892	20279		Peter D Stent	06/11/91	25.00	Shasta	BEAR CREEK
			Peter D Stent Total		25.00		
A028239	18761		PHILIP R GUNSAULS	02/28/80	35.00	Modoc	HALLS CANYON
			PHILIP R GUNSAULS Total		35.00		
A008194	4668	2076	PHYLLIS A HARRIS	12/22/34	200.00	Modoc	CLEAR LAKE
			PHYLLIS A HARRIS Total		200.00		
A001538	697	353	Pickering Family Trust	05/12/24	456.20	Shasta	FALL RIVER
			Pickering Family Trust Total		456.20		
A028570	20219		Pine Creek Cattle Company	10/02/85	157.50	Lassen	CEDAR CREEK
			Pine Creek Cattle Company Total		157.50		
A024696	18118	11874	R A STANFORD	10/17/74	23.00	Modoc	THOMAS & BAYNES DITCH, UNST
			R A STANFORD Total		23.00		
A014474	8866	6313	RAMIRO CHAVEZ	09/11/51	14.00	Lassen, Modoc	KELLY DRAW, UNKNOWN
			RAMIRO CHAVEZ Total		14.00		

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A000992	2307	1711	RAY BREINER	03/29/18	837.00	Modoc	FITZHUGH CREEK
A000993	2309	1712	RAY BREINER	03/29/18	457.00	Modoc	FITZHUGH CREEK
A000994	2309	1713	RAY BREINER	03/29/18	157.00	Modoc	FITZHUGH CREEK
A001252	2310	1714	RAY BREINER	04/21/19	400.00	Modoc	UNST
A007458	4506	4879	RAY BREINER	12/08/32	706.00	Modoc	FITZHUGH CREEK
			RAY BREINER Total		2,597.00		
A027787	19030	11857	REDWOOD ROD & GUN CLUB	06/30/83	3.30	Modoc	BOWMAN SPRINGS
			REDWOOD ROD & GUN CLUB Total		3.30		
A025806B	018103 B	13132	RICHARD D WILLARD	08/11/78	2.50	Shasta	UNST
			RICHARD D WILLARD Total		2.50		
A019517	13969	9567	RICHARD E SHOEMAKER	07/06/60	44.00	Lassen	FRAZIER CREEK
			RICHARD E SHOEMAKER Total		44.00		
A000135	69	284	RICHARD L JENNINGS	09/16/15	1,428.00	Modoc	PORTUGE FLAT DRAINAGE
A000486	202	53	RICHARD L JENNINGS	09/27/16	146.00	Modoc	RALSTON CREEK
A010805	6340	3101	RICHARD L JENNINGS	07/07/44	149.00	Modoc	RALSTON GULCH
			RICHARD L JENNINGS Total		1,723.00		
A019209	13968	8686	RICHARD W CALLISON	02/02/60	126.30	Lassen	FRAZIER CREEK
			RICHARD W CALLISON Total		126.30		
A014321	8871	5241	ROBERT HEATON	07/01/58	47.10	Shasta	ROARING CREEK
			ROBERT HEATON Total		47.10		
A022203	15185	9750	ROBERT C MCDONALD	06/23/65	20.00	Lassen	UNST
			ROBERT C MCDONALD Total		20.00		
A013466	8223	6293	ROBERT C PEDOTTI	11/16/49	565.00	Modoc	RYE GRASS SWALE
A018851	12997	9869	ROBERT C PEDOTTI	07/10/59	569.00	Modoc	RYE GRASS SWALE
			ROBERT C PEDOTTI Total		1,234.00		
A002237	987	444	Robert C. Mann	01/11/26	193.30	Modoc	PIT RIVER
			Robert C. Mann Total		193.30		
A021090	14039	8599	ROBERT H MACKAY & SONS INC	12/21/62	3.50	Modoc	UNST
A021091	14040	8600	ROBERT H MACKAY & SONS INC	12/21/62	11.00	Modoc	UNST
			ROBERT H MACKAY & SONS INC Total		14.50		
A026159	18367	12239	ROGER ERICKSON	12/28/79	0.50	Modoc	CANTRELL CREEK
			ROGER ERICKSON Total		0.50		
A001164	573	318	ROLLIE L GILLIAM	02/03/19	400.00	Modoc	RYE GRASS SWALE
A003398	1769	1613	ROLLIE L GILLIAM	05/04/23	150.00	Modoc	RYE GRASS SWALE
			ROLLIE L GILLIAM Total		550.00		
A021444	14410	10692	Ronald M LaGrande	08/27/63	93.00	Modoc	COOLEY GULCH
			Ronald M LaGrande Total		93.00		
A025784B	017642 B	12412	RONALD STICE	09/16/96	3.40	Shasta	UNST
			RONALD STICE Total		3.40		
A022562	15288	9753	RONALD VIERRA	08/29/66	24.00	Lassen	UNST
			RONALD VIERRA Total		24.00		
A000596	346	252	RONALD L SCHLUTER	02/24/17	563.00	Modoc	EMIGRANT CREEK
A003050	1396	1039	RONALD L SCHLUTER	09/22/22	295.00	Modoc	UNST

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
			RONALD L SCHLUTER Total		888.00		
A020754	14061	9326	RONALD WESLEY KETLER	04/24/62	180.60	Modoc	UNST
A021405	14789	9325	RONALD WESLEY KETLER	07/23/63	55.00	Modoc	UNST, UNXX
A021908	15045	9336	RONALD WESLEY KETLER	09/17/64	45.00	Modoc	UNST
			RONALD WESLEY KETLER Total		280.60		
A000065	630	1146	SARAH WADE	03/15/32	30.70	Lassen	WILLOW CREEK
			SARAH WADE Total		30.70		
A021346	14382	8764	SHIRLEY A HUGHES TRUSTOR	06/18/63	18.00	Modoc	UNST
			SHIRLEY A HUGHES TRUSTOR Total		18.00		
A003220	1453	411	SIERRA PACIFIC INDUSTRIES	01/12/23	135.80	Shasta	NELSON CREEK
			SIERRA PACIFIC INDUSTRIES Total		135.80		
A014477	9129	4385	SL RANCH	03/23/56	200.00	Modoc	CROOKS CANYON
			SL RANCH Total		200.00		
A000980	4477	2474	SOUTH FORK IRRIGATION DISTRICT	03/09/34	17,000.00	Modoc	SOUTH FORK PIT RIVER, WEST VALLEY CREEK
A019309	12963	10603	SOUTH FORK IRRIGATION DISTRICT	03/14/60	2,240.00	Modoc	SOUTH FORK PIT RIVER, WEST VALLEY CREEK
			SOUTH FORK IRRIGATION DISTRICT Total		19,240.00		
A026955	18635	13409	Stephen Lyon	08/11/81	0.40	Shasta	UNSP
			Stephen Lyon Total		0.40		
A026795	18852	12922	STEPHEN C NELSON	04/20/81	49.00	Modoc	UNST
			STEPHEN C NELSON Total		49.00		
A016526	10828	8665	Steven Barber	08/15/55	5.40	Modoc	UNSP
A021923	14862	9173	Steven Barber	10/06/64	20.00	Modoc	UNSP
			Steven Barber Total		25.40		
A000338	137	54	SX Lowry Ranch	03/15/16	550.00	Modoc	GOVERNMENT CORRALS FLAT
A000421	865	1401	SX Lowry Ranch	08/03/16	1,550.00	Modoc	ANTELOPE FLAINS
A001108	568	4410	SX Lowry Ranch	10/05/18	380.00	Modoc	UNST
A023280	16046	10813	SX Lowry Ranch	03/13/79	2,000.00	Modoc	DOBE SWALE
A020904	14743	12437	SX Lowry Ranch	04/24/89	970.00	Modoc	UNST
			SX Lowry Ranch Total		5,450.00		
A006291	3873		TERRAL C YORK	03/17/29	500.00	Modoc	PARKER CREEK
			TERRAL C YORK Total		500.00		
A006290	3872		TERRY YORK	03/17/29	180.00	Modoc	PARKER CREEK
			TERRY YORK Total		180.00		
A021455	14781	11127	THE DENIS M ROUSE 1993 TRUST	09/10/63	34.00	Lassen	UNST (AKA HOMER JACK DITCH)
			THE DENIS M ROUSE 1993 TRUST Total		34.00		
A030197	20842	13614	THE HUNT FAMILY TRUST	11/08/05	4.50	Modoc	UNST
			THE HUNT FAMILY TRUST Total		4.50		
A020916	14574	10783	THE MCARTHUR 1969 TRUST	08/29/62	1,800.00	Lassen	EAST FORK JUNIPER CREEK, UNST
			THE MCARTHUR 1969 TRUST Total		1,800.00		
A025081	16924	11432	THOMAS M DRIGER	06/08/76	0.90	Modoc	UNST
			THOMAS M DRIGER Total		0.90		
A022935	15994	9632	TIM D BABCOCK	10/23/67	10.50	Lassen	UNST
			TIM D BABCOCK Total		10.50		
A028656	20237	13990	TIMOTHY W SKALLAND	03/19/04	6.00	Shasta	UNST (AKA INDIAN CREEK)
			TIMOTHY W SKALLAND Total		6.00		

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A020062	13147	8361	TOM GIFFORD	03/31/61	30.00	Modoc	UNST
A020063	13148	9260	TOM GIFFORD	03/31/61	42.00	Modoc	TURNER CREEK
			TOM GIFFORD Total		72.00		
A019862	13061	9279	TOMMY B. ESPERANCE	04/09/70	30.00	Lassen	UNST
			TOMMY B. ESPERANCE Total		30.00		
A000420	188	298	TRINITY MEADOWS LP	11/13/23	553.40	Shasta	HATCHET CREEK
			TRINITY MEADOWS LP Total		553.40		
A000760	852	465	U S FISH & WILDLIFE SERVICE	12/29/03	2,709.00	Modoc	PINE CREEK
A001042	853	466	U S FISH & WILDLIFE SERVICE	12/29/03	1,191.00	Modoc	PINE CREEK, STOCKDILL SLOUGH
A001321	854	13528	U S FISH & WILDLIFE SERVICE	12/29/03	8,100.00	Modoc	PARKER CREEK, STOCKDILL SLOUGH
A012263	7291	4822	U S FISH & WILDLIFE SERVICE	12/29/03	1,100.00	Modoc	PINE CREEK
			U S FISH & WILDLIFE SERVICE Total		11,100.00		
A012068	7103	3978	U S LASSEN NATL FOREST	09/04/47	1.10	Lassen	BOARD CABIN SPRING
A012069	7104	4001	U S LASSEN NATL FOREST	09/04/47	0.30	Lassen	FIVE TROUGHS SPRING
A014978	9234	4533	U S LASSEN NATL FOREST	08/19/52	0.80	Lassen	PAT MORRIS SPRING
A018840	12883	9191	U S LASSEN NATL FOREST	07/01/59	630.00	Lassen	LITTLE DAVIS CREEK, UNST
A019698	12777	7758	U S LASSEN NATL FOREST	08/22/60	0.40	Shasta	COBBLE SPRING
A019699	12778	7759	U S LASSEN NATL FOREST	08/22/60	0.40	Lassen	COVE CACHE SPRING
A019700	12779	7760	U S LASSEN NATL FOREST	08/22/60	1.10	Shasta	COYOTE SPRING
A021662	14493	8914	U S LASSEN NATL FOREST	03/02/64	1.50	Lassen	WILLOW SPRING
A021663	14494	8915	U S LASSEN NATL FOREST	03/02/64	1.30	Siskiyou	WILEY RANCH SPRINGS
A025248	17964	12076	U S LASSEN NATL FOREST	01/19/77	650.00	Lassen	BIG JACK LAKE
A025660	17965	12077	U S LASSEN NATL FOREST	01/27/78	50.00	Lassen	BIG JACK LAKE
A018105A01	14822	11220	U S LASSEN NATL FOREST	04/30/82	190.00	Shasta	PROCTOR CREEK, UNST
A018105A02	14822	11220	U S LASSEN NATL FOREST	04/30/82	40.00	Shasta	PROCTOR CREEK, UNST
A027411	20039	12932	U S LASSEN NATL FOREST	07/13/82	0.10	Shasta	SOLDIER CREEK
A027412	20040	12933	U S LASSEN NATL FOREST	07/13/82	0.20	Shasta	SOLDIER CREEK
A029987	20731		U S LASSEN NATL FOREST	08/09/91	2.80	Siskiyou	MAYFIELD SPRING
A030254	20732		U S LASSEN NATL FOREST	05/07/93	73.30	Shasta	UNST
			U S LASSEN NATL FOREST Total		1,664.10		
A009132	5320	3945	U S MODOC NATL FOREST	09/29/37	0.70	Siskiyou	HEMLOCK SPRING
A009202	5329	4577	U S MODOC NATL FOREST	12/10/37	0.70	Siskiyou	SCHONCHIN SPRING
A010841	6296	5038	U S MODOC NATL FOREST	07/18/44	0.80	Modoc	HARRIS SPRING
A012708	7536	3580	U S MODOC NATL FOREST	09/23/48	0.30	Modoc	BOTTLE CREEK, BOTTLE SPRING
A013190	7748	3581	U S MODOC NATL FOREST	06/30/49	0.40	Modoc	LAYTON SPRING
A013194	7751	4023	U S MODOC NATL FOREST	06/30/49	0.40	Modoc	COTTONWOOD FLAT SPRING
A013213	7752	4401	U S MODOC NATL FOREST	07/08/49	0.20	Lassen	UNSP
A013214	7753	4402	U S MODOC NATL FOREST	07/08/49	0.20	Modoc	UNSP
A013215	7754	4396	U S MODOC NATL FOREST	07/08/49	0.70	Lassen	UNSP
A013821	8359	3894	U S MODOC NATL FOREST	06/28/50	0.20	Modoc	HOWARDS GULCH CAMPGROUND SPRING
A014088	8664	4277	U S MODOC NATL FOREST	12/04/50	0.10	Modoc	WEST VALLEY SPRING
A014089	8665	4986	U S MODOC NATL FOREST	12/04/50	0.10	Modoc	FITZHUGH SPRING
A014090	8666	4484	U S MODOC NATL FOREST	12/04/50	0.30	Modoc	GROUSE SPRING
A014091	8742	4281	U S MODOC NATL FOREST	12/04/50	0.20	Modoc	COWHEAD SPRING
A010091	11574	6605	U S MODOC NATL FOREST	04/09/58	8.90	Modoc	UNST

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Facd Amt	County	Source
A019203	11655	6376 U S MODOC NATL FOREST		06/30/58	0.10	Modoc	UNSP
A018204	11656	6377 U S MODOC NATL FOREST		06/30/58	0.10	Modoc	UNSP
A018636	12026	6619 U S MODOC NATL FOREST		04/10/59	0.30	Lassen	RICHMAN SPRING
A019163	12503	7311 U S MODOC NATL FOREST		01/04/60	0.50	Lassen	SUMMIT SPRING
A019164	12504	6712 U S MODOC NATL FOREST		01/04/60	0.10	Modoc	HUNTER SPRING
A019165	12467	7467 U S MODOC NATL FOREST		01/04/60	0.10	Modoc	HIDDEN SPRING
A019166	12468	6713 U S MODOC NATL FOREST		01/04/60	0.20	Modoc	QUAIL SPRING
A019189	12469	7312 U S MODOC NATL FOREST		01/25/60	0.20	Lassen	CHICKEN SPRING
A019283	12505	7532 U S MODOC NATL FOREST		03/07/60	0.40	Modoc	RONEY SPRING
A019284	12506	6714 U S MODOC NATL FOREST		03/07/60	0.40	Modoc	STUDLEY SPRING
A019285	12507	7533 U S MODOC NATL FOREST		03/07/60	0.20	Modoc	HORSEHEAD SPRING
A019340	12470	6715 U S MODOC NATL FOREST		04/04/60	0.30	Modoc	HARPER SPRING
A019365	12508	7534 U S MODOC NATL FOREST		04/20/60	0.20	Modoc	FERN SPRING
A019367	12510	7314 U S MODOC NATL FOREST		04/20/60	0.20	Lassen	MUD SPRING
A019368	12511	6716 U S MODOC NATL FOREST		04/20/60	0.20	Lassen	WATER CANYON SPRING
A019369	12812	7535 U S MODOC NATL FOREST		04/20/60	0.20	Modoc	HOG GULCH SPRING
A019370	12557	6717 U S MODOC NATL FOREST		04/20/60	0.20	Lassen	DAGO SPRINGS
A019970	13069	8052 U S MODOC NATL FOREST		02/07/61	0.30	Modoc	FOX MOUNTAIN SPRING
A019971	13070	8053 U S MODOC NATL FOREST		02/07/61	0.40	Modoc	PLUM SPRING
A019972	13071	8333 U S MODOC NATL FOREST		02/07/61	7.50	Lassen	UNSP
A019973	13072	8054 U S MODOC NATL FOREST		02/07/61	0.20	Lassen	SCHOTT SPRING
A020112	13484	8055 U S MODOC NATL FOREST		05/08/61	0.10	Lassen	DEER SPRING
A020113	13485	8056 U S MODOC NATL FOREST		05/08/61	0.10	Lassen	STUMP SPRING
A020716	13706	8558 U S MODOC NATL FOREST		04/10/62	0.20	Lassen	WALKER FLAT DRAW SPRING
A020717	13707	8559 U S MODOC NATL FOREST		04/10/62	0.30	Lassen	INDIAN SPRING
A021095	14181	8841 U S MODOC NATL FOREST		01/02/63	0.20	Lassen	UNSP
A021097	14183	8842 U S MODOC NATL FOREST		01/02/63	0.20	Modoc	UNSP
A021099	14185	8843 U S MODOC NATL FOREST		01/02/63	0.20	Lassen	UNSP
A021100	14095	8653 U S MODOC NATL FOREST		01/02/63	0.20	Modoc	UNSP
A021101	14096	8592 U S MODOC NATL FOREST		01/02/63	0.30	Modoc	MUD SPRING
A021102	14097	8643 U S MODOC NATL FOREST		01/02/63	0.30	Modoc	PINE SPRING
A021103	14098	8622 U S MODOC NATL FOREST		01/02/63	0.60	Modoc	HOSKINS SPRING
A021104	14099	8623 U S MODOC NATL FOREST		01/02/63	0.80	Modoc	HEAD OF RUSH CREEK SPRING
A021105	14100	8654 U S MODOC NATL FOREST		01/02/63	0.50	Modoc	CHALK SPRING
A021165	14101	8659 U S MODOC NATL FOREST		02/18/63	0.70	Modoc	RONEY FLAT SPRING
A021491	14341	8773 U S MODOC NATL FOREST		10/07/63	0.50	Lassen	DEER SPRING
A021492	14342	8838 U S MODOC NATL FOREST		10/07/63	0.50	Lassen	BAUNSELMEIER SPRING
A021501	14422	8840 U S MODOC NATL FOREST		10/15/63	0.50	Lassen	JIMMY PACKWOOD SPRING
A021502	14489	8906 U S MODOC NATL FOREST		10/15/63	0.50	Lassen	GERIG SPRING
A021503	14536	8907 U S MODOC NATL FOREST		10/15/63	0.40	Modoc	DEEP CUT SPRING
A026211	17982	12567 U S MODOC NATL FOREST		02/20/80	0.20	Lassen	UNST
A026216	17985	12091 U S MODOC NATL FOREST		02/20/80	0.20	Lassen	UNST
A026217	17986	12092 U S MODOC NATL FOREST		02/20/80	0.20	Lassen	UNST
A026218	17987	12093 U S MODOC NATL FOREST		02/20/80	0.20	Lassen	UNST
A026220	17989	12094 U S MODOC NATL FOREST		02/20/80	0.20	Lassen	UNST

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A026221	17990	12095 U S MODOC NATL FOREST		02/20/80	0.20	Lassen	WINDMILL FLAT
A026222	17991	12096 U S MODOC NATL FOREST		02/20/80	0.10	Lassen	UNSP
A026289	18180	12097 U S MODOC NATL FOREST		04/10/80	0.20	Lassen	UNST
A026290	18182	12098 U S MODOC NATL FOREST		04/10/80	0.20	Lassen	UNST
A026348	18251	12090 U S MODOC NATL FOREST		05/14/80	0.20	Modoc	UNST
A026405	18265	12099 U S MODOC NATL FOREST		06/06/80	0.10	Modoc	SHAKE CANYON
A026477	18381	12100 U S MODOC NATL FOREST		07/29/80	0.20	Lassen	UNST
A026697	19797	13446 U S MODOC NATL FOREST		06/30/81	0.10	Modoc	UNST
A026693	19794	U S MODOC NATL FOREST		06/30/81	0.20	Modoc	UNST
A026694	19795	U S MODOC NATL FOREST		06/30/81	0.20	Modoc	UNST
A026698	19798	U S MODOC NATL FOREST		06/30/81	0.20	Lassen	UNST
A027231	18659	12568 U S MODOC NATL FOREST		03/09/82	0.20	Lassen	UNST
A027233	18661	12568 U S MODOC NATL FOREST		03/09/82	0.20	Lassen	UNST
A027234	18662	12570 U S MODOC NATL FOREST		03/09/82	0.20	Lassen	UNST
A027235	18663	12571 U S MODOC NATL FOREST		03/09/82	0.20	Lassen	COYOTE FLAT DRAW
A027236	18664	12572 U S MODOC NATL FOREST		03/09/82	0.20	Lassen	UNST
A027237	18665	12573 U S MODOC NATL FOREST		03/09/82	0.20	Lassen	UNST
A027238	18666	12574 U S MODOC NATL FOREST		03/09/82	0.20	Lassen	UNST
A027431	18853	13495 U S MODOC NATL FOREST		07/15/82	0.10	Modoc	UNST
A027647	19599	U S MODOC NATL FOREST		02/01/83	102.00	Lassen	UNST
A027648	19600	U S MODOC NATL FOREST		02/01/83	96.50	Lassen	UNST
A027732	19288	12746 U S MODOC NATL FOREST		04/27/83	0.20	Lassen	UNST
A027733	19289	12747 U S MODOC NATL FOREST		04/27/83	0.20	Lassen	UNST
A027734	19290	12748 U S MODOC NATL FOREST		04/27/83	0.20	Lassen	UNST
A027735	19291	12749 U S MODOC NATL FOREST		04/27/83	0.20	Lassen	UNST
A027737	19293	12750 U S MODOC NATL FOREST		04/27/83	0.20	Lassen	UNST
A027738	19294	12738 U S MODOC NATL FOREST		04/27/83	0.20	Lassen	UNST
A027739	19295	12752 U S MODOC NATL FOREST		04/27/83	0.20	Lassen	UNST
A027740	19296	12753 U S MODOC NATL FOREST		04/27/83	0.20	Lassen	UNST
A027741	19297	12754 U S MODOC NATL FOREST		04/27/83	0.20	Lassen	UNST
A027742	19298	12755 U S MODOC NATL FOREST		04/27/83	0.20	Lassen	UNST
A027999	19750	13062 U S MODOC NATL FOREST		03/15/84	0.10	Modoc	UNST
A028001	19752	13359 U S MODOC NATL FOREST		03/15/84	0.20	Modoc	UNST
A028002	19753	13360 U S MODOC NATL FOREST		03/15/84	0.20	Modoc	UNST
A028004	19755	13015 U S MODOC NATL FOREST		03/15/84	0.20	Modoc	UNST
A028006	19757	13016 U S MODOC NATL FOREST		03/15/84	0.20	Modoc	UNST
A028007	19758	13017 U S MODOC NATL FOREST		03/15/84	0.20	Modoc	UNST
A028008	19759	13018 U S MODOC NATL FOREST		03/15/84	0.20	Modoc	UNST
A028009	19760	13019 U S MODOC NATL FOREST		03/15/84	0.20	Modoc	UNST
A028011	19762	13361 U S MODOC NATL FOREST		03/15/84	0.20	Modoc	UNST
A028012	19763	13362 U S MODOC NATL FOREST		03/15/84	0.20	Modoc	UNST
A028014	19765	13020 U S MODOC NATL FOREST		03/15/84	0.20	Modoc	UNST
A028019	19770	13021 U S MODOC NATL FOREST		03/15/84	0.20	Modoc	UNST
A028021	19772	13493 U S MODOC NATL FOREST		03/15/84	0.20	Lassen	UNST
A028022	19773	13022 U S MODOC NATL FOREST		03/15/84	0.20	Lassen	COYOTE FLAT DRAW

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Facil Amt	County	Source
A028024	19775	13022	U S MODOC NATL FOREST	03/15/84	0.20	Modoc	STONE COAL CREEK
A028027	19778	13466	U S MODOC NATL FOREST	03/15/84	0.20	Modoc	STONE COAL CREEK
A028028	19779	13024	U S MODOC NATL FOREST	03/15/84	0.20	Modoc	UNST
A028030	19781	13025	U S MODOC NATL FOREST	03/15/84	0.20	Lassen	WALKER DRAW
A028031	19782	13397	U S MODOC NATL FOREST	03/15/84	0.20	Lassen	UNST
A028030	19751		U S MODOC NATL FOREST	03/15/84	0.20	Modoc	UNST
A028005	19756		U S MODOC NATL FOREST	03/15/84	0.20	Modoc	UNST
A028015	19766		U S MODOC NATL FOREST	03/15/84	0.20	Lassen	UNST
A028016	19767		U S MODOC NATL FOREST	03/15/84	0.20	Lassen	UNST
A028017	19769		U S MODOC NATL FOREST	03/15/84	0.20	Lassen	CARY SPRING
A028018	19769		U S MODOC NATL FOREST	03/15/84	0.20	Modoc	UNST
A028026	19777		U S MODOC NATL FOREST	03/15/84	0.20	Modoc	MUD SPRING
A028029	19780		U S MODOC NATL FOREST	03/15/84	0.20	Modoc	UNST
A028032	19783		U S MODOC NATL FOREST	03/15/84	0.20	Modoc	UNST
A028033	19784		U S MODOC NATL FOREST	03/15/84	0.20	Modoc	DEEP CUT SPRINGS
A028398	19671	13366	U S MODOC NATL FOREST	02/26/85	0.10	Lassen	UNST
A028400	19673	13374	U S MODOC NATL FOREST	02/26/85	0.10	Modoc	UNST
A028638	20023	13496	U S MODOC NATL FOREST	03/20/86	0.20	Lassen	UNST
A028841	20026	13453	U S MODOC NATL FOREST	03/20/86	0.20	Lassen	AMBROSE CANYON
A028845	20030	13365	U S MODOC NATL FOREST	03/20/86	0.20	Lassen	UNST
A028846	20031	13392	U S MODOC NATL FOREST	03/20/86	0.20	Lassen	UNST
A028837	20022		U S MODOC NATL FOREST	03/20/86	0.20	Modoc	UNST
A028839	20024		U S MODOC NATL FOREST	03/20/86	0.20	Modoc	UNST
A028840	20025		U S MODOC NATL FOREST	03/20/86	0.20	Modoc	UNST
A028842	20027		U S MODOC NATL FOREST	03/20/86	0.20	Lassen	UNST
A028843	20028		U S MODOC NATL FOREST	03/20/86	0.20	Lassen	SOUTH FORK JUNIPER CREEK
A028844	20029		U S MODOC NATL FOREST	03/20/86	0.20	Lassen	UNST
A028847	20032	13545	U S MODOC NATL FOREST	07/11/03	0.20	Lassen	UNST
A026899	19799	13550	U S MODOC NATL FOREST	07/22/03	0.20	Lassen	UNST
A026895	19796	13556	U S MODOC NATL FOREST	09/10/03	0.20	Modoc	ROCK SPRINGS
A028399	19672	13567	U S MODOC NATL FOREST	09/24/03	0.10	Lassen	UNST
A027432	18854	13574	U S MODOC NATL FOREST	11/24/03	0.10	Modoc	YELLOWJACKET SPRING
A028936	20021	13573	U S MODOC NATL FOREST	11/24/03	0.20	Lassen	UNST
U S MODOC NATL FOREST Total					247.00		
A013019	7741	3782	U S SHASTA-TRINITY NATL FOREST	04/05/49	0.20	Shasta	DEEP CREEK
A013186	8047	3783	U S SHASTA-TRINITY NATL FOREST	06/30/49	1.60	Siskiyou	SLAGGER CAMP SPRING
A013187	8048	3784	U S SHASTA-TRINITY NATL FOREST	06/30/49	1.60	Siskiyou	LOST SPRINGS
A013189	8050	3786	U S SHASTA-TRINITY NATL FOREST	06/30/49	1.40	Siskiyou	BEAR SPRINGS
A020670	13640	8641	U S SHASTA-TRINITY NATL FOREST	03/21/62	1.00	Siskiyou	BELNAP SPRING
A020671	13641	8674	U S SHASTA-TRINITY NATL FOREST	03/21/62	0.90	Siskiyou	HARRIS SPRING
U S SHASTA-TRINITY NATL FOREST Total					6.70		
A016866	10676	6381	US BUREAU OF LAND MANAGEMENT	01/31/56	1.50	Lassen	UNST
A016869	10689	6382	US BUREAU OF LAND MANAGEMENT	01/31/56	10.80	Lassen	UNST
A016869	10659	6078	US BUREAU OF LAND MANAGEMENT	01/31/56	2.90	Lassen	BALD MOUNTAIN LAKE
A016870	10640	6079	US BUREAU OF LAND MANAGEMENT	01/31/56	0.20	Lassen	UNDR

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A016871	10641	6080	US BUREAU OF LAND MANAGEMENT	01/31/56	4.00	Lassen	UNST
A016873	10642	6081	US BUREAU OF LAND MANAGEMENT	01/31/56	4.40	Lassen	NORTH GULCH, SPRING GULCH, UNST
A016899	10719	6540	US BUREAU OF LAND MANAGEMENT	02/20/56	10.00	Shasta	UNST
A0181058	14822	11219	US BUREAU OF LAND MANAGEMENT	04/24/58	180.00	Shasta	PROCTER CREEK, UNST
A020527	13928	8530	US BUREAU OF LAND MANAGEMENT	12/15/61	54.70	Shasta	UNST
A020528	13601	8140	US BUREAU OF LAND MANAGEMENT	12/15/61	6.00	Shasta	UNST
A020933	13992	8568	US BUREAU OF LAND MANAGEMENT	09/06/62	6.70	Shasta	UNST
A020998	14034	8590	US BUREAU OF LAND MANAGEMENT	10/29/62	4.70	Shasta	UNST
A021060	14078	8581	US BUREAU OF LAND MANAGEMENT	12/03/62	0.10	Shasta	UNST
A021774	14725	9233	US BUREAU OF LAND MANAGEMENT	05/18/64	6.40	Shasta	UNST
A027616	19354	12775	US BUREAU OF LAND MANAGEMENT	12/23/82	1,533.00	Lassen	DRY CREEK
A020088	19503	13261	US BUREAU OF LAND MANAGEMENT	03/29/84	0.80	Modoc	UNST
A028091	19506	13085	US BUREAU OF LAND MANAGEMENT	03/29/84	0.60	Modoc	UNST
A028093	19508	13371	US BUREAU OF LAND MANAGEMENT	03/29/84	0.90	Lassen	UNST
A028095	19510	13086	US BUREAU OF LAND MANAGEMENT	03/29/84	1.00	Modoc	UNST
A028096	19511	13087	US BUREAU OF LAND MANAGEMENT	03/29/84	0.40	Modoc	UNST
A028098	19512	13303	US BUREAU OF LAND MANAGEMENT	03/29/84	0.80	Lassen	UNST
A028099	19513	13262	US BUREAU OF LAND MANAGEMENT	03/29/84	1.20	Lassen	UNST
A028089	19504		US BUREAU OF LAND MANAGEMENT	03/29/84	3.00	Modoc	UNST
A028090	19505		US BUREAU OF LAND MANAGEMENT	03/29/84	1.00	Modoc	UNST
A028094	19507		US BUREAU OF LAND MANAGEMENT	03/29/84	1.10	Lassen	UNST
A028261	19536	13349	US BUREAU OF LAND MANAGEMENT	10/01/84	1.20	Modoc	UNST
A028264	19539	13370	US BUREAU OF LAND MANAGEMENT	10/01/84	0.90	Lassen	UNST
A028265	19540	13373	US BUREAU OF LAND MANAGEMENT	10/01/84	0.30	Lassen	UNST
A028270	19545	13364	US BUREAU OF LAND MANAGEMENT	10/01/84	0.90	Modoc	UNST
A028271	19546	13391	US BUREAU OF LAND MANAGEMENT	10/01/84	1.20	Modoc	UNST
A028272	19547	13358	US BUREAU OF LAND MANAGEMENT	10/01/84	0.20	Modoc	UNST
A028273	19548	13318	US BUREAU OF LAND MANAGEMENT	10/01/84	0.30	Lassen	UNST
A028274	19549	13335	US BUREAU OF LAND MANAGEMENT	10/01/84	0.40	Lassen	UNST
A028275	19550	13376	US BUREAU OF LAND MANAGEMENT	10/01/84	0.80	Lassen	UNST
A028276	19551	13334	US BUREAU OF LAND MANAGEMENT	10/01/84	0.40	Lassen	UNST
A028262	19537		US BUREAU OF LAND MANAGEMENT	10/01/84	1.10	Lassen	UNST
A028701	19953	13464	US BUREAU OF LAND MANAGEMENT	01/03/86	1.00	Modoc	UNST
A028702	19954	13227	US BUREAU OF LAND MANAGEMENT	01/03/86	1.20	Lassen	UNST
A028703	19955	13330	US BUREAU OF LAND MANAGEMENT	01/03/86	0.70	Lassen	UNST
A028704	19956	13336	US BUREAU OF LAND MANAGEMENT	01/03/86	0.40	Modoc	UNST
A028709	19961	13319	US BUREAU OF LAND MANAGEMENT	01/03/86	0.60	Lassen	UNST
A028706	19958		US BUREAU OF LAND MANAGEMENT	01/03/86	5.20	Lassen	UNST
A028717	19946	13341	US BUREAU OF LAND MANAGEMENT	01/14/86	0.90	Lassen	UNST
A028718	19947	13084	US BUREAU OF LAND MANAGEMENT	01/14/86	0.80	Lassen	UNST
A028721	19950	13343	US BUREAU OF LAND MANAGEMENT	01/14/86	1.10	Modoc	UNST
A028893	20111	13372	US BUREAU OF LAND MANAGEMENT	09/08/86	0.40	Modoc	UNST
A028894	20112	13297	US BUREAU OF LAND MANAGEMENT	09/08/86	1.10	Modoc	UNST
A029230	20724		US BUREAU OF LAND MANAGEMENT	04/19/88	1.30	Lassen	UNST
A029232	20725		US BUREAU OF LAND MANAGEMENT	04/19/88	1.30	Lassen	UNST

Pit River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Facd Amt	County	Source
A029589	20649	13333	US BUREAU OF LAND MANAGEMENT	10/16/89	0.40	Lassen	UNST
A021051	21129		US BUREAU OF LAND MANAGEMENT	05/12/00	6.00	Modoc	UNST
A021052	21130		US BUREAU OF LAND MANAGEMENT	05/12/00	9.00	Modoc	UNST
A021053	21131		US BUREAU OF LAND MANAGEMENT	05/12/00	15.00	Modoc	UNST
A028258	19533	13555	US BUREAU OF LAND MANAGEMENT	09/10/03	0.40	Lassen	UNST
A028257	19532	13572	US BUREAU OF LAND MANAGEMENT	11/24/03	0.60	Lassen	UNST
A028259	19534	13652	US BUREAU OF LAND MANAGEMENT	06/30/06	0.80	Lassen	UNST
A028256	19531	13673	US BUREAU OF LAND MANAGEMENT	10/23/06	0.60	Lassen	UNST
			US BUREAU OF LAND MANAGEMENT Total		1,892.10		
A005604	3240	1087	WARREN L WEBER	01/13/28	136.20	Modoc	DRY CREEK
			WARREN L WEBER Total		136.20		
A025140	17110	11557	WILLIAM PAPEZ	09/01/76	8.50	Modoc	UNST
A027961	19258	12760	WILLIAM PAPEZ	01/26/84	3.50	Modoc	UNST
			WILLIAM PAPEZ Total		12.00		
A027438	19320		WILLIAM C PROCK	07/16/82	229.00	Modoc	UNST
			WILLIAM C PROCK Total		229.00		
			Grand Total		166,380.90		

Feather River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A012398	8208	5317	AMY POWELL-REILLY	10/13/49	0.30	Plumas	UNSP
			AMY POWELL-REILLY Total		0.30		
A028202	19382	12743	APRIL L KEENAN	08/01/84	0.30	Plumas	UNST
			APRIL L KEENAN Total		0.30		
A040025	8864	4105	ASSOCIATION OF THOMPSON LAKE	10/02/40	5.10	Plumas	THOMPSON LAKE
A029432	20487		ASSOCIATION OF THOMPSON LAKE	03/08/89	20.00	Plumas	THOMPSON LAKE
			ASSOCIATION OF THOMPSON LAKE Total		25.10		
A009275	5190	2732	BERNICE C TERRY	04/15/38	4.50	Plumas	CROMBERG SPRING
			BERNICE C TERRY Total		4.50		
A012394	7599	3752	BIG MEADOWS INC	03/09/48	41.30	Plumas	UNSP
			BIG MEADOWS INC Total		41.30		
A015111	8442	6153	BOB CARTER	12/10/52	1.70	Plumas	UNSP
			BOB CARTER Total		1.70		
A010349	5964	2936	BRYAN P PITCAVAGE	12/31/41	21.30	Plumas	CLEAR CREEK
			BRYAN P PITCAVAGE Total		21.30		
A020786	14328	8802	BUCKS LAKE LODGE	05/22/62	0.10	Plumas	UNSP, UNST
			BUCKS LAKE LODGE Total		0.10		
A014583	9845	8347	BUCKS LAKE LODGES INCORPORATED	11/20/51	4.20	Plumas	UNST
			BUCKS LAKE LODGES INCORPORATED Total		4.20		
A011477	5689	3905	BUCKS LAKE SUMMER WATER ASSOCIATION	07/22/46	0.60	Plumas	UNST
A021842	14893	9171	BUCKS LAKE SUMMER WATER ASSOCIATION	07/09/84	0.40	Plumas	UNST
			BUCKS LAKE SUMMER WATER ASSOCIATION Total		1.00		
A007370	4083	2235	CALIF DEPT OF TRANSPORTATION	03/08/32	2.20	Plumas	UNSP
A016380	10367	5872	CALIF DEPT OF TRANSPORTATION	05/17/55	3.40	Sierra	UNSP
			CALIF DEPT OF TRANSPORTATION Total		5.60		
A005630	15476		CALIF DEPT OF WATER RESOURCES	07/30/27	1,393,568.50	Butte, Contra Costa, Sacramento	FEATHER RIVER, ITALIAN SLOUGH, SACRAMENTO RIVER DELTA CHANNELS
A014443	16479		CALIF DEPT OF WATER RESOURCES	08/24/51	9,004,510.20	Butte, Contra Costa	FEATHER RIVER, SACRAMENTO SAN JOAQUIN DELTA CHANNELS

Feather River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A016951	14587	9389	CALIF DEPT OF WATER RESOURCES	03/20/56	18,200.00	Plumas	INDIAN CREEK
A016952	12945	9152	CALIF DEPT OF WATER RESOURCES	03/20/56	30,000.00	Plumas	LITTLE LAST CHANCE CREEK
A018844	12946	9928	CALIF DEPT OF WATER RESOURCES	07/06/59	4,962.00	Plumas	LITTLE LAST CHANCE CREEK
A020117	14688	10975	CALIF DEPT OF WATER RESOURCES	05/09/61	3,400.00	Plumas	INDIAN CREEK
A016990	15254		CALIF DEPT OF WATER RESOURCES	01/03/67	49,000.00	Plumas	BIG GRIZZLY CREEK
A021443	15295		CALIF DEPT OF WATER RESOURCES	01/05/67	34,000.00	Plumas	BIG GRIZZLY CREEK
CALIF DEPT OF WATER RESOURCES Total					10,537,640.70		
A012548	7491	3530	CAMP TIMBERWOLF IMPROVEMENT COMMITTEE	06/16/48	0.40	Plumas	UNSP
CAMP TIMBERWOLF IMPROVEMENT COMMITTEE Total					0.40		
A007003	3886	1575	CAROL A RHODEHOUSE	07/10/31	3,330.30	Plumas	BLACKHAWK CREEK
CAROL A RHODEHOUSE Total					3,330.30		
A019730	12871	10458	CASIMIR JATCZAK	09/07/60	0.20	Plumas	UNST
CASIMIR JATCZAK Total					0.20		
A010011	5685	2581	CITY OF PORTOLA	04/08/43	875.90	Plumas	WILLOW CREEK
A017069	12282	10013	CITY OF PORTOLA	08/03/56	600.00	Plumas	UNSP (\$), UNSP (7)
CITY OF PORTOLA Total					1,475.90		
A012900	7594	4841	Collin Harris	01/17/49	126.00	Sierra	ANTELOPE CREEK
Collin Harris Total					126.00		
A029127	20591		COZETTE E GRAHAM	10/14/87	18.70	Plumas	TWELVE MILE RAVINE, UNST
COZETTE E GRAHAM Total					18.70		
A007978	4430	2682	DANIEL WILSON	06/15/34	2.20	Plumas	INDIAN CREEK
DANIEL WILSON Total					2.20		
A019121	13930	8392	DANIEL H CLIFTON	12/04/59	0.40	Sierra	TREASURE SPRING, TREASURE SPRINGS CREEK
DANIEL H CLIFTON Total					0.40		
A015967	10328	7268	DANNY WILSON	10/05/53	0.20	Butte	BALSAM CREEK
DANNY WILSON Total					0.20		
A017314	11195	8371	DARLA J WOJCIK FAMILY TRUST	10/08/56	1.90	Butte	OREGON GULCH

Feather River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Facu Amt	County	Source
			DARLA J WOJCIK FAMILY TRUST Total		1.90		
A009972	5640	3476	DAVID C NORTON	08/09/40	16.20	Plumas	UNSP
A014018	8784	9609	DAVID C NORTON	10/25/50	3.50	Plumas	UNSP
			DAVID C NORTON Total		19.70		
A004122	2107	2023	DAVID K LEE	05/15/40	135.80	Plumas	COLD SPRING, KINGS CREEK
A005171	2866	2024	DAVID K LEE	05/15/40	91.70	Plumas	SUNFLOWER FLAT CREEK
			DAVID K LEE Total		227.50		
A017739	11215	6958	DAVID ROBERT OSTLER	07/24/57	1.10	Sierra	UNSP
			DAVID ROBERT OSTLER Total		1.10		
A006728	3882	2143	DAWN INSTITUTE OF SCIENCE & ART	07/11/30	8.40	Plumas	UNSP
A009968	5884		DAWN INSTITUTE OF SCIENCE & ART	07/22/93	1.30	Plumas	UNSP
			DAWN INSTITUTE OF SCIENCE & ART Total		9.70		
A017195	11014	5884	DAWN M JONES	07/20/56	0.20	Plumas	UNST
			DAWN M JONES Total		0.20		
A016436	10623	6036	DEAN PANFILI	06/23/55	630.80	Plumas	LONG VALLEY CREEK
			DEAN PANFILI Total		630.80		
A001024	497	217	DELBERT H LEHR	07/17/18	108.60	Plumas	UNXX
A011786	6906	3421	DELBERT H LEHR	03/19/47	312.00	Plumas	EAST BRANCH OF NORTH FORK FEATHER RIVER
			DELBERT H LEHR Total		420.60		
A016583	10326	7291	Derek C Anderson	06/07/65	3.50	Plumas	UNST
			Derek C Anderson Total		3.50		
A021361	14791	9026	DEWEY S RAVENSCROFT	06/25/63	5.00	Plumas	TEEN CANYON
			DEWEY S RAVENSCROFT Total		5.00		
A029537	20577	13827	DIANE MONTGOMERY	01/10/11	35.00	Sierra	UNST
			DIANE MONTGOMERY Total		35.00		
A026571	18470	13746	Donald A Wallace	10/07/80	89.00	Sierra	SIERRA VALLEY CHANNELS
			Donald A Wallace Total		89.00		
A017963	11625	6601	DUSTIN F DOYLE	01/28/58	0.10	Plumas	UNST
			DUSTIN F DOYLE Total		0.10		
A011271	6535	3737	ELLIOT P SMART	01/31/46	1.60	Plumas	WATERING TROUGH SPRING
			ELLIOT P SMART Total		1.60		
A008964	4958	2564	EST OF WILLIAM JAMES DAWSON JR	05/06/37	5.60	Plumas	UNST
			EST OF WILLIAM JAMES DAWSON JR Total		5.60		
A017132	10832	5918	Est. of Martin A. Poss	06/14/56	0.20	Plumas	UNST
			Est. of Martin A. Poss Total		0.20		
A008460	4682	2223	Feather River Land Trust, a Cal Nonprofit	10/03/59	200.00	Plumas	TAYLOR LAKE
A012844	7617	9165	Feather River Land Trust, a Cal Nonprofit	12/03/48	100.00	Plumas	TAYLOR LAKE
			Feather River Land Trust, a Cal Nonprofit Total		300.00		

Feather River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Facu Amt	County	Source
A026942	20121		FIVE BEARS HYDRO, INC	08/06/81	1,448.00	Plumas	SOUTH BRANCH WARD CREEK
A027349	20122		FIVE BEARS HYDRO, INC	06/09/82	5,791.80	Plumas	SOUTH BRANCH WARD CREEK
			FIVE BEARS HYDRO, INC Total		7,239.80		
A009616	5470	2570	FRAZIER CREEK WATER ASSOCIATION	06/14/39	112.20	Butte	EAST BRANCH FRAZIER CREEK, WEST BRANCH FRAZIER CREEK
			FRAZIER CREEK WATER ASSOCIATION Total		112.20		
A008996	5022	4494	FREELANDER TRUST	06/14/37	412.70	Plumas	CLEAR CREEK, OWL CREEK
A017303	12796	7821	FREELANDER TRUST	08/03/66	467.50	Plumas	CLEAR CREEK, OWL CREEK
			FREELANDER TRUST Total		880.20		
A015571	10136	7096	GARY L BROWN	10/07/53	607.00	Plumas	INDIAN CREEK
			GARY L BROWN Total		607.00		
A018968	13221	7798	GENE ALEXANDER	09/04/59	0.10	Plumas	UNST
			GENE ALEXANDER Total		0.10		
A010963	6386	3323	GENE H FISHER	01/26/48	27.40	Butte	ROMA CREEK
			GENE H FISHER Total		27.40		
A008495	4785	2340	GRAEAGLE LAND & WATER COMPANY	11/14/35	11,464.70	Plumas	GRAY EAGLE CREEK, LONG LAKE
A008496	4785	2341	GRAEAGLE LAND & WATER COMPANY	11/14/35	2,895.50	Plumas	GRAY EAGLE CREEK
			GRAEAGLE LAND & WATER COMPANY Total		14,360.20		
A004022	1978	2010	GRAY EAGLE LODGE	06/11/24	5.40	Plumas	UNSP
A004023	1979	1042	GRAY EAGLE LODGE	08/14/31	610.90	Plumas	GRAY EAGLE CREEK
			GRAY EAGLE LODGE Total		616.30		
A021216	14766	9215	GRIZZLY LAKE RESORT IMPROVEMENT DISTRICT	04/01/63	42.00	Plumas	HUMBUG CREEK
			GRIZZLY LAKE RESORT IMPROVEMENT DISTRICT Total		42.00		
A017171	11030	6181	HAROLD D FRANCIS	07/11/56	0.20	Plumas	UNST
			HAROLD D FRANCIS Total		0.20		
A017471	11399	7881	HYDE FAMILY 1990 TRUST	02/20/57	5.40	Plumas	UNST
			HYDE FAMILY 1990 TRUST Total		5.40		
A023364	16585		JAMES D BAKER	10/07/69	0.40	Sierra	TREASURE SPRING, TREASURE SPRING CREEK
			JAMES D BAKER Total		0.40		
A017160	10997	5889	JAMES F RUTHERFORD	12/02/04	0.20	Plumas	UNST
			JAMES F RUTHERFORD Total		0.20		
A027754	19252	12757	JAMES P ROBBINS	05/12/83	3.40	Plumas	UNSP
			JAMES P ROBBINS Total		3.40		

Feather River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Facu Amt	County	Source
A012122	7659	3486	JEANNETTE S SASSER	10/08/47	0.50	Plumas	CROMBERG SPRING
			JEANNETTE S SASSER Total		0.50		
A017231	10894	6053	JEFFERY L WILSON	08/10/56	22.40	Plumas	JACKASS CREEK
			JEFFERY L WILSON Total		22.40		
A001712	730	1128	JOAN ESCALANTE	03/06/20	1.10	Butte	UNST
			JOAN ESCALANTE Total		1.10		
A015071	9932	5288	JOHN J GILLAM	11/03/52	144.80	Plumas	HARVEY RavINE
			JOHN J GILLAM Total		144.80		
A020468	13751	8748	JOHN P SCHMIDT	11/06/61	0.20	Plumas	UNST
			JOHN P SCHMIDT Total		0.20		
A024048	16589	11004	Kathy L McDonell	06/05/80	0.30	Plumas	CROMBERG SPRING
A025089	17679	11895	Kathy L McDonell	02/26/85	1.00	Plumas	CROMBERG SPRING
			Kathy L McDonell Total		1.30		
A006723	3634	2500	Kovach Trust	07/08/30	1,809.00	Butte	EMPIRE CREEK
			Kovach Trust Total		1,809.00		
A011753	7180	5086	LAKE MADRONE WATER DISTRICT	03/04/47	1.70	Butte	FERN DELL CREEK
A030657	21027		LAKE MADRONE WATER DISTRICT	10/07/97	200.00	Butte	BERRY CREEK
			LAKE MADRONE WATER DISTRICT Total		201.70		
A023880	16107	10828	LAKE OROVILLE INVESTMENT GROUP LLC	08/14/70	9.50	Butte	UNST
			LAKE OROVILLE INVESTMENT GROUP LLC Total		9.50		
A018149	11610	7646	LARRY MCMULLAN	05/22/58	0.20	Plumas	UNSP
			LARRY MCMULLAN Total		0.20		
A012117	7658	3484	Laura Rowan Peake	10/02/47	0.30	Plumas	CROMBERG SPRING
			Laura Rowan Peake Total		0.30		
A023924	16402	10760	LDS Recreation Properties LLC	11/18/71	57.70	Sierra	BONITA CREEK, UNST
			LDS Recreation Properties LLC Total		57.70		
A029901	20707		Lewis Van Vleck	06/12/89	44.50	Sierra	SIERRA VALLEY CHANNELS
			Lewis Van Vleck Total		44.50		
A005996	3203	1067	LOREN PERKINS	07/27/28	217.20	Plumas	UNCR
A009886	5589	2625	LOREN PERKINS	04/29/40	202.70	Plumas	UNCR
			LOREN PERKINS Total		419.90		
A016529A	10428	007026A	LOREN V PERKINS LIVING TRUST	08/17/55	5.10	Butte	CARTER RavINE
A016530	10429	7027	LOREN V PERKINS LIVING TRUST	08/17/55	0.70	Butte	CARTER RavINE
			LOREN V PERKINS LIVING TRUST Total		5.80		
A005015	2623	2118	LOTTS LAKE ASSOCIATION	05/13/26	0.20	Plumas	UNSP
			LOTTS LAKE ASSOCIATION Total		0.20		
A023964	16180	10365	LOUIS A PAVEN	07/22/70	403.00	Sierra	BIG SPRING, SMALL SPRING

Feather River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Facu Amt	County	Source
			LOUIS A PAYEN Total		403.00		
A011713	6995	3586	MARGUERITE A MOHIUDDIN	02/03/47	7.70	Plumas	UNSP
			MARGUERITE A MOHIUDDIN Total		7.70		
A0165298	10428	0070268	MARK PHILLIPS	08/17/58	6.50	Butte	UNSP
			MARK PHILLIPS Total		6.50		
A022485	15693	10425	MARK A GLOISTEIN	06/06/66	20.00	Sierra	UNST
			MARK A GLOISTEIN Total		20.00		
A014807	9846	4942	MARK D EVANS	05/15/52	0.20	Plumas	UNST
			MARK D EVANS Total		0.20		
A023260A	15932	11069	MARK L SCOTT	11/26/80	17.00	Butte	UNST
			MARK L SCOTT Total		17.00		
A008422	4644	2423	Mary Ann Nash	08/21/35	9.00	Butte	OGDEN CREEK
			Mary Ann Nash Total		9.00		
A000685	312	166	MASSACK WATER USERS ASSOCIATION	05/18/17	5.60	Plumas	UNSP
A024644	20513		MASSACK WATER USERS ASSOCIATION	09/18/89	1.70	Plumas	UNSP
			MASSACK WATER USERS ASSOCIATION Total		7.30		
A015570	10135	7055	MC INTYRE RANCHING INC	10/07/53	758.70	Plumas	INDIAN CREEK
			MC INTYRE RANCHING INC Total		758.70		
A019090	13222	7708	MICHAEL MONAHAN	11/20/59	0.20	Plumas	UNST
			MICHAEL MONAHAN Total		0.20		
A011243	6994	4540	MICHAEL NEWSON	12/26/45	0.10	Plumas	UNSP
			MICHAEL NEWSON Total		0.10		
A006469	3446	1600	MICHAEL D GRANT	10/28/29	0.70	Plumas	UNSP
A011201	6472	3482	MICHAEL D GRANT	11/01/45	17.90	Plumas	UNSP
			MICHAEL D GRANT Total		18.60		
A024815	18294	12167	MIGUEL AUBAN	12/01/08	1.40	Plumas	UNSP
			MIGUEL AUBAN Total		1.40		
A024421	17166	11470	MIGUEL AUBEN	07/26/73	2.00	Plumas	UNST
			MIGUEL AUBEN Total		2.00		
A031433	21285		MINERAL RESOURCES LLC	06/06/11	46.00	Butte	UNST
			MINERAL RESOURCES LLC Total		46.00		
A004281	2443	1232	MIRIAM C BARKER	10/28/24	5.10	Plumas	LITTLE GRAY EAGLE CREEK
			MIRIAM C BARKER Total		5.10		
A030596	20954	13840	NADINE M BASS	11/08/11	19.00	Sierra	UNST
			NADINE M BASS Total		19.00		
A010917	6402	3113	NORMAN F ROBERTS	11/21/44	1.10	Plumas	UNSP
			NORMAN F ROBERTS Total		1.10		
A020303	13340	8417	NORMAN R COTE	07/14/61	0.40	Plumas	UNST
			NORMAN R COTE Total		0.40		

Feather River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A014113	11518		North Yuba Water District	08/18/58	624,084.30	Butte, Plumas	LOST CREEK, SOUTH FORK FEATHER RIVER
			North Yuba Water District Total		624,084.30		
A026904	18878		OKIZU FOUNDATION	07/03/61	49.00	Butte	BERRY CREEK, UNST
A031379			OKIZU FOUNDATION	12/17/02	40.00	Butte	BERRY CREEK, UNST
			OKIZU FOUNDATION Total		89.00		
A019233	13931	8393	PAUL CUETO	02/15/60	0.40	Sierra	TREASURE SPRING, TREASURE SPRING CREEK
			PAUL CUETO Total		0.40		
A011397	6637	3381	PERRY GREENE	05/14/46	2.40	Plumas	UNSP
			PERRY GREENE Total		2.40		
A012279	7286	3603	PETER SENTER	01/30/48	0.10	Plumas	UNSP
			PETER SENTER Total		0.10		
A014653	9216	4183	PG&E	01/22/52	0.60	Plumas	UNST
			PG&E Total		0.60		
A011585	6656	3638	R C K RANCH LLC	10/09/46	464.10	Plumas	MORRIS SLOUGH
			R C K RANCH LLC Total		464.10		
A017776	11243	6014	RALPH F BECKER	08/16/57	2.20	Plumas	UNSP
			RALPH F BECKER Total		2.20		
A019265	13932	8394	RANDY JENSEN	02/28/60	0.40	Sierra	TREASURE SPRING, TREASURE SPRING CREEK
			RANDY JENSEN Total		0.40		
A007526	4213	2065	REGENTS OF THE UNIVERSITY OF CALIFORNIA	03/29/23	1.90	Plumas	SCHNEIDER CREEK
			REGENTS OF THE UNIVERSITY OF CALIFORNIA Total		1.90		
A019750	13241	8020	RICHARD GREIN	09/23/60	0.10	Plumas	UNSP
			RICHARD GREIN Total		0.10		
A004234	2125	631	RICHARD L SCHWENDINGER	09/24/24	1.70	Plumas	RUSSEL SPRING, UNSP (3)
			RICHARD L SCHWENDINGER Total		1.70		
A009207	5218	2284	ROBERT RITTER	12/22/37	0.30	Plumas	CROMBERG SPRING
			ROBERT RITTER Total		0.30		
A023260C	16932	11071	ROBERT TEICHMAN	11/26/60	0.20	Butte	UNST
			ROBERT TEICHMAN Total		0.20		
A011976	7075	6680	ROBERT A JONES	06/10/63	18.80	Plumas	UNSP
			ROBERT A JONES Total		18.80		
A004261	2148	732	ROBERT B BECKWITH	10/16/24	0.70	Plumas	UNSP
A020432	13824	9217	ROBERT B BECKWITH	01/18/91	0.90	Plumas	UNSP

Feather River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
			ROBERT B BECKWITH Total		1.20		
A027688	19665	13174	ROBERT J PALOWODA	03/11/83	0.10	Plumas	UNST
			ROBERT J PALOWODA Total		0.10		
A023500	17476	11505	ROBERT S CONOVER	09/02/77	0.50	Plumas	UNST
			ROBERT S CONOVER Total		0.50		
A009274	5189	2193	ROBERT W ELFEN	04/15/38	0.60	Plumas	CROMBERG SPRING
A009392	5116	2572	ROBERT W ELFEN	08/18/38	0.60	Plumas	CROMBERG SPRING
			ROBERT W ELFEN Total		1.20		
A016910	10730	5905	ROBERT W STEIN	02/28/66	140.00	Plumas	BIG GRIZZLY CREEK
			ROBERT W STEIN Total		140.00		
A019653	12990	9223	RON CARPENTER	08/09/60	166.50	Plumas	HAUNS CREEK
			RON CARPENTER Total		166.50		
A020911	14297	8961	RONALD DREISBACH	08/27/62	76.00	Butte	GRIZZLY CREEK
			RONALD DREISBACH Total		76.00		
A014760	9210	5515	RUSSELL C WESTOVER JR	04/17/52	0.60	Plumas	UNSP
			RUSSELL C WESTOVER JR Total		0.60		
A022855	15751	10561	SEAN CUNNINGHAM	12/31/75	452.40	Plumas	MILL CREEK
			SEAN CUNNINGHAM Total		452.40		
A017870	11564	9566	SHIRLEY ISHAM	11/01/57	33.00	Plumas	MOSQUITO SPRINGS
			SHIRLEY ISHAM Total		33.00		
A016520	10670	9872	SIERRA BIBLE CAMP INC	08/12/56	19.20	Plumas	UNSP
			SIERRA BIBLE CAMP INC Total		19.20		
A009690	5443	3114	SIERRA PACIFIC HOLDING COMPANY	08/08/29	150.00	Butte	GRUBBS CREEK, LITTLE FREY CREEK
			SIERRA PACIFIC HOLDING COMPANY Total		150.00		
A006412	3643	1485	SOPER COMPANY	08/17/20	17.00	Yuba	STICKNER SPRING
A014218	8611	4300	SOPER COMPANY	03/29/51	3.40	Plumas	UNSP
A014219	8612	4301	SOPER COMPANY	03/29/51	48.00	Plumas	MOSES CREEK
			SOPER COMPANY Total		68.40		
A021440	14485	10038	SOPER COMPANY, A DELAWARE CORPORATION	08/22/63	2.20	Plumas	UNSP
			SOPER COMPANY, A DELAWARE CORPORATION Total		2.20		
A002142	1268		SOUTH FEATHER WATER & POWER AGENCY	12/17/20	5,000.00	Butte	LOST CREEK
A002778	2492		SOUTH FEATHER WATER & POWER AGENCY	09/06/22	31,148.90	Butte	LOST CREEK
A002979	1271		SOUTH FEATHER WATER & POWER AGENCY	08/12/22	131,935.80	Butte	LOST CREEK
A001651	1267		SOUTH FEATHER WATER & POWER AGENCY	01/05/23	145,508.40	Plumas	SOUTH FORK FEATHER RIVER
			SOUTH FEATHER WATER & POWER AGENCY Total		315,593.10		
A025060	20656		Squirrel Creek, LLC	07/07/87	9.00	Plumas	BEAR CREEK
			Squirrel Creek, LLC Total		9.00		

Feather River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A014864	9192	6512	THE CAMP TIMBERWOLF IMPROVMENT COMM, INC	06/18/52	1.50	Plumas	UNSP
			THE CAMP TIMBERWOLF IMPROVMENT COMM, INC Total		1.50		
A001739	1911	845	THERMALITO WATER AND SEWER DISTRICT	03/29/20	8,200.00	Butte	CONCOW CREEK
A003040	1912	737	THERMALITO WATER AND SEWER DISTRICT	09/16/22	8,200.00	Butte	CONCOW CREEK
			THERMALITO WATER AND SEWER DISTRICT Total		16,400.00		
A011205	6989	3483	THOMAS E NOLTE	11/07/49	1.10	Plumas	CROMBERG SPRING
			THOMAS E NOLTE Total		1.10		
A014810	9849	5616	TIME EADE	05/15/52	0.10	Plumas	UNST
			TIME EADE Total		0.10		
A016582	10535	6631	TOMMIE D MASSENGILL	09/06/59	2.30	Plumas	UNST
			TOMMIE D MASSENGILL Total		2.30		
A006171	3243	1089	TRAVIS O MCWILLIAMS	01/28/29	36.70	Butte	BRANCH OF BUSHMAN CREEK
			TRAVIS O MCWILLIAMS Total		36.70		
A009293	5181	2548	U S FOREST SERVICE	05/16/38	17.90	Sierra	UNSP
A014228	8709	3968	U S FOREST SERVICE	04/04/51	0.30	Sierra	UNSP
A014281	8800	4915	U S FOREST SERVICE	09/02/51	0.30	Sierra	UNSP
A014282	8801	4947	U S FOREST SERVICE	05/02/51	1.50	Sierra	LEWIS MILL GUARD STATION SPRING
A014283	8802	5334	U S FOREST SERVICE	05/02/51	0.90	Sierra	SARDINE LOOKOUT SPRING
A014284	8803	4701	U S FOREST SERVICE	05/02/51	0.30	Sierra	UNSP
A014285	8804	4186	U S FOREST SERVICE	05/02/51	0.70	Plumas	UNSP
A014286	8805	5013	U S FOREST SERVICE	09/02/51	1.20	Sierra	UNSP
A014287	8806	4922	U S FOREST SERVICE	05/02/51	0.60	Sierra	UNSP
A023225	16015	10230	U S FOREST SERVICE	01/30/69	0.60	Plumas	HORSETROUGH SPRING
A023226	16014	10274	U S FOREST SERVICE	01/30/69	0.80	Plumas	BECKWORTH SPRING
A027284	18875		U S FOREST SERVICE	04/07/82	32.00	Sierra	CARMAN CREEK, UNST
			U S FOREST SERVICE Total		56.80		

Feather River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A019416	12655	8021	U S LASSEN NATL FOREST	05/05/60	120.00	Plumas	MORRIS LAKE
A019417	12656	8022	U S LASSEN NATL FOREST	05/05/60	27.00	Plumas	GRASSY LAKE
A019418	12657	8023	U S LASSEN NATL FOREST	05/05/60	27.00	Plumas	SADDLE LAKE
A019419	12658	8024	U S LASSEN NATL FOREST	05/05/60	8.00	Plumas	LONG LAKE
A020429	13430	8025	U S LASSEN NATL FOREST	10/06/61	3.40	Butte	UNSP
A021083	14154	8026	U S LASSEN NATL FOREST	12/14/62	34.00	Plumas	SPRING VALLEY LAKE
U S LASSEN NATL FOREST Total					219.40		
A008990	5028	2332	U S PLUMAS NATL FOREST	06/05/37	3.10	Plumas	UNCR
A008991	5029	2930	U S PLUMAS NATL FOREST	06/05/37	0.70	Plumas	UNSP
A009514	5369	3736	U S PLUMAS NATL FOREST	03/01/39	33.60	Butte	FOLEY GULCH, MOUNTAIN HOUSE CREEK
A003918	2625	861	U S PLUMAS NATL FOREST	05/24/39	23.40	Plumas	TOLLGATE CREEK
A009734	5826	3747	U S PLUMAS NATL FOREST	09/22/39	4.90	Plumas	UNST
A009770	5559	4894	U S PLUMAS NATL FOREST	11/21/39	4.70	Plumas	UNSP
A010726	6216	2968	U S PLUMAS NATL FOREST	11/05/43	0.90	Plumas	UNSP
A011146	6509	3339	U S PLUMAS NATL FOREST	09/06/45	3.00	Plumas	UNSP
A011907	7171	6503	U S PLUMAS NATL FOREST	05/27/47	1.70	Plumas	UNST
A012038	7092	5500	U S PLUMAS NATL FOREST	08/13/47	2.80	Plumas	KLING RAVINE
A012535	7401	3605	U S PLUMAS NATL FOREST	06/04/48	6.10	Plumas	UNSP
A013625	8291	5325	U S PLUMAS NATL FOREST	03/10/50	4.70	Plumas	COLD SPRINGS
A014761	9211	5070	U S PLUMAS NATL FOREST	04/17/52	0.30	Plumas	UNST
A014815	10916	6076	U S PLUMAS NATL FOREST	05/20/52	540.00	Plumas	SNAKE LAKE
A015676	9796	5371	U S PLUMAS NATL FOREST	01/08/54	0.30	Plumas	FAINT SPRING
A016200	10940	8222	U S PLUMAS NATL FOREST	01/12/55	12.30	Plumas	CLUB CRIBEN

Feather River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A017074	10784	6101	U S PLUMAS NATL FOREST	08/04/56	0.70	Plumas	LINSP
A017832	11562	6924	U S PLUMAS NATL FOREST	09/23/57	0.30	Plumas	LINSP
A018188	11617	6281	U S PLUMAS NATL FOREST	07/17/58	0.20	Plumas	UNST
A018413	11822	6885	U S PLUMAS NATL FOREST	11/14/58	0.70	Butte	LINSP
A019239	12414	10996	U S PLUMAS NATL FOREST	02/16/60	0.90	Plumas	WEST BRANCH WHITEHORSE CREEK
A019586	12604	7673	U S PLUMAS NATL FOREST	07/28/60	0.70	Butte	BEAR RANCH L O SPRING
A019587	12605	7674	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	RIDGE SPRING
A019588	12606	7675	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	STONY CREEK SPRING
A019589	12607	7676	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	CHIPMUNK SPRING
A019590	12608	7677	U S PLUMAS NATL FOREST	07/28/60	0.20	Plumas	POISON CREEK SPRING
A019591	12609	8061	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	BEAR SPRING
A019592	12610	7678	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	CROCKER CUT-OFF SPRING
A019593	12611	7679	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	LITTLE DIXIE SPRING
A019594	12612	7680	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	DOYLE SPRING
A019596	12614	7682	U S PLUMAS NATL FOREST	07/28/60	0.20	Plumas	JENKINS #3 SPRING
A019597	12615	7683	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	GRANITE SPRING
A019598	12616	7684	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	PLINCO SPRING
A019599	12617	7685	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	CHASE SPRING
A019600	12618	8063	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	COVOTE SPRING
A019601	12619	7686	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	SQUAW CAMP SPRING
A019602	12620	7687	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	HORSE SHOE SPRING
A019603	12621	7688	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	HORTON CANYON SPRING
A019604	12622	8063	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	JUNIPER SPRING

Feather River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Facu Amt	County	Source
A019605	12623	7689	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	FITCH CANYON SPRING
A019606	12624	7690	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	MAHOGANY SPRING
A019607	12625	7691	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	JENKINS #2 SPRING
A019608	12626	8064	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	MIDWAY HOUSE SPRING
A019609	12627	7692	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	DOWING CABIN SPRING
A019610	12628	7693	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	JUNIPER SPRING
A019611	12629	8065	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	HOG SPRING
A019612	12630	7694	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	JOHNSON MILL SPRING
A019613	12631	7695	U S PLUMAS NATL FOREST	07/28/60	0.70	Butte	SPOON RAVINE SPRING
A019614	12632	7696	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	LONE SPRING
A019615	12633	7697	U S PLUMAS NATL FOREST	07/28/60	0.40	Plumas	SECTION 15 SPRING
A019617	12635	7699	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	SQUAW SUPPRESSION CAMP SPRING
A019619	12637	8066	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	RATTLESNAKE SPRING
A019620	12638	8067	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	CEDAR SPRING
A019621	12639	8068	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	PINE TREE SPRING
A019622	12640	7700	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	GALEPPI SPRING
A019623	12641	7701	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	MURDOCK CROSSING SPRING
A019624	12642	7702	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	SQUAW VALLEY SPRING
A019625	12643	7703	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	BASS #1 SPRING
A019626	12644	7704	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	SOUTH TROUGH SPRING
A019627	12645	7710	U S PLUMAS NATL FOREST	07/28/60	0.70	Plumas	DAVIDSON MINE SPRING
A019628	12646	8305	U S PLUMAS NATL FOREST	07/28/60	0.30	Plumas	SQUAW CANYON SPRING
A020852	13351	8617	U S PLUMAS NATL FOREST	07/12/62	1.60	Plumas	UNSP

Feather River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A021295	14364	8995	U S PLUMAS NATL FOREST	08/29/63	0.20	Plumas	BLAKELESS SPRING #2
A021296	14365	8982	U S PLUMAS NATL FOREST	08/29/63	0.80	Plumas	CHASE ENCLOSURE SPRING #2
A021297	14366	8996	U S PLUMAS NATL FOREST	08/29/63	0.80	Plumas	CHASE ENCLOSURE SPRING #1
A021304	14367	8968	U S PLUMAS NATL FOREST	05/29/63	0.80	Plumas	BULSON SPRING NO 3
A021305	14368	8969	U S PLUMAS NATL FOREST	05/29/63	0.80	Plumas	BULSON SPRING NO 2
A021306	14369	8970	U S PLUMAS NATL FOREST	05/29/63	0.80	Plumas	BULSON SPRING NO 1
A021307	14370	8971	U S PLUMAS NATL FOREST	08/29/63	0.60	Plumas	BLAKELESS SPRING NO 4
A021308	14371	8972	U S PLUMAS NATL FOREST	08/29/63	0.30	Plumas	BLAKELESS SPRING NO 1
A021312	14372	8984	U S PLUMAS NATL FOREST	08/29/63	0.50	Plumas	BIG BUCK SPRING
A021313	14373	9004	U S PLUMAS NATL FOREST	08/29/63	1.70	Plumas	HEADQUARTERS SPRING #1, HEADQUARTERS SPRINGS #2&3
A021314	14244	8997	U S PLUMAS NATL FOREST	08/29/63	0.80	Plumas	TROSI CANYON SPRING
A021316	14374	8986	U S PLUMAS NATL FOREST	08/29/63	1.50	Plumas	BIG PINE SPRING
A021317	14375	8999	U S PLUMAS NATL FOREST	08/29/63	0.40	Plumas	CEDAR CANYON SPRING
A022187	15225	8986	U S PLUMAS NATL FOREST	06/10/69	0.10	Plumas	UNST
A024263	16728	10955	U S PLUMAS NATL FOREST	12/19/72	9.00	Plumas	UNSP
A026877	18796		U S PLUMAS NATL FOREST	06/17/61	42.00	Plumas	DOTTA CANYON
			U S PLUMAS NATL FOREST Total		720.60		
A019565	12818	9877	USA-USDA FOREST SERVICE	01/02/09	0.80	Plumas	UNNAMED SPRING
			USA-USDA FOREST SERVICE Total		0.80		
A020529	13891	9187	VERDA F LEE FAMILY DATED 4/11/2001	12/18/61	54.00	Plumas	UNSP
			VERDA F LEE FAMILY DATED 4/11/2001 Total		54.00		
A028992	20339		WALLACE FAMILY TRUST	03/20/87	184.00	Sierra	SIERRA VALLEY CHANNELS
			WALLACE FAMILY TRUST Total		184.00		
A011516	7110	2738	WAYNE RANKIN	05/20/53	108.60	Plumas	BERRY CREEK
			WAYNE RANKIN Total		108.60		
A014113	11518		Yuba County Water District	12/28/50	330,861.98	Butte, Sutter, Plumas	SOUTH FORK FEATHER RIVER, LOST CREEK, FEATHER RIVER

Feather River - Post-1914 Appropriative Water Rights

No comments
- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Facu Amt	County	Source
			Yuba County Water District Total		330,861.50		
			Grand Total		11,862,602.48		

Yuba River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A003426	1371	1140	Appropriative	Licensed	ALBERT P STIEFEL ALBERT P STIEFEL Total	11/08/22	87.10 87.10	Butte	UNST, WYMAN RAVINE
A016725	10685	6660	Appropriative	Licensed	ALLEGHANY COUNTY WATER DISTRICT ALLEGHANY COUNTY WATER DISTRICT Total	04/18/02	12.00 12.00	Sierra	UNSP
A016724	10441	7079	Appropriative	Licensed	ALLEN C UPTON ALLEN C UPTON Total	11/08/55	1.00 1.00	Butte	WYANDOTTE CREEK
A028393	20887		Appropriative	Permitted	ALLEN F MOORE ALLEN F MOORE Total	02/22/85	3.00 3.00	Yuba	DRY CREEK, UNSP
A025086	17517	11958	Appropriative	Licensed	ANANDA CHURCH OF SELF REALIZATION	06/16/76	43.20	Nevada	UNST
A028680	20373		Appropriative	Permitted	ANANDA CHURCH OF SELF REALIZATION ANANDA CHURCH OF SELF REALIZATION Total	12/24/85	29.30 72.50	Nevada	UNST
A024624	17031	13124	Appropriative	Licensed	ANDERSON AND ANDERSON INC	06/25/75	25.00	Nevada	UNST
A027748	19166	13125	Appropriative	Licensed	ANDERSON AND ANDERSON INC ANDERSON AND ANDERSON INC Total	05/05/83	1.00 26.00	Nevada	UNST
A028403	20927		Appropriative	Permitted	ANNA MAY ROSE ANNA MAY ROSE Total	03/07/85	2.00 2.00	Yuba	DRY CREEK, UNST
A020234	21008		Appropriative	Permitted	AUBURN SKI CLUB INC AUBURN SKI CLUB INC Total	03/15/93	122.00 122.00	Nevada	UPPER CASTLE CREEK
A025584	17400	11440	Appropriative	Licensed	Bank of America Bank of America Total	11/29/77	9.60 9.60	Yuba	UNST
A006099	3220	1080	Appropriative	Licensed	BENJAMIN N BORSOFF BENJAMIN N BORSOFF Total	10/19/28	17.90 17.90	Yuba	EAST BRANCH RICH GULCH
A018175	11802	6611	Appropriative	Licensed	BERNICE ROSENLOF BERNICE ROSENLOF Total	06/10/98	12.30 12.50	Nevada	UNST
A019562	12917	7493	Appropriative	Licensed	BILL AABERG BILL AABERG Total	07/20/60	0.30 0.30	Sierra	UNST
A024530	17274	11238	Appropriative	Licensed	BILLY G CAROTHERS BILLY G CAROTHERS Total	01/21/74	10.00 10.00	Nevada	SWEETLAND CREEK
A020521	13657	8703	Appropriative	Licensed	BITNEY SPRINGS LLC BITNEY SPRINGS LLC Total	12/11/61	14.00 14.00	Nevada	UNST
A026408	18310	12193	Appropriative	Licensed	BOB LATTA BOB LATTA Total	06/06/80	0.80 0.80	Sierra	HOWARD CREEK, NORTH YUBA RIVER

Yuba River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A005590	2913	814	Appropriative	Licensed	BRADLEY T SHARPE	07/01/27	2.20	Yuba	WEST BRANCH RICH GULCH
A005597	2914	815	Appropriative	Licensed	BRADLEY T SHARPE	09/07/27	18.10	Yuba	WEST BRANCH RICH GULCH
A006096	3218	1084	Appropriative	Licensed	BRADLEY T SHARPE	10/19/28	1.00	Yuba	WEST BRANCH RICH GULCH
A006097	3219	1085	Appropriative	Licensed	BRADLEY T SHARPE	10/19/28	17.90	Yuba	WEST BRANCH RICH GULCH
					BRADLEY T SHARPE Total		39.20		
A020485	13927	8368	Appropriative	Licensed	Brian Brackbill	11/08/61	0.60	Sierra	Unnamed Stream
					Brian Brackbill Total		0.60		
A019980	12915	7492	Appropriative	Licensed	BRIAN G JACOBS	07/23/60	0.20	Sierra	UNST
					BRIAN G JACOBS Total		0.20		
A008986	5083	2162	Appropriative	Licensed	BROWNS VALLEY IRRIGATION DISTRICT	03/01/41	2,171.90	Yuba	TENNESSEE CREEK
A013130	8649	13608	Appropriative	Licensed	BROWNS VALLEY IRRIGATION DISTRICT	08/31/05	20,000.00	Yuba	DRY CREEK
A013873	9703	13609	Appropriative	Licensed	BROWNS VALLEY IRRIGATION DISTRICT	08/31/05	31,900.00	Yuba	DRY CREEK
A023757	16792	13610	Appropriative	Licensed	BROWNS VALLEY IRRIGATION DISTRICT	08/31/05	11,000.00	Yuba	DRY CREEK
					BROWNS VALLEY IRRIGATION DISTRICT Total		65,071.90		
A023134	15964	10995	Appropriative	Licensed	BRUCE K JORDAN	09/18/68	0.90	Nevada	UNSP
					BRUCE K JORDAN Total		0.90		
A024293	15835	10700	Appropriative	Licensed	BRUCE L RAYNER	01/30/73	1.80	Nevada	MOSQUITO CREEK
					BRUCE L RAYNER Total		1.80		
A029103	20550	13712	Appropriative	Licensed	CAL-WESTERN RECONVEYANCE CORPORATION	05/09/07	6.70	Butte	ROBINSON RAVINE
					CAL-WESTERN RECONVEYANCE CORPORATION Total		6.70		
A013870	8369	4804	Appropriative	Licensed	CALIF DEPT OF FORESTRY AND FIRE PROTECTION	07/27/50	2.40	Nevada	UNSP
					CALIF DEPT OF FORESTRY AND FIRE PROTECTION Total		2.40		
A020427	13564	7019	Appropriative	Licensed	CAROL BROOKS	10/05/61	0.60	Sierra	UNSP
					CAROL BROOKS Total		0.60		
A016874	10804	9323	Appropriative	Licensed	CAROL B DARDICK	01/31/56	21.40	Nevada	UNST
					CAROL B DARDICK Total		21.40		
A019282	12436	7189	Appropriative	Licensed	CATHOLIC YOUTH ORGANIZATION	03/04/60	3.40	Yuba	UNSP
					CATHOLIC YOUTH ORGANIZATION Total		3.40		
A024183	10804	10883	Appropriative	Licensed	CHARLES FOWLER	09/15/72	0.10	Nevada	LEFT OVER SPRING
					CHARLES FOWLER Total		0.10		
A024598	18997	13267	Appropriative	Licensed	CHARLES A JOHNSON	02/21/74	2.20	Nevada	UNSP

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A028191	20013		Appropriative	Permitted	CHARLES A JOHNSON Total		2.20		
					CHEROKEE NEVADA CORPORATION	11/21/94	1,445.00	Sierra	UNST
					CHEROKEE NEVADA CORPORATION Total		1,445.00		
A019561	12916	7540	Appropriative	Licensed	CHRISTIAN HUNTINGTON	07/20/60	0.20	Sierra	UNST
					CHRISTIAN HUNTINGTON Total		0.20		
A014960	9302	7082	Appropriative	Licensed	Christopher W Miller	08/12/52	0.40	Flacer	UNSP
					Christopher W Miller Total		0.40		
A026117	18434	12293	Appropriative	Licensed	CITY OF NEVADA CITY	10/17/79	53.70	Nevada	LITTLE DEER CREEK, UNST
					CITY OF NEVADA CITY Total		53.70		
A021159	14239	9010	Appropriative	Licensed	CONSTANCE C CLOVER	02/13/63	1.00	Sierra	UNSP
					CONSTANCE C CLOVER Total		1.00		
A005880	3102	2172	Appropriative	Licensed	COUGHLAN FAMILY RANCH	04/16/28	1,013.60	Nevada	BONNIE RAVINE, GLENWON RAVINE, ROBERTS CREEK
					COUGHLAN FAMILY RANCH Total		1,013.60		
A023111	15803	10206	Appropriative	Licensed	CRAIG LABADIE	08/13/66	0.80	Sierra	UNST
					CRAIG LABADIE Total		0.80		
A004731	2393	733	Appropriative	Licensed	CYRUS M ROLLINS	08/12/25	2.40	Sierra	UNSP
A006120	3232	1309	Appropriative	Licensed	CYRUS M ROLLINS	11/13/28	1.70	Sierra	UNST
					CYRUS M ROLLINS Total		4.10		
A023082	15977	10901	Appropriative	Licensed	DAN T THOMPSON	07/10/68	10.20	Nevada	KENTUCKY RAVINE
					DAN T THOMPSON Total		10.20		
A021554	14793	9832	Appropriative	Licensed	DANIEL MASON	11/27/63	18.00	Nevada	FRENCH CORRAL CREEK
					DANIEL MASON Total		18.00		
A021672	14830	9700	Appropriative	Licensed	DANIEL J GUYER	03/05/64	140.00	Sierra	UNST
					DANIEL J GUYER Total		140.00		
A017285	11045	7214	Appropriative	Licensed	DAVE KING	09/20/56	37.00	Nevada	KENTUCKY RAVINE
					DAVE KING Total		37.00		
A019710	12873	10129	Appropriative	Licensed	David Grenell	08/24/60	1.10	Sierra	THOMAS ELLIS SPRING #3, THOMAS ELLIS SPRING #4
					David Grenell Total		1.10		
A025514	16108	10245	Appropriative	Licensed	DAVID HERSHBERGER	05/20/70	0.30	Nevada	UNSP
A026069	17908	12157	Appropriative	Licensed	DAVID HERSHBERGER	08/14/79	0.60	Nevada	UNSP
					DAVID HERSHBERGER Total		0.90		
A019025	12515	7832	Appropriative	Licensed	DAVID RUMSEY	10/09/59	0.20	Sierra	UNSP
					DAVID RUMSEY Total		0.20		
A020313	13946	8660	Appropriative	Licensed	DAVID WALSH	07/21/61	0.20	Sierra	UNST
					DAVID WALSH Total		0.20		
A022928	15954	10996	Appropriative	Licensed	DAVID B JORDON	10/13/67	0.90	Nevada	UNSP
					DAVID B JORDON Total		0.90		
A027876	19125	12696	Appropriative	Licensed	DAVID B PEDERSON	09/15/83	1.40	Yuba	UNST
					DAVID B PEDERSON Total		1.40		
A016558	11367	8127	Appropriative	Licensed	DAVID C BREWER	08/29/55	4.20	Nevada	LITTLE ROCK CREEK
					DAVID C BREWER Total		4.20		

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A022898	15669	11110	Appropriative	Licensed	DAVID K DAVISON	08/28/67	4.70	Sierra	HUNGRY MOUTH CANYON
					DAVID K DAVISON Total		4.70		
A025105	17076	11251	Appropriative	Licensed	DAVID W MARKS	07/19/76	11.00	Nevada	KENTUCKY RAVINE
					DAVID W MARKS Total		11.00		
A021598	14416	8825	Appropriative	Licensed	DAWN B VINJE	01/15/64	18.00	Yuba	UNST
					DAWN B VINJE Total		18.00		
A019390	12911	8910	Appropriative	Licensed	DENISE STEBLER	04/26/60	1.60	Sierra	ROCK CREEK
					DENISE STEBLER Total		1.60		
A022566	15575	9996	Appropriative	Licensed	DIANE W ROLLINS	04/14/72	20.00	Sierra	DRURY RAVINE
					DIANE W ROLLINS Total		20.00		
A010009	5687	4866	Appropriative	Licensed	DICKEY EXPLORATION COMPANY	09/23/40	97.00	Sierra	WET RAVINE
					DICKEY EXPLORATION COMPANY Total		97.00		
A023535	16409	11027	Appropriative	Licensed	DIRK C REED	06/24/70	15.70	Nevada	UNST, WILLOW VALLEY CREEK
					DIRK C REED Total		15.70		
A090332	21118		Appropriative	Permitted	DONNER SUMMIT PUBLIC UTILITY DISTRICT	02/08/94	664.00	Nevada	LAKE ANGELA
					DONNER SUMMIT PUBLIC UTILITY DISTRICT Total		664.00		
A025719	17010	12075	Appropriative	Licensed	DOROTHEA SELBY	04/17/78	13.90	Yuba	UNST
					DOROTHEA SELBY Total		13.90		
A028988	20947		Appropriative	Permitted	Dorothy Pencik	03/16/87	24.00	Sierra	OAK VALLEY CREEK
					Dorothy Pencik Total		24.00		
A020808	13929	8700	Appropriative	Licensed	DOROTHY L VENDLEY	07/19/68	9.20	Nevada	SPRING CREEK
					DOROTHY L VENDLEY Total		9.20		
A009827	9663	2650	Appropriative	Licensed	DOWNIEVILLE PUBLIC UTILITY DISTRICT	05/15/01	114.00	Sierra	PAULBY CREEK
					DOWNIEVILLE PUBLIC UTILITY DISTRICT Total		114.00		
A026227	17973	11822	Appropriative	Licensed	DUANE FRED LEE	02/21/80	2.60	Nevada	UNST
					DUANE FRED LEE Total		2.60		
A022735	15630	10005	Appropriative	Licensed	DUANE T NICHOLSON	03/05/73	4.50	Yuba	UNST
					DUANE T NICHOLSON Total		4.50		
A020146	13371	8148	Appropriative	Licensed	DWAYNE M DOBBINS	08/24/61	0.20	Nevada	UNSP
					DWAYNE M DOBBINS Total		0.20		
A024876	17136	11423	Appropriative	Licensed	EDWARD CARTER	09/10/75	2.20	Yuba	UNST
					EDWARD CARTER Total		2.20		
A020291	13386	9922	Appropriative	Licensed	ELLEN DAVIS	05/12/72	102.00	Yuba	LITTLE DRY CREEK
					ELLEN DAVIS Total		102.00		
A015415	9591	9978	Appropriative	Licensed	Eric Christopher Dunisch	07/16/53	0.40	Placer	UNSP
					Eric Christopher Dunisch Total		0.40		
A013594	7966	4185	Appropriative	Licensed	ERMA B BELLETT	02/20/50	61.00	Nevada	UNST

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A019722	8313	4184	Appropriative	Licensed	ERMA B BELLETT	06/05/90	19.00	Nevada	UNST
					ERMA B BELLETT Total		80.00		
A019723	13031	9257	Appropriative	Licensed	ERNEST LOCATELLI	08/31/60	6.50	Sierra	MINE TUNNEL
					ERNEST LOCATELLI Total		6.50		
A020340	13854	8677	Appropriative	Licensed	Estate of Luella Debruin	08/02/61	4.90	Nevada	FRENCH CORRAL CREEK, UNST
A022900	15557	10027	Appropriative	Licensed	Estate of Luella Debruin	09/01/67	5.30	Nevada	UNST
					Estate of Luella Debruin Total		10.20		
A003932	1725	3267	Appropriative	Licensed	FAR VIEW ENTERPRISES INC	03/27/23	191.90	Butte	KINGS CREEK, LINCOLN HOUSE RAVINE
A016151	10611	7713	Appropriative	Licensed	FAR VIEW ENTERPRISES INC	11/23/54	90.00	Butte	LINCOLN HOUSE RAVINE
					FAR VIEW ENTERPRISES INC Total		241.90		
A017987	11400	6918	Appropriative	Licensed	FELLOWSHIP OF FRIENDS, INC	11/20/57	2.40	Yuba	UNST
A023519	15990	9584	Appropriative	Licensed	FELLOWSHIP OF FRIENDS, INC	07/06/66	3.20	Yuba	UNST
A025865	17749	13546	Appropriative	Licensed	FELLOWSHIP OF FRIENDS, INC	07/17/03	40.00	Yuba	WOODS CREEK
A027042	19277	13547	Appropriative	Licensed	FELLOWSHIP OF FRIENDS, INC	07/17/03	16.00	Yuba	UNST
A027043	19278	13548	Appropriative	Licensed	FELLOWSHIP OF FRIENDS, INC	07/17/03	42.00	Yuba	WOODS CREEK
					FELLOWSHIP OF FRIENDS, INC Total		103.60		
A007217	4420	2197	Appropriative	Licensed	FLORENCE B VON PLATEN	03/28/32	9.50	Nevada	UNXX
					FLORENCE B VON PLATEN Total		8.50		
A020310	13945	9349	Appropriative	Licensed	PORREST THOMAS	07/19/61	0.60	Sierra	UNSP
					PORREST THOMAS Total		0.60		
A010186	5823	2957	Appropriative	Licensed	PORSYTHE FAMILY TRUST	04/18/41	3.40	Sierra	UNSP
					PORSYTHE FAMILY TRUST Total		3.40		
A019007	12872	10128	Appropriative	Licensed	FRANCIS B PLANT	09/29/59	1.80	Sierra	SPRING #3, THOMAS ELLIS SPRING #1, THOMAS ELLIS SPRING #2, UNSP
					FRANCIS B PLANT Total		1.80		
A028922	20946		Appropriative	Permitted	Frank Pencik	10/23/86	6.00	Sierra	OAK VALLEY CREEK
					Frank Pencik Total		6.00		
A0167928	10815	008972B	Appropriative	Licensed	FRANK A MACHI	12/06/85	4.70	Nevada	UNST
					FRANK A MACHI Total		4.70		
A023956	16404	12058	Appropriative	Licensed	FRANKLIN JONES	12/30/71	0.60	Nevada	UNST

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A012154	7067	7040	Appropriative	Licensed	FRANKLIN JONES Total Gary J. Howsley	11/14/47	0.00 120.10	Yuba	LITTLE DRY CREEK
A019827	14390	9729	Appropriative	Licensed	Gary J. Howsley Total GARY POOR	04/08/71	120.10 5.30	Sierra	UNST
A009765	5532	4921	Appropriative	Licensed	GARY POOR Total GARY ZOLLIDAN	11/09/39	5.30 1.50	Sierra	HARDY SPRING
A014371	9978	5645	Appropriative	Licensed	GARY ZOLLIDAN Total GARY D SMITH	08/27/51	1.50 2,903.80	Yuba	FRENCH DRY CREEK
A017407	11040	6917	Appropriative	Licensed	GARY D SMITH Total GARY W DE MAR	12/26/96	2,903.80 72.50	Sierra	ARIZONA TUNNEL SPRING
A022567	15385	9649	Appropriative	Licensed	GARY W DE MAR Total GEORGE KOOLERY	09/02/66	72.50 1.90	Sierra	UNSP
A022341	15153	9652	Appropriative	Licensed	GEORGE KOOLERY Total GEORGINE TOMASI	11/23/65	1.90 0.80	Nevada	UNST
A023893	16447	10718	Appropriative	Licensed	GEORGINE TOMASI Total GERALD BROOKS	10/07/71	0.80 16.00	Nevada	DWL CREEK
A002696	1200	511	Appropriative	Licensed	GERALD BROOKS Total GOLD LAKE HOLDINGS LLC	12/21/21	16.00 3.00	Sierra	UNCR
A028147	19447		Appropriative	Permitted	GOLD LAKE HOLDINGS LLC Total GREENE ACRES PROPERTY OWNERS ASSOCIATION	06/04/84	3.00 14.00	Sierra	UNSP
A026763	18953	12672	Appropriative	Licensed	GREENE ACRES PROPERTY OWNERS ASSOCIATION Total GREGORY G KSANDER	03/25/81	14.00 0.20	Sierra	UNSP
A023470	16259	10568	Appropriative	Licensed	GREGORY G KSANDER Total GREGORY L COMBS	03/19/70	0.20 5.40	Nevada	UNST
A015100	9828	5683	Appropriative	Licensed	GREGORY L COMBS Total GUS NORTON	12/01/52	5.40 0.80	Sierra	UNST
A026703	18522	12361	Appropriative	Licensed	GUS NORTON Total Heidi Biber	02/03/81	0.80 1.20	Nevada	UNST
A014962	9304	5293	Appropriative	Licensed	Heidi Biber Total HELENE M WULBERN REVOCABLE TRUST	08/12/92	1.20 0.20	Pleaser	UNSP
A014390A	008798A	007078A	Appropriative	Licensed	HELENE M WULBERN REVOCABLE TRUST 11/21/02 HELENE M WULBERN REVOCABLE TRUST 11/21/02 Total		0.20 0.20		
A020243	13943	9370	Appropriative	Licensed	HENRY C LITTLE HENRY C LITTLE Total	07/31/92	20.00 20.00	Butte	WYANDOTTE CREEK
A030265	20863		Appropriative	Permitted	Hilary Winslow	06/01/61	0.60	Sierra	UNSP
A026949	18911	12357	Appropriative	Licensed	Hilary Winslow Total HOLT FAMILY TRUST	07/07/93	0.60 7.00	Sierra	UNST
					HOLT FAMILY TRUST Total HUEY JOHNSON	08/10/81	7.00 0.20	Nevada	UNST
					HUEY JOHNSON Total		0.20		

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A028682	20102		Appropriative	Permitted	HUTCH H HUTCHISON	12/26/85	0.30	Nevada	UNSP
					HUTCH H HUTCHISON Total		0.30		
A010716	6536	3002	Appropriative	Licensed	IRVING N CHRISTENSEN	10/05/43	7.80	Sierra	UNSP
A019279	12546	7168	Appropriative	Licensed	IRVING N CHRISTENSEN	03/04/60	4.50	Sierra	UNSP
					IRVING N CHRISTENSEN Total		12.30		
A011257	6539	3342	Appropriative	Licensed	JACK E BERNDT	01/10/46	4.30	Sierra	UNSP, UNST
					JACK E BERNDT Total		4.30		
A014991	9201	5505	Appropriative	Licensed	JAMES NEWMAN	08/22/52	2.20	Nevada	UNST
					JAMES NEWMAN Total		2.20		
A012118	7160	3884	Appropriative	Licensed	James & Aileen Stevens Revocable Trust	10/03/47	15.00	Yuba	LITTLE DRY CREEK
A014946	9692	5084	Appropriative	Licensed	James & Aileen Stevens Revocable Trust	07/31/52	11.00	Yuba	LITTLE DRY CREEK
					James & Aileen Stevens Revocable Trust Total		26.00		
A019647	12870	8606	Appropriative	Licensed	JAMES K CHRISTENSEN	08/04/60	27.80	Sierra	EMPIRE SPRING
					JAMES K CHRISTENSEN Total		27.80		
A018804	12160	8625	Appropriative	Licensed	JAMES L MOHANI	06/17/59	1.00	Yuba	MOONSHINE CREEK
					JAMES L MOHANI Total		1.00		
A010181	6026	2944	Appropriative	Licensed	James M & Aileen Stevens Rev Tr	04/09/41	98.70	Yuba	LITTLE DRY CREEK
					James M & Aileen Stevens Rev Tr Total		98.70		
A026522	18511	12362	Appropriative	Licensed	JAMES NELSON DEGLANDON	09/11/80	24.00	Nevada	UNST
					JAMES NELSON DEGLANDON Total		24.00		
A026282	18202	12016	Appropriative	Licensed	JAMES R CUMMINS	04/09/80	6.10	Yuba	UNST
					JAMES R CUMMINS Total		6.10		
A021869	14988	8879	Appropriative	Licensed	JAMES S AVILLA	08/05/64	0.30	Placer	UNSP
					JAMES S AVILLA Total		0.30		
A010839	6383	3431	Appropriative	Licensed	Jana Burgess-Henry	07/15/44	29.00	Yuba	WAGNER CREEK
					Jana Burgess-Henry Total		29.00		
A013342	8218	4053	Appropriative	Licensed	Janie Kouch	09/08/49	1.20	Yuba	SOUTH HONCUT CREEK
					Janie Kouch Total		1.20		
A024799	17790	12294	Appropriative	Licensed	JAY CORY	04/14/75	0.20	Sierra	UNSP
					JAY CORY Total		0.20		
A021644	14628	9333	Appropriative	Licensed	JENISE J WARDEN	02/13/64	0.40	Nevada	UNSP
					JENISE J WARDEN Total		0.40		
A010896	6542	3299	Appropriative	Licensed	JERRY DON ELLSWORTH	03/14/01	57.00	Sierra	FIDDLE CREEK
					JERRY DON ELLSWORTH Total		57.00		
A025403	17354	11466	Appropriative	Licensed	JESSIE C TROST	06/23/77	0.10	Yuba	UNST
					JESSIE C TROST Total		0.10		
A020770	14744	9239	Appropriative	Licensed	JO HAMILTON	05/10/62	2.00	Nevada	UNSP (2)
					JO HAMILTON Total		2.00		
A021970	14989	8881	Appropriative	Licensed	JOAN M HANSON	11/23/64	1.00	Placer	UNSP
					JOAN M HANSON Total		1.00		
A025903	18013	13383	Appropriative	Licensed	JOE W ALEXANDER	09/12/77	49.90	Yuba	UNST
A026515A	018442A	13384	Appropriative	Licensed	JOE W ALEXANDER	02/05/92	5.20	Yuba	UNST

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A026315B	Q16422B	13385	Appropriative	Licensed	JOE W ALEXANDER	02/05/92	6.00	Yuba	UNST
					JOE W ALEXANDER Total		61.10		
A006057	3283	2041	Appropriative	Licensed	JOHN BARKER	09/17/28	5.10	Sierra	UNSP
					JOHN BARKER Total		5.10		
A029542	17468	11250	Appropriative	Licensed	JOHN FARACE	10/27/77	1.80	Yuba	KEYSTONE CREEK
					JOHN FARACE Total		1.80		
A018696	12090	7389	Appropriative	Licensed	JOHN A PARKER	05/07/59	0.20	Sierra	UNST
					JOHN A PARKER Total		0.20		
A013686	8167	5234	Appropriative	Licensed	JOHN H LUNDIN	03/28/50	1.60	Yuba	UNST
					JOHN H LUNDIN Total		1.60		
A026073	18076	12089	Appropriative	Licensed	JOHN R POWERS III & JANEY H POWERS REVOC TRUST DATED 9/6/00	08/24/79	4.20	Nevada	UNST
					JOHN R POWERS III & JANEY H POWERS REVOC TRUST DATED 9/6/00 Total		4.20		
A017288	10935	6019	Appropriative	Licensed	JOHN T SMEE	09/21/56	0.10	Sierra	UNST
					JOHN T SMEE Total		0.10		
A010173	5777	4026	Appropriative	Licensed	JOSEPH E MARCANTONIO	03/29/41	36.90	Sierra	SLATE CASTLE Ravine
A018484	11094	6979	Appropriative	Licensed	JOSEPH E MARCANTONIO	01/21/59	0.30	Sierra	SLATE CASTLE CREEK
					JOSEPH E MARCANTONIO Total		37.00		
A012700	7530	3719	Appropriative	Licensed	JULI SHAPIRO-ABDEEN	09/15/48	25.00	Nevada	UNST
					JULI SHAPIRO-ABDEEN Total		25.00		
A016732	11900	6537	Appropriative	Licensed	JUNE BURCHAM WILHELM	11/10/55	0.50	Nevada	UNXX
					JUNE BURCHAM WILHELM Total		0.50		
A019448	13768	8041	Appropriative	Licensed	KATHARINE SPIERS	05/24/60	42.00	Yuba	UNST
					KATHARINE SPIERS Total		42.00		
A018914	12417	7415	Appropriative	Licensed	Katherine Greene	06/14/59	17.00	Yuba	GARDEN Ravine
					Katherine Greene Total		17.00		
A020792	14164	8897	Appropriative	Licensed	KATHLEEN H GOLDEN	05/26/62	0.20	Sierra	UNSP
					KATHLEEN H GOLDEN Total		0.20		
A014740	9017	5273	Appropriative	Licensed	KEITH L DOLAR	04/04/52	85.30	Butte	UNST
					KEITH L DOLAR Total		85.30		
A026245	18702	12528	Appropriative	Licensed	KEN BURKINDINE	03/04/80	0.40	Sierra	UNST
					KEN BURKINDINE Total		0.40		
A027819	19230	12680	Appropriative	Licensed	KEVIN HOMAN	08/04/83	2.00	Nevada	UNST
					KEVIN HOMAN Total		2.00		
A008930	4661	1926	Appropriative	Licensed	KIM HEMSTALK	05/04/35	5.00	Sierra	COYOTE Ravine
					KIM HEMSTALK Total		5.00		
A022315	16073		Appropriative	Permitted	KINGVALE PROPERTY OWNERS & WATER USERS INC	07/18/69	20.00	Nevada	FOCHETTI SPRING, LOLA MONTEZ SPRING, S P SPRING
					KINGVALE PROPERTY OWNERS & WATER USERS INC Total		20.00		
A026074	18068		Appropriative	Permitted	LA PORTE PINES COUNTRY CLUB	08/24/79	55.00	Plumas	UNSP, UNSP(2), UNST

Yuba River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A027273	18597		Appropriative	Permitted	LA PORTE PINES COUNTRY CLUB	09/17/02	54.80	Plumas	UNSP
					LA PORTE PINES COUNTRY CLUB Total		109.80		
A004494	2081	781	Appropriative	Licensed	LAKE VERA MUTUAL WATER COMPANY	03/06/25	70.00	Nevada	ROCK CREEK
A005719	2979	782	Appropriative	Licensed	LAKE VERA MUTUAL WATER COMPANY	10/13/27	729.90	Nevada	ROCK CREEK
					LAKE VERA MUTUAL WATER COMPANY Total		799.90		
A023047	15779	10779	Appropriative	Licensed	LAKE WILDWOOD ASSOCIATION	05/17/68	3,840.00	Nevada	DEER CREEK
					LAKE WILDWOOD ASSOCIATION Total		3,840.00		
A007657	4239	6379	Appropriative	Licensed	LANCE BARLEAN	08/28/33	3.40	Yuba	UNSP
					LANCE BARLEAN Total		3.40		
A028134	20886	13842	Appropriative	Licensed	LEAH M STOCKER	11/08/11	5.00	Yuba	UNST
					LEAH M STOCKER Total		5.00		
A018396	11929	7012	Appropriative	Licensed	LEONARD C FUQUA	11/09/98	0.20	Sierra	COLD SPRING
					LEONARD C FUQUA Total		0.20		
A029180	20922		Appropriative	Permitted	LINDA BATES	03/19/02	5.00	Sierra	GRIZZLY GULCH
					LINDA BATES Total		5.00		
A026603	18765	13817	Appropriative	Licensed	LINDA BIRGE	01/05/11	45.00	Nevada	UNST
					LINDA BIRGE Total		45.00		
A024857	17681	12173	Appropriative	Licensed	LOUIS CLIFFORD LESTER SR	08/14/75	14.50	Nevada	UNST
					LOUIS CLIFFORD LESTER SR Total		14.50		
A012025	7313	6960	Appropriative	Licensed	LOWELL G ROBINSON	08/05/47	0.30	Sierra	UNSP
					LOWELL G ROBINSON Total		0.30		
A023801	15654	10493	Appropriative	Licensed	MAPLE GROVE MUTUAL WATER COMPANY	06/05/67	1.10	Sierra	CEDAR SPRING
A023799	16373		Appropriative	Permitted	MAPLE GROVE MUTUAL WATER COMPANY	06/02/71	10.00	Sierra	UNSP, WILSON SPRING
					MAPLE GROVE MUTUAL WATER COMPANY Total		11.10		
A006834	3665	1878	Appropriative	Licensed	MARIE BERTILLION COLLINS	11/19/30	0.70	Sierra	UNSP
A024808	16940	11499	Appropriative	Licensed	MARIE BERTILLION COLLINS	05/07/75	0.70	Sierra	UNSP
A026189	18266		Appropriative	Permitted	MARIE BERTILLION COLLINS	01/08/99	2.00	Sierra	UNSP
					MARIE BERTILLION COLLINS Total		3.40		
A018779	12139	8117	Appropriative	Licensed	MARIE M LANDERS	06/09/99	0.30	Sierra	UNSP
					MARIE M LANDERS Total		0.30		
A013399	8022	3796	Appropriative	Licensed	MARIN COUNCIL BOY SCOUT TRUST FUND #2	10/13/49	42.50	Nevada	CHUBB LAKE
					MARIN COUNCIL BOY SCOUT TRUST FUND #2 Total		42.50		
A014999	9301	9983	Appropriative	Licensed	MARK MOORE	08/12/52	0.40	Placer	UNSP
					MARK MOORE Total		0.40		
A019345	9575	5165	Appropriative	Licensed	MARK ROTH	06/09/98	0.10	Placer	UNSP

No comments
- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A018079	11547	6800	Appropriative	Licensed	MARK ROTH Total		0.10		
					MARTIN FAMILY TRUST	04/02/58	3.70	Nevada	UNST
					MARTIN FAMILY TRUST Total		3.70		
A027000	18773	13792	Appropriative	Licensed	MAURICE ALTSHULER	05/28/09	20.00	Nevada	UNST
A090728	21195	13793	Appropriative	Licensed	MAURICE ALTSHULER	05/28/09	6.00	Nevada	UNST
					MAURICE ALTSHULER Total		26.00		
A021251	14195	9944	Appropriative	Licensed	MICHAEL CIAFARDONI	04/22/63	17.00	Nevada	UNST
					MICHAEL CIAFARDONI Total		17.00		
A025891	17758	11770	Appropriative	Licensed	MICHAEL K SCHARF	12/26/78	1.70	Nevada	UNST
					MICHAEL K SCHARF Total		1.70		
A009790	9462	9069	Appropriative	Licensed	MILTON R HOLSTROM	10/13/99	726.00	Sierra	EMPIRE CREEK, UNSP
					MILTON R HOLSTROM Total		726.00		
A024730	17194	11795	Appropriative	Licensed	Modern Building Inc.	12/20/74	25.00	Butte	UNST
					Modern Building Inc. Total		25.00		
A001270	2082	12795	Appropriative	Licensed	NEVADA IRRIGATION DISTRICT	07/10/91	130,701.50	Nevada	CANYON CREEK, FALL CREEK, JACKSON CREEK, TEXAS CREEK, TRAP CREEK
A001614	1481		Appropriative	Permitted	NEVADA IRRIGATION DISTRICT	01/08/20	60,000.00	Nevada	DEER CREEK
A001615	5801	8808	Appropriative	Licensed	NEVADA IRRIGATION DISTRICT	01/08/20	36,496.40	Nevada	DEER CREEK, SOUTH FORK DEER CREEK
A002276	2085	12797	Appropriative	Licensed	NEVADA IRRIGATION DISTRICT	03/25/21	60,000.00	Nevada, Sierra	MIDDLE YUBA RIVER
A005193	13770		Appropriative	Permitted	NEVADA IRRIGATION DISTRICT	09/08/26	50,000.00	Nevada, Sierra	MIDDLE YUBA RIVER (@ MILTON DAM), MIDDLE YUBA RIVER (@ JACKSON MEADOWS DAM)
A006702	5807	12800	Appropriative	Licensed	NEVADA IRRIGATION DISTRICT	06/16/30	4,889.30	Nevada	CLEAR CREEK, FALL CREEK, TRAP CREEK
A008180	5815		Appropriative	Permitted	NEVADA IRRIGATION DISTRICT	11/27/34	207,894.90	Nevada	CLEAR CREEK, FALL CREEK, RUCKER CREEK, TEXAS CREEK, TRAP CREEK
A020017	13772		Appropriative	Permitted	NEVADA IRRIGATION DISTRICT	03/06/61	101,160.00	Nevada	SOUTH YUBA RIVER
					NEVADA IRRIGATION DISTRICT Total		651,142.10		
A014961	9303	6158	Appropriative	Licensed	NORMAN R PICKLES	08/12/52	0.40	Placer	UNSP
					NORMAN R PICKLES Total		0.40		
A015957	11516		Appropriative	Permitted	North Yuba Water District	05/18/99	145,084.30	Plumas, Yuba	SLATE CREEK
					North Yuba Water District Total		145,084.30		

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A013959	6944	4700	Appropriative	Licensed	O'Brien Ranch LLC	09/21/50	983.80	Butte, Yuba	SOUTH HONCUT CREEK
O'Brien Ranch LLC Total							983.80		
A018965	12005	6754	Appropriative	Licensed	OLIVER G MILHOUS	03/03/59	20.00	Nevada	UNST
OLIVER G MILHOUS Total							20.00		
A000481	203	368	Appropriative	Licensed	ORIGINAL SIXTEEN TO ONE MINE, INC	07/31/24	724.00	Sierra	BUCKEYE RAVINE
A001193	562	121	Appropriative	Licensed	ORIGINAL SIXTEEN TO ONE MINE, INC	02/25/19	362.00	Sierra	UNSP
ORIGINAL SIXTEEN TO ONE MINE, INC Total							1,086.00		
A013609	8312	3836	Appropriative	Licensed	OSHA B READER	04/14/50	49.60	Sierra	UNST
A018928	12203	6983	Appropriative	Licensed	OSHA B READER	08/20/59	1.70	Sierra	UNSP
OSHA B READER Total							51.30		
A011120	6599	3392	Appropriative	Licensed	OSTROM FAMILY TRUST	07/27/45	12.00	Sierra	UNSP
A011501	6713	3393	Appropriative	Licensed	OSTROM FAMILY TRUST	08/07/46	38.20	Sierra	UNSP
A017138	10850	6922	Appropriative	Licensed	OSTROM FAMILY TRUST	06/14/56	0.20	Sierra	UNSP
A017137	10852	5981	Appropriative	Licensed	OSTROM FAMILY TRUST	06/14/56	0.10	Sierra	UNSP
A018782	12221		Appropriative	Permitted	OSTROM FAMILY TRUST	10/02/01	40.10	Sierra	ANDERSON SPRING
A023778	16372		Appropriative	Permitted	OSTROM FAMILY TRUST	05/04/71	24.10	Sierra	UNSP, WIXON SPRING
OSTROM FAMILY TRUST Total							114.70		
A024169	16758	11081	Appropriative	Licensed	PACIFIC EDGE INC	08/30/72	9.00	Yuba	UNST
PACIFIC EDGE INC Total							9.00		
A015342	9622	5189	Appropriative	Licensed	PAUL F BUKENHOFER	09/17/53	72.50	Yuba	UNST
PAUL F BUKENHOFER Total							72.50		
A020823	13820	8728	Appropriative	Licensed	PAULA M SCHROEDER	06/20/62	0.60	Sierra	UNSP
PAULA M SCHROEDER Total							0.60		
A018176	11803	8201	Appropriative	Licensed	PHILIP PERSONENI	06/10/58	91.70	Nevada	SHADY CREEK
PHILIP PERSONENI Total							91.70		
A024842	17048	11439	Appropriative	Licensed	PHILIP J SIMMONS	07/22/75	1.00	Sierra	UNST
PHILIP J SIMMONS Total							1.00		
A009617	5497	2705	Appropriative	Licensed	PONTA, MELVIN J & MARCELLA M 1984 REVOCABLE TRUST	09/26/44	89.80	Sierra	WOODRUFF CREEK
A011994	7054	3526	Appropriative	Licensed	PONTA, MELVIN J & MARCELLA M 1984 REVOCABLE TRUST	07/16/47	1.60	Sierra	UNSP
PONTA, MELVIN J & MARCELLA M 1984 REVOCABLE TRUST Total							41.40		
A027638	18933	12446	Appropriative	Licensed	R MARILYN WILSON	01/24/83	2.00	Nevada	KENTUCKY RAVINE
R MARILYN WILSON Total							2.00		
A018368	11988	8848	Appropriative	Licensed	RAENNE A KALFSBEEK	10/10/58	3.70	Yuba	GOLDEN GATE RAVINE
RAENNE A KALFSBEEK Total							3.70		
A008343	4680	1903	Appropriative	Licensed	RAINBOW HOLDING COMPANY, LTD	05/25/35	112.90	Placer	UNSP
RAINBOW HOLDING COMPANY, LTD Total							112.90		
A025997	18129	12158	Appropriative	Licensed	RAMON HERNANDEZ	05/16/79	15.00	Yuba	UNST
RAMON HERNANDEZ Total							15.00		
A017934	11530	0977	Appropriative	Licensed	RAY COLALIZZI	01/06/58	0.80	Sierra	INDEPENDENCE CREEK

Yuba River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
					RAY COLAIZZI Total		0.80		
A022385	15508	10302	Appropriative	Licensed	REGULAR BAPTIST CAMP INCORPORATED	02/18/66	87.00	Sierra	PILOT LAKE (AKA DELAUNTY LAKE)
A022386	15220	11011	Appropriative	Licensed	REGULAR BAPTIST CAMP INCORPORATED	09/19/02	3.20	Sierra	UNSP (3)
					REGULAR BAPTIST CAMP INCORPORATED Total		90.20		
A018212	11725	9140	Appropriative	Licensed	RENTIER INCORPORATED	07/09/58	0.70	Sierra	UNST
					RENTIER INCORPORATED Total		0.70		
A018279	11926	7127	Appropriative	Licensed	RICHARD L MILLER	08/21/58	0.20	Sierra	UNSP
					RICHARD L MILLER Total		0.20		
A017797	11267	7196	Appropriative	Licensed	RICHARD W WALKER	08/22/57	1.70	Placer	UNST
					RICHARD W WALKER Total		1.70		
A027542	18885	12513	Appropriative	Licensed	RICHARDS LAND & CATTLE CO	09/30/82	12.00	Yuba	WOODS CREEK
A027603	16884	13360	Appropriative	Licensed	RICHARDS LAND & CATTLE CO	12/03/82	49.00	Yuba	WOODS CREEK
					RICHARDS LAND & CATTLE CO Total		61.00		
A019559	12914	7539	Appropriative	Licensed	ROBERT CARLSTROEM	07/20/60	0.20	Sierra	UNST
					ROBERT CARLSTROEM Total		0.20		
A021496	14525	9634	Appropriative	Licensed	ROBERT A HELLER	10/09/63	1.10	Sierra	UNXX
					ROBERT A HELLER Total		1.10		
A026640	18874		Appropriative	Permitted	ROBERT A ROWE	12/02/80	3.20	Nevada	KENTUCKY RAVINE
					ROBERT A ROWE Total		3.20		
A016792A	10815	D08072A	Appropriative	Licensed	ROBERT L RYAN	12/06/85	9.40	Nevada	UNST
					ROBERT L RYAN Total		9.40		
A014951	10084	5848	Appropriative	Licensed	ROBERTA D'ARCY	08/06/52	113.10	Yuba	DRY CREEK
					ROBERTA D'ARCY Total		113.10		
A018674	12824	8179	Appropriative	Licensed	ROCHELLE A FLEMING	04/28/59	0.30	Sierra	UNST
					ROCHELLE A FLEMING Total		0.30		
A021562	14484	8801	Appropriative	Licensed	ROGER P VAN CRAEYNEST	12/04/63	2.70	Sierra	UNSP
					ROGER P VAN CRAEYNEST Total		2.70		
A026809	18475	12287	Appropriative	Licensed	RONALD GUILD	04/29/81	4.00	Yuba	PRAIRIE CREEK
					RONALD GUILD Total		4.00		
A027976	19244	12656	Appropriative	Licensed	RONALD L GOODSPEED	02/08/84	0.30	Nevada	UNST
					RONALD L GOODSPEED Total		0.30		
A018286	11774	7006	Appropriative	Licensed	ROSS JACOBS	08/26/58	0.20	Sierra	UNST
					ROSS JACOBS Total		0.20		

Yuba River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A026363	18255	12070	Appropriative	Licensed	ROY BRAATZ	05/19/80	1.30	Nevada	UNST
					ROY BRAATZ Total		3.30		
A020283	13977	10086	Appropriative	Licensed	ROY RAMEY	06/13/61	24.20	Nevada	WEST BRANCH GOLD RUN CREEK
					ROY RAMEY Total		24.20		
A008984	5142	2367	Appropriative	Licensed	RUBY DEVELOPMENT COMPANY	06/02/37	241.10	Sierra	ROCK CREEK
					RUBY DEVELOPMENT COMPANY Total		241.10		
A024904	17224	11479	Appropriative	Licensed	RUBY J RICKARD	10/17/75	2.00	Nevada	UNSP
					RUBY J RICKARD Total		2.00		
A018252	11757	7003	Appropriative	Licensed	SEGHEZZI INC	03/20/64	51.70	Nevada	UNST
					SEGHEZZI INC Total		51.70		
A020309	13944	8350	Appropriative	Licensed	SHAWN BEACHAMP	07/19/61	0.60	Sierra	UNSP
					SHAWN BEACHAMP Total		0.60		
A021727	14700	9328	Appropriative	Licensed	SHERMAN D WINSHIP	04/07/64	15.00	Nevada	UNST
					SHERMAN D WINSHIP Total		15.00		
A021417	14529	9226	Appropriative	Licensed	SIBLEY HANSEN	08/02/63	0.10	Sierra	SMALL SPRING
					SIBLEY HANSEN Total		0.10		
A006286	3316	2427	Appropriative	Licensed	SIERRA CLUB	05/13/29	2.80	Nevada	ZERO SPRING
A008463	4945	2628	Appropriative	Licensed	SIERRA CLUB	10/05/35	5.60	Nevada	UNSP
					SIERRA CLUB Total		8.40		
A020890	14177	9068	Appropriative	Licensed	SIERRA PACIFIC INDUSTRIES	08/06/62	5.60	Sierra	UNSP, UNST
					SIERRA PACIFIC INDUSTRIES Total		5.60		
A026028	16161	12301	Appropriative	Licensed	SOPER COMPANY	06/18/79	2.50	Nevada	UNST
					SOPER COMPANY Total		2.50		
A026067	18454	11796	Appropriative	Licensed	STARDUSTER LAKE ASSOCIATION	08/17/79	27.00	Nevada	UNST
					STARDUSTER LAKE ASSOCIATION Total		27.00		
A023591	16215	10645	Appropriative	Licensed	STEPHEN MAKI	08/24/70	2.30	Nevada	UNST
					STEPHEN MAKI Total		2.30		
A028615	20873		Appropriative	Permitted	STEVE MEHALAKIS	11/08/85	20.00	Yuba	UNST
A028616	20874		Appropriative	Permitted	STEVE MEHALAKIS	11/08/85	656.00	Yuba	UNST
					STEVE MEHALAKIS Total		676.00		
A016659	10458	6570	Appropriative	Licensed	Steven A Beckwith	10/10/55	7.00	Nevada	UNCR
					Steven A Beckwith Total		7.00		
A028964	20071	13053	Appropriative	Licensed	STEVEN NIGHTINGALE	09/26/85	0.40	Sierra	UNST
					STEVEN NIGHTINGALE Total		0.40		
A030074	20797		Appropriative	Permitted	SUGAR BOWL CORPORATION	06/15/95	136.00	Fleecer	LAKE MARY

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A030359	20798		Appropriative	Permitted	SUGAR BOWL CORPORATION	06/15/95	136.00	Placer	LAKE MARY
					SUGAR BOWL CORPORATION Total		272.00		
A017808	11602	6617	Appropriative	Licensed	SUSAN TRIMBLE SILVEY	08/30/57	0.30	Nevada	UNSP, UNST
					SUSAN TRIMBLE SILVEY Total		0.30		
A022135	15294	9724	Appropriative	Licensed	SUSAN M FORD	04/30/65	6.00	Sierra	UNSP
					SUSAN M FORD Total		6.00		
A020187	20186		Appropriative	Permitted	SUSAN T TOWNSEND	07/10/84	35.00	Nevada	COWL CREEK
					SUSAN T TOWNSEND Total		35.00		
A017798	11268	6932	Appropriative	Licensed	SUSANNAH SCHROLL	08/22/57	0.90	Placer	UNST
					SUSANNAH SCHROLL Total		0.90		
A010980	6391	3171	Appropriative	Licensed	Terry Mitchell Riley	02/13/45	17.00	Yuba	MOONSHINE CREEK
					Terry Mitchell Riley Total		17.00		
A021079	14144	9865	Appropriative	Licensed	THE KRUMP LIMITED PARTNERSHIP	12/11/62	29.00	Nevada	NORTH CREEK
					THE KRUMP LIMITED PARTNERSHIP Total		29.00		
A011106	6583	4849	Appropriative	Licensed	THOMAS DE JONGHE	07/13/45	19.70	Sierra	UNSP, VAN JOAN CREEK
A018863	12077	6842	Appropriative	Licensed	THOMAS DE JONGHE	04/24/59	796.40	Sierra	SAN JUAN CANYON
					THOMAS DE JONGHE Total		816.10		
A009651	5425	2777	Appropriative	Licensed	THOMAS A JEKYLL	06/30/39	5.60	Yuba	MOONSHINE CREEK
					THOMAS A JEKYLL Total		5.60		
A020126	20885		Appropriative	Permitted	THOMAS R POPE	04/30/84	7.00	Yuba	UNST
					THOMAS R POPE Total		7.00		
A010399	11928	7011	Appropriative	Licensed	TIMOTHY WALKER	11/05/98	0.20	Sierra	COLD SPRING
					TIMOTHY WALKER Total		0.20		
A017142	10833	6907	Appropriative	Licensed	TREVOR D ROBBINS	06/20/56	2.60	Nevada	UNST
					TREVOR D ROBBINS Total		2.60		
A014930	9266	9083	Appropriative	Licensed	TRI-LODGE ASSOCIATION	07/28/52	16.80	Nevada	LYTTON CREEK
					TRI-LODGE ASSOCIATION Total		16.80		
A015246	9585	4864	Appropriative	Licensed	TROY L JONES	03/19/53	2.30	Nevada	UNSP
					TROY L JONES Total		2.30		
A022265	15651	13721	Appropriative	Licensed	TSCHOPP MUTUAL WATER COMPANY	08/30/07	8.40	Sierra	UNSP, WIXON SPRING
					TSCHOPP MUTUAL WATER COMPANY Total		8.40		
A018581	11887	7507	Appropriative	Licensed	TYE ROMMEL	03/10/59	0.10	Sierra	UNST
					TYE ROMMEL Total		0.10		
A006563	3462	4000	Appropriative	Licensed	U S FOREST SERVICE	02/13/30	0.40	Sierra	UNSP
A007608	4266	1863	Appropriative	Licensed	U S FOREST SERVICE	07/05/33	1.60	Sierra	UNSP

Yuba River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A007691	4232	1864	Appropriative	Licensed	U S FOREST SERVICE	09/28/33	0.40	Sierra	GENTLE ANNIE SPRING
A007767	4269	1865	Appropriative	Licensed	U S FOREST SERVICE	11/27/33	0.30	Sierra	UNSP
A008493	4684	2139	Appropriative	Licensed	U S FOREST SERVICE	11/13/35	6.20	Sierra	JERRETT SPRING
A009561	5364	2480	Appropriative	Licensed	U S FOREST SERVICE	04/19/39	8.40	Sierra	BAKER SPRING
A010038	5700	4893	Appropriative	Licensed	U S FOREST SERVICE	10/17/40	5.60	Placer	SUMMIT SPRING NO 1
A010153	5788	2659	Appropriative	Licensed	U S FOREST SERVICE	03/22/41	1.10	Nevada	LOGAN SPRING
A010154	5789	2660	Appropriative	Licensed	U S FOREST SERVICE	03/22/41	1.40	Nevada	BIG LICK SPRINGS
A010155	5790	2661	Appropriative	Licensed	U S FOREST SERVICE	03/22/41	1.00	Nevada	DEMPSEY SPRINGS
A010156	5791	4888	Appropriative	Licensed	U S FOREST SERVICE	03/22/41	9.20	Nevada	WHITE CLOUD SPRINGS
A010158	5793	2662	Appropriative	Licensed	U S FOREST SERVICE	03/22/41	1.40	Nevada	COLEMAN SPRINGS
A010159	5794	4175	Appropriative	Licensed	U S FOREST SERVICE	03/22/41	0.60	Nevada	SKILLMAN FLAT SPRING
A010160	5795	2663	Appropriative	Licensed	U S FOREST SERVICE	03/22/41	0.60	Nevada	DEMORY SPRING
A010161	5796	2664	Appropriative	Licensed	U S FOREST SERVICE	03/22/41	1.40	Nevada	UPPER DERBEC SPRING
A010162	5797	2665	Appropriative	Licensed	U S FOREST SERVICE	03/22/41	9.80	Nevada	SNOWTENT SPRING
A010163	5798	2666	Appropriative	Licensed	U S FOREST SERVICE	03/22/41	2.90	Nevada	DERBEC SPRINGS
A010164	5799	2667	Appropriative	Licensed	U S FOREST SERVICE	03/22/41	4.40	Nevada	WILLOW SPRINGS
A010446	6018	2891	Appropriative	Licensed	U S FOREST SERVICE	05/06/42	3.10	Nevada	THIMBLEBERRY CREEK
A010447	6019	2892	Appropriative	Licensed	U S FOREST SERVICE	05/06/42	3.70	Nevada	JUNCTION HOUSE SPRING
A010448	6020	4895	Appropriative	Licensed	U S FOREST SERVICE	05/06/42	1.10	Nevada	GROUSE RIDGE SPRING NO 3
A010449	6021	3057	Appropriative	Licensed	U S FOREST SERVICE	05/06/42	0.20	Nevada	MOGONIGAL SPRING
A010451	6023	2894	Appropriative	Licensed	U S FOREST SERVICE	05/06/42	3.40	Nevada	BEAR TRAP CREEK
A010452	6024	3058	Appropriative	Licensed	U S FOREST SERVICE	05/06/42	0.20	Nevada	GROUSE RIDGE SPRING NO 1
A010453	6025	3921	Appropriative	Licensed	U S FOREST SERVICE	05/06/42	0.60	Nevada	GROUSE RIDGE SPRING NO 2

Yuba River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A010496	6091	2895	Appropriative	Licensed	U S FOREST SERVICE	07/15/42	0.90	Nevada	MOBLEY HOMESTEAD SPRING NO 1
A010497	6092	2896	Appropriative	Licensed	U S FOREST SERVICE	07/15/42	4.70	Nevada	HOLDEN SPRING
A010500	6095	2898	Appropriative	Licensed	U S FOREST SERVICE	07/15/42	1.80	Nevada	UNSP
A010502	6099	2899	Appropriative	Licensed	U S FOREST SERVICE	07/15/42	3.20	Nevada	MOBLEY HOMESTEAD SPRING NO 2
A010503	6100	2900	Appropriative	Licensed	U S FOREST SERVICE	07/15/42	4.10	Nevada	INDIAN SPRING
A010506	6103	2902	Appropriative	Licensed	U S FOREST SERVICE	07/15/42	0.90	Nevada	UPPER WOOLSEY SPRING
A010634	6150	2903	Appropriative	Licensed	U S FOREST SERVICE	05/01/43	2.20	Sierra	HALLS RANCH SPRING
A010637	6153	2905	Appropriative	Licensed	U S FOREST SERVICE	05/01/43	2.20	Sierra	WILD PLUM SPRING
A010639	6155	2907	Appropriative	Licensed	U S FOREST SERVICE	05/01/43	1.60	Sierra	DEADWOOD SPRING
A010640	6156	2908	Appropriative	Licensed	U S FOREST SERVICE	05/01/43	2.20	Sierra	GOLD LAKE SPRING
A010642	6158	2910	Appropriative	Licensed	U S FOREST SERVICE	05/01/43	1.50	Sierra	SADDLEBACK SPRING
A011382	6627	7752	Appropriative	Licensed	U S FOREST SERVICE	04/23/46	0.60	Nevada	RED MOUNTAIN SPRING NO 1
A012054	7080	3979	Appropriative	Licensed	U S FOREST SERVICE	08/21/47	210.30	Sierra	BEAR CREEK
A012104	7107	5532	Appropriative	Licensed	U S FOREST SERVICE	09/24/47	5.00	Sierra	HASKELL CREEK
A012105	7197	4210	Appropriative	Licensed	U S FOREST SERVICE	09/24/47	0.10	Sierra	GLEASON SPRING
A012108	7198	8987	Appropriative	Licensed	U S FOREST SERVICE	09/24/47	6.10	Sierra	CARVIN CREEK, UNSP
A012734	7577	4944	Appropriative	Licensed	U S FOREST SERVICE	10/07/48	17.90	Placer	UNSP
A013626	8115	5514	Appropriative	Licensed	U S FOREST SERVICE	03/10/50	8.20	Sierra	GRASSY LAKE CREEK
A013627	8116	4873	Appropriative	Licensed	U S FOREST SERVICE	03/10/50	12.20	Sierra	ORGAN CREEK
A014368	9086	4981	Appropriative	Licensed	U S FOREST SERVICE	06/27/51	0.10	Sierra	INDEPENDENCE RAVINE
A014369	8833	5423	Appropriative	Licensed	U S FOREST SERVICE	06/27/51	1.60	Sierra	FIDDLE CREEK
A014399	8880	5114	Appropriative	Licensed	U S FOREST SERVICE	07/19/51	2.00	Nevada	RATTLESNAKE CREEK
A014400	8830	6972	Appropriative	Licensed	U S FOREST SERVICE	07/19/51	0.60	Nevada	JACKSON CREEK

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
A016642	10775	6162	Appropriative	Licensed	U S FOREST SERVICE	09/30/55	0.90	Sierra	CARVIN CREEK
A017236	14333	9873	Appropriative	Licensed	U S FOREST SERVICE	08/13/56	4,320.00	Nevada	WEAVER LAKE
A017827	11555	6959	Appropriative	Licensed	U S FOREST SERVICE	09/19/57	0.90	Sierra	UNSP (2)
A017867	11386	8642	Appropriative	Licensed	U S FOREST SERVICE	10/31/57	4.00	Nevada	UNSP
A018294	11777	7651	Appropriative	Licensed	U S FOREST SERVICE	08/28/58	0.20	Nevada	MARSH TRACT SPRING
A018744	13212	8632	Appropriative	Licensed	U S FOREST SERVICE	05/28/59	130.00	Sierra	UNST
A018745	13213	8633	Appropriative	Licensed	U S FOREST SERVICE	05/28/59	90.00	Sierra	PACKER CREEK
A018746	13214	8634	Appropriative	Licensed	U S FOREST SERVICE	05/28/59	380.00	Sierra	SALMON CREEK
A018747	13215	8635	Appropriative	Licensed	U S FOREST SERVICE	05/28/59	282.20	Sierra	SARDINE CREEK
A018748	13216	8636	Appropriative	Licensed	U S FOREST SERVICE	05/28/59	350.00	Sierra	SAWMILL CREEK
A018749	13217	8636	Appropriative	Licensed	U S FOREST SERVICE	05/28/59	250.00	Sierra	SALMON CREEK
A021130	14147	8562	Appropriative	Licensed	U S FOREST SERVICE	01/22/63	2.20	Sierra	UNSP
A021420	14530	8940	Appropriative	Licensed	U S FOREST SERVICE	08/06/63	0.20	Sierra	UNSP
A023124	15805	9651	Appropriative	Licensed	U S FOREST SERVICE	09/05/68	0.30	Sierra	UNSP
A028413	19713	13031	Appropriative	Licensed	U S FOREST SERVICE	03/29/85	0.80	Sierra	UNSP
					U S FOREST SERVICE Total		6,170.90		
A024067	16490	11008	Appropriative	Licensed	WALTER BALDWIN	05/12/72	8.00	Yuba	UNST
					WALTER BALDWIN Total		8.00		
A022419	15278	9703	Appropriative	Licensed	WASHINGTON COUNTY WATER DISTRICT	03/11/66	48.00	Nevada	HENDERSON RAVINE
					WASHINGTON COUNTY WATER DISTRICT Total		48.00		
A016523	10823	7089	Appropriative	Licensed	WAYNE L HARSHBARGER	01/09/56	35.00	Nevada	UNST
					WAYNE L HARSHBARGER Total		35.00		
A018170	11648	7666	Appropriative	Licensed	WILLIAM C DOUB II	06/05/58	1.10	Yuba	LITTLE WILLOW CREEK
					WILLIAM C DOUB II Total		1.10		
A026642	18723		Appropriative	Permitted	WILLIAM H CLEMENS	12/03/80	3.00	Nevada	RAPP RAVINE
					WILLIAM H CLEMENS Total		3.00		
A011353	6661	3358	Appropriative	Licensed	WILLIAM R SMITH	03/28/46	0.60	Sierra	BJM CROW CANYON

Yuba River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
					WILLIAM R SMITH Total		0.60		
A002197	1154	435	Appropriative	Licensed	YUBA COUNTY WATER AGENCY	02/11/21	511,784.30	Yuba	NORTH YUBA RIVER
A003026	1354	436	Appropriative	Licensed	YUBA COUNTY WATER AGENCY	09/07/22	10,000.00	Yuba	WORTH YUBA RIVER
A005004	2664	777	Appropriative	Licensed	YUBA COUNTY WATER AGENCY	04/20/26	15,000.00	Yuba	NORTH YUBA RIVER
A005632	15026		Appropriative	Permitted	YUBA COUNTY WATER AGENCY	07/30/27	1,189,000.00	Yuba	NORTH YUBA RIVER, YUBA RIVER
A009516	6106	3050	Appropriative	Licensed	YUBA COUNTY WATER AGENCY	03/01/39	72,397.80	Yuba	NORTH YUBA RIVER
A010282	8330	5544	Appropriative	Licensed	YUBA COUNTY WATER AGENCY	09/12/41	5,335.00	Yuba	NORTH YUBA RIVER
A015204	15027		Appropriative	Permitted	YUBA COUNTY WATER AGENCY	03/28/66	246,000.00	Yuba	NORTH YUBA RIVER, YUBA RIVER
A015574	15030		Appropriative	Permitted	YUBA COUNTY WATER AGENCY	03/28/66	514,000.00	Nevada, Yuba	MIDDLE YUBA RIVER, NORTH YUBA RIVER, OREGON CREEK, YUBA RIVER
A029837	20595		Appropriative	Permitted	YUBA COUNTY WATER AGENCY	10/11/90	21,719.30	Yuba	DEADWOOD CREEK, OWL GULCH
					YUBA COUNTY WATER AGENCY Total		2,555,236.40		
A002978	1270	12984	Appropriative	Licensed	YUBA COUNTY WATER DISTRICT	08/12/22	6,060.00	Yuba	DRY CREEK
A013957	11516		Appropriative	Licensed	YUBA COUNTY WATER DISTRICT	09/20/50	145,082.64	Plumas, Yuba	NORTH YUBA RIVER, YUBA RIVER
					YUBA COUNTY WATER DISTRICT Total		151,142.64		
A011596	7086	4699	Appropriative	Licensed	YUBA INVESTMENT COMPANY	10/28/46	2,556.70	Yuba	DRY CREEK
					YUBA INVESTMENT COMPANY Total		2,556.70		
A026914	18489	12619	Appropriative	Licensed	YUBA RIVER RECREATION GROUP INC	07/13/81	2.60	Nevada	HUMBUG CREEK
					YUBA RIVER RECREATION GROUP INC Total		2.60		
					Grand Total		3,995,920.74		

Bear River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A029052	20786	13687	ANNE K SOUSA	12/13/06	5.80	Nevada	UNST
			ANNE K SOUSA Total		5.80		
A029455	20562		ARTHUR W ARMSTRONG	3/28/89	7.00	Nevada	IRON CROSS CREEK, ROCK CREEK
			ARTHUR W ARMSTRONG Total		7.00		
A025897	18040	11864	BEN R RAWE	1/5/79	0.30	Nevada	WOLF CREEK
			BEN R RAWE Total		0.30		
A026042	17989	11895	Bethel Church Nevada County	7/9/79	1.50	Nevada	UNST
			Bethel Church Nevada County Total		1.50		
A019535	12763	7754	BETTY THOMAS	7/11/60	20.00	Nevada	UNST
			BETTY THOMAS Total		20.00		
A015964	10090	7264	BLEAU 1989 REVOCABLE TRUST DATED 12/22/89	5/5/65	14.80	Nevada	UNST
			BLEAU 1989 REVOCABLE TRUST DATED 12/22/89 Total		14.80		
A027766	19029	12402	BOB J BALDWIN	6/7/83	2.40	Nevada	UNST
			BOB J BALDWIN Total		2.40		
A000959	743	385	CAMP FAR WEST IRRIGATION DISTRICT	4/1/18	4,832.10	Yuba	BEAR RIVER
A002801	2089	2265	CAMP FAR WEST IRRIGATION DISTRICT	6/13/22	5,000.00	Yuba	BEAR RIVER
A003843	2090	2267	CAMP FAR WEST IRRIGATION DISTRICT	2/11/24	3,592.20	Yuba	BEAR RIVER
A010190	5852	2740	CAMP FAR WEST IRRIGATION DISTRICT	4/28/41	5,000.00	Yuba	BEAR RIVER
			CAMP FAR WEST IRRIGATION DISTRICT Total		18,424.30		
A021821	14841	9992	CITY OF GRASS VALLEY	6/18/64	4.00	Nevada	RHODE ISLAND RAVINE
A025601	17893		CITY OF GRASS VALLEY	12/16/77	2,200.00	Nevada	UNXX
			CITY OF GRASS VALLEY Total		2,204.00		
A029097	20492	13344	COX-HARTLEY FAMILY 1993 TRUST	8/17/87	17.00	Nevada	LONG RAVINE
			COX-HARTLEY FAMILY 1993 TRUST Total		17.00		
A028932	18555	12337	CRAIG FERRARI	7/27/81	1.30	Nevada	LONG RAVINE
A029177	20384	13514	CRAIG FERRARI	1/28/88	3.30	Nevada	LONG RAVINE
			CRAIG FERRARI Total		4.60		
A020794	14711	10153	DANIEL HALE	5/28/62	8.30	Nevada	UNSP, UNST
			DANIEL HALE Total		8.30		
A017495	11042	5812	DARKHORSE GOLF CLUB LLC	3/5/57	9.00	Nevada	UNST
A027767	19028	12401	DARKHORSE GOLF CLUB LLC	6/7/83	1.90	Nevada	UNST
			DARKHORSE GOLF CLUB LLC Total		10.90		
A026161	16143	12136	DAVID MCFARLANE	1/3/00	0.10	Nevada	UNSP
			DAVID MCFARLANE Total		0.10		
A015282	9761	4714	DAVID L FERGUSON	4/7/53	15.00	Nevada	INDIAN RAVINE
			DAVID L FERGUSON Total		15.00		
A025099	16957	11240	DENNIS ACMOODY	7/14/76	0.70	Placer	CAMPBELL CREEK
			DENNIS ACMOODY Total		0.70		
A023012	15728	10361	Dept of Fish and Game	3/27/68	44.00	Yuba	UNST
A023013	15729	10387	Dept of Fish and Game	3/27/68	9.60	Nevada	UNST
A023014	15730	10388	Dept of Fish and Game	3/27/68	21.00	Yuba	UNST

Bear River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A024601	16798	11218	Dept of Fish and Game	5/2/74	3.00	Yuba	UNST
A024641	16797	11212	Dept of Fish and Game	4/22/82	5.10	Yuba	UNST
			Dept of Fish and Game Total		82.70		
A021495	14411	9027	DONALD L DAY	10/9/63	9.20	Nevada	UNST
			DONALD L DAY Total		9.20		
A027513	18935	12432	DORIS L MINARD	9/13/82	3.10	Nevada	UNST
			DORIS L MINARD Total		3.10		
A021843	14973	9263	ELIZABETH STREATER	7/10/64	0.10	Nevada	UNSP
			ELIZABETH STREATER Total		0.10		
A017856	11509	6590	GARY M LAUGHLIN	10/23/57	0.80	Nevada	UNSP (2)
			GARY M LAUGHLIN Total		0.80		
A027958	19299	12783	GLADYS MARTINES	1/25/84	3.00	Nevada	UNST
A029885	20705		GLADYS MARTINES	1/25/91	27.00	Nevada	UNST
			GLADYS MARTINES Total		30.00		
A023070	16276	11076	GREGORY W BOCK	6/18/68	52.30	Nevada	UNST
			GREGORY W BOCK Total		52.30		
A014179	8713	4076	HERRMANN GOTTFIELD	3/7/51	21.30	Nevada	UNST
			HERRMANN GOTTFIELD Total		21.30		
A017529	11052	6926	HIDDEN MEADOW RANCH	4/3/57	91.80	Nevada	UNCR
			HIDDEN MEADOW RANCH Total		91.80		
A015979	10532	5520	IKE GOMEZ	5/19/54	18.30	Nevada	LONG HOLLOW
			IKE GOMEZ Total		18.30		
A028605	20716		JACK F ANDERSEN	10/28/69	6.50	Nevada	SOUTH WOLF CREEK, UNST
			JACK F ANDERSEN Total		6.50		
A018371	11846	8036	JAMES C PAGE	10/14/58	90.80	Placer	UNST
A025408	18090	11807	JAMES C PAGE	6/28/77	29.00	Placer	UNST
			JAMES C PAGE Total		119.80		
A030915	21141		JAMES M SILLER	1/2/03	89.00	Yuba	VINEYARD CREEK
			JAMES M SILLER Total		89.00		
A025582	17443	11469	Jape Holley Taylor	11/29/77	15.00	Nevada	UNST
			Jape Holley Taylor Total		15.00		
A030508	20929		JAY BETZ	11/21/95	56.00	Nevada	ROCK CREEK, UNST
			JAY BETZ Total		56.00		
A025502	17606	12279	JAY VICE	9/7/77	9.40	Nevada	MEYER RAVINE
			JAY VICE Total		9.40		
A017437	11015	7742	JEFFREY L FINK	1/28/57	3.50	Nevada	UNST
			JEFFREY L FINK Total		3.50		
A029100	20553	13829	Jim A Nevins	1/11/11	8.40	Placer	UNST
			Jim A Nevins Total		8.40		
A024814	17265	11749	JOHN C HUSMANN	5/23/75	0.50	Nevada	UNST
			JOHN C HUSMANN Total		0.50		
A014896	9165	4969	JOSEPH D LITCHFIELD	7/8/52	10.00	Nevada	UNST
			JOSEPH D LITCHFIELD Total		10.00		
A025493	17730	12042	JOSHUA L WITTLER	8/29/77	21.00	Nevada	INDIAN SPRINGS CREEK, UNST

Bear River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
			JOSHUA L WITTLER Total		21.00		
A028102	19386	12709	Judy Bauer	4/4/84	4.00	Nevada	UNST
			Judy Bauer Total		4.00		
A017942B	11413	008636B	LADSON J GEDDINGS	10/14/61	9.80	Nevada	LONG HOLLOW RAVINE
			LADSON J GEDDINGS Total		9.80		
A019810	13852	8657	LAKE MANAGEMENT COMMITTEE	10/27/60	35.00	Nevada	BUTLER CREEK
			LAKE MANAGEMENT COMMITTEE Total		35.00		
A017258	11462	6296	LAKE OF THE PINES ASSN INC	3/27/56	17.00	Nevada	RAGSDALE CREEK
A022535	15355	9675	LAKE OF THE PINES ASSN INC	7/27/66	4,150.00	Nevada	MAGNOLIA CREEK
			LAKE OF THE PINES ASSN INC Total		4,167.00		
A018214	11635	6752	LCB PROPERTIES LLC	7/11/58	55.80	Nevada	LONG HOLLOW RAVINE
			LCB PROPERTIES LLC Total		55.80		
A022821A		009610A	Louis BARTOLUCCI	5/6/02	21.00	Nevada	UNST
A023549A		010658A	Louis BARTOLUCCI	12/14/98	14.00	Nevada	UNST
			Louis BARTOLUCCI Total		35.00		
A025375	17757	11924	LUELLA BURTON	6/1/77	23.00	Placer	UNST
A028660	19898	15032	LUELLA BURTON	12/13/65	10.00	Placer	UNST
			LUELLA BURTON Total		33.00		
A017863	11531	9020	MARTIN P & BARBARA C BRUMM JOINT LIVING TRUST	10/25/57	26.80	Nevada	UNST
			MARTIN P & BARBARA C BRUMM JOINT LIVING TRUST Total		26.80		
A017918	11685	10988	MELBA C SMITH	12/17/57	53.00	Nevada	WOLF CREEK
			MELBA C SMITH Total		53.00		
A027040	18782	12458	MICHAEL J BONELLI	10/13/61	14.50	Nevada	UNST
			MICHAEL J BONELLI Total		14.50		
A028348	19601	12817	MICHAEL K SCHARF	12/4/84	3.90	Placer	UNST
			MICHAEL K SCHARF Total		3.90		
A031298	21148		MICHAEL S DICKEY	5/15/03	49.00	Nevada	UNST
			MICHAEL S DICKEY Total		49.00		
A028630	20005	13060	MIKE BASICH	12/2/85	0.10	Placer	CAMPBELL CREEK
			MIKE BASICH Total		0.10		
A019749C		008012C	MOREHEAD LAND LLC	10/13/00	402.40	Nevada, Sutter	EAST BORROW PIT OF SUTTER BYPASS, POODLE CREEK, UNST
			MOREHEAD LAND LLC Total		402.40		
A002652A	5803	10350	NEVADA IRRIGATION DISTRICT	11/22/21	12,500.00	Nevada, Placer	BEAR RIVER
A006229	5804	8809	NEVADA IRRIGATION DISTRICT	3/26/29	50,936.30	Placer	BEAR RIVER
A002652B	11626		NEVADA IRRIGATION DISTRICT	11/22/21	65,000.00	Placer	BEAR RIVER
			NEVADA IRRIGATION DISTRICT Total		128,436.30		
A023107	16058	10594	PATRICK D BRYAN	8/7/68	9.20	Nevada	UNST
			PATRICK D BRYAN Total		9.20		
A028561	19808	12977	PAUL R SEIDER	9/20/85	1.50	Nevada	SOUTH WOLF CREEK
			PAUL R SEIDER Total		1.50		

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A026684	18972	12398	PINE LAKE ASSOCIATION	1/13/81	45.00	Nevada	UNST
			PINE LAKE ASSOCIATION Total		45.00		
A025922A	17880	11925	PITTS FAMILY TRUST	3/11/86	18.00	Nevada	UNST
			PITTS FAMILY TRUST Total		18.00		
A017912	11841	7101	RICHARD L BARBER	12/11/57	5.80	Placer	UNSP (2)
A021867	15251	9546	RICHARD L BARBER	8/10/64	358.30	Placer	LITTLE BEAR CREEK, UNST
			RICHARD L BARBER Total		363.90		
A020105	13690	7762	RICHARD P O'NEIL	5/1/61	2.50	Nevada	WOLF CREEK
			RICHARD P O'NEIL Total		2.50		
A021473	14619	8876	ROBERT FORD	9/23/63	0.90	Nevada	UNST
			ROBERT FORD Total		0.90		
A025962	17954	12055	ROBERT C ERDMANN	4/3/79	5.00	Nevada	UNST
			ROBERT C ERDMANN Total		5.00		
A025922B	17889	11926	Robert M Rourke	3/11/86	5.30	Nevada	UNST
			Robert M Rourke Total		5.30		
A003995	1847	1612	ROBERT N CAIN	5/20/24	40.00	Nevada	MAGNOLIA CREEK
A015607	9697	5685	ROBERT N CAIN	11/10/53	91.10	Nevada	MAGNOLIA CREEK
			ROBERT N CAIN Total		131.10		
A017942A	11413	008536A	ROBERT P WADMAN	10/14/81	48.30	Nevada	LONG HOLLOW Ravine
			ROBERT P WADMAN Total		48.30		
A024624	16166	12199	ROBIN BURKE	4/27/87	8.80	Placer	UNST
			ROBIN BURKE Total		8.80		
A023550	16229	12356	RODRIC ANDERSON	7/10/70	8.00	Nevada	UNST
			RODRIC ANDERSON Total		8.00		
A025226	17450	12339	ROGER C PATTERSON	1/3/77	92.00	Placer	UNST
			ROGER C PATTERSON Total		92.00		
A031859			RON BINGAMAN	10/20/10	2,172.00	Nevada	
A030973	21073		RON BINGAMAN	10/14/99	2,172.00	Nevada	UNST (AKA WOLF HANNAMAN RANDOM DITCH)
			RON BINGAMAN Total		4,344.00		
A026072	18034	11907	RONALD F BURKHARDT	8/24/78	18.00	Nevada	UNST
			RONALD F BURKHARDT Total		18.00		
A017767	11458	8624	Ryan R Say	8/17/57	4.80	Nevada	UNST
			Ryan R Say Total		4.80		
A025492	17729	11941	SARAH JOELSON	8/29/77	15.00	Nevada	INDIAN SPRINGS CREEK
			SARAH JOELSON Total		15.00		
A026100	18035	11880	SCOTT C JASPAR	9/28/79	2.40	Nevada	UNST
			SCOTT C JASPAR Total		2.40		
A019003	12858	7437	SETH NOTO	9/25/59	1.10	Nevada	UNST
			SETH NOTO Total		1.10		
A023549B	010658B		SHARON EARHART	12/14/98	8.00	Nevada	UNST
			SHARON EARHART Total		8.00		
A026876	19442	12618	SHEILA ST GERMAIN	6/17/81	5,166.00	Nevada	UNST
			SHEILA ST GERMAIN Total		5,166.00		

Bear River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A024984	16847	11190	SMITH & SMITH RANCH, A PARTNERSHIP	1/29/76	3.00	Nevada	UNST
A027152	16851	12679	SMITH & SMITH RANCH, A PARTNERSHIP	12/17/81	2.40	Nevada	UNST
			SMITH & SMITH RANCH, A PARTNERSHIP Total		5.40		
A010221	14871	11120	SOUTH SUTTER WATER DISTRICT	5/15/81	130,745.10	Yuba	BEAR RIVER
A014804	11297	11118	SOUTH SUTTER WATER DISTRICT	5/12/52	139,534.80	Yuba	BEAR RIVER
			SOUTH SUTTER WATER DISTRICT Total		270,279.90		
A014773B	9106	006560B	SPRING VALLEY HOMEOWNERS ASSOCIATION	12/10/82	24.00	Placer	UNST
A020532	13760	8381	SPRING VALLEY HOMEOWNERS ASSOCIATION	3/1/62	52.00	Placer	UNST
A025139	17584	13120	SPRING VALLEY HOMEOWNERS ASSOCIATION	8/31/76	4.70	Placer	UNST
			SPRING VALLEY HOMEOWNERS ASSOCIATION Total		80.70		
A017420	11047	6954	STEVE KOTHE	1/23/57	84.90	Nevada	RAGSDALE CREEK
			STEVE KOTHE Total		84.90		
A022382	15366	10099	THE LAKEWOOD ASSOCIATION INC	2/4/86	486.00	Nevada	DRY CREEK
			THE LAKEWOOD ASSOCIATION INC Total		486.00		
A026160	18323	12118	THOMAS S VAN HORNE	12/31/79	3.10	Nevada	UNSP
A027695	19793	12934	THOMAS S VAN HORNE	3/23/83	11.90	Nevada	UNST
			THOMAS S VAN HORNE Total		15.00		
A010150	5785	2656	U S FOREST SERVICE	3/22/41	0.50	Nevada	KING WOODFORD SPRING
A010439	6011	2888	U S FOREST SERVICE	5/6/42	0.70	Nevada	FOWLER SPRING
A010504	6101	4977	U S FOREST SERVICE	7/15/42	10.50	Nevada	MULE SPRING
			U S FOREST SERVICE Total		11.70		
A025211	17449	12756	UNITED AUBURN INDIAN DEVELOPMENT CORP	12/13/76	49.90	Placer	UNST
			UNITED AUBURN INDIAN DEVELOPMENT CORP Total		49.90		
A028170	19998	13007	William Scott	6/29/84	0.10	Nevada	UNST
			William Scott Total		0.10		
A028128	19417		WILLIAM M DONNELLY JR	5/23/84	2.00	Nevada	UNST
			WILLIAM M DONNELLY JR Total		2.00		
			Grand Total		476,023.40		

American River - Post-1914 Appropriative Water Right

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD10397	5958	3042	AL RENKER	3/11/1942	0.10	El Dorado	SOUTH FORK AMERICAN RIVER
			AL RENKER Total		0.10		
AD07905	4344	1601	ALBERT E CASH	4/12/1934	0.20	El Dorado	BULL CREEK
			ALBERT E CASH Total		0.20		
AD27366	19666		ALBERT R DAVIDSON	6/21/1962	30.00	El Dorado	UNST
			ALBERT R DAVIDSON Total		30.00		
AD16894	11321	7150	ALLEN E NEWTON	2/14/1956	18.20	Placer	UNST
			ALLEN E NEWTON Total		18.20		
AD13849	8297	551R	ALLEN FAMILY TRUST	7/17/1950	53.90	Placer	UNST
			ALLEN FAMILY TRUST Total		53.90		
AD28457	16473	13786	American River Conservancy	7/15/1980	49.00	El Dorado	GRAVITE CREEK
			American River Conservancy Total		49.00		
AD13296	8191	6304	ANN BATEY	8/15/1949	137.00	El Dorado	INDIAN CREEK
			ANN BATEY Total		137.00		
AD29219	20482		ANTHONY J FREITAS	4/7/1995	21.20	El Dorado	JOHNTOWN CREEK
			ANTHONY J FREITAS Total		21.20		
AD27926	19263	12703	APPLE MOUNTAIN LP	12/7/1983	11.80	El Dorado	SOUTH CANYON, UNST
			APPLE MOUNTAIN LP Total		11.80		
AD11184	8479	3390	ARDEN HALL	10/16/1945	0.10	El Dorado	SOUTH FORK AMERICAN RIVER
			ARDEN HALL Total		0.10		
AD11516	8689	3383	ARTHUR S DEAN	8/15/1946	36.20	El Dorado	UNSP
			ARTHUR S DEAN Total		36.20		
AD21646	14938	11111	AUBURN LAKE TRAILS PROPERTY OWNERS ASSOC	2/21/1964	34.00	El Dorado	HAINE BAR CANYON
AD23586	16296	11112	AUBURN LAKE TRAILS PROPERTY OWNERS ASSOC	7/14/1970	20.00	El Dorado	HAINE BAR CANYON
AD26410	18279	12013	AUBURN LAKE TRAILS PROPERTY OWNERS ASSOC	6/10/1980	14.00	El Dorado	HAINE BAR CANYON
			AUBURN LAKE TRAILS PROPERTY OWNERS ASSOC Total		68.00		
AD11817	6920	6045	BAKER FAMILY TRUST 1999	4/8/1947	13.70	El Dorado	HANGTOWN CREEK
AD11850	6959	3357	BAKER FAMILY TRUST 1999	5/11/1947	3.40	El Dorado	HANGTOWN CREEK
			BAKER FAMILY TRUST 1999 Total		17.10		
AD16135	12391	745R	BARBARA ELLEN HOLLAND	12/8/1959	5.30	El Dorado	UNSP, UNST
			BARBARA ELLEN HOLLAND Total		5.30		
AD203968	13169	8778	BARBAREE JERNIGAN	5/5/1971	2.20	El Dorado	WHITE ROCK CREEK
			BARBAREE JERNIGAN Total		2.20		
AD17420	11173	6280	BEADLE LIVING TRUST DATED SEPTEMBER 12, 1995	1/11/1997	5.90	Placer	UNST
			BEADLE LIVING TRUST DATED SEPTEMBER 12, 1995 Total		5.90		
AD27752	19822		BEAR STATE WATER WORKS	5/10/1983	37.00	El Dorado	UNSP
			BEAR STATE WATER WORKS Total		37.00		
AD21885	14852	9503	BENJAMIN KEH	7/20/1964	4.00	Placer	HINERS RAUTNE
			BENJAMIN KEH Total		4.00		
AD22037	15105	9621	Berry Patty LLC	2/4/1995	2.20	El Dorado	UNSP (2)
			Berry Patty LLC Total		2.20		
AD18182	12853	6484	BERTABELLE STEAD	6/13/1958	0.50	El Dorado	NEW WORLD TUNNELL
			BERTABELLE STEAD Total		0.50		
AD14263	8672	4696	BISHOP FAMILY TRUST	4/20/1951	0.30	El Dorado	UNSP

American River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD15346		9640	7253 BISHOP FAMILY TRUST	5/16/1953	0.40	El Dorado	UNSP
AD16123		10244	10698 BISHOP FAMILY TRUST	11/4/1954	2.20	El Dorado	UNSP
AD18515		13834	10699 BISHOP FAMILY TRUST	2/3/1959	1.20	El Dorado	UNSP
			BESHOP FAMILY TRUST Total		4.10		
AD10731		6307	5449 BLACK ROCK RANCH	11/17/1943	715.10	El Dorado	HASTINGS CREEK (AKA BLACK ROCK CREEK)
AD13123		3468	5350 BLACK ROCK RANCH	5/31/1949	52.00	El Dorado	HASTING CREEK (AKA BLACK ROCK CREEK)
AD19943		13963	9915 BLACK ROCK RANCH	1/31/1961	104.80	El Dorado	BLACK ROCK CREEK
			BLACK ROCK RANCH Total		671.70		
AD23438		16059	10231 BLUE CANYON PROPERTIES INC	1/16/1970	15.00	Placer	UNST
			BLUE CANYON PROPERTIES INC Total		15.00		
AD04365		2048	1112 BORIS T YEN	12/15/1924	2.80	El Dorado	EVANS CREEK
			BORIS T YEN Total		2.80		
AD25841		17711	12427 BRETTE MARK GREEN	10/3/1978	1.30	El Dorado	UNST
			BRETTE MARK GREEN Total		1.30		
AD16974		10644	5562 Brian P Tucker	9/28/1956	9.60	Placer	UNDR
			Brian P Tucker Total		9.60		
AD06999		2297	1419 BRIAN K BRAY	7/7/1931	0.30	El Dorado	UNST
			BRIAN K BRAY Total		0.30		
AD14138		6583	4678 BURNS LIVING TRUST	1/22/1951	0.20	El Dorado	BULL CREEK
AD20543		13567	9133 BURNS LIVING TRUST	12/29/1961	0.40	El Dorado	UNSP (3)
			BURNS LIVING TRUST Total		0.60		
AD13971		8391	6961 BYRON D SHER	9/29/1950	76.00	El Dorado	UNWX
			BYRON D SHER Total		76.00		
AD04868		2458	945 BYRON W BACCHI IRREVOCABLE TRUST, THE	12/19/1925	36.20	El Dorado	NORTH INDIAN CREEK
			BYRON W BACCHI IRREVOCABLE TRUST, THE Total		36.20		
AD13766		6755	5625 C A JONES	5/31/1950	12.00	El Dorado	NORTON RAVINE
			C A JONES Total		12.00		
AD21806		15127	9611 CARDWELL R CURREN	6/9/1964	4.70	El Dorado	WEST FORK SAWMILL CREEK
			CARDWELL R CURREN Total		4.70		
AD22082		15107	9622 CAROL BERCIER	2/24/1965	1.00	El Dorado	UNSP (2)
			CAROL BERCIER Total		1.00		
AD05806		2036	1071 CAROL WARD	1/16/1928	79.00	Placer	ANTELOPE CREEK
AD09500		5335	3137 CAROL WARD	1/31/1939	90.30	Placer	ANTELOPE CREEK
			CAROL WARD Total		169.00		
AD07586		4189	3154 CECIL L WESTEL JR	6/14/1933	5.00	El Dorado	LONG CANYON
			CECIL L WESTEL JR Total		5.00		
AD26475		18404	12699 CHARLES DAVIS	7/28/1980	0.30	Placer	UNST
			CHARLES DAVIS Total		0.30		
AD23990		16722	10947 CHARLES D BRADARIC	3/7/1972	4.50	Placer	UNST
			CHARLES D BRADARIC Total		4.50		
AD18283		11628	10069 CHARLES K MCCLATCHY	3/17/1958	6.00	El Dorado	UNST
			CHARLES K MCCLATCHY Total		6.00		
AD26380		19259	CHI WEST INC	5/22/1980	72,392.80	El Dorado	ROCK CREEK
AD27353		19260	CHI WEST INC	6/4/1982	67,178.70	El Dorado	ROCK CREEK
			CHI WEST INC Total		139,571.50		
AD23939		16492	11032 CHRIS BEAUCHAMP	12/8/1971	3.90	El Dorado	UNST
			CHRIS BEAUCHAMP Total		3.90		

American River - Post-1914 Appropriative Water Right

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD18939	12275	10064	CHRISTIAN CHURCHES OF N CALIF-W NEVADA CHRISTIAN CHURCHES OF N CALIF-W NEVADA Total	8/20/1959	12.30	Floater	UNSP
AD25097	12594	11894	CINDY WHITE CINDY WHITE Total	7/9/1976	0.60	El Dorado	UNST
AD12149	7201	4847	CITY OF PLACERVILLE	11/4/1947	10.00	El Dorado	UNST
AD14706	9209	6282	CITY OF PLACERVILLE CITY OF PLACERVILLE Total	3/11/1952	6.60	El Dorado	BIG CANYON CREEK
AD01883	858	1070	CITY OF SACRAMENTO	3/29/1920	2.10	El Dorado	SAVLES CANYON
AD12140	11358		CITY OF SACRAMENTO	10/29/1947	271,798.50	Sacramento	AMERICAN RIVER
AD12321	11359		CITY OF SACRAMENTO	2/13/1948	443,476.50	El Dorado	BRUSH CREEK, SILVER CREEK, SOUTH FORK SILVER CREEK
AD16080	11361		CITY OF SACRAMENTO	5/7/1958	95,186.80	Sacramento	AMERICAN RIVER
AD17682	11360		CITY OF SACRAMENTO	10/30/2000	966,174.80	El Dorado	BRUSH CREEK, GRILLE CREEK, LOON LAKE, ROCKBOUND LAKE, RUBICOH RIVER, SILVER CREEK, SOUTH FORK RUBICOH RIVER
			CITY OF SACRAMENTO Total		1,776,593.70		
AD04062	1853	1434	CITY OF STOCKTON	9/21/1939	12.20	Amador	UNCR
AD07952	4514	2248	CITY OF STOCKTON CITY OF STOCKTON Total	5/28/1934	0.40	Amador	UNCR
AD25409	17623	12579	CLARENCE DILTS CLARENCE DILTS Total	8/21/1978	2.40	El Dorado	UNSP
AD19791	12964	8081	CLARIS GOULART CLARIS GOULART Total	10/4/1960	62.40	Floater	UNST
AD29857			COUNTY OF SAN JOAQUIN COUNTY OF SAN JOAQUIN Total	3/9/1990	147,000.00		
AD17368	10943	6893	Dale Copper Dale Copper Total	12/17/1956	31.00	El Dorado	UNST
AD19975	13230	10022	DALE B COOK DALE B COOK Total	3/16/1973	14.70	El Dorado	UNST
AD34427	18890	11259	DANIEL E LITTLE DANIEL E LITTLE Total	8/3/1973	2.80	El Dorado	UNST
AD13521	8424	4467	Daniel J Peterson Daniel J Peterson Total	12/27/1949	145.00	El Dorado	UNST
AD24575	16850	11161	DARREL PEARSON DARREL PEARSON Total	3/21/1974	2.90	El Dorado	KELLEY CREEK
AD17571B	11120	9732	DAVE TOGNETTI DAVE TOGNETTI Total	4/25/1957	4.10	Placer	ANTELOPE CREEK
AD05704	3038	1684	DAVID B BARTHOLOMEW DAVID B BARTHOLOMEW Total	9/30/1927	0.30	El Dorado	UNSP (2)
AD17571A	11120	9731	DAVID C MOORE DAVID C MOORE Total	4/25/1957	3.90	Placer	ANTELOPE CREEK
AD08024	3663	857	DAVID HAYNES MERINGS DAVID HAYNES MERINGS Total	3/18/1926	0.30	El Dorado	UNSP
AD13462	7434	3529	DAVID W GIRARD DAVID W GIRARD Total	4/6/1948	4.00	El Dorado	CHURK RAUNHE
AD16289	10247	5807	David William Barton David William Barton Total	3/18/1955	14.60	Placer	UNSP
AD28776	19076	12620	DE ANZA PLACER GOLD MINING COMPANY	4/6/1981	9.80	Placer	PAGGE CREEK

American River - Post-1914 Appropriative Water Right

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD27566	19829	13641	DE ANZA PLACER GOLD MINING COMPANY	11/8/2011	215.20	Placer	NORTH FORK FORBES CREEK
AD29364	20777	13644	DE ANZA PLACER GOLD MINING COMPANY	12/9/2011	11.20	Placer	PAGGE CREEK
			DE ANZA PLACER GOLD MINING COMPANY Total		226.20		
AD21763	15075	8882	DEAN P A ELBERT	5/6/1964	9.00	El Dorado	THIRD OTTER CREEK
			DEAN P A ELBERT Total		9.00		
AD11689	6706	5205	DEER HILLS PROPERTY OWNERS ASSN	1/9/1947	45.00	El Dorado	UNST
			DEER HILLS PROPERTY OWNERS ASSN Total		45.00		
AD16995	11491	7992	DENNIS R DALTON	6/9/1956	3.00	Placer	UNST
			DENNIS R DALTON Total		3.00		
AD162118	11657	9367	DIAMANTE DEVELOPMENT LLC	7/9/1956	0.50	El Dorado	UNSP
AD22791	15500	10062	DIAMANTE DEVELOPMENT LLC	5/18/1967	0.30	El Dorado	UNST
			DIAMANTE DEVELOPMENT LLC Total		0.80		
AD09134	5059	3790	DIANE COSGROVE	10/2/1937	0.10	El Dorado	COLD STREAM
			DIANE COSGROVE Total		0.10		
AD21857	15201	10018	DIANE W BUCHHOLZ	7/30/1964	16.00	El Dorado	BEAR CREEK
			DIANE W BUCHHOLZ Total		16.00		
AD28208A	019433A	13035	DIANNA NEWBORN	3/8/1991	5.50	El Dorado	UNST
AD29956	20456	13724	DIANNA NEWBORN	6/6/2007	14.50	El Dorado	UNST
			DIANNA NEWBORN Total		20.00		
AD04357	2047	1346	DINO E ANDREOTTI	12/9/1924	1.80	El Dorado	UNCR
AD22596	15410	9637	DINO E ANDREOTTI	9/30/1966	0.20	El Dorado	UNST
			DINO E ANDREOTTI Total		2.00		
AD26436	16729	12676	DOBBS RANCH	6/30/1980	0.50	El Dorado	UNSP
AD26436	15731	12677	DOBBS RANCH	6/30/1980	0.40	El Dorado	UNSP
			DOBBS RANCH Total		0.90		
AD05413	2955	3008	DON K AND J A TAYLOR, TRUSTEES	4/11/1927	137.80	Placer	RED RAVINE (AKA BUCKEYE RAVINE)
			DON K AND J A TAYLOR, TRUSTEES Total		137.80		
AD23032	15758	10314	Donald Ray Neal	4/19/1968	12.00	Placer	UNST
			Donald Ray Neal Total		12.00		
AD14326	9289	5017	DONALD DEAN HUTCHISON	5/29/1951	43.90	Placer	ANTELOPE CREEK
			DONALD DEAN HUTCHISON Total		43.90		
AD12588	7431	4049	DONALD G RHODES	7/19/1948	2.50	El Dorado	UNSP
AD18589	12063	8421	DONALD G RHODES	2/26/1959	2.50	El Dorado	UNST
			DONALD G RHODES Total		5.00		
AD13752	8200	4756	DONALD W FIELDS	5/23/1950	4.10	El Dorado	WEBER CREEK
			DONALD W FIELDS Total		4.10		
AD06952	5622	2563	DONNA MCTAGGART	7/12/1940	0.20	El Dorado	PYRAMID CREEK
			DONNA MCTAGGART Total		0.20		
AD24705	17708	12232	DOROTHY A MARTIN	11/6/1974	1.80	El Dorado	WHITE ROCK CREEK
			DOROTHY A MARTIN Total		1.80		
AD21159	28087	13231	DOUGLAS A NICKELL	6/12/1984	0.10	Placer	UNSP
			DOUGLAS A NICKELL Total		0.10		
AD30352	20682		DOUGLAS B VEERKAMP	4/14/1994	88.00	El Dorado	UNST
			DOUGLAS B VEERKAMP Total		88.00		
AD21686	19623	9202	Douglas R. Gingerich	3/17/1964	20.00	Placer	UNST
			Douglas R. Gingerich Total		20.00		
AD18590	13565	8107	DRONE GRANT INVESTMENT GROUP	3/12/1959	61.30	El Dorado, Placer	DEVILS CANYON CREEK
			DRONE GRANT INVESTMENT GROUP Total		61.30		

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD24514C	16976	11411	DWIGHT R DENTON	1/25/1984	6.00	El Dorado	SWEETWATER CREEK
AD24514D	16978	11412	DWIGHT R DENTON	1/25/1984	20.00	El Dorado	SWEETWATER CREEK
AD27630	16901	12613	DWIGHT R DENTON	1/13/1983	0.00	El Dorado	SWEETWATER CREEK
AD27703	19034	12615	DWIGHT R DENTON	4/4/1983	5.00	El Dorado	SWEETWATER CREEK
			DWIGHT R DENTON Total		40.00		
AD25711	17843	12515	ECHO LANE INVESTORS	4/6/1978	10.00	El Dorado	INDIAN CREEK
			ECHO LANE INVESTORS Total		10.00		
AD13369	8403	5210	EDWARD MACKAY	9/28/1949	9.50	El Dorado	UNCR
			EDWARD MACKAY Total		9.50		
AD26573	19066	12660	EDWARD L PURKEY	10/8/1980	1.40	El Dorado	UNST
			EDWARD L PURKEY Total		1.40		
AD12475	7386	3689	EDWARD P AKIN	4/14/1946	40.00	El Dorado	UNST
			EDWARD P AKIN Total		40.00		
AD1692	1053	3184	EL DORADO IRRIGATION DISTRICT	3/25/2000	1,125.00	El Dorado	NORTH FORK WEBER CREEK
			EL DORADO IRRIGATION DISTRICT Total		1,125.00		
AD19532	13336	8231	ELAINE BARKER	7/8/1960	1.20	Placer	UNST
			ELAINE BARKER Total		1.20		
AD12675	7654	4021	ELISABETH MILLER	12/23/1946	25.00	El Dorado	COLD SPRINGS CREEK
AD14603	4953	5507	ELISABETH MILLER	12/14/1951	15.00	El Dorado	UNST
			ELISABETH MILLER Total		40.00		
AD22364	15320	9022	ELIZABETH CRONIN	1/13/1966	0.10	El Dorado	UNST
			ELIZABETH CRONIN Total		0.10		
AD11628	6789	3206	ELIZABETH A NILES	11/18/1946	0.80	El Dorado	UNSP
			ELIZABETH A NILES Total		0.80		
AD18541	12027	9676	EMIGRANT GAP MUTUAL WATER CO	3/19/1959	73.00	Placer	BLUE CANYON CREEK, UNST
			EMIGRANT GAP MUTUAL WATER CO Total		73.00		
AD24535	17217	11424	ERLINE M HELLO	1/25/1974	16.00	El Dorado	COLOMA CANYON CREEK
			ERLINE M HELLO Total		16.00		
AD11522B	6700	605447b	Estate of Rudolf K. Sachau	8/21/1946	36.40	Placer	UNSP
AD25016	17647	11750	Estate of Rudolf K. Sachau	3/5/1976	1.00	Placer	UNSP
			Estate of Rudolf K. Sachau Total		37.40		
AD26825	18611	12395	ESTHER E TOWNZEN	5/11/1961	2.10	El Dorado	UNST
			ESTHER E TOWNZEN Total		2.10		
AD19626	12972	9337	EUGENE FILEV	10/24/1980	2.00	El Dorado	UNSP (3)
			EUGENE FILEV Total		2.00		
AD06431	3385	1247	EUGENE LANGENBACH	9/10/1929	0.10	El Dorado	UNST
			EUGENE LANGENBACH Total		0.10		
AD16037	10068	5122	EUGENE A WILSON	9/6/1954	1.40	El Dorado	UNST
			EUGENE A WILSON Total		1.40		
AD25631	17347	11246	EUGENE H MEYER	1/3/1978	0.20	El Dorado	BURNT SHAFTY CREEK
			EUGENE H MEYER Total		0.20		
AD00548	258	176	EVELYN T WICKS	12/28/1916	53.70	Placer	SECRET RAVINE
			EVELYN T WICKS Total		53.70		
AD12316	7162	4341	EVERETT B DYER III	2/11/1946	2.00	El Dorado	SOUTH FORK TENNESSEE CREEK
			EVERETT B DYER III Total		2.00		
AD19553	12930	7751	FARHAD MORTAZAVI	7/18/1960	1.70	Placer	UNST
			FARHAD MORTAZAVI Total		1.70		
AD16544	10554	6167	FAY F CARVER	8/23/1955	1.60	Placer	UNST
			FAY F CARVER Total		1.60		
AD16211A	11667	9386	FAY LOUIE LIVING REVOCABLE TRUST OF 5/11/01	7/8/1988	10.00	El Dorado	GREEN SPRING CREEK

American River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD22236	15448	9324	FAY LOUIE LIVING REVOCABLE TRUST OF 5/11/01 FAY LOUIE LIVING REVOCABLE TRUST OF 5/11/01 Total	7/16/1965	17.00	El Dorado	GREEN SPRINGS CREEK
AD31074	21172		FLA Roseville LP FLA Roseville LP Total	8/5/2005	49.00	Placer	UNST
AD18951	13584	9959	FORESTHILL PUBLIC UTILITY DISTRICT	3/24/1959	81.00	Placer	MILL CREEK
AD21945	15378		FORESTHILL PUBLIC UTILITY DISTRICT	10/22/1964	24,075.80	Placer	NORTH SHIRTTAIL CANYON
AD24596	16844	13038	FORESTHILL PUBLIC UTILITY DISTRICT FORESTHILL PUBLIC UTILITY DISTRICT Total	4/22/1974	186.80	Placer	MILL CREEK
AD12131	7200	5976	FOUR CORNERS LANDOWNERS ASSOC FOUR CORNERS LANDOWNERS ASSOC Total	10/16/1947	567.00	El Dorado	JACOBS CREEK
AD07776	4364	2233	FRANCINE MARQUIS FRANCINE MARQUIS Total	12/5/1933	0.40	El Dorado	UNSP
AD29955	20661		FRANCIS P ALLEN TRUST FRANCIS P ALLEN TRUST Total	5/15/1991	2.50	El Dorado	PEACOCK RAVINE
AD06540	3509	1119	FRANK D MORILLAS FRANK D MORILLAS Total	1/20/1930	61.10	Placer	SECRET RAVINE
AD20339	19427	6239	FRANK P ROMANO FRANK P ROMANO Total	8/2/1961	3.40	El Dorado	UNSP
AD24683	17146	11477	FRED H RUSSELL III FRED H RUSSELL III Total	8/30/1974	6.00	El Dorado	UNST
AD11588A	6729	003374A	FREDERICK R MCLAREN	9/20/1982	6.80	El Dorado	INDIAN CREEK
AD11588B	6729	003374B	FREDERICK R MCLAREN	9/20/1982	6.80	El Dorado	INDIAN CREEK
AD11588C02	6729	003374C02	FREDERICK R MCLAREN	12/13/1985	75.70	El Dorado	INDIAN CREEK
AD16368A	10290	008701A	FREDERICK R MCLAREN	9/20/1982	3.80	El Dorado	INDIAN CREEK
AD16368B	10290	008701B	FREDERICK R MCLAREN	9/20/1982	3.80	El Dorado	INDIAN CREEK
AD16368C02	10290	008701C02	FREDERICK R MCLAREN FREDERICK R MCLAREN Total	12/13/1985	43.60	El Dorado	INDIAN CREEK
AD0340E	2339	2053	GAEL M BARSOTTI	5/18/1923	188.40	El Dorado	BRUSH CANYON
AD20305	14796	9606	GAEL M BARSOTTI	7/18/1961	70.20	El Dorado	BRUSH CANYON
AD30306	14797	9679	GAEL M BARSOTTI	7/18/1961	70.20	El Dorado	BRUSH CANYON
AD20307	14798	9680	GAEL M BARSOTTI GAEL M BARSOTTI Total	7/18/1961	70.20	El Dorado	BRUSH CANYON
AD26060	16050	11935	GAIL IRENE WHITE GAIL IRENE WHITE Total	8/8/1979	0.40	Placer	UNST
AD07913	3806	1699	GALE A HCGUIRE GALE A HCGUIRE Total	7/20/1931	0.30	El Dorado	BULL CREEK
AD16657	12072	6495	GARY T MATSON GARY T MATSON Total	4/21/1999	9.00	El Dorado	UNST
AD18158	11644	8407	GEOFF H JOHNSON GEOFF H JOHNSON Total	5/26/1950	72.20	El Dorado	UNSP, UNST
AD15252	9538	7761	George Popescu George Popescu Total	3/24/1953	15.00	El Dorado	KELLEY CREEK
AD15522	10018	7542	George & Geri Grant LP George & Geri Grant LP Total	9/2/1953	36.20	Placer	DWL CREEK, UNST
AD0248E	1632	486	GEORGE A FARIS GEORGE A FARIS Total	7/27/1921	0.40	El Dorado	UNSP (2)
AD16763	10500	5508	GEORGE A LAY GEORGE A LAY Total	12/9/1955	11.00	Placer	UNDR

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt.	County	Source
AD22996	15853	10207	GEORGE ANGELO TSAKOPOULOS	3/26/1968	15.00	Sacramento	ALDER CREEK
			GEORGE ANGELO TSAKOPOULOS Total		15.00		
AD18004	11546	8163	GEORGE L COX	3/18/1958	36.70	Placer	UNST
AD21211	14210	8655	GEORGE L COX	3/29/1963	6.60	Placer	UNST
			GEORGE L COX Total		43.30		
AD13131	7830	3813	GEORGE W SHRIVER	6/2/1949	0.20	El Dorado	SOUTH FORK AMERICAN RIVER
			GEORGE W SHRIVER Total		0.20		
A005644A	12027		GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT	3/24/2000	74,347.90	El Dorado	PILOT CREEK
							BACON CANYON, BRANCH OF FIRST CANYON OTTER CREEK, BRANCH OF SECOND CANYON OTTER CREEK, BRANCH OF THIRD CANYON OTTER CREEK, DEEP CANYON, PILOT CREEK, UNXX, UNXX (2)
AD16212	11304		GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT	3/24/2000	20,000.00	El Dorado	
AD16688	11306		GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT	10/24/1955	20,363.90	El Dorado	ONION CREEK
			GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT Total		118,711.00		
AD18487	11899	7157	GERALD E HAWKINS	1/23/1939	6.10	El Dorado	UNSP
			GERALD E HAWKINS Total		6.10		
AD02944	1193	296	Gerald R Decamp	7/26/1922	0.30	El Dorado	COLD STREAM
			Gerald R Decamp Total		0.30		
AD07305	3982	1701	GILBERT A ALBANI	6/27/1932	0.20	El Dorado	UNSP
			GILBERT A ALBANI Total		0.20		
AD18586	11912	6624	GLEN EASTMAN	3/4/1939	0.90	El Dorado	UNSP, UNST
			GLEN EASTMAN Total		0.90		
AD15804	9984	6171	GORDON J VICINI	3/30/1954	98.80	El Dorado	BURNT SHALTY CREEK, UNST
			GORDON J VICINI Total		98.80		
AD11586CD1	6729	003374CD1	GREENSTONE COUNTRY OWNER'S ASSOC	12/13/1985	101.80	El Dorado	INDIAN CREEK
AD18368CD1	10290	008701CD1	GREENSTONE COUNTRY OWNER'S ASSOC	12/13/1985	210.90	El Dorado	INDIAN CREEK
AD26722	16583	12463	GREENSTONE COUNTRY OWNER'S ASSOC	2/30/1981	30.00	El Dorado	UNST
AD26415	15584	12461	GREENSTONE COUNTRY OWNER'S ASSOC	5/1/1981	1.70	El Dorado	UNST
AD26816	16595	12599	GREENSTONE COUNTRY OWNER'S ASSOC	5/1/1981	3.80	El Dorado	UNST
AD26817	16586	12460	GREENSTONE COUNTRY OWNER'S ASSOC	5/1/1981	39.00	El Dorado	UNST
AD26818	16587	12462	GREENSTONE COUNTRY OWNER'S ASSOC	5/1/1981	4.10	El Dorado	UNST
			GREENSTONE COUNTRY OWNER'S ASSOC Total		391.30		
AD03783	1743	590	GREGORY D HAWES	1/10/1924	0.60	El Dorado	COLD STREAM
			GREGORY D HAWES Total		0.60		
AD15048	9282	6572	GREGORY M WATSON	10/7/1952	5.00	Placer	UNST
			GREGORY M WATSON Total		5.00		
AD16526	10359	5837	GREGORY W PAINTER	10/22/1959	0.10	El Dorado	UNSP (2)
			GREGORY W PAINTER Total		0.10		
AD27615	16869	12406	HARLEY DELANO	12/30/1982	0.90	El Dorado	UNST
			HARLEY DELANO Total		0.90		
AD26099	16080	11266	HENRIETTA DENNIS	9/27/1929	1.30	El Dorado	UNSP
			HENRIETTA DENNIS Total		1.30		
AD06797	3653	1400	HENRIK KAM	9/17/1930	0.20	El Dorado	FORN CREEK
			HENRIK KAM Total		0.20		
AD14439	8890	4857	HENRY TEICHERT	8/23/1951	3.00	Placer	UNXX

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD15338		9553	5071 HENRY TEICHERT	5/12/1953	20.00	Placer	GRAPEVINE RAVINE
			HENRY TEICHERT Total		23.00		
AD13839		8361	5452 HENRY WALTHER	7/6/1950	38.00	Placer	UNST
AD15077		9273	5687 HENRY WALTHER	11/15/1952	16.00	Placer	UNST
			HENRY WALTHER Total		54.00		
AD13419		7892	5430 HIDDEN VALLEY COMMUNITY ASSOC	10/26/1949	165.50	Placer	MINERS RAVINE
AD14525		8807	5431 HIDDEN VALLEY COMMUNITY ASSOC	10/16/1951	57.30	Placer	MINERS RAVINE, UNST
			HIDDEN VALLEY COMMUNITY ASSOC Total		222.80		
AD12364		5127	4118 JACALYN GAY WINJE	2/27/1948	12.30	El Dorado	UNST
			JACALYN GAY WINJE Total		12.30		
AD29353A	017135A	13736	JACK E DEL CONTE	4/27/1990	1.40	Sacramento	LINDA CREEK
			JACK E DEL CONTE Total		1.40		
AD08756		4822	3431 JACK R WEAVER	8/8/1936	0.20	El Dorado	UNSP
			JACK R WEAVER Total		0.20		
AD25930		17740	11751 JAMES HART	2/28/1979	13.00	El Dorado	UNST
			JAMES HART Total		15.00		
AD14370		8994	5329 JAMES PETRIKIN	6/27/1951	50.70	Placer	DIRTY FACE RAVINE
			JAMES PETRIKIN Total		50.70		
AD25854		17735	12594 JAMES A CROFF	10/13/1976	6.80	El Dorado	UNST
			JAMES A CROFF Total		6.80		
AD07294		3973	1684 JAMES A WATT	6/16/1932	0.20	Alpine	UNSP
			JAMES A WATT Total		0.20		
AD09643		5384	2489 JAMES D & JANIS L ALDEA REVOKABLE TRUST	6/26/1979	0.16	El Dorado	UNST
AD10477		6004	2967 JAMES D & JANIS L ALDEA REVOKABLE TRUST	6/12/1942	0.30	El Dorado	UNST
			JAMES D & JANIS L ALDEA REVOKABLE TRUST Total		0.46		
AD28184		19584	12893 JAMES D MCCLAIN	7/6/1984	0.30	El Dorado	UNST
			JAMES D MCCLAIN Total		0.30		
AD28474		19727	13369 JAMES G CLARK	6/13/1985	0.50	El Dorado	UNST
			JAMES G CLARK Total		0.50		
AD12124		7129	6648 JAMES W ARNOLD	19/6/1947	14.00	El Dorado	NORTON RAVINE
			JAMES W ARNOLD Total		14.00		
AD19092A		12310	10056 JANI MANDEL	10/29/1939	7.10	Placer	UNST
			JANI MANDEL Total		7.10		
AD23041		15939	11075 JANICE M SUTHERLAND	5/10/1968	45.00	El Dorado, Placer	CLIPPER CREEK, UNST
			JANICE M SUTHERLAND Total		45.00		
AD04397B	000948B		JASON CARDINET	8/20/2004	16.30	Placer	AUBURN RAVINE
			JASON CARDINET Total		16.30		
AD04783		2403	943 JEFF LITTLE	9/24/1925	0.40	El Dorado	SOUTH FORK AMERICAN RIVER
			JEFF LITTLE Total		0.40		
AD20490		13614	8160 JEFF WEAVER	11/10/1961	1.40	El Dorado	MOSQUITO CREEK
			JEFF WEAVER Total		1.40		
AD10751		5237	3906 JEFFREY TILFORD	1/18/1944	149.30	Placer	UNST
AD14545		9004	5160 JEFFREY TILFORD	11/1/1951	21.20	Placer	UNXX
			JEFFREY TILFORD Total		170.50		
AD22817		15961	11707 JEFFREY C OLSON	6/14/1967	23.00	El Dorado	MARTEL CREEK, UNST
			JEFFREY C OLSON Total		23.00		
AD13542		6041	4124 JEFFREY R LEONG	1/18/1950	85.30	Placer	UNCH
			JEFFREY R LEONG Total		85.30		
AD14884		9127	8123 JEFFREY S HUBER	7/1/1952	12.00	Placer	CAPS RAVINE

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
			JEFFREY S RUBER Total		12.00		
AD05601	2909	1003	JEREMIAH FLYNN	7/11/1927	0.30	El Dorado	UNSP
			JEREMIAH FLYNN Total		0.30		
AD13302	8031	4853	Jerome Vickrey	12/7/1949	0.80	El Dorado	UNST
			Jerome Vickrey Total		0.80		
AD24109	16523	10713	JERRY DUNCAN	7/6/1972	9.00	Placer	UNST
			JERRY DUNCAN Total		9.00		
AD19185	12475	7817	JERRY JOHNSON	1/18/1969	35.00	Placer	UNST
			JERRY JOHNSON Total		35.00		
AD19392	13761	8064	JERRY W BALLEW	4/26/1960	3.80	El Dorado	UNSP
			JERRY W BALLEW Total		3.80		
AD25885	17736	11800	JOANNE K BATEMAN	10/13/1976	15.00	El Dorado	UNST
			JOANNE K BATEMAN Total		15.00		
AD12156	7142	3777	JOHN BRIGGS	11/17/1947	10.00	El Dorado	UNST
			JOHN BRIGGS Total		10.00		
AD15662	9733	6523	JOHN METROPOLIS III	12/28/1953	5.30	El Dorado	SOUTH FORK AMERICAN RIVER
			JOHN METROPOLIS III Total		5.30		
AD09199	5174	2571	John A. Cunningham	12/31/1937	0.10	El Dorado	COLD STREAM
			John A. Cunningham Total		0.10		
AD11812	6852	4317	JOHN C SUNDIN	4/4/1947	1.10	El Dorado	CHUNK CREEK
			JOHN C SUNDIN Total		1.10		
AD20259	13374	8114	JOHN E MARLOW	6/12/1961	16.20	El Dorado	UNST
AD20514	13836	10791	JOHN E MARLOW	12/5/1961	15.60	El Dorado	UNST
			JOHN E MARLOW Total		31.80		
AD07862	4251	1980	JOHN H PETERSON	9/6/1933	0.20	El Dorado	UNSP
			JOHN H PETERSON Total		0.20		
AD71802	14569	9751	JOHN P HENDERSON	5/29/1964	28.00	El Dorado	IRISH CREEK
			JOHN P HENDERSON Total		28.00		
AD16157	11843	6687	John Ryan Neil	5/26/1958	185.30	El Dorado	UNST
			John Ryan Neil Total		185.30		
AD17223	11314	6248	JOHN T LUUKKONEN	8/9/1956	266.50	Placer	SAILORS Ravine
			JOHN T LUUKKONEN Total		266.50		
AD02190	1003	510	JOH KNUDSEN	11/16/1948	87.00	Placer	CAPS Ravine
			JOH KNUDSEN Total		87.00		
AD23302	15958	11159	JOSEPH MALONEY	7/2/1969	14.70	El Dorado	UNST
			JOSEPH MALONEY Total		14.70		
AD30402	20968	13804	JOSEPH M KEATING	4/6/2010	14.00	El Dorado	UNST
			JOSEPH M KEATING Total		14.00		
AD12999	7757	4363	JOSEPH S LANZA	3/24/1949	173.80	El Dorado	FISH CREEK
			JOSEPH S LANZA Total		173.80		
AD18684	12034	7387	JOSH L WILSON JR	4/30/1959	3.40	Placer	UNSP
			JOSH L WILSON JR Total		3.40		
AD25560	17345	12476	KARL HEMPLING	11/10/1977	4.00	El Dorado	UNST
AD25567	17346	11420	KARL HEMPLING	11/15/1977	2.40	El Dorado	UNST
			KARL HEMPLING Total		6.40		
AD12240	7239	6374	KATHERINE A TUTTLE	1/13/1948	70.00	El Dorado	WHITE ROCK CANYON
			KATHERINE A TUTTLE Total		70.00		
AD25726	17660	12394	KEN JOSEPH	3/17/1989	1.10	El Dorado	UNST
			KEN JOSEPH Total		1.10		
AD24875	16908	13688	KENIETH RHEINTEL	12/13/2006	7.50	El Dorado	BRUSHY CANYON

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD13816	8147	3839	KENNETH PIMENTEL Total	3/6/1950	2.50		
			KENNETH SAYLOR		0.20	El Dorado	UNST
			KENNETH SAYLOR Total		0.20		
AD27851	19312		KENNETH WILSON	2/10/1983	8,398.10	El Dorado	CANYON CREEK
			KENNETH WILSON Total		8,398.10		
AD06685	3565	1390	KENNETH J HAGRI	5/21/1930	0.30	El Dorado	UNCR
			KENNETH J HAGRI Total		0.30		
AD18579	11931	7229	KENNETH J TURTON	3/30/1965	15.00	Placer	MORMON RAVINE
			KENNETH J TURTON Total		15.00		
AD12885	7858	4479	KENNETH S HILL	12/29/1948	36.00	El Dorado	UNST
			KENNETH S HILL Total		36.00		
AD13146	7822	3824	KEVIN CAIRNS	8/9/1948	0.20	El Dorado	EVANS CREEK
			KEVIN CAIRNS Total		0.20		
AD10212	5851	3524	KIRKWOOD MOUNTAIN RESORT LLC	5/28/1941	0.20	Alpine	UNSP
AD30002	20851		KIRKWOOD MOUNTAIN RESORT LLC	2/7/1992	250.00	Alpine	CARLES LAKE
AD30453	30452		KIRKWOOD MOUNTAIN RESORT LLC	8/8/1995	250.00	Alpine	CARLES LAKE
			KIRKWOOD MOUNTAIN RESORT LLC Total		500.20		
AD10484	6044	3289	KRISTAN OTTO	6/26/1942	0.10	El Dorado	SOUTH FORK AMERICAN RIVER
			KRISTAN OTTO Total		0.10		
AD08623	4765	3541	KYBURZ MUTUAL WATER COMPANY	3/30/1936	1.10	El Dorado	SOUTH FORK AMERICAN RIVER
AD26486	18511		KYBURZ MUTUAL WATER COMPANY	8/7/1980	146.00	El Dorado	UNST, UNST (2)
			KYBURZ MUTUAL WATER COMPANY Total		147.10		
AD13718	8158	4471	LAGUNA HOMEOWNERS ASSOCIATION	5/3/1950	10.00	Placer	UNST
			LAGUNA HOMEOWNERS ASSOCIATION Total		10.00		
AD16850	10445	7204	LAKEVIEW HILLS COMMUNITY ASSOCIATION	3/10/1965	113.85	Placer	CARROLL CREEK, MINERS RAVINE
			LAKEVIEW HILLS COMMUNITY ASSOCIATION Total		113.85		
AD12840	7093	4445	LARANIE INVESTMENTS	8/13/1947	18.00	Placer	GRAPEVINE RAVINE
			LARANIE INVESTMENTS Total		18.00		
AD25607	17809	11717	LARISA LYSAK	2/2/1978	0.90	Placer	UNST
			LARISA LYSAK Total		0.90		
AD21886	15629	10773	Larry Bowser	8/31/1964	2.10	Placer	UNST
			Larry Bowser Total		2.10		
AD18617	12314	7987	LARRY JONES	3/31/1959	7.80	Placer	UNST
			LARRY JONES Total		7.80		
AD245144	16970	11409	LARRY R GOULDEN	1/25/1984	12.00	El Dorado	UNST
			LARRY R GOULDEN Total		12.00		
AD07316	4014	1942	LAWRENCE E SWENSON	7/6/1932	0.10	El Dorado	UNST
			LAWRENCE E SWENSON Total		0.10		
AD21225	14866	10002	LAWRENCE L CABODI	4/8/1963	2.20	El Dorado	UNSP
			LAWRENCE L CABODI Total		2.20		
AD08386	4628	1932	LAWRENCE T WELDEN	6/11/1935	0.10	El Dorado	UNSP
			LAWRENCE T WELDEN Total		0.10		
AD28467	19739		LEE A CHIUSANO	6/4/1965	2.80	El Dorado	UNST
			LEE A CHIUSANO Total		2.80		
AD25315	17212	11457	LEE F SMITH	3/31/1977	7.00	El Dorado	TEHNISSEE CREEK
			LEE F SMITH Total		7.00		
AD20840	12791	8411	LEO E FINNERAN	7/3/1982	4.00	El Dorado	UNCR
			LEO E FINNERAN Total		4.00		
AD13519	8104	5414	LEON H GASTALDI	12/27/1949	83.00	El Dorado	UNST

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt.	County	Source
			LEON H GASTALDI Total		83.00		
AD13292	7887	3787	LEV V RIKOFF	8/11/1949	0.30	El Dorado	UNSP
			LEV V RIKOFF Total		0.30		
AD02011	937	151	LEZLIE ELAINE DORSETT	9/16/1920	0.20	El Dorado	UNSP
			LEZLIE ELAINE DORSETT Total		0.20		
AD26523	16777	12447	LINDA D WALDECK	9/11/1980	0.30	Placer	UNST
			LINDA D WALDECK Total		0.30		
AD19325	12555	8113	LINDA R MURRAY	3/24/1969	9.00	Placer	UNST
			LINDA R MURRAY Total		9.00		
AD21407	14357	8866	LINZY L COTHAM JR	7/24/1983	26.60	El Dorado	UNST
			LINZY L COTHAM JR Total		26.60		
AD19825	12971	8225	Lionell Williams Trust	10/24/1960	4.50	El Dorado	UNSP
			Lionell Williams Trust Total		4.50		
AD13316	7868	3768	LOIS PENMAN	8/29/1949	0.30	El Dorado	UNSP
			LOIS PENMAN Total		0.30		
AD18512	12002	7506	LORI JANOWSKI	1/29/1959	25.00	El Dorado	UNGR
AD30239	38915		LORI JANOWSKI	3/23/1993	6.00	El Dorado	UNST
			LORE JANOWSKI Total		31.00		
AD29223	20717	13677	LOUIS W HEBERT	11/27/2006	1.20	Placer	UNST
			LOUIS W HEBERT Total		1.20		
AD13612	6402	3842	LUCILLE HONIG	3/1/1950	10.00	El Dorado	DUTCH MARY RAVINE
			LUCILLE HONIG Total		10.00		
AD03910	1970	586	LYDIA BACA	3/18/1924	0.10	El Dorado	UNSP
			LYDIA BACA Total		0.10		
AD26406	18219	13068	MARC ALLISON	6/6/1980	0.20	Placer	UNST
			MARC ALLISON Total		0.20		
AD19764	12790	7667	MARCIA C TAFFY WARNER	9/30/1960	19.00	El Dorado	MOSQUITO CREEK
			MARCIA C TAFFY WARNER Total		19.00		
AD14410	9394	5598	MARK FOSTER	7/30/1951	29.20	Placer	SECRET RAVINE
			MARK FOSTER Total		29.20		
AD113588	8528	9363	MARK HANNUM	1/10/1946	11.80	Placer	UNST
			MARK HANNUM Total		11.80		
AD26934	16880	12449	MARTHA J CROWL	7/30/1981	0.60	Placer	UNST
			MARTHA J CROWL Total		0.60		
AD10364	5940	3071	Mary Hillabrand	12/12/1944	0.10	El Dorado	UNSP
			Mary Hillabrand Total		0.10		
AD09163	4500	3953	MARY WOOD	11/20/1934	3.40	El Dorado	UNSP
			MARY WOOD Total		3.40		
AD07070	3919	1555	Mary Leslie Rev. Trust	9/1/1921	0.10	El Dorado	UNST
			Mary Leslie Rev. Trust Total		0.10		
AD20706	13438	8489	MELINDA S LAU	5/29/1962	149.50	El Dorado	SHENOGLIE CREEK
			MELINDA S LAU Total		149.50		
AD19680	13228	10485	MHC TT, INC.	12/16/1960	152.00	Placer	KELLY CREEK
AD21460	14567	10468	MHC TT, INC.	10/1/1983	44.00	Placer	KELLY CREEK
			MHC TT, INC. Total		196.00		
AD09026	5162	2957	MICHAEL HICKOX	6/28/1927	0.20	El Dorado	UNST
			MICHAEL HICKOX Total		0.20		
AD27979	19335	12741	Michael K Baughman	2/17/1984	6.00	Placer	UNST
			Michael K Baughman Total		6.00		
AD14244	9003	4848	Michael K Baughman	4/10/1951	161.30	Placer	UNRX

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD16057	17953	12693	Michael K Baughman Total MICHAEL KIM	7/30/1979	161.30 30.00	El Dorado	UNST
AD18683	12245	7914	MICHAEL MCCARTY Total MICHAEL MCCARTY	4/20/1959	3.80	Placer	UNST
AD09463	5323	2485	MICHAEL CARL VISHAN Total MICHAEL CARL VISHAN	8/4/1942	543.00 543.00	El Dorado	COON GULCH
AD14620	9007	5860	MICHAEL R POSEHN Total MICHAEL R POSEHN	1/15/1952	1.00 1.00	Placer	UNST
AD30430	20999		Michael W Dennis Total Michael W Dennis	11/22/1994	10.00	Placer	UNST
AD17382	10898	7668	Michelle D. Menard Total Michelle D. Menard	12/7/1956	19.00 19.00	El Dorado	UNST
AD20086	13353	9954	MICHIGAN BLUFF MUTUAL WATER COMPANY	4/13/1961	2.50	Placer	UNWX
AD20653	13784	9955	MICHIGAN BLUFF MUTUAL WATER COMPANY	3/14/1962	6.10	Placer	UNSP
AD24997	17213	11598	MICHIGAN BLUFF MUTUAL WATER COMPANY	2/18/1976	8.10	Placer	UNSP
AD27842	19719	13254	MICHIGAN BLUFF MUTUAL WATER COMPANY MICHIGAN BLUFF MUTUAL WATER COMPANY Total	1/31/1983	3.40 22.10	Placer	UNSP (AKA BOHEA HINE TUNNEL)
AD345148	16976	11410	MIKE LEMIRE	1/25/1984	10.00	El Dorado	SWEETWATER CREEK
AD37802	18577	12443	MIKE LEMIRE	4/25/1989	7.00	El Dorado	SWEETWATER CREEK
AD26427	18499	13619	MINERS COVE HOMEOWNERS ASSOCIATION MINERS COVE HOMEOWNERS ASSOCIATION Total	11/21/2005	15.00 15.00	Placer	MINERS RAVINE
AD21616	14965	9252	MINERS RAVINE ESTATES HOMEOWNERS ASSOCIATION MINERS RAVINE ESTATES HOMEOWNERS ASSOCIATION Total	1/24/1964	21.00 21.00	Placer	MINERS RAVINE
AD17414	12359	7015	MITCHELL D HOPE MITCHELL D HOPE Total	3/20/1964	25.50 25.50	Placer	MINERS RAVINE
AD11264	6934	10620	MT RALSTON PROPERTIES ASSN INC	8/2/2005	13.00	El Dorado	TAHARACK CREEK
AD15623	10214	10630	MT RALSTON PROPERTIES ASSN INC	8/2/2005	6.00	El Dorado	TAHARACK CREEK
AD26577	18519	12457	MT RALSTON PROPERTIES ASSN INC MT RALSTON PROPERTIES ASSN INC Total	8/2/2005	23.00 42.80	El Dorado	UNSP
AD18485	12089	9025	N JON NELSON N JON NELSON Total	1/21/1959	3.10 3.10	El Dorado	CHINA CREEK
AD09358	5288	2246	NANCY BAUER NANCY BAUER Total	7/29/1938	0.10 0.10	El Dorado	UNST
AD11097	8445	3024	NANCY BALCH-PRICE FISCHER NANCY BALCH-PRICE FISCHER Total	7/5/1945	0.10 0.10	Alpine	UNSP
AD04827	1878	893	NANCY E DOLCINI NANCY E DOLCINI Total	6/14/1924	0.70 0.70	El Dorado	UNSP
AD06529	5805	4403	NEVADA IRRIGATION DISTRICT	1/9/1930	3,411.60	Placer	#UBURN RAVINE
AD08177	5812	12801	NEVADA IRRIGATION DISTRICT NEVADA IRRIGATION DISTRICT Total	11/27/1934	1,580.00 4,991.60	Placer	UNST (AKA WILSON CRK)
AD19872	13025	8108	New Forestry, LLC New Forestry, LLC Total	12/9/1960	3.70 3.70	Placer	UNSP
AD17307	10845	8389	NIKOLAI BARADEN NIKOLAI BARADEN Total	8/3/1956	35.00 35.00	El Dorado	UNST

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD25424	17385	12027	NORMA JEAN SCHNEIDER	7/11/1977	2.00	El Dorado	UNST
AD25425	17388	11497	NORMA JEAN SCHNEIDER	7/11/1977	2.00	El Dorado	UNST
			NORMA JEAN SCHNEIDER Total		4.00		
AD25144	19837	13175	NORTH CANYON LAKE ASSOCIATION	9/10/1976	35.00	El Dorado	NORTH CANYON CREEK
			NORTH CANYON LAKE ASSOCIATION Total		35.00		
AD14794	9291	9728	NORTH FORK ASSOCIATION	5/5/1952	22.00	Placer	FREEMAN CREEK
			NORTH FORK ASSOCIATION Total		22.00		
AD11836	6927	4243	NORTHERN CALIFORNIA CONFERENCE ASSOC OF 7TH DAY ADVENTISTS	4/27/1947	13.00	El Dorado	MOUND SPRINGS CREEK
AD13597	6214	4244	NORTHERN CALIFORNIA CONFERENCE ASSOC OF 7TH DAY ADVENTISTS	2/20/1950	20.00	El Dorado	MOUND SPRINGS CREEK
			NORTHERN CALIFORNIA CONFERENCE ASSOC OF 7TH DAY ADVENTISTS Total		33.00		
AD04219	2598	941	ORENO J TONARELLI	9/17/1924	0.20	El Dorado	COLD STREAM
			ORENO J TONARELLI Total		0.20		
AD28076	17830	11663	ORVILLE F SLINGSBY	8/28/1979	0.30	Placer	UNST
			ORVILLE F SLINGSBY Total		0.30		
AD26693	16492	12411	OSCAR R CAMPBELL JR	11/25/1980	0.20	El Dorado	UNST
			OSCAR R CAMPBELL JR Total		0.20		
AD14228	16620	6853	OUR LADY OF THE OAKS, A CALIF CORP	4/5/1951	63.00	Placer	UNST
			OUR LADY OF THE OAKS, A CALIF CORP Total		63.00		
AD04597A	000948A		PATRIC JAMES HILLENBRAND LIVING TRUST	8/20/2004	21.00	Placer	AUBURN Ravine
			PATRIC JAMES HILLENBRAND LIVING TRUST Total		21.00		
AD21423	14599	8781	PATRICIA MCCORMICK	8/8/1983	0.20	El Dorado	STATIGN CREEK
			PATRICIA MCCORMICK Total		0.20		
AD16326	11482	7303	Patty A Hooper	6/9/1985	318.60	Placer	UNST (2)
			Patty A Hooper Total		318.60		
AD13994	8520	5323	PATTY BERRY	10/13/1950	2.50	El Dorado	UNSP
AD22051	15106	9620	PATTY BERRY	2/24/1985	0.60	El Dorado	UNSP (2)
AD22053	15108	9625	PATTY BERRY	2/24/1985	0.10	El Dorado	UNSP (2)
			PATTY BERRY Total		3.20		
AD20326	13199	9365	Paul Perron	7/26/1961	13.00	Placer	UNST
			Paul Perron Total		13.00		
AD06842	3733	1467	PAUL HEWES	12/6/1930	0.90	El Dorado	FORNI CREEK
			PAUL HEWES Total		0.90		
AD17571C	11120	9733	PAUL NIPPERT	4/25/1957	4.10	Placer	ANTELOPE CREEK
			PAUL NIPPERT Total		4.10		
AD24146	16670	10954	PAUL THOMASSON	8/17/1972	2.00	El Dorado	OTTER CREEK
			PAUL THOMASSON Total		2.00		
AD04344	2305	1423	Paul A Zanetta	4/10/1934	16.10	El Dorado	MILL CREEK
			Paul A Zanetta Total		16.10		
AD25975	17940	11667	PAUL S BURNS	4/16/1979	0.10	Placer	UNST
			PAUL S BURNS Total		0.10		
AD13160	6316	4332	PAULA S DWELLY	6/17/1949	11.60	Placer	LIVE OAK Ravine (AKA LIVE OAK CREEK)
			PAULA S DWELLY Total		11.60		
AD07016	3808	1837	PAULINE RODGERS	7/25/1931	0.30	El Dorado	UNSP
			PAULINE RODGERS Total		0.30		
AD16327	11493	7912	PETE JENSON	4/7/1967	32.00	Placer	UNST

American River - Post-1914 Appropriative Water Right

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt.	County	Source
			PETE JENSON Total		32.00		
AD1885F	1271B	7826	PETER M LA TONA	7/15/1959	2.30	Placer	MINERS RAVINE
			PETER M LA TONA Total		2.30		
A001923	843	351	PETER N BERBOHM	5/12/1924	30.30	Placer	SAILORS RAVINE
			PETER N BERBOHM Total		30.30		
A003982	1791	1111	PETER R BOHLEY	5/6/1924	2.70	El Dorado	EVANS CREEK
AD22299	15076	10250	PETER R BOHLEY	10/1/1965	0.20	El Dorado	EVANS CREEK
			PETER R BOHLEY Total		2.90		
AD13576	8457	4797	PILOT HILL ESTATES HOMEOWNERS ASSOC	2/9/1950	57.00	El Dorado	UNST
			PILOT HILL ESTATES HOMEOWNERS ASSOC Total		57.00		
AD18095	13955		PLACER COUNTY WATER AGENCY	4/7/1958	839,436.40	Placer, Sacramento	DUNCAH CANYON, MIDDLE FORK AMERICAN RIVER, NORTH FORK AMERICAN RIVER, RUBICON RIVER, MIDDLE FORK AMERICAN RIVER, NORTH FORK AMERICAN RIVER, NORTH FORK LONG CANYON, RUBICON RIVER, SOUTH FORK LONG CANYON
AD18087	13858		PLACER COUNTY WATER AGENCY	4/8/1958	451,592.40	Placer, Sacramento	NORTH FORK LONG CANYON, RUBICON RIVER, SOUTH FORK LONG CANYON
			PLACER COUNTY WATER AGENCY Total		1,291,030.80		
A003887A	001093A		PLASSE HOMESTEAD WATER ASSOCIATION	1/29/2003	1.10	Amador	UNSP, UNST
			PLASSE HOMESTEAD WATER ASSOCIATION Total		1.10		
A003887B	001093B		PLASSE'S MEADOW GROUP LLC	1/29/2003	1.00	Amador	UNSP, UNST
			PLASSE'S MEADOW GROUP LLC Total		1.00		
AD18095	11572	10371	QUINETTE SERVICE	4/17/1958	9.30	El Dorado	CRYSTAL SPRING
			QUINETTE SERVICE Total		9.30		
AD19052B	12310	10057	R W VELON	7/20/2004	7.10		
			R W VELON Total		7.10		
AD13820	5423	3833	RALPH MILLER	12/27/1949	40.00	El Dorado	UNST
			RALPH MILLER Total		40.00		
AD26840	18496	13406	Randolph G Wilson	8/4/1961	1.00	El Dorado	UNST
			Randolph G Wilson Total		1.00		
AD06801	3748	1602	RAYMOND BENDER	9/20/1930	0.30	El Dorado	UNSP
			RAYMOND BENDER Total		0.30		
AD18189	11652	6789	RAYMOND KRINGEL	6/10/1963	1.70	El Dorado	UNST
			RAYMOND KRINGEL Total		1.70		
AD06414	3366	1603	RAYMOND A YOUNG	8/19/1929	0.10	El Dorado	UNSP
			RAYMOND A YOUNG Total		0.10		
AD13844	8219	5979	RAYMOND BEST PATCHEN	3/22/1950	110.00	El Dorado	MAHAYATTA CREEK
			RAYMOND BEST PATCHEN Total		110.00		
AD06410	2669	1804	RAYMOND W LARSEN	8/16/1929	362.00	El Dorado	SOUTH FORK BRUSH CANYON
			RAYMOND W LARSEN Total		362.00		
AD19683	12838	7726	RICHARD E FREY	3/1/1960	42.50	Placer	UNST
			RICHARD E FREY Total		42.50		
AD07647	4207	1682	RICHARD FIELLEN	8/14/1933	1.10	El Dorado	ROCKY CANYON
			RICHARD FIELLEN Total		1.10		
AD13829	8347	4892	RICHARD C PAYNE & RUTH L PAYNE FAMILY TRUST	7/5/1930	0.10	El Dorado	UNSP

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
			RICHARD C PAYNE & RUTH L PAYNE FAMILY TRUST Total		0.10		
AD12184	7096	3602	RICHARD E AKIN	12/31/1947	29.20	El Dorado	UNST
			RICHARD E AKIN Total		29.20		
AD08696	4801	2471	RICHARD K JONES	6/18/1936	0.10	El Dorado	UNST
			RICHARD K JONES Total		0.10		
AD03262	938	491	RICHARD L GALLAGHER	3/5/1921	1.20	El Dorado	COLD STEAM
			RICHARD L GALLAGHER Total		1.20		
AD26122	19361	12714	RICHARD SCOTT HEER	4/26/1984	3.00	El Dorado	UNST
			RICHARD SCOTT HEER Total		3.00		
AD19328	12673	7410	RICK MANICA	3/28/1960	21.00	El Dorado	OTTER CREEK
			RICK MANICA Total		21.00		
AD01778	819	789	RICK MASSIE	4/17/1975	27.00	Placer	CLOVER VALLEY CREEK
			RICK MASSIE Total		27.00		
AD14377	6812	4885	Robert Alchele	6/28/1951	0.10	El Dorado	ROCKY CANYON
			Robert Alchele Total		0.10		
AD09726	5617	2573	ROBERT BRUCIA	9/18/1938	0.10	El Dorado	STATION CREEK
			ROBERT BRUCIA Total		0.10		
AD20627A	13629	009467A	ROBERT DEITZ II	8/13/1992	4.50	El Dorado	UNST
			ROBERT DEITZ II Total		4.50		
AD24672	16897	11435	ROBERT B JORDAN	8/16/1974	14.90	El Dorado	JOHNTOWN CREEK
			ROBERT B JORDAN Total		14.90		
AD24888	17819	12469	ROBERT D BERGHOLD	9/29/1975	1.00	Placer	MINERS NAVINE
			ROBERT D BERGHOLD Total		1.00		
AD11142	6463	3364	ROBERT E JONES	5/24/1963	0.10	El Dorado	SOUTH FORK AMERICAN RIVER
			ROBERT E JONES Total		0.10		
AD13740	6740	5312	Robert E Woodward, Jr	5/15/1950	33.00	Placer	UNST
			Robert E Woodward, Jr Total		33.00		
AD24946	16889	11244	ROBERT H AND ERIKA L ANDERSON REVOCABLE TRUST	12/31/1975	4.30	El Dorado	UNST
			ROBERT H AND ERIKA L ANDERSON REVOCABLE TRUST Total		4.30		
AD12181	7151	4478	ROBERT H POWELL	12/1/1947	7.00	El Dorado	UNST
			ROBERT H POWELL Total		7.00		
AD25495	17339	13232	ROBERT I RIDGWAY	9/2/1977	1.40	El Dorado	UNST
			ROBERT I RIDGWAY Total		1.40		
AD25483	17379	12048	ROBERT N DUPRIEST	8/10/1977	0.40	Placer	UNST
			ROBERT N DUPRIEST Total		0.40		
AD06263	3316	1122	ROBERT P STANLEY	4/30/1929	0.10	El Dorado	UNSP
			ROBERT P STANLEY Total		0.10		
AD20816	13089	7970	Roberta Kanter	3/6/1961	1.00	Placer	UNST
			Roberta Kanter Total		1.00		
AD20627	13966	9648	RODNEY PIMENTAL	6/22/1962	5.00	El Dorado	UNST
			RODNEY PIMENTAL Total		5.00		
AD28421	19942	13743	ROGER E TURNER	10/31/2007	1.30	Placer	DRY CREEK
			ROGER E TURNER Total		1.30		
AD03953	-9960	2192	ROLF W MORROW	4/22/1937	0.10	El Dorado	UNSP
			ROLF W MORROW Total		0.10		
AD03934	1648	2369	RONALD JAVOR	3/31/1934	0.40	El Dorado	UNSP
			RONALD JAVOR Total		0.40		

American River - Post-1914 Appropriative Water Right

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD07387	4140	1820	RONALD E MINER	9/23/1932	0.20	El Dorado	UNSP
			RONALD E MINER Total		0.20		
AD03496	1500	488	RONALD J BELL	7/2/1923	0.30	El Dorado	UNSP
			RONALD J BELL Total		0.30		
AD17173	11536	6987	RONALD J COLEMAN	7/12/1956	25.50	Placer	UNST
			RONALD J COLEMAN Total		25.50		
AD12463	7363	3771	RONALD N HUSTON	4/7/1948	24.00	El Dorado	INDIAN CREEK, UNST
			RONALD N HUSTON Total		24.00		
AD21171	18326	9258	RONALD ROSS CLOVER	2/27/1963	1.70	Placer	SECRET RAVINE
			RONALD ROSS CLOVER Total		1.70		
AD13233	7831	10052	ROSE ANN GUTIERREZ	7/13/1949	121.00	El Dorado	PILOT CREEK
AD23937	15494	11930	ROSE ANN GUTIERREZ	12/6/1971	19.00	El Dorado	PILOT CREEK
AD23938	16493	11031	ROSE ANN GUTIERREZ	12/6/1971	16.00	El Dorado	UNST
			ROSE ANN GUTIERREZ Total		156.00		
AD21676	14889	9227	RSC DEVELOPMENT CORPORATION	8/24/1964	57.10	Placer	DUTCH RAVINE
			RSC DEVELOPMENT CORPORATION Total		57.10		
AD23903	16642	10603	RYAN ENNIS	10/27/1971	0.00	El Dorado	UNSP
			RYAN ENNIS Total		0.00		
AD25122	16986	11267	S360 Granite Lakes LLC	8/2/1976	10.00	Placer	UNST
			S360 Granite Lakes LLC Total		10.00		
AD06011	4474	3509	SACRAMENTO MOUNTAINERS	7/5/1934	1.00	El Dorado	UNSP
			SACRAMENTO MOUNTAINERS Total		1.00		
AD25216	17145	11453	SACRAMENTO VALLEY TEEN CHALLENGE INC	3/31/1976	6.00	Placer	UNST
			SACRAMENTO VALLEY TEEN CHALLENGE INC Total		6.00		
AD26969	16764	13757	Saeed Zarakani	3/20/2008	3.00	Placer	UNST
			Saeed Zarakani Total		3.00		
AD26137	18210	12245	SALLY MARKSTEIN	11/19/1979	1.40	Placer	UNST
			SALLY MARKSTEIN Total		1.40		
AD05830	4008	6324	San Juan Water District	2/11/1928	4,581.00	Placer	NORTH FORK AMERICAN RIVER
			San Juan Water District Total		4,581.00		
AD22515	19318	9950	SCHOENHAUER FAMILY PARTNERSHIP	6/20/1966	12.00	El Dorado	RINGSOLD CREEK
			SCHOENHAUER FAMILY PARTNERSHIP Total		12.00		
AD11917	7176	10135	SCHUBIN RANCH LP	6/5/1947	83.00	El Dorado	UNST
AD13663	8322	10134	SCHUBIN RANCH LP	3/20/1950	150.00	El Dorado	UNST
AD14778	9141	10136	SCHUBIN RANCH LP	4/25/1952	90.00	El Dorado	UNST
			SCHUBIN RANCH LP Total		323.00		
AD03321	1554	5486	SCOTS TRACT CABIN OWNERS ASSN	3/23/1923	15.60	El Dorado	CODY CREEK
			SCOTS TRACT CABIN OWNERS ASSN Total		15.60		
AD05683	3035	1201	SCOTT E ADAMS	9/7/1927	0.10	El Dorado	UNSP
			SCOTT E ADAMS Total		0.10		
AD16320	11779	6978	SCOTT KRIGER	9/16/1958	1.30	El Dorado	CHINA CREEK
			SCOTT KRIGER Total		1.30		
AD07340	4026	2295	Sharon Warden	8/6/1932	0.10	El Dorado	UNSP
AD07341	4027	1584	Sharon Warden	8/6/1932	0.10	El Dorado	UNSP
			Sharon Warden Total		0.20		
AD10326	5939	3329	SHARON L CAMERON	11/21/1941	0.10	El Dorado	UNSP
AD20264	12189	9779	SHARON L CAMERON	5/5/1971	2.60	El Dorado	WHITE ROCK CREEK
			SHARON L CAMERON Total		2.70		

American River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD28993	20394	13325	SHIRLAND LAKEVIEW ESTATES HOMEOWNERS ASSOC	3/24/1987	6.00	Placer	UNST
			SHIRLAND LAKEVIEW ESTATES HOMEOWNERS ASSOC Total		6.00		
AD18985	12217	8621	SHIRLIE ROBERTS	9/1/1939	9.70	El Dorado	JOHNTOWN CREEK
			SHIRLIE ROBERTS Total		9.70		
AD20601	14248		SIERRA LAKES COUNTY WATER DISTRICT	1/3/1964	1,177.00	Placer	ICE LAKES
			SIERRA LAKES COUNTY WATER DISTRICT Total		1,177.00		
AD19114	12541	9031	SIERRA PACIFIC INDUSTRIES	12/2/1959	1.10	El Dorado	OHION CREEK
			SIERRA PACIFIC INDUSTRIES Total		1.10		
AD28208	0194338	13036	SILVER SPRINGS LLC	3/6/1991	0.50	El Dorado	UNST
			SILVER SPRINGS LLC Total		0.50		
AD19119	12368	9032	SLEEPY HOLLOW OWNERS ASSOCIATION	12/3/1939	47.50	El Dorado	UNST
			SLEEPY HOLLOW OWNERS ASSOCIATION Total		47.50		
AD10017	5671	7195	SOUTHFORK PARTNERSHIP	9/24/1940	23.00	Placer	BADGER RAVINE, UNST
			SOUTHFORK PARTNERSHIP Total		23.00		
AD12180	7151	4477	STAR-CREST LUMBER, INC	12/1/1947	49.00	El Dorado	UNST
AD13257	8873	4480	STAR-CREST LUMBER, INC	7/25/1949	7.70	El Dorado	UNST
			STAR-CREST LUMBER, INC Total		56.70		
AD25310	17844	11713	STEPHEN HOFFMAN	3/29/1977	4.50	El Dorado	UNST
			STEPHEN HOFFMAN Total		4.50		
AD06080	3181	3038	STEPHEN RULAND	10/3/1928	0.10	El Dorado	UNSP
			STEPHEN RULAND Total		0.10		
AD21485	14483	10075	STEPHEN C MARIANOS	3/8/1963	6.00	El Dorado	WEBER CREEK
			STEPHEN C MARIANOS Total		6.00		
AD25380	17876	12386	STEPHEN W BEAM	6/2/1977	0.60	El Dorado	UNST
			STEPHEN W BEAM Total		0.60		
AD06549	3477	1888	STEVEN BENNETTS	2/4/1930	20.40	El Dorado	EMIGRAVT RAVINE CREEK
			STEVEN BENNETTS Total		20.40		
AD19927	13052	9923	STEVEN FORD	1/17/1961	3.20	El Dorado	UNST
			STEVEN FORD Total		3.20		
AD15298	9533	5060	STONEWORTH INC	4/17/1953	73.30	Placer	SOUTH FORK DRY CREEK
AD18752	12360	7518	STONEWORTH INC	5/29/1959	162.00	Placer	SOUTH FORK DRY CREEK
			STONEWORTH INC Total		235.30		
AD20144	13369	8089	Susan McElhane	3/23/1961	0.10	Placer	UNST
			Susan McElhane Total		0.10		
AD16885	10910	7612	SUSAN A FREDERICKS	3/8/1956	19.00	El Dorado	UNST
AD21232	14404	10096	SUSAN A FREDERICKS	4/10/1963	7.20	El Dorado	UNST
			SUSAN A FREDERICKS Total		22.20		
AD25240	17257	11601	Susan D Hobbs	4/22/1977	6.00	El Dorado	UNST
			Susan D Hobbs Total		6.00		
AD26023	16081	11847	SWANSBORO COUNTRY PROPERTY OWNERS ASSOCIATION INC	6/13/1979	23.00	El Dorado	UNST
AD26024	16082	11928	SWANSBORO COUNTRY PROPERTY OWNERS ASSOCIATION INC	6/13/1979	40.50	El Dorado	UNST
AD26025	16083	11848	SWANSBORO COUNTRY PROPERTY OWNERS ASSOCIATION INC	6/13/1979	17.00	El Dorado	REDBIRD CREEK

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD26026	18084	11884	SWANSBORO COUNTRY PROPERTY OWNERS ASSOCIATION INC	6/13/1979	7.10	El Dorado	UNST
AD26027	18085	11849	SWANSBORO COUNTRY PROPERTY OWNERS ASSOCIATION INC	6/13/1979	40.00	El Dorado	UNST
AD28792	20058	13240	SWANSBORO COUNTRY PROPERTY OWNERS ASSOCIATION INC	2/3/1986	9.00	El Dorado	UNST
			SWANSBORO COUNTRY PROPERTY OWNERS ASSOCIATION INC Total		136.60		
AD09269	5187	2694	SWORD & SANDALS INC	4/13/1938	0.60	El Dorado	UNSP
			SWORD & SANDALS INC Total		0.60		
AD24361B	0171358	13157	TANYA M BOYD	4/27/1990	0.80	Sacramento	LINDA CREEK
			TANYA M BOYD Total		0.80		
AD08791	4877	3191	TAYLOR T WHEELER	9/14/1936	0.10	El Dorado	UNSP
			TAYLOR T WHEELER Total		0.10		
AD22476	15551	10769	TERENCE A HALL	5/27/1966	15.00	El Dorado	EMPIRE CREEK
			TERENCE A HALL Total		15.00		
AD29233	30340		TERRIL R LUKENS EXEMPTION TRUST & LUKEN SURVIVOR'S TRUST UDT	4/19/1988	181.00	Pleasant	UNSP
			TERRIL R LUKENS EXEMPTION TRUST & LUKEN SURVIVOR'S TRUST UDT Total		181.00		
AD07036	3799	1416	Terry D. Herringshaw	8/10/1931	0.20	El Dorado	UNSP
			Terry D. Herringshaw Total		0.20		
AD11055	6442	3324	THE BRUCE & PAT BLAIKIE FAMILY TRUST DATED 5/20/1993	5/22/1945	0.20	El Dorado	SOUTH FORK AMERICAN RIVER
			THE BRUCE & PAT BLAIKIE FAMILY TRUST DATED 5/20/1993 Total		0.20		
AD22465	15447	9913	The Pepper Family Trust	5/13/1966	1.80	El Dorado	BURNT SHANTY CREEK
			The Pepper Family Trust Total		1.80		
AD08440	2386	1549	THE RITO S CASTANON FAMILY TRUST	9/18/1929	0.10	El Dorado	UNST
			THE RITO S CASTANON FAMILY TRUST Total		0.10		
AD20627D	13628 00R487D		THOMAS WALTERS	8/13/1992	25.20	El Dorado	UNST
			THOMAS WALTERS Total		25.20		
AD20627B	13628 00R487B		THOMAS E WALTERS	8/13/1992	1.30	El Dorado	UNST
			THOMAS E WALTERS Total		1.30		
AD26881	19271	13888	THOMAS L PIATANESI	9/2/1981	7.00	El Dorado	UNST
			THOMAS L PIATANESI Total		7.00		
AD17411	11024	6810	THOMAS S VAN HORNE	12/27/1956	17.00	Pleasant	UNST
			THOMAS S VAN HORNE Total		17.00		
AD04510	2315	776	TIFFANY HOLBROOK	3/19/1925	6.50	El Dorado	UNSP
			TIFFANY HOLBROOK Total		6.50		
AD17108	11013	7216	TIMBERLAKE ESTATES HOMEOWNERS ASSOC	5/20/1956	12.00	Pleasant	UNST
			TIMBERLAKE ESTATES HOMEOWNERS ASSOC Total		12.00		
AD07788	4294	1674	TIMOTHY B COLLINS	12/28/1933	0.20	El Dorado	UNSP
			TIMOTHY B COLLINS Total		0.20		
AD22062	15089	9129	TIMOTHY J MANDELLA	3/1/1965	0.40	El Dorado	UNSP (2)
			TIMOTHY J MANDELLA Total		0.40		
AD06617	2718	1806	TONY PLANCHON	10/6/1930	0.20	El Dorado	UNST
			TONY PLANCHON Total		0.20		
AD06888	3628	1343	TRACY ANN BRENNIHAN-MULLIGAN	6/29/1931	0.10	El Dorado	ROCK CREEK

American River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD16407	12161	6790	TRACY ANN BRENNAN-MULLIGAN	6/17/1959	0.10	El Dorado	SOUTH FORK AMERICAN RIVER
			TRACY ANN BRENNAN-MULLIGAN Total		0.20		
AD16402	10551	6908	TROOP #1 B S A	6/2/1955	0.50	El Dorado	CODY LAKE, UNSP
			TROOP #1 B S A Total		0.50		
AD04597C	000948C		Trudy Reed, et al	8/20/2004	6.20	Flake	AUBURN RAVINE
			Trudy Reed, et al Total		6.20		
AD02914	15662	13980	TRUST OF WILLIAM & MARY ROTHHAUS	9/29/1967	3.00	El Dorado	JOHNSTOWN CREEK
AD025406	17863	13081	TRUST OF WILLIAM & MARY ROTHHAUS	6/24/1977	15.00	El Dorado	JOHNSTOWN CREEK
			TRUST OF WILLIAM & MARY ROTHHAUS Total		16.00		
AD18106	11630	6767	TRUSTEN & WADSWORTH	4/28/1958	2.00	El Dorado	UNST
			TRUSTEN & WADSWORTH Total		2.00		
AD02188D	14767	9277	TWILIGHT RIDE LLC	8/26/1964	0.80	Flaker	UNST
			TWILIGHT RIDE LLC Total		0.80		
AD12046	7203	6975	Tyson Muncher	1/28/1964	31.10	El Dorado	EAST FORK SAWHILL CREEK, SAWMILL CREEK
			Tyson Muncher Total		31.10		
AD02141	936	745	U S ELDERADO NATL FOREST	12/17/1920	1.20	El Dorado	COLD STREAM
AD03679	1719	534	U S ELDERADO NATL FOREST	2/26/1924	0.10	El Dorado	ATWOOD SPRING
AD04722	2382	1420	U S ELDERADO NATL FOREST	8/6/1925	0.20	El Dorado	UNSP
AD04740	2383	2102	U S ELDERADO NATL FOREST	8/19/1925	2.30	El Dorado	UNST
AD05142	2644	1001	U S ELDERADO NATL FOREST	8/4/1926	0.50	El Dorado	UNST
AD06730	3585	2405	U S ELDERADO NATL FOREST	4/14/1930	0.50	El Dorado	UNSP
AD07196	3954	1679	U S ELDERADO NATL FOREST	2/27/1932	3.00	Amador	UNST
AD07304	4040	2441	U S ELDERADO NATL FOREST	6/27/1932	0.10	El Dorado	UNSP
AD07496	4170	4543	U S ELDERADO NATL FOREST	3/7/1933	0.80	El Dorado	UNST
AD07572	4163	4098	U S ELDERADO NATL FOREST	3/24/1933	0.60	Alpini	UNST
AD08271	4574	1856	U S ELDERADO NATL FOREST	3/4/1935	0.40	El Dorado	UNSP
AD08582	4761	3767	U S ELDERADO NATL FOREST	3/11/1936	0.50	El Dorado	ASPEN CREEK
AD08829	4944	2169	U S ELDERADO NATL FOREST	3/30/1937	3.30	El Dorado	COX CREEK
AD08936	4964	3972	U S ELDERADO NATL FOREST	4/3/1937	3.40	Amador	UNSP
AD09056	5052	2161	U S ELDERADO NATL FOREST	7/29/1937	0.40	El Dorado	UNSP
AD09086	5020	2164	U S ELDERADO NATL FOREST	8/21/1937	2.60	El Dorado	FRY CREEK
AD09087	5021	2165	U S ELDERADO NATL FOREST	8/21/1937	1.30	El Dorado	UNST
AD09120	5050	3254	U S ELDERADO NATL FOREST	9/16/1937	1.00	El Dorado	ROCKY CANYON
AD09122	5051	2336	U S ELDERADO NATL FOREST	9/21/1937	0.80	El Dorado	ROCKY CANYON
AD09126	5100	2166	U S ELDERADO NATL FOREST	9/27/1937	0.20	El Dorado	PYRAMID CREEK
AD09129	5101	2167	U S ELDERADO NATL FOREST	9/27/1937	0.20	El Dorado	PYRAMID CREEK
AD09189	5104	2168	U S ELDERADO NATL FOREST	11/27/1937	0.70	El Dorado	UNSP
AD09251	5195	3922	U S ELDERADO NATL FOREST	3/4/1938	5.20	Amador	BLACK ROCK SPRING
AD09269	5177	4059	U S ELDERADO NATL FOREST	5/6/1938	1.10	El Dorado	DATES SPRING
AD09296	5178	3129	U S ELDERADO NATL FOREST	5/19/1938	0.70	El Dorado	OLANIE SPRING
AD09310	5191	3756	U S ELDERADO NATL FOREST	6/6/1938	0.50	El Dorado	SNOW SLIDE CREEK
AD09399	5261	3386	U S ELDERADO NATL FOREST	8/26/1938	0.90	El Dorado	UNSP
AD09408	5251	4016	U S ELDERADO NATL FOREST	9/10/1938	0.30	El Dorado	UNST
AD09425	5373	2337	U S ELDERADO NATL FOREST	9/24/1938	0.30	El Dorado	UNSP
AD09655	5407	2864	U S ELDERADO NATL FOREST	7/5/1939	1.80	Flaker	BUCKEYE SPRING
AD09643	5366	3273	U S ELDERADO NATL FOREST	2/28/1940	1.00	El Dorado	UNSP
AD09689	5580	2865	U S ELDERADO NATL FOREST	4/9/1940	0.50	El Dorado	UNST
AD09684	5581	2866	U S ELDERADO NATL FOREST	4/26/1940	1.30	El Dorado	UNCR
AD09690	5586	2867	U S ELDERADO NATL FOREST	5/8/1940	1.10	El Dorado	ASPEN CREEK

American River - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD09955		5846	3502 U S ELDORADO NATL FOREST	7/20/1940	1.00	El Dorado	BRYANT FORK CREEK
AD10110		5844	5870 U S ELDORADO NATL FOREST	2/5/1941	5.30	Amador	SHEEP CORRAL CREEK
AD10192		5858	3161 U S ELDORADO NATL FOREST	4/29/1941	0.20	Alpine	ROSS SPRINGS
AD10289		5907	3921 U S ELDORADO NATL FOREST	9/24/1941	0.20	El Dorado	UNST
AD10360		5977	4095 U S ELDORADO NATL FOREST	1/13/1942	0.20	El Dorado	UNST
AD10385		5979	2948 U S ELDORADO NATL FOREST	3/8/1942	0.30	El Dorado	STATION CREEK
AD10405		5960	3288 U S ELDORADO NATL FOREST	3/16/1942	7.00	El Dorado	UNST
AD10463		5975	2933 U S ELDORADO NATL FOREST	5/16/1942	2.00	El Dorado	UNST
AD10593		6143	4548 U S ELDORADO NATL FOREST	1/25/1943	1.80	El Dorado	CHAMPAGNE CANYON, UNST
AD10604		6178	3643 U S ELDORADO NATL FOREST	2/24/1943	0.20	El Dorado	ASPEN CREEK
AD10608		6179	4044 U S ELDORADO NATL FOREST	3/4/1943	0.70	El Dorado	UNSP
AD10614		6144	3297 U S ELDORADO NATL FOREST	3/16/1943	6.80	El Dorado	ALDER CREEK
AD10773		6281	2940 U S ELDORADO NATL FOREST	2/23/1944	0.10	El Dorado	UNST
AD10821		6282	4670 U S ELDORADO NATL FOREST	5/19/1944	12.70	El Dorado	COOY CREEK
AD10823		6283	3094 U S ELDORADO NATL FOREST	5/26/1944	1.00	El Dorado	UNSP, UNST
AD10827		6284	5854 U S ELDORADO NATL FOREST	6/5/1944	5.70	El Dorado	UNSP
AD11256		6733	7767 U S ELDORADO NATL FOREST	1/10/1946	44.00	El Dorado	TAHARACK FLAT CREEK
AD11370		6734	3497 U S ELDORADO NATL FOREST	4/12/1946	0.20	El Dorado	UNST
AD11464		6662	3573 U S ELDORADO NATL FOREST	7/10/1946	0.10	El Dorado	PORNI CREEK
AD11606		6759	3330 U S ELDORADO NATL FOREST	11/16/1946	0.20	El Dorado	FRY CREEK
AD11742		6881	3419 U S ELDORADO NATL FOREST	2/25/1947	0.20	El Dorado	ROCKY CANYON
AD11667		7003	3395 U S ELDORADO NATL FOREST	5/9/1947	0.10	El Dorado	UNSP
AD11893		6976	4861 U S ELDORADO NATL FOREST	3/26/1947	0.70	El Dorado	ASPEN CREEK
AD11971		7009	4744 U S ELDORADO NATL FOREST	7/3/1947	0.50	El Dorado	SAVLES CANYON
AD12000		7051	3346 U S ELDORADO NATL FOREST	7/21/1947	0.70	El Dorado	UNST
AD12057		7081	3399 U S ELDORADO NATL FOREST	8/26/1947	0.20	El Dorado	UNST
AD12397		7324	3721 U S ELDORADO NATL FOREST	3/12/1948	0.20	El Dorado	PYRAMID CREEK
AD12552		7449	5528 U S ELDORADO NATL FOREST	6/22/1948	1.20	El Dorado	BULL CREEK
AD13363		7911	3634 U S ELDORADO NATL FOREST	10/5/1949	0.50	El Dorado	UNSP
AD13410		8004	3797 U S ELDORADO NATL FOREST	10/24/1949	0.10	Alpine	JOHNS SPRING
AD13653		8136	6630 U S ELDORADO NATL FOREST	3/27/1950	1.70	El Dorado	BRYAN CREEK
AD14409		9031	4352 U S ELDORADO NATL FOREST	7/27/1951	0.10	El Dorado	UNSP
AD14462		9036	4713 U S ELDORADO NATL FOREST	8/29/1951	0.40	El Dorado	UNSP
AD14902		9262	4533 U S ELDORADO NATL FOREST	7/10/1952	463.70	El Dorado	ASPEN CREEK
AD14980		10028	4996 U S ELDORADO NATL FOREST	8/31/1953	55.00	El Dorado	SMITH LAKE
AD14992		10029	4997 U S ELDORADO NATL FOREST	8/31/1953	54.00	El Dorado	CLYDE LAKE
AD14993		10030	4998 U S ELDORADO NATL FOREST	8/31/1953	30.00	El Dorado	YOEI LAKE
AD14994		10031	4999 U S ELDORADO NATL FOREST	8/31/1953	160.00	El Dorado	WRIGHTS LAKE
AD14995		10032	5000 U S ELDORADO NATL FOREST	8/31/1953	80.00	El Dorado	ROSE LAKE
AD14996		10033	5001 U S ELDORADO NATL FOREST	8/31/1953	85.40	El Dorado	LOIS LAKE
AD14997		10034	5002 U S ELDORADO NATL FOREST	8/31/1953	203.60	El Dorado	LAKE SCHMIDELL
AD14998		10035	5003 U S ELDORADO NATL FOREST	8/31/1953	40.00	El Dorado	LYONS LAKE
AD14999		10036	6199 U S ELDORADO NATL FOREST	8/31/1953	110.00	El Dorado	BUCK ISLAND LAKE
AD15500		10037	5004 U S ELDORADO NATL FOREST	8/31/1953	38.00	El Dorado	LAWRENCE LAKE
AD15501		10038	6058 U S ELDORADO NATL FOREST	8/31/1953	190.00	El Dorado	SPIDER LAKE
AD15503		10040	5005 U S ELDORADO NATL FOREST	8/31/1953	30.00	El Dorado	BARNETT LAKE
AD15506		10043	5006 U S ELDORADO NATL FOREST	8/31/1953	148.40	El Dorado	MIDDLE VELMA LAKE
AD15509		10046	6025 U S ELDORADO NATL FOREST	8/31/1953	160.00	Alpine	WINNEMACCA LAKE
AD15512		10049	5011 U S ELDORADO NATL FOREST	8/31/1953	60.00	El Dorado	ISLAND LAKE
AD15513		10050	4985 U S ELDORADO NATL FOREST	8/31/1953	21.00	El Dorado	UPPER TWIN LAKE

American River - Post-1914 Appropriative Water Right

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt.	County	Source
AD15514	10051	5164	U S ELDORADO NATL FOREST	8/21/1953	26.00	El Dorado	LOWER TWIN LAKE
AD15616	10052	6200	U S ELDORADO NATL FOREST	11/23/1953	440.00	El Dorado	ROCKBOUND LAKE
AD10564	10564	5531	U S ELDORADO NATL FOREST	8/21/1955	0.20	El Dorado	UNST
AD17521	11260	8645	U S ELDORADO NATL FOREST	3/22/1957	2.80	El Dorado	CERLE CREEK
AD17646	11571	6935	U S ELDORADO NATL FOREST	10/11/1957	0.20	El Dorado	ROCKY CANYON
AD18022	11627	7172	U S ELDORADO NATL FOREST	3/3/1958	2.90	Amador	UNSP
AD19541	12406	7607	U S ELDORADO NATL FOREST	7/13/1960	3.50	El Dorado	PILLIKEN SPRING
AD19544	12408	7971	U S ELDORADO NATL FOREST	7/13/1960	0.40	Placer	JERRYS CANYON SPRING
AD19546	12810	7922	U S ELDORADO NATL FOREST	7/13/1960	0.40	Placer	CHIRPUNK RIDGE SPRING
AD19547	12811	7973	U S ELDORADO NATL FOREST	7/13/1960	0.40	Placer	LYTCHBURG SPRING
AD19548	12612	7974	U S ELDORADO NATL FOREST	7/13/1960	0.40	Placer	BEAR SPRINGS
AD19549	12813	7975	U S ELDORADO NATL FOREST	7/13/1960	0.40	Placer	DESERT COLD SPRING
AD20699	13769	8329	U S ELDORADO NATL FOREST	3/19/1962	0.40	El Dorado	UNST
AD20695	13795	8324	U S ELDORADO NATL FOREST	3/26/1962	0.20	El Dorado	OWENS CAMP SPRING
AD23420	16189	10597	U S ELDORADO NATL FOREST	12/23/1969	4.30	Placer	SOUTH FORK LONG CANYON
AD28204	19518	12944	U S ELDORADO NATL FOREST	8/31/1984	2.20	El Dorado	UNSP
U S ELDORADO NATL FOREST Total					2,595.40		
AD07629	4209	1702	U S FOREST SERVICE	7/26/1933	0.10	El Dorado	UNST
AD07848	4350	2136	U S FOREST SERVICE	2/14/1934	0.40	Placer	GREEK STORE SPRING
AD09114	5095	2811	U S FOREST SERVICE	9/14/1937	13.40	Placer	BLUE CANYON RANGER STATION SP
AD09816	5530	2599	U S FOREST SERVICE	1/29/1940	4.30	Placer	UNSP
AD10426	5779	2886	U S FOREST SERVICE	2/20/1941	4.70	Placer	TEXAS HILL SPRING
AD10129	5782	2655	U S FOREST SERVICE	2/20/1941	0.60	Placer	DAVISON SPRING
AD10442	6014	4181	U S FOREST SERVICE	5/6/1942	0.10	Placer	NORTH FORK SPRING
AD10443	6015	3037	U S FOREST SERVICE	5/6/1942	5.30	Placer	ONION VALLEY SPRING NO 3
AD10445	6017	2890	U S FOREST SERVICE	5/6/1942	0.60	Placer	LONG VALLEY SPRING
AD11157	6589	3207	U S FOREST SERVICE	9/19/1945	1.00	Placer	TADPOLE SPRING
AD11787	6697	4862	U S FOREST SERVICE	3/19/1947	0.30	Placer	UNSP
AD12036	7055	3260	U S FOREST SERVICE	8/12/1947	3.10	Placer	PAGGE CREEK
AD14193	8704	4112	U S FOREST SERVICE	3/14/1951	11.00	Placer	ELLIOTT MEADOW SPRING
AD14194	8705	4113	U S FOREST SERVICE	6/26/1955	34.10	Placer	ELLIOTT RANCH SPRING
AD14195	9308	4964	U S FOREST SERVICE	3/14/1951	1.40	Placer	BEAR SPRING
AD14196	9706	4126	U S FOREST SERVICE	3/14/1951	0.40	Placer	CHICKEN HAWK SPRING
AD14197	8707	4127	U S FOREST SERVICE	3/14/1951	0.30	Placer	ORCHARD SPRING
AD14198	8708	4876	U S FOREST SERVICE	3/14/1951	0.20	Placer	SECRET HOUSE SPRING
AD16517	10278	7335	U S FOREST SERVICE	8/11/1955	96.80	Placer	CODY CREEK
AD16691	10621	7367	U S FOREST SERVICE	10/26/1955	6.10	Placer	FULDA SPRING
AD17304	11837	7098	U S FOREST SERVICE	1/14/1965	84.90	Placer	POWDERHORN CREEK
AD21469	14495	8992	U S FOREST SERVICE	10/7/1963	5.30	Placer	BEARTRAP SPRING
AD23221	16016	10309	U S FOREST SERVICE	1/30/1969	0.40	Placer	DELLER SPRING
AD23222	16177	10620	U S FOREST SERVICE	1/30/1969	1.10	Placer	MT MILDRED CREEK
AD23223	16178	10611	U S FOREST SERVICE	1/30/1969	4.20	Placer	DOLLY CREEK
AD23224	16179	10616	U S FOREST SERVICE	1/30/1969	3.50	Placer	FRENCH MEADOW CREEK
AD23227	16015	10543	U S FOREST SERVICE	1/30/1969	0.80	Placer	WILLMONT SPRING
AD23228	16012	10310	U S FOREST SERVICE	1/30/1969	0.30	Placer	GIANT GAP SPRING #1
AD23229	16011	10311	U S FOREST SERVICE	1/30/1969	0.30	Placer	GIANT GAP SPRING #2
U S FOREST SERVICE Total					283.80		
AD13103	7893	4220	U.S. BUREAU OF RECLAMATION	3/21/1956	4.00	El Dorado	KNOCKERBOCKER CREEK
AD13370	11319		U.S. BUREAU OF RECLAMATION	4/22/1958	5,347,832.00	Contra Costa, Sacramento	AMERICAN RIVER, OLD RIVER, SACRAMENTO RIVER

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD13371	11316		U.S. BUREAU OF RECLAMATION	7/29/2002	680,435.30	Colusa Colusa, Sacramento	AMERICAN RIVER, Sacramento River
AD13629	8151	6854	U.S. BUREAU OF RECLAMATION	3/1/1963	30.00	El Dorado	UNST
AD14165	8572	4221	U.S. BUREAU OF RECLAMATION	3/21/1956	22.00	El Dorado	KNICKERBOCKER CREEK
AD14515	8587	4798	U.S. BUREAU OF RECLAMATION	10/24/1957	14.30	El Dorado	UNST
AD15028	9246	5078	U.S. BUREAU OF RECLAMATION	11/17/1959	15.00	El Dorado	UNST
AD17371	10923	5924	U.S. BUREAU OF RECLAMATION	10/22/1959	19.60	El Dorado	MIDDLE FORK AMERICAN RIVER
AD18196	12709	7506	U.S. BUREAU OF RECLAMATION	3/9/1966	0.10	Placer	UNSP (2)
AD19977	15093	8229	U.S. BUREAU OF RECLAMATION	2/8/1961	71.70	Placer	CARLTON SPRING, NORTH FORK AMERICAN RIVER
AD20011	13161		U.S. BUREAU OF RECLAMATION	2/28/1961	23.00	El Dorado	KNICKERBOCKER CREEK
AD20475	13934	8589	U.S. BUREAU OF RECLAMATION	11/7/1961	0.10	Placer	NORTH FORK AMERICAN RIVER
AD21189	14220	8671	U.S. BUREAU OF RECLAMATION	3/13/1963	18.00	El Dorado	UNST
			U.S. BUREAU OF RECLAMATION Total		6,028,434.10		
AD05214	2776	1075	ULF ASPENLIND	9/17/1926	251.70	Placer	CANYON CREEK
			ULF ASPENLIND Total		251.70		
AD23318	15937	11643	UNION PACIFIC RAILROAD COMPANY	6/4/1960	4.00	Placer	UNXX
			UNION PACIFIC RAILROAD COMPANY Total		4.00		
AD27266	16612		US BUREAU OF LAND MANAGEMENT	11/4/1967	2,533.90	Placer	DARDANELLES CREEK, POND CREEK
			US BUREAU OF LAND MANAGEMENT Total		2,533.90		
AD05581	3152	5560	USDA-FOREST SERVICE, LAKE TAHOE BASIN MANAGEMENT UNIT	7/16/1928	4.30	El Dorado	HAWLEY SPRING
AD10200	5968	6099	USDA-FOREST SERVICE, LAKE TAHOE BASIN MANAGEMENT UNIT	9/24/1941	0.70	El Dorado	BEHWOOD CREEK
AD15510	10047	5008	USDA-FOREST SERVICE, LAKE TAHOE BASIN MANAGEMENT UNIT	8/31/1951	141.80	El Dorado	HEATHER LAKE
AD27516	18091	12562	USDA-FOREST SERVICE, LAKE TAHOE BASIN MANAGEMENT UNIT	9/15/1982	0.30	El Dorado	HAWLEY SPRING
			USDA-FOREST SERVICE, LAKE TAHOE BASIN MANAGEMENT UNIT Total		147.10		
AD04026	1899	738	VERYL T KUCHAR	10/5/1928	113.10	Placer	BIG CHIEF CREEK, BOULDER CREEK
AD112568	6528	9362	VERYL T KUCHAR	1/10/1946	61.00	Placer	UNST
			VERYL T KUCHAR Total		174.10		
AD15983	9982	5786	VICKIE L LONGO	7/26/1954	3.80	El Dorado	SOUTH FORK AMERICAN RIVER
			VICKIE L LONGO Total		3.80		
AD05535	3114	1098	VICTOR HERRERO	6/17/1927	0.10	El Dorado	UNSP
			VICTOR HERRERO Total		0.10		
AD17916	11348	7619	VINCENT J GRAVES	12/16/1957	2.70	Placer	BABIE CREEK
			VINCENT J GRAVES Total		2.70		
AD26603	20068	13242	WAYNE BRUMMOND	10/28/1985	2.50	Placer	UNXX
			WAYNE BRUMMOND Total		2.50		
AD11162	8477	3032	WAYNE HILLARD	9/27/1945	0.20	El Dorado	SOUTH FORK AMERICAN RIVER
			WAYNE HILLARD Total		0.20		
AD24241	16911	12453	WILLIAM FAWX	11/8/1972	0.10	Placer	DUTCH RAVINE
			WILLIAM FAWX Total		0.10		
AD27705	19112	12876	WILLIAM OZAWA	4/5/1983	1.30	El Dorado	UNST
			WILLIAM OZAWA Total		1.30		
AD27173	18743	13544	WILLIAM SMITH	7/11/2003	19.00	El Dorado	AGORN CREEK

American River - Post-1914 Appropriative Water Right

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
			WILLIAM SMITH Total		19.00		
AD16891	10691	7265	WILLIAM WHITAKER	2/14/1956	0.40	El Dorado	UNST
			WILLIAM WHITAKER Total		0.40		
AD19850	13243		WILLIAM B ASHTON	11/21/1960	37.00	El Dorado	SILVER FORK OF SOUTH FORK AMERICAN RIVER, SUGAR LOAF CREEK
			WILLIAM B ASHTON Total		37.00		
AD01963	935	428	WILLIAM B TIMBERLAKE	8/11/1920	2.90	El Dorado	NILSSON SPRINGS
			WILLIAM B TIMBERLAKE Total		2.90		
AD05989	3394	1436	WILLIAM C SAWTELL	7/19/1928	0.20	El Dorado	UNST
			WILLIAM C SAWTELL Total		0.20		
AD27491	19229	13413	WILLIAM P KLEIN JR	8/31/1962	0.80	Placer	UNST
AD26034	20068	13411	WILLIAM P KLEIN JR	3/15/1964	12.00	Placer	UNST
AD26035	20069	13412	WILLIAM P KLEIN JR	3/15/1964	11.00	Placer	UNST
			WILLIAM P KLEIN JR Total		23.80		
AD27520	19116	13269	WILLIAM V DALLAS	9/16/1962	0.20	Placer	UNST
			WILLIAM V DALLAS Total		0.20		
AD10121	5976	3045	WILLIS H LAMBERT	2/20/1941	0.70	El Dorado	UNST
			WILLIS H LAMBERT Total		0.70		
AD14086	8441	4369	WILLOMAE DOBBS	12/11/1950	0.40	El Dorado	UNSP
AD15916	9868	5030	WILLOMAE DOBBS	6/16/1954	0.70	El Dorado	UNSP
			WILLOMAE DOBBS Total		1.10		
AD22829	15275	10683	WILSON GRANAT	1/15/1965	3.30	Placer	UNST
			WILSON GRANAT Total		3.30		
AD13893	6603	4079	WOODBRIIDGE RANCH HOMEOWNERS ASSOCIATION	8/14/1950	33.00	Sacramento	UNCR
			WOODBRIIDGE RANCH HOMEOWNERS ASSOCIATION Total		33.00		
AD05015	4390	3604	YANKEE HILL ESTATES OWNERS ASSOCIATION	7/9/1934	287.00	Placer	ANTELOPE CREEK
AD13394	8207	4781	YANKEE HILL ESTATES OWNERS ASSOCIATION	10/11/1949	25.00	Placer	ANTELOPE CREEK
AD16437	10551	5511	YANKEE HILL ESTATES OWNERS ASSOCIATION	6/23/1955	142.70	Placer	ANTELOPE CREEK
			YANKEE HILL ESTATES OWNERS ASSOCIATION Total		455.80		
			Grand Total		9,560,877.80		

East Creeks of Sacramento River Basin - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A009602	5719	2809	BIRD HAVEN RANCH LLC	1/11/1940	852.90	Glenn	BUTTE CREEK
			BIRD HAVEN RANCH LLC Total		852.90		
A002234	1114	5236	BUTTE VALLEY IRRIGATION DISTRICT	2/28/1921	17,163.80	Siskiyou	BUTTE CREEK
A023025	16330	10776	BUTTE VALLEY IRRIGATION DISTRICT	4/10/1968	10,000.00	Siskiyou	BUTTE CREEK
			BUTTE VALLEY IRRIGATION DISTRICT Total		27,163.80		
A013794	8624	8176	CAMERON PARK COMMUNITY SERVICES DISTRICT	6/14/1950	240.00	El Dorado	DEER CREEK
			CAMERON PARK COMMUNITY SERVICES DISTRICT Total		240.00		
A009216	5153	6113	CITY OF CHICO	12/30/1937	258.90	Butte	BIG CHICO CREEK
			CITY OF CHICO Total		258.90		
A013675	8194	7075	COLUSA SHOOTING CLUB	4/7/1950	853.90	Colusa	BUTTE CREEK
A013728	8195	7076	COLUSA SHOOTING CLUB	5/10/1950	1,386.90	Colusa	BUTTE CREEK
			COLUSA SHOOTING CLUB Total		2,240.80		
A009525	5717	2984	Dept of Fish and Game	6/19/1939	5,474.50	Butte, Glenn	BUTTE CREEK
A013008	7747	8712	Dept of Fish and Game	7/24/1968	5,182.50	Butte, Glenn	BUTTE CREEK
A013323	7885	4793	Dept of Fish and Game	10/24/1957	2,554.80	Glenn	BUTTE CREEK DRAINAGE DISTRICT DITCH
A014354	9663	4794	Dept of Fish and Game	10/24/1957	2,700.70	Butte	BUTTE CREEK
A015467	14438	9973	Dept of Fish and Game	12/21/1972	5,463.00	Glenn	BUTTE CREEK DRAINAGE DISTRICT DITCH
A015468	14439	9974	Dept of Fish and Game	12/21/1972	5,463.00	Butte	BUTTE CREEK
A024590	17233		Dept of Fish and Game	4/10/1974	7,428.00	Butte	BUTTE CREEK
			Dept of Fish and Game Total		34,266.50		
A022564	16029	10433	GAIL BROWN	8/29/1966	493.00	Butte	BUTTE CREEK
			GAIL BROWN Total		493.00		
A002777	1779	2389	GORRILL LAND COMPANY	3/6/1922	4,581.90	Butte	BUTTE CREEK, HAMLIN SLOUGH
A004664	2448	2390	GORRILL LAND COMPANY	6/30/1925	4,523.50	Butte	HAMLIN SLOUGH
A004665	2449	2391	GORRILL LAND COMPANY	3/13/1942	3,930.10	Butte	BUTTE CREEK
A022321	16018	11044	GORRILL LAND COMPANY	10/25/1965	2,500.00	Butte	BUTTE CREEK
A025717	17845	11996	GORRILL LAND COMPANY	4/12/1978	4,400.00	Butte	HAMLIN SLOUGH
			GORRILL LAND COMPANY Total		19,935.50		
A022799	15502	9911	LOUIS A PAYEN	5/31/1967	45.00	Sacramento	LITTLE DEER CREEK
			LOUIS A PAYEN Total		45.00		
A023298	15950	10194	LUCIAN B VANDEGRIFT TRUST	6/17/1969	45.00	Butte	LITTLE BUTTE CREEK
			LUCIAN B VANDEGRIFT TRUST Total		45.00		
A005109	3210	2614	M & T INCORPORATED	7/17/1926	5,060.00	Butte	BUTTE CREEK
A008188	4700	2617	M & T INCORPORATED	12/1/1934	5,060.00	Butte	BUTTE CREEK
A008565	4744		M & T INCORPORATED	2/27/1936	3,074.40	Butte	BIG BUTTE CREEK

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A009735	5847		M & T INCORPORATED	9/22/1939	13,587.00	Butte	BIG BUTTE CREEK
A015666	10390	9267	M & T INCORPORATED	5/10/1954	500.00	Butte	BUTTE CREEK
			M & T INCORPORATED Total		27,281.40		
A014546	9664	5394	MCPHERRIN LAND CO	11/2/1951	6,396.80	Butte	BUTTE CREEK
A015710	14021	8676	MCPHERRIN LAND CO	6/25/1968	2,122.40	Butte	BUTTE CREEK
			MCPHERRIN LAND CO Total		8,519.20		
A019743	13039	10035	MELVIN D MYERS	9/19/1960	142.00	Lassen	BUTTE CREEK
			MELVIN D MYERS Total		142.00		
A023084	15727	10197	MICHAEL HARRIS	7/15/1968	32	Butte	LITTLE CHICO CREEK
			MICHAEL HARRIS Total		32		
A000476	271		Paradise Irrigation District	5/3/1917	9,500.00	Butte	LITTLE BUTTE CREEK
A022061	16040		Paradise Irrigation District	6/17/1970	6,800.00	Butte	LITTLE BUTTE CREEK
			Paradise Irrigation District Total		16,300.00		
A005110	3211	2615	PARROTT INVESTMENT COMPANY	7/17/1926	5,060.00	Butte	BUTTE CREEK
A008187	4699	2616	PARROTT INVESTMENT COMPANY	12/1/1934	5,060.00	Butte	BUTTE CREEK
A008559	4743		PARROTT INVESTMENT COMPANY	2/19/1936	3,074.40	Butte	BIG BUTTE CREEK
A009736	5848		PARROTT INVESTMENT COMPANY	9/22/1939	13,587.00	Butte	BIG BUTTE CREEK
A015667	10391	9268	PARROTT INVESTMENT COMPANY	5/10/1954	500.00	Butte	BUTTE CREEK
			PARROTT INVESTMENT COMPANY Total		27,281.40		
A001656	794	880	RANCHO ESQUON INC	2/5/1920	3,665.45	Butte	HAMLIN SLOUGH
A002576	1722	1027	RANCHO ESQUON INC	10/6/1921	1,832.80	Butte	BUTTE CREEK
A002805	1872	1028	RANCHO ESQUON INC	3/24/1922	3,832.10	Butte	BUTTE CREEK
A002909	2027	1029	RANCHO ESQUON INC	6/27/1922	3,014.90	Butte	BUTTE CREEK
A004663	2447	1030	RANCHO ESQUON INC	6/30/1925	4,598.48	Butte	HAMLIN SLOUGH
A022039	16039	11046	RANCHO ESQUON INC	2/5/1965	5,540.00	Butte	BUTTE CREEK
			RANCHO ESQUON INC Total		22,483.73		
A023201	16771		RECLAMATION DISTRICT #1004	12/1/1978	36,000.00	Colusa, Sutter	BUTTE CREEK, BUTTE SLOUGH
			RECLAMATION DISTRICT #1004 Total		36,000.00		
A007925	4365	1797	RECLAMATION DISTRICT #833	5/1/1934	2,217.20	Colusa	BUTTE CREEK
			RECLAMATION DISTRICT #833 Total		2,217.20		
A004989	2706	837	SIERRA PACIFIC INDUSTRIES	1/8/1965	1,831.70	Butte	WEST BRANCH BUTTE CREEK
			SIERRA PACIFIC INDUSTRIES Total		1,831.70		
A001041	542	485	STANFORD VINA RANCH IRRIGATION CO	8/5/1918	4,581.90	Tehama	DEER CREEK
			STANFORD VINA RANCH IRRIGATION CO Total		4,581.90		
A020531			STATE WATER RESOURCES CONTROL BOARD	12/19/1961	0.00	Lassen, Modoc	ASH CREEK, BUTTE CREEK, UNST, WILLOW CREEK
			STATE WATER RESOURCES CONTROL BOARD Total		0.00		
A022534	16022	10432	Stephen Melme IV	7/27/1966	1,695.00	Butte	BUTTE CREEK

East Creeks of Sacramento River Basin - Post-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
Stephen Meline IV Total					1,695.00		
A012437	7366	3458	U S FISH & WILDLIFE SERVICE	3/25/1948	1,097.00	Colusa	BUTTE CREEK
A013540	8838	4472	U S FISH & WILDLIFE SERVICE	1/12/1950	44,162.60	Shasta, Tehama	BATTLE CREEK
A014316	9662	7053	U S FISH & WILDLIFE SERVICE	5/21/1951	590.30	Colusa	BUTTE CREEK
A017862	11615	6591	U S FISH & WILDLIFE SERVICE	10/25/1957	7,963.60	Shasta	BATTLE CREEK
A020288	13384	7993	U S FISH & WILDLIFE SERVICE	7/3/1961	21,719.30	Shasta	BATTLE CREEK, Battle Creek
A022227	15046	9561	U S FISH & WILDLIFE SERVICE	7/19/1965	14,479.60	Shasta	BATTLE CREEK, Battle Creek
U S FISH & WILDLIFE SERVICE Total					90,012.60		
A031071	21277		U S KLAMATH NATIONAL FOREST - GOOSENEST RECLAMATION DISTRICT	6/6/2011	185.00	Siskiyou	BUTTE CREEK
U S KLAMATH NATIONAL FOREST - GOOSENEST RECLAMATION DISTRICT					185.00		
Total							
Grand Total					326,104.54		

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Fees Amt	County	Source
A017927	11386	9808	ANTHONY D CRUYSEN ANTHONY D CRUYSEN Total	12/26/1957	33.00	Shasta	CLEAR CREEK
A022232	16907	11906	BENNETT FAMILY TRUST BENNETT FAMILY TRUST Total	2/6/1969	74.00	Shasta	SOUTH FORK CLEAR CREEK
A011485	10425	0563	BILL GIBSON BILL GIBSON Total	11/18/1954	627.00	Shasta Tehama	COTTONWOOD CREEK
A012972	8537	4100	CALIF DEPT OF TRANSPORTATION CALIF DEPT OF TRANSPORTATION Total	10/9/1950	5.80	Shasta	MIDDLE FORK COTTONWOOD CREEK
A0163230		0990330	CARPENTER FAMILY REVOCABLE TRUST CARPENTER FAMILY REVOCABLE TRUST Total	6/3/1994	167.20	Tehama	COTTONWOOD CREEK
A016373C		099033C	CEVASCO ROBT CEVASCO REVOC TRUST 2/18/9 CEVASCO ROBT CEVASCO REVOC TRUST 2/18/9 Total	6/3/1994	45.70	Tehama	COTTONWOOD CREEK
A012074	7550	6320	CONAWAY PRESERVATION GROUP LLC CONAWAY PRESERVATION GROUP LLC Total	9/8/1947	3,728.93	Yuba	WILLOW SLOUGH
A020669	19272		CONAWAY PRESERVATION GROUP LLC CONAWAY PRESERVATION GROUP LLC Total	1/27/1981	10,000.00	Yuba	CACHE CREEK, VOLO BYPASS
A021382	30208		COUNTY OF COLUSA COUNTY OF COLUSA Total	7/9/1982	10.00	Colusa	STONY CREEK (UNDERFLOW)
A016373A		099033A	DENNIS C DIERKSEN DENNIS C DIERKSEN Total	5/9/1994	64.10	Shasta	COTTONWOOD CREEK
A013764	8679	8460	RONALD KRENN RONALD KRENN Total	5/29/1920	18.20	Tehama	SOUTH FORK COTTONWOOD CREEK
A024723	16873	11283	FRENCH GULCH-WHISKEYTOWN SCHOOL DISTRICT FRENCH GULCH-WHISKEYTOWN SCHOOL DISTRICT Total	12/11/1974	10.20	Shasta	CLEAR CREEK
A007269	4198	2000	HAMMER FAMILY TRUST HAMMER FAMILY TRUST Total	6/6/1932	1,462.80	Tehama	SOUTH FORK COTTONWOOD CREEK
A021223	14272	8831	HARRY A BAKER REVOCABLE TRUST HARRY A BAKER REVOCABLE TRUST Total	4/8/1982	2.70	Tehama	SOUTH FORK COTTONWOOD CREEK
A020222	20992		Heart Consciousness Church, Inc. Heart Consciousness Church, Inc. Total	3/8/1993	245.00	Lake	CRAZY CREEK, PUTAH CREEK, UNIST
A012070	8588	6076	IGO ONO COMMUNITY SERVICE DISTRICT IGO ONO COMMUNITY SERVICE DISTRICT Total	10/2/1950	241.20	Shasta	COTTONWOOD CREEK
A000234	157	152	JOSHUA L SOSKE JR. JOSHUA L SOSKE JR Total	5/11/1946	24.60	Glen Siskiyou	NORTH FORK STONY CREEK
A013760	8228	4312	KENT W PPRIMMER KENT W PPRIMMER Total	4/24/1950	122.20	Tehama	COTTONWOOD CREEK
A016372B		099032B	KEVIN J DEVINE KEVIN J DEVINE Total	5/3/1994	41.20	Tehama	COTTONWOOD CREEK
A013110	7843	4736	LEMA 1992 TRUST LEMA 1992 TRUST Total	5/24/1949	219.90	Tehama	COTTONWOOD CREEK
A022234	16905	10921	MARY ANN SMITH MARY ANN SMITH Total	2/6/1969	1.20	Shasta	SOUTH FORK CLEAR CREEK
A021558			MIDDLETOWN FARM & CATTLE COMPANY MIDDLETOWN FARM & CATTLE COMPANY Total	2/20/2007	434.00	Lake	HARDIN CREEK, PUTAH CREEK, UNIST
A022233	16904	11090	ROBERT W ANDERSON ROBERT W ANDERSON Total	2/6/1969	69.00	Shasta	SOUTH FORK CLEAR CREEK

West Creeks of Sacramento River Basin - Pool-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Fees Amt	County	Source
A024785	16934	11388	ROBERT W ANDERSON	3/24/1975	2.20	Shasta	SOUTH FORK CLEAR CREEK UNIST
ROBERT W ANDERSON Total					71.20		
A022261	17853		STONY CREEK WATER DISTRICT	2/14/1977	3,000.00	Colusa, Glenn	LITTLE STONY CREEK, STONY CREEK
STONY CREEK WATER DISTRICT Total					3,000.00		
A020104	13480	8028	THE REVOCABLE TRUST OF ROBERT F RETZLOFF	4/27/1991	271.70	Glenn	STONY CREEK UNDERFLOW
THE REVOCABLE TRUST OF ROBERT F RETZLOFF Total					271.70		
A019104	12853	7454	U S NATIONAL PARK SERVICE	11/21/1959	2.20	Shasta	CLEAR CREEK
U S NATIONAL PARK SERVICE Total					2.20		
A002242	1130	2452	U.S. BUREAU OF RECLAMATION	2/17/1921	90,260.00	Glenn	STONY CREEK
A018115	12776		U.S. BUREAU OF RECLAMATION	4/20/1958	100,000.00	Contra Costa, Tehama	STONY CREEK
A011376	12264		U.S. BUREAU OF RECLAMATION	7/26/1960	1,325,371.20	Contra Costa, Shasta	CLEAR CREEK
A015424	12202	9957	U.S. BUREAU OF RECLAMATION	4/19/2002	1,220,761.80	Shasta	CLEAR CREEK
U.S. BUREAU OF RECLAMATION Total					2,270,322.00		
A010272	016032		WAYNE ROCHLITZ	4/2/1991	85.00	Tehama	COTTONWOOD CREEK
WAYNE ROCHLITZ Total					85.00		
A012994	7469	2402	WILLIAM T GRAY	2/23/1940	114.00	Shasta	COTTONWOOD CREEK
WILLIAM T GRAY Total					114.00		
A011389	12818		YOLO COUNTY F C & W C DISTRICT	5/2/1946	421,000.00	Lake, Yolo	CACHE CREEK, NORTH FORK CACH
YOLO COUNTY F C & W C DISTRICT Total					421,000.00		
Grand Total					3,226,648.80		

Sacramento River - Post-1914 Appropriative Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A011384	6629	3641	A & L AG RENTAL & LEASING INC	4/25/1946	1,094.90	Colusa	SACRAMENTO RIVER
			A & L AG RENTAL & LEASING INC Total		1,094.90		
A000657	338	237	Alice K Marks	4/27/1917	136.50	Sutter	SACRAMENTO RIVER
			ALICE K MARKS Total		136.50		
A001976	1243	1206	Allen A Ehrke	9/31/1932	158.80	Colusa	SACRAMENTO RIVER
			ALLEN A EHRKE Total		158.80		
A012469A	7267	003122A	Anna C. Byrd 1997 Trust	4/13/1948	1,598.50	Sutter	SACRAMENTO RIVER
			Anna C. Byrd 1997 Trust Total		1,598.50		
A008931	4985	3169	Arnold Andretti	4/1/1937	1,094.90	Colusa	SACRAMENTO RIVER
A01161R	6793	3170	Arnold Andretti	1/14/1946	2,007.30	Colusa	SACRAMENTO RIVER
			ARNOLD ANDREOTTI Total		3,102.20		
A01345A	8010	7251	Arthur Andretti	1/9/1949	4,927.00	Colusa	SACRAMENTO RIVER
			ARTHUR ANDREOTTI Total		4,927.00		
A013482	7392	3655	Barry A McClain	4/23/1948	182.50	Sacramento	SACRAMENTO RIVER
			BARRY A MCCLAIN Total		182.50		
A005100	2609	903	Burtis Ranch	7/13/1926	140.50	Sutter	SACRAMENTO RIVER
			BURTIS RANCH Total		140.50		
A010900	6375	3569	Burton H Lauppe	10/9/1944	1,069.10	Sutter	SACRAMENTO RIVER
			BURTON H LAUPPE Total		1,069.10		
A000166	72	1753	Cachel Dehe Band of Wintun Indians DE	1/27/1915	3,196.40	Colusa	SACRAMENTO RIVER
			CACHEL DEHE BAND OF WINTUN INDIANS OF Total		3,196.40		
A014445A	16491		Calif Dept of Water Resources	8/25/1951	1,575,212.40	Contra Costa, Sacramento	ITALIAN SLOUGH, SACRAMENTO RIVER DELTA CHANNELS
A017812	16482		Calif Dept of Water Resources	3/15/1957	1,100,000.00	Madra, Nevada, Sacramento	ITALIAN SLOUGH, SACRAMENTO RIVER DELTA CHANNELS, SAN LUIS CREEK
			CALIF DEPT OF WATER RESOURCES Total		2,675,212.40		
A014662	9061	6360	Carter Family Trust & Carter Family Martial Trust	2/15/1952	2,498.20	Colusa	SACRAMENTO RIVER
			CARTER FAMILY TRUST & CARTER FAMILY MARTIAL TRUST Total		2,498.20		
A0002306	304	0017688	Charles W Seaver	1/10/1916	1,566.10	Colusa	SACRAMENTO RIVER
			CHARLES W SEAVER Total		1,566.10		
A001179	809	1478	Charles W Tuttle Jr	2/15/1919	4,189.50	Colusa	SACRAMENTO RIVER
			CHARLES W TUTTLE JR Total		4,189.50		
A006716	3630	1849	City of Redding	6/70/1930	53.70	Shasta	SACRAMENTO RIVER
A008884	5163	2840	City of Redding	1/26/1937	3,619.90	Shasta	SACRAMENTO RIVER
A010320	5921	2736	City of Redding	1/18/1944	325.80	Shasta	SACRAMENTO RIVER

Sacramento River - Post-1914 Appropriative Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A015197	9071	5677	CITY OF REDDING	2/16/1953	2,117.00	Shasta	SACRAMENTO RIVER
			CITY OF REDDING Total		4,211.10		
A001743	392		CITY OF SACRAMENTO	10/30/2000	61,800.00	Sacramento	SACRAMENTO RIVER
			CITY OF SACRAMENTO Total		61,800.00		
A025616	18150		CITY OF WEST SACRAMENTO	12/22/1977	16,350.00	Yuba	SACRAMENTO RIVER
			CITY OF WEST SACRAMENTO Total		16,350.00		
A010383	5952	3585	COLUSA DRAIN MUTUAL WATER COMPANY	1/10/1942	5,666.10	Glenn	SACRAMENTO RIVER
A016305	14595	12067	COLUSA DRAIN MUTUAL WATER COMPANY	4/7/1955	3,660.00	Yuba	SACRAMENTO RIVER
			COLUSA DRAIN MUTUAL WATER COMPANY Total		9,326.10		
A015462	9647	7332	COLUSA PROPERTIES INC	8/6/1953	2,032.70	Colusa	SACRAMENTO RIVER
			COLUSA PROPERTIES INC Total		2,032.70		
A001199	614	904	CONAWAY PRESERVATION GROUP LLC	3/11/1939	43,557.70	Yuba	SACRAMENTO RIVER
A001580	792	905	CONAWAY PRESERVATION GROUP LLC	4/18/1930	3,394.00	Yuba	SACRAMENTO RIVER
A012071	7234	5487	CONAWAY PRESERVATION GROUP LLC	9/6/1947	70,143.50	Yuba	SACRAMENTO RIVER
			CONAWAY PRESERVATION GROUP LLC Total		119,095.20		
A001061	513	1062	COUNTY OF SACRAMENTO	6/6/1931	2,715.20	Sacramento	SACRAMENTO RIVER
A014494	8921	4060	COUNTY OF SACRAMENTO	8/19/1962	479.60	Sacramento	SACRAMENTO RIVER
			COUNTY OF SACRAMENTO Total		3,194.80		
A017210	13672	9926	Cranmore Farms LLC	6/6/1956	100.00	Sutter	SACRAMENTO RIVER
			Cranmore Farms LLC Total		100.00		
A004376	2021	1241	DANIEL A SERPA REV TRUST	12/15/1932	116.10	Sacramento	SACRAMENTO RIVER
			DANIEL A SERPA REV TRUST Total		116.10		
A017134	10734	6192	DIAMOND LANDS CORPORATION	6/14/1956	650.00	Tehama	SACRAMENTO RIVER
			DIAMOND LANDS CORPORATION Total		650.00		
A016199	13660	8205	DIANNE E BUTLER	9/7/1967	721.60	Colusa, Sutter	SACRAMENTO RIVER
			DIANNE E BUTLER Total		721.60		
A0124095	7267	0037226	DOLORES AZEVEDO	4/13/1946	91.20	Sutter	SACRAMENTO RIVER
			DOLORES AZEVEDO Total		91.20		
A005993	3112	2383	DONNA L REED	3/19/1942	857.70	Yuba	SACRAMENTO RIVER
			DONNA L REED Total		857.70		
A014314	8762	5080	DRISCOLL STRAWBERRY ASSOCIATES	3/21/1951	240.90	Tehama	SACRAMENTO RIVER
			DRISCOLL STRAWBERRY ASSOCIATES Total		240.90		
A007641A	4315	005389A	E D WILLEY & SONS LLC	8/4/1933	9,582.70	Sutter	SACRAMENTO RIVER

Sacramento River - Post-1914 Appropriative Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
			E D WILLEY & SON INC Total		9,582.70		
A011774	6725	3527	EASTSIDE MUTUAL WATER COMPANY	3/4/1946	5,474.50	Colusa	SACRAMENTO RIVER
			EASTSIDE MUTUAL WATER COMPANY Total		5,474.50		
A013796	6337	4758	ELLIS FAMILY TRUST	6/16/1950	580.40	Sutter	SACRAMENTO RIVER
			ELLIS FAMILY TRUST Total		580.40		
A009916	3066	1994	EMERY BURKE POUNDSTONE	5/16/1926	2,717.70	Colusa	SACRAMENTO RIVER
A009967	3064	2763	EMERY BURKE POUNDSTONE	8/22/1940	7,788.40	Colusa	SACRAMENTO RIVER
			EMERY BURKE POUNDSTONE Total		5,506.10		
A006672	3568	10019	Erdman Family Trust	5/8/1930	1,400.00	Colusa	SACRAMENTO RIVER
			Erdman Family Trust Total		1,400.00		
A017150	13671	10221	Fatez A Saeed	6/25/1956	997.00	Yuba	SACRAMENTO RIVER
			Fatez A Saeed Total		997.00		
A009032	5004	3674	FEDORA FARMS LLC	7/6/1937	547.50	Colusa, Sutter	SACRAMENTO RIVER
A013511	6061	3675	FEDORA FARMS LLC	12/15/1949	328.50	Colusa, Sutter	SACRAMENTO RIVER
A013512	6062	3676	FEDORA FARMS LLC	12/15/1949	567.60	Colusa, Sutter	SACRAMENTO RIVER
			FEDORA FARMS LLC Total		1,443.60		
A006670	3654	1516	Frank J. O'Brien Family Trust	5/6/1930	1,681.40	Sutter	SACRAMENTO RIVER
			Frank J. O'Brien Family Trust Total		1,681.40		
A014884	9186	5432	FRANK LAMB TRUST	1/1/20/1951	1,527.30	Sutter	SACRAMENTO RIVER
			FRANK LAMB TRUST Total		1,527.30		
A013467	7835	7216	GARY J RUMIANO	11/29/1949	726.00	Tehama	SACRAMENTO RIVER
			GARY J RUMIANO Total		726.00		
A000918	29	2871	GLENN-COLUSA IRRIGATION DISTRICT	3/3/2006	53,673.00	Yuba	SACRAMENTO RIVER
A001554	796	7208	GLENN-COLUSA IRRIGATION DISTRICT	12/3/1919	26,076.20	Glenn	SACRAMENTO RIVER
A001624	797	7209	GLENN-COLUSA IRRIGATION DISTRICT	1/14/1920	10,793.60	Glenn	SACRAMENTO RIVER
A006680	4795	6367	GLENN-COLUSA IRRIGATION DISTRICT	5/28/1936	674.36	Colusa	HUNTERS CREEK
A017125	6272	4340	GLENN-COLUSA IRRIGATION DISTRICT	10/8/1947	3,360.00	Colusa	STONE CORRAL CREEK
A023005	15687	10635	GLENN-COLUSA IRRIGATION DISTRICT	7/12/1968	416.00	Colusa	WIST
A030638	21101		GLENN-COLUSA IRRIGATION DISTRICT	2/18/1999	102,900.00	Glenn	SACRAMENTO RIVER
			GLENN-COLUSA IRRIGATION DISTRICT Total		279,894.18		
A001653	1248	439	GREEN VALLEY CORPORATION A CA CORP	2/5/1920	3,106.70	Colusa	SACRAMENTO RIVER
			GREEN VALLEY CORPORATION A CA CORP Total		3,106.70		
A011281	7286	5261	HAMMOND RESERVOIR IRRIGATION ASSN	2/11/1946	5,742.20	Siskiyou	NORTH FORK SACRAMENTO RIVER
A016219	10679	8531	HAMMOND RESERVOIR IRRIGATION ASSN	1/26/1955	346.00	Siskiyou	NORTH FORK SACRAMENTO RIVER
			HAMMOND RESERVOIR IRRIGATION ASSN Total		6,088.20		
A006696	3590	3586	HAROLD ARMSTRONG	6/12/1930	1,885.10	Colusa	SACRAMENTO RIVER
			HAROLD ARMSTRONG Total		1,885.10		
A003466	1552	646	Heldrick & Heldrick Properties LP	6/5/1923	345.20	Sutter	SACRAMENTO RIVER
			Heldrick & Heldrick Properties LP Total		345.20		

Sacramento River - Post-1914 Appropriative Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A018154	14510	8798	HEIDRICK & MCGINNIS PROP LP HEIDRICK & MCGINNIS PROP LP Total	1/7/1969	484.00	Sutter	SACRAMENTO RIVER
A006146	3234	1484	HENLE FAMILY LIMITED PARTNERSHIP HENLE FAMILY LIMITED PARTNERSHIP Total	12/27/1928	3,503.70	Sutter	SACRAMENTO RIVER
A006438A	001799A		HENRY D RICHTER JR	6/20/1991	3,176.80	Sutter	SACRAMENTO RIVER
A013646	8156	7216	HENRY D RICHTER JR HENRY D RICHTER JR Total	3/22/1950	739.60	Yolo	SACRAMENTO RIVER
A016361A	013861A		HERSHEY LAND COMPANY ROW CROP LLC HERSHEY LAND COMPANY ROW CROP LLC Total	6/10/2002	4,195.00	Sutter, Yolo	COLUSA BASIN DRAINAGE CANAL, SACRAMENTO RIVER
A001765B	1111	000613B	HIATT DOWNER RANCH LLC	4/9/1920	1,697.90	Sutter	SACRAMENTO RIVER
A003290B	002627B		HIATT DOWNER RANCH LLC HIATT DOWNER RANCH LLC Total	7/27/1990	1,184.30	Sutter	SACRAMENTO RIVER
A001617	1865	1407	JACK W BABER JACK W BABER Total	3/20/1934	1,959.90	Colusa	SACRAMENTO RIVER
A002317A	1259	001130A	JAMES T HUNSON JAMES T HUNSON Total	7/4/1980	82.50	Sutter	SACRAMENTO RIVER
A012899	7681	3766	JOHN ZUPPAN	1/13/1949	275.20	Burns, Tehama	SACRAMENTO RIVER
A014447	8840	8011	JOHN ZUPPAN JOHN ZUPPAN Total	8/27/1951	575.70	Tehama	SACRAMENTO RIVER
A017537	11071	5955	JOHN AND JANE FITZGERALD FAMILY REVOCABLE TRUST JOHN AND JANE FITZGERALD FAMILY REVOCABLE TRUST Total	4/2/1957	109.50	Sutter	OLD CHANNEL SACRAMENTO RIVER
A003994	1850	651	Johnathan Tucker Johnathan Tucker Total	1/13/1928	76.40	Glenn	SACRAMENTO RIVER
A007306	3980	1949	Joseph Alamo Joseph Alamo Total	6/29/1932	3,622.70	Colusa	SACRAMENTO RIVER
A006418B	001799B		KENNETH L WALLACE	6/20/1991	1,127.70	Sutter	SACRAMENTO RIVER
A014726	9002	4951	KENNETH L WALLACE KENNETH L WALLACE Total	3/24/1952	160.60	Sutter	SACRAMENTO RIVER
A014520	8926	5112	KENNETH R PYLMAH KENNETH R PYLMAH Total	10/15/1951	146.00	Yolo	SACRAMENTO RIVER
A004364	2227	901	Knights Landing Investors LLC Knights Landing Investors LLC Total	12/13/1926	3,537.60	Sutter, Yolo	SACRAMENTO RIVER
A006454	3385	1469	KRAMER RANCH KRAMER RANCH Total	10/6/1929	474.50	Yolo	SACRAMENTO RIVER
A013607B	8393	1116	LAKE CALIFORNIA PROPERTY OWNERS ASSN INC	3/26/1962	1,220.00	Tehama	SACRAMENTO RIVER
A023140	16056	1186	LAKE CALIFORNIA PROPERTY OWNERS ASSN INC LAKE CALIFORNIA PROPERTY OWNERS ASSN INC Total	9/23/1968	985.00	Tehama	SACRAMENTO RIVER
A004501	3285	1738	LAWRENCE SCHNEIDER AND RUTH SCHNEIDER FAMILY REV TRUST	4/19/1937	71.60	Yolo	SACRAMENTO RIVER
A017603	7503	4098	LAWRENCE SCHNEIDER AND RUTH SCHNEIDER FAMILY REV TRUST LAWRENCE SCHNEIDER AND RUTH SCHNEIDER FAMILY REV TRUST Total	11/17/1948	110.90	Yolo	SACRAMENTO RIVER

Sacramento River - Post-1914 Appropriative Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A000624	429	001205A	LEE W RICHTER	12/30/1982	335.90	Sutter	SACRAMENTO RIVER
			LEE W RICHTER Total		335.90		
A0010744	591	004676A	LOMO COLD STORAGE A CAL GEN PARTNERSHIP	9/10/1918	1,951.60	Sutter	SACRAMENTO RIVER
A004613	2347	940	LOMO COLD STORAGE A CAL GEN PARTNERSHIP	11/28/1955	212.20	Sutter	SACRAMENTO RIVER
A004699	2364	1154	LOMO COLD STORAGE A CAL GEN PARTNERSHIP	3/21/1932	670.40	Sutter	SACRAMENTO RIVER
A006466	3615	4168	LOMO COLD STORAGE A CAL GEN PARTNERSHIP	11/14/1929	20,255.50	Sutter	SACRAMENTO RIVER
			LOMO COLD STORAGE A CAL GEN PARTNERSHIP Total		23,089.90		
A007232	3803	1651	LORNA KELSEO	4/7/1932	64.10	Yolo	SACRAMENTO RIVER
			LORNA KELSEO Total		64.10		
A003700	1833	1458	LOUISE A MARTIN-KOBELLAS	10/31/1923	556.70	Sutter	SACRAMENTO RIVER
			LOUISE A MARTIN-KOBELLAS Total		556.70		
A002707	1162	1729	M & H REALTY PARTNERS VI L P	12/29/1921	305.50	Sacramento	SACRAMENTO RIVER
			M & H REALTY PARTNERS VI L P Total		305.50		
A005213	4516	2618	M & T INCORPORATED	1/15/1935	1,450.00	Butte	SACRAMENTO RIVER
			M & T INCORPORATED Total		1,450.00		
A00764102	0063890	2	MARIA JOHN NICHOLAS KELLY RANCH LLC	1/9/2001	761.00	Sutter	SACRAMENTO RIVER
			MARIA JOHN NICHOLAS KELLY RANCH LLC Total		761.00		
A012120	7137	4666	MARIEETTE B HOLLINS	10/7/1947	387.80	Colusa	SACRAMENTO RIVER
			MARIEETTE B HOLLINS Total		387.80		
A008631	5120	7210	MAXWELL IRRIGATION DISTRICT	4/8/1936	28,990.80	Colusa	SACRAMENTO RIVER
A030445	21004		MAXWELL IRRIGATION DISTRICT	2/17/1995	13,630.00	Colusa	COLUSA BASIN DRAIN, LURLINE CREEK, SACRAMENTO RIVER, STONE CORRAL CREEK
A011956	8266	4586	MAXWELL IRRIGATION DISTRICT	6/24/1947	2,596.36	Colusa	RECLAMATION DISTRICT 2047 MAIN DRAIN
A014378	8404	4523	MAXWELL IRRIGATION DISTRICT	6/28/1951	1,636.36	Colusa	LATERAL DRAIN OF RECLAMATION DISTRICT 2047
A011955	8265	4643	MAXWELL IRRIGATION DISTRICT	6/24/1957	4,720.66	Colusa	RECLAMATION DISTRICT 2047 MAIN DRAIN
A011957	8267	4644	MAXWELL IRRIGATION DISTRICT	6/24/1957	22,085.95	Colusa	LOGAN AND HUYFER CREEK, AND RECLAMATION DISTRICT 2047 MAIN DRAIN CANAL
A011958	8268	4694	MAXWELL IRRIGATION DISTRICT	6/24/1957	3,226.45	Colusa	STONE CORRAL CREEK
A013919	9042	5692	MAXWELL IRRIGATION DISTRICT	6/25/1950	4,948.78	Colusa	LURLINE CREEK
A030445	21004		MAXWELL IRRIGATION DISTRICT	5/30/1995	13,630.00	Colusa	SACRAMENTO RIVER, COLUSA BASIN DRAIN, STONE CORRAL CREEK, LURLINE CREEK
			MAXWELL IRRIGATION DISTRICT Total		97,463.36		
A015150	9391	4775	MCM PROPERTIES, A CALIF CORP	1/12/1953	1,094.90	Sutter	SACRAMENTO RIVER
A015152	9393	4776	MCM PROPERTIES, A CALIF CORP	1/12/1953	474.50	Sutter	SACRAMENTO RIVER
			MCM PROPERTIES, A CALIF CORP Total		1,569.40		

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A001074B	591	004676B	MERIDIAN FARMS WATER CO	9/10/1918	67,335.90	Sutter	SACRAMENTO RIVER
MERIDIAN FARMS WATER CO Total					67,335.90		
A007641B	4215	006389B	MERILYN C SCHEIDEL	4/4/1933	3,464.60	Sutter	SACRAMENTO RIVER
MERILYN C SCHEIDEL Total					3,464.60		
A004355A		002831A	MICHAEL E LONON	6/9/2000	822.00	Sutter	SACRAMENTO RIVER
MICHAEL E LONON Total					822.00		
A007598	4220	1693	MILDRED HEIDRICK	6/23/1933	447.70	Yuba	SACRAMENTO RIVER
MILDRED HEIDRICK Total					447.70		
A015811	9814	5407	Moore Bros.	3/31/1954	794.20	Colusa	SACRAMENTO RIVER
Moore Bros. Total					794.20		
A004367	2012	1394	Narusuke Monguchi	12/15/1924	161.50	Yolo	SACRAMENTO RIVER UNDERFLOW
Narusuke Monguchi Total					161.50		
A000534	247	1050	NATOMAS CENTRAL MUTUAL WATER CO	5/28/1931	15,394.20	Sacramento, Sutter	NATOMAS CROSS CANAL, SACRAMENTO RIVER
A001056	511	2814	NATOMAS CENTRAL MUTUAL WATER CO	8/22/1918	16,205.20	Sacramento, Sutter	NATOMAS CROSS CANAL, SACRAMENTO RIVER
A001203	500	3109	NATOMAS CENTRAL MUTUAL WATER CO	3/5/1919	58,394.20	Sacramento, Sutter	NATOMAS CROSS CANAL, SACRAMENTO RIVER
A001413	1129	3110	NATOMAS CENTRAL MUTUAL WATER CO	4/27/1919	26,655.10	Sacramento, Sutter	NATOMAS CROSS CANAL, SACRAMENTO RIVER
A015572	15150	9794	NATOMAS CENTRAL MUTUAL WATER CO	10/9/1953	11,446.00	Sacramento, Sutter	NATOMAS CROSS CANAL, SACRAMENTO RIVER
A022309	15314	9989	NATOMAS CENTRAL MUTUAL WATER CO	10/8/1965	2,627.00	Sacramento, Sutter	RECLAMATION DISTRICT 1000 EAST DRAIN, RECLAMATION DISTRICT 1000 WEST DRAIN, RECLAMATION DISTRICT 1000 MAIN DRAIN
A025727	19400		NATOMAS CENTRAL MUTUAL WATER CO	2/7/1985	10,000.00	Sacramento, Sutter	NATOMAS CROSS CANAL, RD 1000 EAST DRAIN, RD 1000 MAIN DRAIN, RD 1000 WEST DRAIN, SACRAMENTO RIVER
NATOMAS CENTRAL MUTUAL WATER CO Total					151,121.70		
A007641D1		006389D1	NICOLI G NICHOLAS	1/9/2001	761.00	Sutter	SACRAMENTO RIVER
NICOLI G NICHOLAS Total					761.00		
A000808	415	002820B	OJI BROTHERS, A CO-PARTNERSHIP	3/6/1946	636.60	Sutter	SACRAMENTO RIVER
A000808C	415	002820C	OJI BROTHERS, A CO-PARTNERSHIP	1/3/1915	1,880.70	Sutter	SACRAMENTO RIVER
A003280A		002627A	OJI BROTHERS, A CO-PARTNERSHIP	7/27/1990	3,865.80	Sutter	SACRAMENTO RIVER
A010951	6377	3242	OJI BROTHERS, A CO-PARTNERSHIP	1/11/1945	2,854.00	Sutter	SACRAMENTO RIVER
A013590	8137	3835	OJI BROTHERS, A CO-PARTNERSHIP	2/20/1950	1,047.50	Sutter	SACRAMENTO RIVER
OJI BROTHERS, A CO-PARTNERSHIP Total					10,404.60		
A001765A	1111	000613A	PELGER MUTUAL WATER COMPANY	3/13/1972	1,697.90	Sutter	SACRAMENTO RIVER
A012470B	007250B	008547B	PELGER MUTUAL WATER COMPANY	4/13/1946	22,815.20	Sutter	SACRAMENTO RIVER

Sacramento River - Post-1914 Appropriative Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A030410	70933		FELGER MUTUAL WATER COMPANY	9/16/1994	5,000.00	Sutter	SACRAMENTO RIVER
			FELGER MUTUAL WATER COMPANY Total		5,000.00		
A000882B	479 001 3058		PHIL KNOX LEISER TRUST	12/30/1982	307.10	Sutter	SACRAMENTO RIVER
			PHIL KNOX LEISER TRUST Total		307.10		
A000244	403	2648	PRINCETON-CODORA-GLENN IRRIGATION DISTRICT	12/17/2001	80,936.30	Glenn	SACRAMENTO RIVER
A000770	464	4161	PRINCETON-CODORA-GLENN IRRIGATION DISTRICT	12/17/2001	30,936.30	Glenn	SACRAMENTO RIVER
A017060	13089	6898	PRINCETON-CODORA-GLENN IRRIGATION DISTRICT	5/2/1950	19,074.38	Colusa, Glenn	COLUSA BASIN DRAIN
A030H12	21137		PRINCETON-CODORA-GLENN IRRIGATION DISTRICT	1/1/1998	24,370.00	Colusa, Glenn	COLUSA BASIN DRAIN, SACRAMENTO RIVER
			PRINCETON-CODORA-GLENN IRRIGATION DISTRICT Total		111,216.98		
A000462	303	7205	PROVIDENT IRRIGATION DISTRICT	2/27/2001	89,000.00	Glenn	COLUSA DRAIN, DRAIN NO 13, DRAIN NO 55, SACRAMENTO RIVER, UNDER, WILLOW CREEK
A000640	304	7206	PROVIDENT IRRIGATION DISTRICT	2/27/2001	38,498.00	Glenn	COLUSA DRAIN, DRAIN NO 13, DRAIN NO 55, SACRAMENTO RIVER, UNDER, WILLOW CREEK
A000892	416	7207	PROVIDENT IRRIGATION DISTRICT	1/18/1918	40,146.00	Glenn	COLUSA DRAIN, DRAIN 13, DRAIN NO 55, SACRAMENTO RIVER, UNDER, WILLOW CREEK
A001422	047	1109	PROVIDENT IRRIGATION DISTRICT	9/2/1919	3,371.90	Glenn	COLUSA DRAIN
A030H13	21133		PROVIDENT IRRIGATION DISTRICT	1/1/1998	26,747.00	Glenn	COLUSA BASIN DRAIN, DRAIN NO 13, DRAIN NO 55, SACRAMENTO RIVER, UNDER, WILLOWS CREEK
			PROVIDENT IRRIGATION DISTRICT Total		194,780.90		
A004226	2024	2790	PURHIRAN FARMS LLC	6/28/1945	525.40	Yuba	SACRAMENTO RIVER
			PURHIRAN FARMS LLC Total		525.40		
A014082	14507	6795	QUAD H RANCHES, INC	1/2/1969	307.70	Sutter	SACRAMENTO RIVER
			QUAD H RANCHES, INC Total		307.70		
A004372	2017	1393	R W ROSE	12/15/1924	80.70	Yuba	SACRAMENTO RIVER
			R W ROSE Total		80.70		
A010404	6118	2966	RALPH BECKLEY	3/18/1942	549.30	Colusa	SACRAMENTO RIVER
			RALPH BECKLEY Total		549.30		
A004353B	002881B		RAY E AND JANICE R ANDERSON FAMILY TRUST	6/9/2000	286.40	Sutter	SACRAMENTO RIVER
			RAY E AND JANICE R ANDERSON FAMILY TRUST Total		286.40		
A015151	9392	5586	Rebekah Leiser	1/12/1953	36.70	Sutter	SACRAMENTO RIVER
			Rebekah Leiser Total		36.70		
A000027	31	3185	RECLAMATION DISTRICT #1094	4/2/1915	35,000.00	Colusa, Glenn	SACRAMENTO RIVER
A023201	16771		RECLAMATION DISTRICT #1094	12/26/1966	21,000.00	Colusa	

Sacramento River - Post-1914 Appropriative Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
RECLAMATION DISTRICT #1004 Total					77,000.00		
A000576	315	3065	RECLAMATION DISTRICT #108	1/25/1917	97,469.20	Colusa, Yolo	SACRAMENTO RIVER
A000763	388	3066	RECLAMATION DISTRICT #104	8/27/1917	270,747.80	Colusa, Yolo	SACRAMENTO RIVER
A001589	1885	3067	RECLAMATION DISTRICT #104	2/24/1950	77,986.40	Colusa, Yolo	SACRAMENTO RIVER
A011899	8251	7080	RECLAMATION DISTRICT #108	5/26/1947	27,371.90	Colusa	BACK LEVEE BORROW PIT OF RECLAMATION DISTRICT NO. 108 (COLUSA BASIN DRAIN)
A031436	21274		RECLAMATION DISTRICT #108 RECLAMATION DISTRICT #108 Total	10/18/2010	38,000.00	Colusa	SACRAMENTO RIVER
A001666	684	1301	RECLAMATION DISTRICT #999	2/11/1920	58,394.20	Solano, Yolo	ELK SLOUGH, MINER SLOUGH, SACRAMENTO RIVER, SACRAMENTO RIVER DEEP WATER SHIP CHANNEL, SUTTER SLOUGH
A004069	0090	1303	RECLAMATION DISTRICT #999	4/1/1968	1,472.30	Yolo	SACRAMENTO RIVER DEEP WATER SHIP CHANNEL
A004100	0091	1303	RECLAMATION DISTRICT #999	4/1/1968	34,174.80	Solano, Yolo	ELK SLOUGH, MINER SLOUGH, SACRAMENTO RIVER, SACRAMENTO RIVER DEEP WATER SHIP CHANNEL, SUTTER SLOUGH
A004101	0092	1304	RECLAMATION DISTRICT #999	7/18/1924	3,909.90	Yolo	SACRAMENTO RIVER, SACRAMENTO RIVER DEEP WATER SHIP CHANNEL
RECLAMATION DISTRICT #999 Total					97,951.20		
A020687	13942	9643	RICHARD SWIERSTRA	4/17/1961	45.10	Tuhamia	SACRAMENTO RIVER
RICHARD SWIERSTRA Total					45.10		
A016061	14508	8794	RICHARD & SANDRA GIUSTI FAMILY TRUST DATED 8/13/90	1/2/1969	307.70	Sutter	SACRAMENTO RIVER
RICHARD & SANDRA GIUSTI FAMILY TRUST DATED 8/13/90 Total					307.70		
A000575	314	1718	RIVER GARDEN FARMS COMPANY	1/25/1917	15,530.60	Yolo	SACRAMENTO RIVER
A000577	316	3123	RIVER GARDEN FARMS COMPANY	1/25/1917	13,745.70	Yolo	SACRAMENTO RIVER
A011910	8256	4636	RIVER GARDEN FARMS COMPANY	5/29/1947	6,331.24	Yolo	KNIGHTS LANDING RIDGE CUT, SACRAMENTO RIVER
RIVER GARDEN FARMS COMPANY Total					35,627.54		
A013239	7049	5140	RIVER MAID LAND LTD	7/19/1949	63.40	Sacramento	SACRAMENTO RIVER
RIVER MAID LAND LTD Total					63.40		
A007641C	4215	006389C	RIVER RANCH PARTNERSHIP	6/4/1933	2,795.00	Sutter	SACRAMENTO RIVER
RIVER RANCH PARTNERSHIP Total					2,795.00		
A003317C	1299	001130C	ROBERTA SCHREINER	2/4/1990	35.70	Sutter	SACRAMENTO RIVER
ROBERTA SCHREINER Total					35.70		
A0033201	2172	1040	ROGER L MATTEOLI	12/27/1922	131.40	Yolo	SACRAMENTO RIVER

Sacramento River - Post-1914 Appropriative Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
ROGER L MATTEOLI Total					131.40		
A014836	9153	5437	SACRAMENTO & SAN JOAQUIN DRAINAGE DISTRICT	6/7/1952	277.70	Sutter	SACRAMENTO RIVER
SACRAMENTO & SAN JOAQUIN DRAINAGE DISTRICT Total					277.70		
A030454	21209		SACRAMENTO COUNTY WATER AGENCY	2/15/2006	71,000.00	Sacramento	SACRAMENTO RIVER
SACRAMENTO COUNTY WATER AGENCY Total					71,000.00		
A003423	1046	9994	SACRAMENTO RIVER RANCH II LLC	5/17/1923	3,846.00	Yolo	KNIGHTS LANDING RIDGE CUT, SACRAMENTO RIVER
A004901	2514	9995	SACRAMENTO RIVER RANCH II LLC	3/1/1973	9,398.70	Yolo	KNIGHTS LANDING RIDGE CUT, SACRAMENTO RIVER
A004902	2515	9996	SACRAMENTO RIVER RANCH II LLC	3/1/1973	3,446.70	Yolo	KNIGHTS LANDING RIDGE CUT, SACRAMENTO RIVER
A005359	2611	9997	SACRAMENTO RIVER RANCH II LLC	2/17/1927	1,808.20	Yolo	KNIGHTS LANDING RIDGE CUT, SACRAMENTO RIVER
SACRAMENTO RIVER RANCH II LLC Total					17,399.20		
A004351	2095	1200	SACRAMENTO RIVER RANCH LLC	12/4/1924	113.00	Sutter, Yolo	SACRAMENTO RIVER
SACRAMENTO RIVER RANCH LLC Total					113.00		
A001060	512	1167	SIDDIQUI FAMILY PARTNERSHIP	8/25/1918	88.50	Sacramento	SACRAMENTO RIVER
A001094	516	570	SIDDIQUI FAMILY PARTNERSHIP	9/26/1918	1,186.70	Sacramento	SACRAMENTO RIVER
SIDDIQUI FAMILY PARTNERSHIP Total					1,275.20		
A003200	2171	1653	STIOUX CREEK PROPERTY LLC	12/27/1922	351.30	Sutter	SACRAMENTO RIVER
A005686	2931	1157	STIOUX CREEK PROPERTY LLC	9/16/1927	311.80	Sutter	SACRAMENTO RIVER
STIOUX CREEK PROPERTY LLC Total					663.10		
A022503	15151	9726	SISKIYOU COUNTY F C & W C O	6/23/1966	26,000.00	Siskiyou	SACRAMENTO RIVER
A023016	15992		SISKIYOU COUNTY F C & W C O	4/3/1968	14.00	Siskiyou	SCOTT CAMP CREEK
A024354	16371	12062	SISKIYOU COUNTY F C & W C O	6/20/1986	25.00	Siskiyou	LITTLE CASTLE CREEK
SISKIYOU COUNTY F C & W C O Total					26,039.00		
A013658	6302	6169	SMITH RANCHES AND WOOD ORCHARD	3/29/1950	478.10	Tehama	SACRAMENTO RIVER
SMITH RANCHES AND WOOD ORCHARD Total					478.10		
A006726	3621	4541	STEVE TARKE	7/10/1930	1,624.80	Sutter	SACRAMENTO RIVER
A011450	6736	4542	STEVE TARKE	6/27/1946	2,919.70	Sutter	SACRAMENTO RIVER
STEVE TARKE Total					4,544.50		
A0002304		204	DO1768A STEVEN J RUDEK	1/10/1916	484.00	Colusa	SACRAMENTO RIVER
A0114205	6767	4390	STEVEN J RUDEK	3/20/1951	1,277.40	Colusa	SACRAMENTO RIVER
STEVEN J RUDEK Total					1,761.40		
A0051608	002649B	0011R36	SUTTER BASIN GROWERS COOPERATIVE	8/18/1926	182.50	Sutter	SACRAMENTO RIVER
SUTTER BASIN GROWERS COOPERATIVE Total					182.50		
A000561	287	2817	SUTTER MUTUAL WATER COMPANY	2/1/1917	21,866.10	Sutter	SACRAMENTO RIVER
A000679	419	2818	SUTTER MUTUAL WATER COMPANY	1/3/1916	56,221.00	Sutter	SACRAMENTO RIVER
A000829	420	2819	SUTTER MUTUAL WATER COMPANY	1/3/1916	12,270.40	Sutter	SACRAMENTO RIVER
A000860A	416	002K20A	SUTTER MUTUAL WATER COMPANY	1/3/1916	190,725.30	Sutter	SACRAMENTO RIVER
A001160	569	2822	SUTTER MUTUAL WATER COMPANY	1/24/1919	19,681.30	Sutter	SACRAMENTO RIVER
A001756	1103	352	SUTTER MUTUAL WATER COMPANY	4/9/1920	636.70	Sutter	SACRAMENTO RIVER

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A001763	1108	1110	SUTTER MUTUAL WATER COMPANY	4/9/1920	916.40	Sutter	SACRAMENTO RIVER
A001769	1117	547	SUTTER MUTUAL WATER COMPANY	8/22/1926	3,255.10	Sutter	SACRAMENTO RIVER
A001772	1120	657	SUTTER MUTUAL WATER COMPANY	1/31/1928	94.70	Sutter	SACRAMENTO RIVER
A001195	2169	862	SUTTER MUTUAL WATER COMPANY	11/30/1929	585.80	Sutter	SACRAMENTO RIVER
A007866	4354	2240	SUTTER MUTUAL WATER COMPANY	3/29/1934	3,121.60	Sutter	SACRAMENTO RIVER
A009760	5510	2821	SUTTER MUTUAL WATER COMPANY	11/3/1939	180,984.40	Sutter	SACRAMENTO RIVER
A010658	6189	2823	SUTTER MUTUAL WATER COMPANY	6/16/1943	3,654.40	Sutter	SACRAMENTO RIVER
A011993	7194	4562	SUTTER MUTUAL WATER COMPANY	6/23/1947	2,737.20	Sutter	SACRAMENTO RIVER, WEST BOARDW PIT SUTTER BYPASS
A012470A	007260A	008547A	SUTTER MUTUAL WATER COMPANY	4/13/1948	15,309.70	Sutter	SACRAMENTO RIVER
A016677	13667	8230	SUTTER MUTUAL WATER COMPANY	9/7/1967	2,036.10	Sutter	SACRAMENTO RIVER
SUTTER MUTUAL WATER COMPANY Total					520,616.20		
A013867A	8303	1187	SUZANNE GOELET	3/26/1982	410.00	Tehama	SACRAMENTO RIVER
SUZANNE GOELET Total					410.00		
A001689	1981	8129	Sycamore Mutual Water Company	2/9/1920	47,521.20	Colusa	SACRAMENTO RIVER
A012412	8277	4056	Sycamore Mutual Water Company	3/17/1946	2,189.75	Colusa	R D 2047 MAIN CANAL
A013000	8285	5796	Sycamore Mutual Water Company	3/25/1949	1,824.79	Colusa	R D 2047 MAIN CANAL
A013001	8285	7062	Sycamore Mutual Water Company	3/25/1949	88.54	Colusa	R D 2047 MAIN CANAL
A013002	8285	4057	Sycamore Mutual Water Company	3/25/1949	364.96	Colusa	R D 2047 MAIN CANAL
A018372	14514	9917	Sycamore Mutual Water Company	12/22/1972	1,013.00	Colusa	SACRAMENTO RIVER
Sycamore Mutual Water Company Total					48,012.24		
A014789	9069	7219	THOMAS L NELSON & HAZEL M NELSON TRUST	5/1/1952	656.70	Sutter	SACRAMENTO RIVER
THOMAS L NELSON & HAZEL M NELSON TRUST Total					656.70		
A00764103	0063890	3	THOMAS S ATKINSON II	1/5/2001	761.00	Sutter	SACRAMENTO RIVER
THOMAS S ATKINSON II Total					761.00		
A000742	382	1211	TISDALE IRRIGATION & DRAINAGE CO	7/26/1917	13,473.70	Sutter	SACRAMENTO RIVER
A016995	13868	9335	TISDALE IRRIGATION & DRAINAGE CO	4/3/1950	1,350.00	Sutter	SACRAMENTO RIVER
TISDALE IRRIGATION & DRAINAGE CO Total					13,923.70		
A009169	5099	2695	TOWNE ENTERPRISES	11/3/1937	386.90	Sacramento	SACRAMENTO RIVER
TOWNE ENTERPRISES Total					386.90		
A016166	14505	10001	TRILOGY HOMES LLC	12/6/1954	1,450.00	Sacramento	SACRAMENTO RIVER
TRILOGY HOMES LLC Total					1,450.00		
A005675	12730		U.S. BUREAU OF RECLAMATION	7/30/1927	1,153,752.50	Shasta	SACRAMENTO RIVER
A005620	12721		U.S. BUREAU OF RECLAMATION	4/12/1961	7,998,004.00	Contra Costa, Glenn, Sacramento, Shasta, Tehama	OLD RIVER, SACRAMENTO RIVER

Sacramento River - Post-1914 Appropriative Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A009363	12722		U.S. BUREAU OF RECLAMATION	4/12/1961	1,033,877.50	Contra Costa, Sacramento, San Joaquin, Shasta, Tehama	OLD RIVER, SACRAMENTO RIVER, Victoria Canal
A009364	12723		U.S. BUREAU OF RECLAMATION	8/2/1938	7,818,797.50	Contra Costa, Sacramento, San Joaquin, Shasta, Tehama	OLD RIVER, SACRAMENTO RIVER, Victoria Canal
U.S. BUREAU OF RECLAMATION Total					28,004,531.50		
A006527	3597	2145	VAN RUITEN BROS	1/8/1930	1,094.90	Sutter, Yolo	SACRAMENTO RIVER
VAN RUITEN BROS Total					1,094.90		
A000771	389	4160	W.A. VERXA	9/9/1917	9,084.40	Colusa	SACRAMENTO RIVER
W.A. VERXA Total					9,084.40		
A015711	9751	5593	WALLACE L EDSON	2/2/1954	142.70	Sutter	OLD RIVER, SACRAMENTO RIVER
WALLACE L EDSON Total					142.70		
A0023176	1269	0011308	WAYMON LYNCH	2/4/1980	30.60	Sutter	SACRAMENTO RIVER
WAYMON LYNCH Total					30.60		
A004369	2014	1331	WILLIAM J CORREA	12/18/1974	44.00	Sacramento	SACRAMENTO RIVER
WILLIAM J CORREA Total					44.00		
A002884	1347	968	WILLIAM P LOCKETT	6/17/1922	116.10	Sutter	SACRAMENTO RIVER
A0051604	2649	001183A	WILLIAM P LOCKETT	8/18/1926	385.00	Sutter	SACRAMENTO RIVER
WILLIAM P LOCKETT Total					491.10		
A028238	20073	13351	WILLOW CREEK MUTUAL WATER CO	9/7/1964	5,000.00	Glenn	SACRAMENTO RIVER
WILLOW CREEK MUTUAL WATER CO Total					5,000.00		
A008141	4462	2631	WILSON RANCH PARTNERSHIP	10/24/1934	2,717.40	Yolo	SACRAMENTO RIVER
WILSON RANCH PARTNERSHIP Total					2,717.40		
A003247	1695	4255	WINDSWEPT LAND AND CATTLE COMPANY	3/21/1956	3,209.00	Sutter, Yolo	SACRAMENTO RIVER
WINDSWEPT LAND AND CATTLE COMPANY Total					3,209.00		
A004257	0866	1939	Woodland Development Company, LLC	4/6/1939	666.50	Yolo	SACRAMENTO RIVER
Woodland Development Company, LLC Total					666.50		
A030358	20281		Woodland-Davis Clean Water Agency	4/14/2011	45,000.00	Yolo	SACRAMENTO RIVER
Woodland-Davis Clean Water Agency Total					45,000.00		
A013031	7461	4721	Yolo Land Trust	4/18/1948	1,011.60	Yolo	SACRAMENTO RIVER
Yolo Land Trust Total					1,011.60		
A014610	5857	11038	ZUMWALT MUTUAL WATER COMPANY	1/14/1952	63.00	Colusa	SACRAMENTO RIVER
ZUMWALT MUTUAL WATER COMPANY Total					63.00		
Grand Total					33,497,590.01		

Stanislaus River Watershed - Post 1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	Season	Purpose of Use	County	Source
A00496	18013	8274	ALEX NACCARATO	11/15/81	13.00			Butler	OWA CREEK
A029017	20928		ALEX NACCARATO	3/14/91	20.00			Butler	OWA CREEK
			ALEX NACCARATO Total		33.00				
A018869	12223	0559	ALMA A RYALS	6/18/59	1.10			Butler	UNSP
			ALMA A RYALS Total		1.10				
A016295	10192	10159	BEAR VALLEY HOMEOWNERS ASSOCIATION	4/12/55	2.50			Alameda	UNSP
A022290	15199	10159	BEAR VALLEY HOMEOWNERS ASSOCIATION	9/17/65	1.30			Alameda	UNSP
A022291	15489	10160	BEAR VALLEY HOMEOWNERS ASSOCIATION	9/17/65	3.20			Alameda	UNSP
A049813	20542	13864	BEAR VALLEY HOMEOWNERS ASSOCIATION	8/20/12	7.80			Alameda	UNSP
			BEAR VALLEY HOMEOWNERS ASSOCIATION Total		14.80				
A018356	12170	7514	BERNICE JANE BOTTOMLEY	10/05/58	47.00			Calaveras	CARSON CREEK
			BERNICE JANE BOTTOMLEY Total		47.00				
A012550	7440	4029	BLUE LAKE SPRINGS HOMEOWNERS ASSOCIATION	6/16/40	45.00			Calaveras	MORAN CREEK
A014576	9049	4028	BLUE LAKE SPRINGS HOMEOWNERS ASSOCIATION	11/13/51	51.20			Calaveras	MORAN CREEK
			BLUE LAKE SPRINGS HOMEOWNERS ASSOCIATION Total		96.20				
A027131	18601	12240	BRETT D THOMPSON	12/27/01	1.00			Calaveras	UNST
			BRETT D THOMPSON Total		1.00				
A011790B	15013		CALAVERAS COUNTY WATER DISTRICT	3/24/71	78,500.00			Calaveras, Butte	HIGHLAND CREEK, NORTH FORK STANISLAUS RIVER
A012911	15016		CALAVERAS COUNTY WATER DISTRICT	1/25/49	368,001.00			Calaveras, Butte	HIGHLAND CREEK, NORTH FORK STANISLAUS RIVER
A012912	15017		CALAVERAS COUNTY WATER DISTRICT	1/25/40	3,373.90			Butte	NORTH FORK STANISLAUS RIVER
A012912A	14769		CALAVERAS COUNTY WATER DISTRICT	1/25/40	1,444.00			Butte	NORTH FORK STANISLAUS RIVER
A013981	15018		CALAVERAS COUNTY WATER DISTRICT	5/13/49	63,000.00			Butte	HIGHLAND CREEK
A013992	15019		CALAVERAS COUNTY WATER DISTRICT	5/13/49	63,000.00			Butte	HIGHLAND CREEK
A013993	15020		CALAVERAS COUNTY WATER DISTRICT	5/13/49	50,790.00			Alameda, Butte	HIGHLAND CREEK, NORTH FORK STANISLAUS RIVER
A018727	15021		CALAVERAS COUNTY WATER DISTRICT	5/20/59	506,809.30			Butte	BLAYNE CREEK, NORTH FORK STANISLAUS RIVER
A010148	15023		CALAVERAS COUNTY WATER DISTRICT	12/23/50	732,338.90			Alameda, Butte	BLAYNE CREEK, HIGHLAND CREEK, NORTH FORK STANISLAUS RIVER
A010149	15024		CALAVERAS COUNTY WATER DISTRICT	12/23/50	50,660.00			Alameda, Butte	HIGHLAND CREEK, NORTH FORK STANISLAUS RIVER
			CALAVERAS COUNTY WATER DISTRICT Total		1,910,450.10				
A011148	11642	6479	CASTLE & COOKE CALAVERAS INC	5/22/58	50.00			Calaveras	SAWMILL CREEK
			CASTLE & COOKE CALAVERAS INC Total		50.00				
A039130	20788		CASTLE & COOKE CALIFORNIA INC	4/8/92	98.00			Calaveras	SAW MILL CREEK
			CASTLE & COOKE CALIFORNIA INC Total		98.00				
A014090	9610	4993	CEDAR RIDGE IMPROVEMENT ASSOCIATION	7/9/52	27.90			Butte	TYGHEA CREEK
A018514	12001	9773	CEDAR RIDGE IMPROVEMENT ASSOCIATION	1/30/59	15.00			Butte	UNSP / S
			CEDAR RIDGE IMPROVEMENT ASSOCIATION Total		42.90				
A004895	2599	1308	CLIFFORD D CHENEY	1/26/26	3.40			Butte	UNSP
			CLIFFORD D CHENEY Total		3.40				
A021647	14653	9120	COLD SPRINGS WATER COMPANY INC	2/20/41	104.00			Butte	UNST
			COLD SPRINGS WATER COMPANY INC Total		104.00				
A019732	14038	8088	DANA KAUFFMANN	9/8/60	29.00			Butte	WRIGHT CREEK
			DANA KAUFFMANN Total		29.00				
A018988	12222	6501	DAVE D FICKEL	6/18/59	0.80			Butte	UNSP
			DAVE D FICKEL Total		0.80				
A020819	18892	10239	DAVIES PROPERTIES	6/14/82	6.40			Calaveras	LOVE CREEK
			DAVIES PROPERTIES Total		6.40				
A016980	10014	2887	Donald Paul Deshon	4/2/56	6.00			Butte	UNST
			Donald Paul Deshon Total		6.00				
A019168	44337	7108	EARL D GARRISON	1/1/50	6.00			Calaveras	UNST
			EARL D GARRISON Total		6.00				
A012659	7486	4989	ESTATE OF E ALFORD	8/19/44	24.00			Calaveras	LOVE CREEK
			ESTATE OF E ALFORD Total		24.00				
A021338	14498	10248	Eureka Valley LLC	5/9/74	15.00			Butte	UNST
			Eureka Valley LLC Total		15.00				
A025135	17026	11288	GEORGE A BURTON	4/21/77	52.00			Butte	NORTH FORK WILDCAT CREEK

Stanislaus River Watershed - First 1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	Seasor	Purpose of Use	County	Source
			GEORGE A ATHERTON Total						
A017554	11689	8666	GERALD ENGLER	4/18/57	25.00			Tulare	MORRISON CREEK
			GERALD S ENGLER Total						
A015583	9715	6999	GREENHORN CREEK ASSOCIATES L P	10/2/75	45.00			Calaveras	WYCK
			GREENHORN CREEK ASSOCIATES L P Total						
A020013	21111		GUADALUPE RAMIREZ	4/23/87	18.00			Calaveras	LOVE CREEK
			GUADALUPE RAMIREZ Total						
A000620	5388	5288	BURBING M TERZICH	6/19/70	466.50			Tulare	EAGLE CREEK
			IRVING M TERZICH Total						
A022343	15256	0934	JANICE M ZUKAL	11/24/85	7.00			Tulare	HUGE TUMBLE
			JANICE M ZUKAL Total						
A019307	12352	6643	JEFF R WILSON	3/14/69	14.10			Tulare	URS
			JEFF R WILSON Total						
A021799	15162	10762	JEROME P SOLARI	5/19/84	22.50			Tulare	DEBOMAI GULCH
			JEROME P SOLARI Total						
A018573	11984	0685	JOANNA VIDITO	3/9/59	4.00			Tulare	URST
			JOANNA VIDITO Total						
A025626	17180	11277	JOHN WILLMS RANCH INC	12/30/77	11.00			Stanislaus	URST
			JOHN WILLMS RANCH INC Total						
A020041	13786	0752	JOHN H JANDOSKY	3/17/61	20.00			Calaveras	VENNY CREEK
			JOHN H JANDOSKY Total						
A013517	8005	4279	JOHN V ELLIS	12/27/41	35.00			Calaveras	URST
			JOHN V ELLIS Total						
A019469	16009	10448	JOSEPH W MARTIN JR	6/2/60	9.60			Tulare	ANDREWS CREEK
			JOSEPH W MARTIN JR Total						
A018574	11985	7360	KAREN REESE	07/05/8	68.00			Tulare	GARTH SPRING RUN
			KAREN REESE Total						
A021140	14736	8849	KATHARINE K STEVENS	2/4/61	2.00			Tulare	URSP
			KATHARINE K STEVENS Total						
A011861	6863	4236	KATHARINE R REID	12/16/46	36.00			Tulare	FAULT CREEK
			KATHARINE R REID Total						
A020332	13003	10840	LAKE ALPINE WATER COMPANY	7/23/61	42.00			Alameda	URSP
A021485	13581	11007	LAKE ALPINE WATER COMPANY	10/7/63	261.00			Alameda	BEAR CREEK
A005648G	21237		LAKE ALPINE WATER COMPANY	6/10/09	365.00			Alameda	BEAR CREEK
			LAKE ALPINE WATER COMPANY Total						
A020450	13818	12186	LELAND MEADOW WATER DISTRICT	10/24/61	2.30			Tulare	URSP
A023105	16005	11345	LELAND MEADOW WATER DISTRICT	12/17/68	68.00			Tulare	LELAND CREEK
A020373	18277	12187	LELAND MEADOW WATER DISTRICT	5/21/89	2.70			Tulare	URSP
			LELAND MEADOW WATER DISTRICT Total						
A008919	8961	6482	LENORA HOLMES	3/14/37	0.20			Alameda	URSP
A009217	5429	6481	LENORA HOLMES	12/30/37	0.20			Alameda	URSP
A000951	2546	3753	LENORA HOLMES	3/14/40	0.30			Alameda	URSP
			LENORA HOLMES Total						
A003650	1849	895	MATTHEW T BLOOM	11/27/03	0.30			Tulare	URST
			MATTHEW T BLOOM Total						
A015841	10160	6882	MICHAEL P TRACY	4/23/87	18.00			Tulare	MORRISON CREEK
			MICHAEL P TRACY Total						
A026084	18924	14709	MIKEL C WILLIAMS	9/6/79	0.50			Tulare	MORRISON CREEK, URST
			MIKEL C WILLIAMS Total						
A000077A	1301	9016	Northern California Power Agency	6/9/15	1,062.00			Tulare	HIGHLAND CREEK
			Northern California Power Agency Total						
A003081	2104	2012	ORDALE BRIGATION DISTRICT	9/20/18	90,195.00			Calaveras	STANISLAUS RIVER
A003091	2100	2011	ORDALE BRIGATION DISTRICT	10/19/22	10,754.00			Calaveras	STANISLAUS RIVER
A005048A	15092	12385	ORDALE BRIGATION DISTRICT	7/30/27	60,000.00			Tulare	MIDDLE FORK STANISLAUS RIVER
A010872	8360	8256	ORDALE BRIGATION DISTRICT	8/31/01	80,000.00			Tulare	STANISLAUS RIVER
A010978	6448	5988	ORDALE BRIGATION DISTRICT	8/31/01	25,000.00			Calaveras	STANISLAUS RIVER
A011105	5551	7857	ORDALE BRIGATION DISTRICT	8/31/01	98,000.00			Tulare	MIDDLE FORK STANISLAUS RIVER
A012490	8362	10166	ORDALE BRIGATION DISTRICT	8/31/01	64,500.00			Tulare	MIDDLE FORK STANISLAUS RIVER
A012614	8363	7858	ORDALE BRIGATION DISTRICT	7/21/48	496,187.60			Tulare	MIDDLE FORK STANISLAUS RIVER
A012873	3304	10167	ORDALE BRIGATION DISTRICT	12/22/48	34,001.00			Tulare	MIDDLE FORK STANISLAUS RIVER
A013369	3305	7859	ORDALE BRIGATION DISTRICT	8/22/49	144,795.50			Tulare	MIDDLE FORK STANISLAUS RIVER
A013310	3306	7860	ORDALE BRIGATION DISTRICT	8/22/49	1,103,966.30			Tulare	STANISLAUS RIVER
A026979	19046		ORDALE BRIGATION DISTRICT	4/15/91	1,503,150.50			Calaveras	STANISLAUS RIVER

Stanislaus River Watershed - Pre-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	Season	Purpose of Use	County	Source
A021509	21188		OAKDALE IRRIGATION DISTRICT	8/30/97	50,000.00			Tuolumne	MIDDLE FORK STANISLAUS RIVER
A031770	21499		OAKDALE IRRIGATION DISTRICT	12/2/12	500,000.00			Tuolumne	
			OAKDALE IRRIGATION DISTRICT Total		4,454,648.00				
A001339	660	1391	PACIFIC GAS AND ELECTRIC COMPANY	1/2/34	40,904.70			Tuolumne	SOUTH FORK STANISLAUS RIVER
A000129	1307	1541	PACIFIC GAS AND ELECTRIC COMPANY	12/4/28	3,819.00			Tuolumne	SOUTH FORK STANISLAUS RIVER
A000130	3508	1542	PACIFIC GAS AND ELECTRIC COMPANY	12/4/28	5,360.00			Tuolumne	SOUTH FORK STANISLAUS RIVER
A001022	6107	2862	PACIFIC GAS AND ELECTRIC COMPANY	2/19/81	115,836.40			Tuolumne	MIDDLE FORK STANISLAUS RIVER
A031805	21171		PACIFIC GAS AND ELECTRIC COMPANY	4/5/05	4,700.00			Tuolumne	SOUTH FORK STANISLAUS RIVER
			PACIFIC GAS AND ELECTRIC COMPANY Total		170,726.10				
A022245	15262	0/09	PATRICIA D DAVEY	3/31/71	12.00			Tuolumne	UNST
			PATRICIA D DAVEY Total		12.00				
A023320	16216	12444	PETER G VON DER LINDE	7/28/60	11.10			Tuolumne	URIBARRO NINE TUBBLE
			PETER G VON DER LINDE Total		11.10				
A025177	17033	19151	RICHARD M GONZALES	10/20/76	10.00			Calaveras	POUR CREEK
			RICHARD M GONZALES Total		10.00				
A029116	13653	8199	RNE INVESTMENTS LLC	7/9/26	46.00			Calaveras	AMWORTH CREEK
			RNE INVESTMENTS LLC Total		46.00				
A024335	16788	11104	ROSS A CARKEET JR	4/3/72	0.20			Tuolumne	UNSP
			ROSS A CARKEET JR Total		0.20				
A013353	8073	10902	SHERMAN ACRES MUTUAL WATER ASSN	9/14/49	1.00			Calaveras	UNSP
			SHERMAN ACRES MUTUAL WATER ASSN Total		1.00				
A028920	17704	11731	Sierra Golf Management, Inc.	11/14/75	109.00			Calaveras	ANDREWS CREEK
			Sierra Golf Management, Inc. Total		109.00				
A012739	7567	5256	SIERRA PACIFIC INDUSTRIES	10/9/48	8.00			Tuolumne	UNSP
			SIERRA PACIFIC INDUSTRIES Total		8.00				
A056A0001			SIX MILE LAND COMPANY	5/0/01	81.00			Calaveras	SIX MILE CREEK
A031182			SIX MILE LAND COMPANY	5/0/01	41.00			Calaveras	SIX MILE CREEK
			SIX MILE LAND COMPANY Total		122.00				
A002524	1147	604	SOUTH SAN JOAQUIN IRRIGATION DISTRICT	8/29/21	26,000.00			Calaveras	STANISLAUS RIVER
			SOUTH SAN JOAQUIN IRRIGATION DISTRICT Total		26,000.00				
A030603A			STOCKTON EAST WATER DISTRICT	9/10/94	11,000.00			Calaveras	STANISLAUS RIVER
A030603B			STOCKTON EAST WATER DISTRICT	9/10/94	307,000.00			Calaveras, Tuolumne	STANISLAUS RIVER
			STOCKTON EAST WATER DISTRICT Total		318,000.00				
A010168	5074	3560	TAMARACK CABIN OWNERS ASSN	5/25/01	7.20			Calaveras	UNSP
			TAMARACK CABIN OWNERS ASSN Total		7.20				
A010563	10518		TAMARACK SPRINGS MUTUAL WATER CO	8/31/55	4.00			Calaveras	UNSP (2), UNRX
			TAMARACK SPRINGS MUTUAL WATER CO Total		4.00				
A019990	13140	8191	The Donald A. Bottomley 1992 Trust	2/20/91	4.00			Calaveras	UNST
			The Donald A. Bottomley 1992 Trust Total		4.00				
A018815	12329	7450	THOMAS P KLEIN	6/22/50	2.20			Tuolumne	UNST
			THOMAS P KLEIN Total		2.20				
A059A0002			THOMPSON FAMILY TRUST	10/26/00	28.10			Calaveras	SIMPLE CREEK, UNST
A031364			THOMPSON FAMILY TRUST	10/27/02	28.10			Calaveras	SIMPLE CREEK, UNST
			THOMPSON FAMILY TRUST Total		56.20				
A003912	1781	1118	U S STANISLAUS NATL FOREST	4/18/32	12.00			Tuolumne	GOOSEBERRY SPRING
A010384	9982	3941	U S STANISLAUS NATL FOREST	2/6/42	6.00			Tuolumne	COW CREEK
A010386	9983	3917	U S STANISLAUS NATL FOREST	2/6/42	4.50			Tuolumne	LILARD CREEK
A010423	3086	3561	U S STANISLAUS NATL FOREST	4/1/42	1.00			Calaveras	JRG MEADOW CREEK
A010427	5907	3931	U S STANISLAUS NATL FOREST	4/25/42	0.20			Alpine	JRG CREEK
A010490	6018	3262	U S STANISLAUS NATL FOREST	7/8/42	1.00			Tuolumne	UNSP
A010491	6039	3012	U S STANISLAUS NATL FOREST	7/8/42	1.00			Tuolumne	UNST
A010492	6040	3013	U S STANISLAUS NATL FOREST	7/8/42	0.90			Tuolumne	UNST
A010495	6041	2977	U S STANISLAUS NATL FOREST	7/15/42	3.10			Tuolumne	UNST
A010506	6104	3015	U S STANISLAUS NATL FOREST	11/12/42	3.00			Tuolumne	HUMSBURY CREEK
A010557	6105	2974	U S STANISLAUS NATL FOREST	11/12/42	1.00			Tuolumne	CASCADE CREEK
A010575	6159	2975	U S STANISLAUS NATL FOREST	12/28/42	0.80			Tuolumne	UNST
A010576	6160	3001	U S STANISLAUS NATL FOREST	12/28/42	0.90			Tuolumne	UNST
A010581	6161	3261	U S STANISLAUS NATL FOREST	1/2/43	2.10			Tuolumne	UNST
A013833	8360	3860	U S STANISLAUS NATL FOREST	7/5/40	3.10			Tuolumne	UNST
A014167	8618	1660	U S STANISLAUS NATL FOREST	2/20/51	1.00			Tuolumne	UNSP
A010690	10760	7337	U S STANISLAUS NATL FOREST	3/30/56	0.01			Tuolumne	UNST

Stanislaus River Watershed - Pre-1914 Appropriative Water Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	Season	Purpose of Use	County	Source
AG1704	11017	7115	U.S. STANISLAUS NATL FOREST	2/27/97	11.00		None	Yuba	
AG1800	12115	7497	U.S. STANISLAUS NATL FOREST	3/30/99	0.00		Alpha	Colusa	INSPIRATION SPRING
AG1880	12197	7863	U.S. STANISLAUS NATL FOREST	8/3/99	1.00		Tookome	Yuba	GRANDALL SPRING
AG1881	12198	7255	U.S. STANISLAUS NATL FOREST	8/3/99	1.00		Tookome	Yuba	SCHAFER SPRING
AG1893	12199	7260	U.S. STANISLAUS NATL FOREST	8/3/99	1.20		Tookome	Yuba	FRASER SPRING
AG1976	13053	8031	U.S. STANISLAUS NATL FOREST	8/27/00	7.90		Tookome	Yuba	UNST
AG1970	13034	7977	U.S. STANISLAUS NATL FOREST	8/27/00	0.70		Tookome	Yuba	UNSP
AG1974	13035	8252	U.S. STANISLAUS NATL FOREST	8/27/00	1.00		Alpha	Yuba	UNST
AG1976	13037	8142	U.S. STANISLAUS NATL FOREST	8/27/00	1.80		Tookome	Yuba	UNST
AG2042	13565	8080	U.S. STANISLAUS NATL FOREST	10/5/01	0.00		Colusa	Colusa	UNSP
AG2118	14918	9098	U.S. STANISLAUS NATL FOREST	9/28/04	0.50		Tookome	Yuba	UNSP
AG2203	14969	9097	U.S. STANISLAUS NATL FOREST	1/18/05	0.20		Tookome	Yuba	UNSP
U.S. STANISLAUS NATL FOREST Total					89.70				
AG1858A	20097		U.S. BUREAU OF RECLAMATION	4/17/11	980,000.00			Colusa	STANISLAUS RIVER
AG1858B	20245		U.S. BUREAU OF RECLAMATION	7/18/88	1,000,000.00			Colusa, San Joaquin	STANISLAUS RIVER
AG1859	16908		U.S. BUREAU OF RECLAMATION	6/10/52	5,323,865.00			Colusa	STANISLAUS RIVER
AG19203	16999		U.S. BUREAU OF RECLAMATION	7/19/73	1,420,000.00			Colusa	STANISLAUS RIVER
AG19304	16660		U.S. BUREAU OF RECLAMATION	3/11/60	1,420,000.00			Colusa, Contra Costa	STANISLAUS RIVER
AG2319	20246		U.S. BUREAU OF RECLAMATION	7/18/88	2,895,910.00			Colusa	STANISLAUS RIVER
U.S. BUREAU OF RECLAMATION Total					13,039,775.00				
AG2119	20144		VENTURE 4 MINING, A PARTNERSHIP	7/7/04	2.50			Tookome	UNST (ARA CRETAKORH GLEOC)
VENTURE 4 MINING, A PARTNERSHIP Total					2.50				
AG2560	17409	11514	WILLIAM MICHAEL ROBISON	5/27/77	28.00			Tookome	OWL CREEK, UNST
AG2570	17410	12006	WILLIAM MICHAEL ROBISON	5/27/77	48.00			Tookome	OWL CREEK
AG2571	17411	12007	WILLIAM MICHAEL ROBISON	5/27/77	28.00			Tookome	NORTH FORK WILDCAT CREEK
AG2586	17412	11515	WILLIAM MICHAEL ROBISON	6/9/77	0.70			Tookome	NORTH FORK WILDCAT CREEK
WILLIAM MICHAEL ROBISON Total					96.70				
AG2678	19471	12939	YOUNG BERTRAND TRUSTEE ETAL	10/2/04	0.10			Colusa	LOVE CREEK
YOUNG BERTRAND TRUSTEE ETAL Total					0.10				
Grand Total					20,143,681.00				

Application ID	Permit ID	License ID	Water Right Type	Status	Holder Name	Date	Face Amt	County	Source
AW1414		0583	5049 Appropriative	Issued	Aaron Lentz	2/15/51	3.7	Tulalame	CURTIS CREEK
					Aaron Lentz Total		3.7		
AW2486		15299	9177 Appropriative	Issued	BANK OF AMERICA NT & SA	9/8/00	15	Tulalame	URST
AW2487		15300	9181 Appropriative	Issued	BANK OF AMERICA NT & SA	9/8/00	20	Tulalame	URST
					BANK OF AMERICA NT & SA Total		35		
AW8644		12028	7582 Appropriative	Issued	BARBARA THORNTON	3/11/90	9	Tulalame	GARDOTE CREEK
					BARBARA THORNTON Total		9		
AW0020		13976	4078 Appropriative	Issued	BERNHARD KISSINGER	6/26/61	1.5	Tulalame	URST
					BERNHARD KISSINGER Total		1.5		
AW0034		13395	8154 Appropriative	Issued	BIG CREEK ASSOCIATES	7/25/61	24.5	Tulalame	BIG CREEK DRAINAGE URST
					BIG CREEK ASSOCIATES Total		24.5		
AW18388		12118 028168B	Appropriative	Issued	BOBBY E MADEWELL	5/25/59	1	Tulalame	URST
					BOBBY E MADEWELL Total		1		
AW12961		7549	4032 Appropriative	Issued	BOY SCOUT MEMORIAL FOUNDATION	3/1/49	6	Tulalame	URST
AW16437		10124	6866 Appropriative	Issued	BOY SCOUT MEMORIAL FOUNDATION	11/15/54	7.9	Tulalame	URST
					BOY SCOUT MEMORIAL FOUNDATION Total		13.9		
AW12962		7550	4033 Appropriative	Issued	BOY SCOUT OF AMERICA MEMORIAL FOUNDATION	3/1/49	2.7	Tulalame	ROBERTSON TULLUMNE RIVER
					BOY SCOUT OF AMERICA MEMORIAL FOUNDATION Total		2.7		
AW19217		12502	7478 Appropriative	Issued	BRENT LOOP	2/1/00	3.6	Tulalame	URST
					BRENT LOOP Total		3.6		
AW1372		14266	9116 Appropriative	Issued	BRENTWOOD LAKE CLUB INC	6/29/57	100	Tulalame	URST
					BRENTWOOD LAKE CLUB INC Total		100		
AW10902		5546	3579 Appropriative	Issued	CAMP TAWONGA-TAWONGA JEWISH COMMUNITY CORP	10/16/44	21.7	Tulalame	MIDDLE FORK TULLUMNE RIVER
AW11108		6525	3743 Appropriative	Issued	CAMP TAWONGA-TAWONGA JEWISH COMMUNITY CORP	7/17/45	11	Tulalame	URST
AW16365		7998	4251 Appropriative	Issued	CAMP TAWONGA-TAWONGA JEWISH COMMUNITY CORP	9/27/49	21.7	Tulalame	URST
AW15078		9991	5246 Appropriative	Issued	CAMP TAWONGA-TAWONGA JEWISH COMMUNITY CORP	11/6/52	12.7	Tulalame	URST
					CAMP TAWONGA-TAWONGA JEWISH COMMUNITY CORP Total		66.7		
AW00332		13421	9661 Appropriative	Issued	CAROLE CANEPA	7/28/01	22	Tulalame	URST
					CAROLE CANEPA Total		22		
AW09841		11114	8616 Appropriative	Issued	CAROLYN SUE MOSLEY	7/3/62	0.3	Tulalame	CURTIS CREEK
					CAROLYN SUE MOSLEY Total		0.3		
AW197578		12099 0266328	Appropriative	Issued	CHARLES G YONEDA	10/28/88	0.7	Tulalame	URST
					CHARLES G YONEDA Total		0.7		
AW13101		7096	5279 Appropriative	Issued	CHARLES J HURST	5/19/49	4	Tulalame	WOODS CREEK
AW12560		16131	10516 Appropriative	Issued	CHARLES J HURST	7/17/79	8	Tulalame	URST
					CHARLES J HURST Total		12		
AW16104		10108	9181 Appropriative	Issued	CHRISTOPHER R ROSS	2/6/03	6	Tulalame	URST (MAG LITTLE SUGAR PINE CREEK)
					CHRISTOPHER R ROSS Total		6		
AW00576		13616	9190 Appropriative	Issued	CLIFTON E J HODGE	1/29/62	6	Tulalame	URST
					CLIFTON E J HODGE Total		6		
AW10617		13058	8259 Appropriative	Issued	COUNTY OF TULLUMNE	2/15/62	10	Tulalame	URST
AW19689		20146	13071 Appropriative	Issued	COUNTY OF TULLUMNE	1/3/96	2	Tulalame	URST
					COUNTY OF TULLUMNE Total		12		
AW18601		12335	7329 Appropriative	Issued	CRAIG AND PATRICIA DAMBACHER 1993 FAMILY TRUST	3/20/99	16	Tulalame	URST (2)
					CRAIG AND PATRICIA DAMBACHER 1993 FAMILY TRUST Total		16		
AW09862		516	283 Appropriative	Issued	CROOK REVOCABLE 1999 TRUST	12/15/17	190.4	Tulalame	JAWORNI (OFFY)
AW13529		14878	10317 Appropriative	Issued	CROOK REVOCABLE 1999 TRUST	6/19/03	28	Tulalame	URST
					CROOK REVOCABLE 1999 TRUST Total		224.8		
AW12277		11243	9178 Appropriative	Issued	DANIEL A SCHULTZ	3/9/62	6	Tulalame	URST
					DANIEL A SCHULTZ Total		6		
AW19882		13885	8492 Appropriative	Issued	DAVID C HARDEN	9/1/62	8.4	Tulalame	URST
					DAVID C HARDEN Total		8.4		
AW19299		12411	7485 Appropriative	Issued	DAVID ERNEST HERBERT	3/9/60	1.5	Tulalame	URST
					DAVID ERNEST HERBERT Total		1.5		
AW10580		15434	7885 Appropriative	Issued	DENNIS S DAUOST	9/6/61	1	Tulalame	URST
					DENNIS S DAUOST Total		1		
AW1770C		19155	Appropriative	Permitted	DONALD F MC CLURE	6/30/83	8.1	Tulalame	WASSERBROOK
					DONALD F MC CLURE Total		8.1		

No comments

- n/a -

Tulame River Watershed - Post 1914 Appropriative Water Rights

A020897	1504	8203 Appropriative	Unsettled	EDWARD J FERBERT	11/15/61	5.8	Tulame	URST
				EDWARD J FERBERT Total		5.8		
A020904	1576	8593 Appropriative	Unsettled	Eric J Coffill	5/21/62	17	Tulame	URST
				Eric J Coffill Total		17		
A020975	1350	9150 Appropriative	Unsettled	ESTATE OF LAVERNE LITTERAL	1/29/62	5.5	Tulame	URST
A020987	1560	10008 Appropriative	Unsettled	ESTATE OF LAVERNE LITTERAL	2/5/62	5.4	Tulame	BLUB GLECH
				ESTATE OF LAVERNE LITTERAL Total		10.9		
A02488	1546	10097 Appropriative	Unsettled	ESTATES OF ELDON E & ANNA V AMOS	5/11/73	4	Tulame	URSP
				ESTATES OF ELDON E & ANNA V AMOS Total		4		
A020077	20781	Appropriative	Permitted	G SCOTT FAHEY	3/6/62	44.8	Tulame	TRAWORTH SPRING, URSP, WSA SUGAR FIRE SPRING
A031481	21289	Appropriative	Permitted	G SCOTT FAHEY	8/1/71	64.5	Tulame	URSP
				G SCOTT FAHEY Total		109.3		
A018757603	12029 006630403	Appropriative	Unsettled	GRAY A CLOSSMAN	5/9/60	1	Tulame	URST
				GRAY A CLOSSMAN Total		1		
A019211	12433	7553 Appropriative	Unsettled	Gregory C. Henley	2/3/61	30	Tulame	URST
				Gregory C. Henley Total		30		
A01875767	12099 0066306	Appropriative	Unsettled	GREGORY I CARR	10/28/60	9.7	Tulame	URST
				GREGORY I CARR Total		9.7		
A019253	12662	7705 Appropriative	Unsettled	HELGA ANKER TRUST	2/26/60	8.6	Tulame	RATTLESHAKE CREEK
				HELGA ANKER TRUST Total		8.6		
A019110	12410	7502 Appropriative	Unsettled	HOLLY HAYDEN FITZSIMMONS	1/26/60	1.1	Tulame	SANORA CREEK
				HOLLY HAYDEN FITZSIMMONS Total		1.1		
A015987	10073	5215 Appropriative	Unsettled	INGALLS FAMILY TRUST	8/9/54	213.2	Tulame	DUCKWALL CREEK
				INGALLS FAMILY TRUST Total		213.2		
A013343	8991	5344 Appropriative	Unsettled	JACK G MILES	9/8/49	6.8	Tulame	URST
				JACK G MILES Total		6.8		
A016034	10632	5991 Appropriative	Unsettled	JACK J GARDELLA JR	3/12/56	24.1	Tulame	URST
A016425	10635	5994 Appropriative	Unsettled	JACK J GARDELLA JR	3/12/56	24.6	Tulame	URST
A019043	12594	6946 Appropriative	Unsettled	JACK J GARDELLA JR	10/21/59	60	Tulame	URST
A025898	18041	11845 Appropriative	Unsettled	JACK J GARDELLA JR	1/5/79	75	Tulame	URST
				JACK J GARDELLA JR Total		183.7		
A020272	11381	8125 Appropriative	Unsettled	JAMES CURTON	6/20/61	20	Tulame	URST
A022472	15301	9285 Appropriative	Unsettled	JAMES CURTON	5/19/66	18	Tulame	URST
				JAMES CURTON Total		38		
A020093	14166	9170 Appropriative	Unsettled	JAY HALE	8/13/62	1	Tulame	URSP
				JAY HALE Total		1		
A020458	15513 0081118	Appropriative	Unsettled	JELITO LIVING TRUST DATED 7/29/89	7/8/85	2.3	Tulame	URST
				JELITO LIVING TRUST DATED 7/29/89 Total		2.3		
A020286	17436	8562 Appropriative	Unsettled	JIM LUPO	7/3/61	11	Tulame	CURTIS CREEK
A020843	15886	9381 Appropriative	Unsettled	JIM LUPO	7/5/62	24	Tulame	CURTIS CREEK
				JIM LUPO Total		35		
A020795	15767	8594 Appropriative	Unsettled	JOANE SANTOS TRUST	5/21/62	1.6	Tulame	URST
				JOANE SANTOS TRUST Total		1.6		
A018987	12201	6838 Appropriative	Unsettled	JOHN B GROHL SR FAMILY RESIDUAL TRUST	8/27/59	49	Molok, Tulame	QUIGLEY CREEK, URST
A020598	13699	8716 Appropriative	Unsettled	JOHN B GROHL SR FAMILY RESIDUAL TRUST	2/7/62	64	Tulame	NORTH FORK DRY CREEK, URST
A021190	14209	9145 Appropriative	Unsettled	JOHN B GROHL SR FAMILY RESIDUAL TRUST	2/27/70	26	Tulame	URST
				JOHN B GROHL SR FAMILY RESIDUAL TRUST Total		139		
A018757601A	006630401A	Appropriative	Unsettled	JOHN C BRUNK	8/17/92	2.4	Tulame	URST
				JOHN C BRUNK Total		2.4		
A025101	17000	11401 Appropriative	Unsettled	JOHN ROSS BAKER	10/28/76	21	Tulame	URST
A027519	16792	12518 Appropriative	Unsettled	JOHN ROSS BAKER	9/15/82	9	Tulame	URST
A020743	10679	Appropriative	Permitted	JOHN ROSS BAKER	5/11/60	264	Tulame	TURMACK CREEK, URST
				JOHN ROSS BAKER Total		294		
A025627	17481	11284 Appropriative	Unsettled	JOHN WILLIAMS RANCH INC	1/15/077	6.1	Swallows	URST
				JOHN WILLIAMS RANCH INC Total		6.1		
A019662	12846	7389 Appropriative	Unsettled	JOSEPH H MURRAY JR	8/16/60	19	Swallows	URST
				JOSEPH H MURRAY JR Total		19		
A020407	13406	8886 Appropriative	Unsettled	JUSTUS W HOUCK	9/26/61	1.2	Tulame	URST
				JUSTUS W HOUCK Total		1.2		
A018975	11986	6776 Appropriative	Unsettled	KAREN REESE	3/9/59	18	Tulame	URST
				KAREN REESE Total		18		
A018601	17128	9018 Appropriative	Unsettled	LAKESWOOD PARK ASSOCIATION	1/20/59	7	Tulame	SULLYAN CREEK

No comments

- n/a -

Tulare River Watershed - Post 1914 Appropriative Water Rights

001891	1434	740	Appropriative	Unimproved	LAKESWOOD PARK ASSOCIATION Total	0/12/90	0	0.4	Reclamation	URSP (2)
					LEROY L BELL III			0.4		
001462	8750	5372	Appropriative	Unimproved	LEROY L BELL III Total	4/20/11	89	89	Reclamation	URSP
					LOUISE ROSASCO CUNNINGHAM			89		
					LOUISE ROSASCO CUNNINGHAM Total					
0017718	11081	5971	Appropriative	Unimproved	LUCILLE MURPHY HATLER	7/15/57	6	6	Reclamation	URST
0017719	11084	5972	Appropriative	Unimproved	LUCILLE MURPHY HATLER	7/15/57	40	40	Reclamation	URST
0017720	11085	6098	Appropriative	Unimproved	LUCILLE MURPHY HATLER	7/15/57	26	26	Reclamation	URST
0017721	11086	5974	Appropriative	Unimproved	LUCILLE MURPHY HATLER	7/15/57	2.3	2.3	Reclamation	URST
					LUCILLE MURPHY HATLER Total			74.6		
0025500	1750	11687	Appropriative	Unimproved	MARILYN K RICE	11/15/77	18	18	Reclamation	URSP
					MARILYN K RICE Total			18		
000335	13179	807	Appropriative	Unimproved	MARLYN K RICE Total	4/16/04	1.1	1.1	Reclamation	ROUGH & READY CREEK
					MARK R VANN			1.1		
					MARK R VANN Total			1.1		
0021289	14485	9146	Appropriative	Unimproved	MARY CURTIN	5/27/07	6	6	Reclamation	URST
					MARY CURTIN Total			6.7		
000888	11752	9943	Appropriative	Unimproved	MATTHEW D BEAUCHAMP	11/10/06	51	51	Reclamation	CURTIS CREEK
					MATTHEW D BEAUCHAMP Total			51		
005226	2973	1132	Appropriative	Unimproved	MDL TRUST	10/18/27	10.1	10.1	Reclamation	URSP (2)
					MDL TRUST Total			10.1		
002326	10125	10764	Appropriative	Unimproved	MICHAEL P SARDELLA	10/29/95	9.6	9.6	Reclamation	ROUGH & READY CREEK
					MICHAEL P SARDELLA Total			9.6		
000684	18024	12790	Appropriative	Unimproved	MIKEL C WILLIAMS	9/6/79	0.5	0.5	Reclamation	MORMON CREEK, URST
					MIKEL C WILLIAMS Total			0.5		
000590	17322	9644	Appropriative	Unimproved	Mountain Springs Community LP	2/5/02	0.3	0.3	Reclamation	FLORAL CREEK, URST, Unimproved Stream
					Mountain Springs Community LP Total			1.03		
001384			Appropriative	Unimproved	MOUNTAIN SPRINGS GOLF LLC	1/21/03	99	99	Reclamation	SALLOW CREEK, URST, URST, ANA HOBBS CREEK
					MOUNTAIN SPRINGS GOLF LLC Total			99		
001854	13137	8100	Appropriative	Unimproved	O J SPARROW	2/26/59	10	10	Reclamation	SALLIWH CREEK
					O J SPARROW Total			10		
001670	10359	6219	Appropriative	Unimproved	ODD FELLOWS SIERRA RECREATION ASSN	12/7/54	17.8	17.8	Reclamation	SALVAPINE CREEK
001677	10370	972	Appropriative	Unimproved	ODD FELLOWS SIERRA RECREATION ASSN	12/7/54	15	15	Reclamation	URSP
					ODD FELLOWS SIERRA RECREATION ASSN Total			32.8		
000547	10125	8112	Appropriative	Unimproved	Pamela Prime and David Kirkpatrick Trust	2/20/59	12	12	Reclamation	URST
					Pamela Prime and David Kirkpatrick Trust Total			12		
001046	13110	8032	Appropriative	Unimproved	PATRICIA B BROOKS	1/31/61	30.2	30.2	Reclamation	URST
					PATRICIA B BROOKS Total			30.2		
000895	14918	9901	Appropriative	Unimproved	PINE MOUNTAIN LAKE ASSOCIATION	8/2/62	14	14	Reclamation	URST
002190	19823	10631	Appropriative	Unimproved	PINE MOUNTAIN LAKE ASSOCIATION	2/7/88	7,090.00	7,090.00	Reclamation	BIG CREEK
					PINE MOUNTAIN LAKE ASSOCIATION Total			7,004.00		
000867	21261		Appropriative	Permitted	PLGC Partners	8/27/08	36.8	36.8	Reclamation	URST
000699	21221		Appropriative	Permitted	PLGC Partners	8/29/08	28	28	Reclamation	URST
					PLGC Partners Total			64.8		
002326	13938	10774	Appropriative	Unimproved	RACHEL H VUJOVICH	8/10/69	21	21	Reclamation	URST
002500	17000	11369	Appropriative	Unimproved	RACHEL H VUJOVICH	8/6/76	10	10	Reclamation	URST
					RACHEL H VUJOVICH Total			31		
002102	14057	9698	Appropriative	Unimproved	RICHARD J NORTON	11/23/62	8.5	8.5	Reclamation	URST
					RICHARD J NORTON Total			8.5		
001183	14150	8329	Appropriative	Unimproved	Robert E Thomason	3/8/63	30	30	Reclamation	KANAWKA CREEK
					Robert E Thomason Total			30		
001064	12019	7406	Appropriative	Unimproved	RON GROHL	3/31/59	5	5	Reclamation	URST
					RON GROHL Total			5		
0015254	9645	6368	Appropriative	Unimproved	RONALD E CARTER	3/26/53	51.1	51.1	Reclamation	WOODS CREEK
					RONALD E CARTER Total			51.1		
001998	12887	7817	Appropriative	Unimproved	ROYCE WHITNEY	8/4/66	186.6	186.6	Reclamation	URST
000328	13440	7818	Appropriative	Unimproved	ROYCE WHITNEY	7/26/61	31	31	Reclamation	URST
					ROYCE WHITNEY Total			191.6		
0012858	7618	4990	Appropriative	Unimproved	SCOT PATTERSON	3/24/58	5	5	Reclamation	URST
					SCOT PATTERSON Total			5		
0018784	12118	0681644	Appropriative	Unimproved	SIERRA PACIFIC HOLDING COMPANY	5/25/59	2.5	2.5	Reclamation	URST
					SIERRA PACIFIC HOLDING COMPANY Total			2.5		

No comments

- n/a -

No comments

- n/a -

Tuolumne River Watershed - Post 1914 Appropriative Water Rights

AW01947	4949	5276	Appropriative	Licensed	SONORA RIDGE LLC	8/1/92	49.7	Tuolumne	WILLOW CREEK
					SONORA RIDGE LLC Total		49.7		
AW02246	16280	9454	Appropriative	Unlicensed	SOREN E. EISEN JR RANCH TRUST	5/10/85	5	Tuolumne	URST
					SOREN E. EISEN JR RANCH TRUST Total		5		
AW01938	14246	7472	Appropriative	Licensed	STEPHEN A FINN	1/21/00	0.4	Tuolumne	URST
					STEPHEN A FINN Total		0.4		
AW04504	13515	10811	Appropriative	Licensed	SUSAN A MACDONALD	7/8/85	1.5	Tuolumne	URST
					SUSAN A MACDONALD Total		1.5		
AW00892	13193	5001	Appropriative	Licensed	TUOLUMNE BAND ME-WUK INDIANS	4/19/61	1	Tuolumne	URST
					TUOLUMNE BAND ME-WUK INDIANS Total		1		
AW08758	1835	222	Appropriative	Licensed	TUOLUMNE PARK AND RECREATION DISTRICT	8/12/36	5	Tuolumne	URSP
					TUOLUMNE PARK AND RECREATION DISTRICT Total		5		
AW01673	10371	10969	Appropriative	Licensed	TUOLUMNE UTILITIES DISTRICT	12/7/54	0.1	Tuolumne	URSP
AW01849	15127	7936	Appropriative	Licensed	TUOLUMNE UTILITIES DISTRICT	2/24/59	2	Tuolumne	URST
AW01505	15666	9740	Appropriative	Licensed	TUOLUMNE UTILITIES DISTRICT	1/19/62	28	Tuolumne	URST
AW03813	10949	11576	Appropriative	Licensed	TUOLUMNE UTILITIES DISTRICT	6/22/71	3.9	Tuolumne	URSP
					TUOLUMNE UTILITIES DISTRICT Total		41		
AW01232	1164	540	Appropriative	Licensed	TURLOCK I D & MODESTO I D	4/8/19	325,000.00	Tuolumne	TUOLUMNE RIVER
AW01223	1165	541	Appropriative	Unlicensed	TURLOCK I D & MODESTO I D	4/8/19	325,000.00	St Stanislaus, Tuolumne	TUOLUMNE RIVER
AW01232	1166	542	Appropriative	Licensed	TURLOCK I D & MODESTO I D	11/21/10	1,281,934.50	Tuolumne	TUOLUMNE RIVER
AW03048	2026	2424	Appropriative	Licensed	TURLOCK I D & MODESTO I D	8/24/23	48,595.80	St Stanislaus	TUOLUMNE RIVER
AW06711	4271	2425	Appropriative	Unlicensed	TURLOCK I D & MODESTO I D	6/25/30	400,000.40	St Stanislaus	TUOLUMNE RIVER
AW00996	3980	5418	Appropriative	Unlicensed	TURLOCK I D & MODESTO I D	9/6/40	866,715.00	St Stanislaus, Tuolumne	TUOLUMNE RIVER
AW00997	5040	5419	Appropriative	Unlicensed	TURLOCK I D & MODESTO I D	9/6/40	721,200.40	St Stanislaus, Tuolumne	TUOLUMNE RIVER
AW01426	9319	11057	Appropriative	Unlicensed	TURLOCK I D & MODESTO I D	1/16/51	1,046,800.00	Tuolumne	TUOLUMNE RIVER
AW01427	9320	11058	Appropriative	Unlicensed	TURLOCK I D & MODESTO I D	1/16/51	1,046,800.00	Tuolumne	TUOLUMNE RIVER
					TURLOCK I D & MODESTO I D Total		8,714,948.30		
AW01131	1699	2380	Appropriative	Unlicensed	TURLOCK IRRIGATION DISTRICT	4/2/41	436,568.40	St Stanislaus	TUOLUMNE RIVER
					TURLOCK IRRIGATION DISTRICT Total		436,568.40		
AW04846	2575	1060	Appropriative	Unlicensed	TWIN HARTS LAKE ASSOCIATION	6/29/31	181	Tuolumne	CALDER CREEK
					TWIN HARTS LAKE ASSOCIATION Total		181		
AW07058	5825	2727	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	8/24/31	25.5	Tuolumne	NORTH FORK TUOLUMNE RIVER
AW00759	5475	2728	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	10/31/39	25.5	Tuolumne	SHEEPING CREEK
AW01035	5937	2962	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	1/5/42	1.7	Tuolumne	URST
AW01420	5985	2955	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	4/1/42	22.4	Tuolumne	GRANDITE SPRING
AW01047	6035	3189	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	7/3/42	1	Tuolumne	URSP
AW01049	6037	2946	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	7/3/42	2.2	Tuolumne	URCR
AW01587	6163	4444	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	7/4/43	2.6	Tuolumne	URSP
AW01540	9781	5461	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	8/27/55	6.7	Tuolumne	MIDDLE FORK TUOLUMNE RIVER
AW015828	10132	6519	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	4/9/54	3.3	Tuolumne	MIDDLE FORK TUOLUMNE RIVER
AW01652	10113	5913	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	9/16/54	3.7	Tuolumne	URSP (2)
AW01690	10759	5510	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	3/30/56	13.4	Tuolumne	URSP
AW01729	10962	7582	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	8/28/56	46.2	Tuolumne	JOHANN CREEK
AW018678	12062	7385	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	4/30/59	0.7	Tuolumne	URSP
AW018885	12443	7256	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	8/3/59	1.2	Tuolumne	CLAVEY ROAD SPRING
AW01886	12444	7548	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	8/3/59	1.2	Tuolumne	WALTON SPRING
AW01887	12445	7530	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	8/3/59	1.2	Tuolumne	FLEMING SPRING
AW01888	12446	7257	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	8/3/59	1.2	Tuolumne	WISSE RIDGE SPRING
AW01889	12447	7258	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	8/3/59	1.2	Tuolumne	MT LEWIS SPRING
AW01891	12449	7895	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	8/3/59	1.2	Tuolumne	BROADMOUNTAIN CANYON SPRING
AW01899	12450	7259	Appropriative	Unlicensed	U S STANISLAUS NATL FOREST	8/3/59	1.2	Tuolumne	MARBLE SPRING
					U S STANISLAUS NATL FOREST Total		163.2		
AW018931	10631	5990	Appropriative	Unlicensed	V A RODDEN INC	3/13/56	12.8	Tuolumne	URST
AW018933	10633	5992	Appropriative	Unlicensed	V A RODDEN INC	3/13/56	11.8	St Stanislaus	URST
AW018937	10637	5996	Appropriative	Unlicensed	V A RODDEN INC	3/13/56	10.6	St Stanislaus	JOHNSON CREEK
AW018938	10638	5997	Appropriative	Unlicensed	V A RODDEN INC	3/13/56	8	St Stanislaus	GODWIN CREEK
					V A RODDEN INC Total		50.5		
AW00803	13917	8304	Appropriative	Unlicensed	VERMAN P HATLER	4/2/64	19.2	Tuolumne	URCR
					VERMAN P HATLER Total		19.2		

Tuolumne River Watershed - Post 1914 Appropriative Water Rights

A012094	0904	7316 Appropriative	Licensed	VIRGINIA S SATTLER	3/27/96	4.5 Tockamne	BIG CREEK
A020636	1389	0176 Appropriative	Unrecorded	VIRGINIA S SATTLER Total		4.5	
				W D FAHEY TRUST	3/2/62	0.5 Tockamne	LIBBY
				W D FAHEY TRUST Total		0.3	
A018757A018	0005A018	Appropriative	Licensed	Wagner Family Trust	0/11/92	1.5 Tockamne	UREST
A020885A	14018	9901 Appropriative	Licensed	Wagner Family Trust	8/2/62	15 Tockamne	BIG HAMBURG CREEK
A020885B	14018	9962 Appropriative	Licensed	Wagner Family Trust	8/2/62	12 Tockamne	BIG HAMBURG CREEK
A031545	21452	Appropriative	Permitted	Wagner Family Trust	8/11/10	47.6 Tockamne	Big Hamburg Creek
				Wagner Family Trust Total		76.1	
A019963	12867	7770 Appropriative	Licensed	WILLIAM C RITTS	8/16/00	51.5 Tockamne	UREST, WEST FORK BIG CREEK
				WILLIAM C RITTS Total		51.5	
A017965	11446	7771 Appropriative	Licensed	WILLIAM L GOODEN JR	1/20/98	0 Tockamne	UREST
				WILLIAM L GOODEN JR Total		0	
				Grand Total		162.444	4

No comments

- n/a -

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A022506	15290	9699	AMANDA VANCE	6/23/65	8.40	Mariposa	UNSP
			AMANDA VANCE Total		8.40		
A017301	10995	8196	BRIAN T SCHUTT	7/27/56	22.40	Mariposa	DUTCH CREEK
A017822	12112	8197	BRIAN T SCHUTT	9/13/57	12.00	Mariposa	DUTCH CREEK
			BRIAN T SCHUTT Total		34.40		
A015747	9795	5714	CALIF DEPT OF FORESTRY & FIRE PROTECTION	3/1/59	33.30	Mariposa	UNSP
			CALIF DEPT OF FORESTRY & FIRE PROTECTION Total		33.30		
A016464	10389	6989	Carol M Menzel	7/25/55	570.00	Mariposa	MAXWELL CREEK
			Carol M Menzel Total		570.00		
A020035	13202	10061	CEDAR LODGE LLC	9/14/61	4.50	Mariposa	UNSP
			CEDAR LODGE LLC Total		4.50		
A018358	11785	7994	CHRISTINA CRAIG	10/3/58	5.40	Mariposa	UNST
			CHRISTINA CRAIG Total		5.40		
A017141	10855	6595	COASTAL DEVELOPMENT COMPANY LLC, INDIAN FLAT	6/22/56	3.60	Mariposa	MEACED RIVER UNDERFLOW
A029726	19939	13069	COASTAL DEVELOPMENT COMPANY LLC, INDIAN FLAT	1/14/66	0.50	Mariposa	UNSP
			COASTAL DEVELOPMENT COMPANY LLC, INDIAN FLAT Total		4.10		
A009935	14124	10181	CRANBERRY GULCH WATER SUPPLY LTD	9/11/62	3.00	Mariposa	CRANBERRY SPRING
			CRANBERRY GULCH WATER SUPPLY LTD Total		3.00		
A017006	10766	6549	DALE HURLEY	4/16/56	10.50	Mariposa	UNST
A018267	11668	9206	DALE HURLEY	8/14/58	14.50	Mariposa	UNST
			DALE HURLEY Total		25.00		
A028991	20429	13735	DAVID RICHARD WILKEY	8/23/91	1.80	Mariposa	UNST
			DAVID RICHARD WILKEY Total		1.80		
A026054	18134	12034	DREAM RANCH WEST LLC	7/25/79	23.00	Mariposa	UNST
A026861	20146	13046	DREAM RANCH WEST LLC	6/19/85	10.00	Mariposa	UNST
			DREAM RANCH WEST LLC Total		33.00		
A010696	6196	6528	Estate of Herbert F. Frey	4/16/62	4.30	Mariposa	BEAN CREEK
			Estate of Herbert F. Frey Total		4.30		
A005762	3680	1847	FISKE TRUST	8/8/30	4.80	Mariposa	UNSP
			FISKE TRUST Total		4.80		
A016895	12514	8655	FRANK R DOMINGUES III	5/7/59	1.50	Mariposa	CRANBERRY SPRING
			FRANK R DOMINGUES III Total		1.50		
A027965	19336		GERALD P HARRISON	3/2/84	21.00	Mariposa	SMITH CREEK
			GERALD P HARRISON Total		21.00		
A014903	9338	6134	GLEN PICKREN	8/20/52	35.00	Mariposa	PLUMBAR CREEK
			GLEN PICKREN Total		35.00		
A017647	11272	6825	HORACE MEYER ESTATE	6/11/57	1.00	Mariposa	UNXX
A017648	11457	6826	HORACE MEYER ESTATE	6/11/57	16.00	Mariposa	UNXX
			HORACE MEYER ESTATE Total		17.00		
A021014	14083	6401	JAMES DICKEY	11/13/62	16.00	Mariposa	DUTCH CREEK
			JAMES DICKEY Total		16.00		
A016639	10434	5721	JAMES D LAW	9/29/55	4.50	Mariposa	UNSP
			JAMES D LAW Total		4.50		
A022268	15006	10524	JAMES E EWERT	8/20/69	18.00	Mariposa	UNST
			JAMES E EWERT Total		18.00		
A027761	18391	12814	JERRY INMAN	3/26/83	1.20	Mariposa	UNST
			JERRY INMAN Total		1.20		
A019465	12765	8917	JOHN REYNOLDS	5/31/60	2.70	Mariposa	CRANBERRY SPRING
			JOHN REYNOLDS Total		2.70		

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A023205	15972	10272	John C. Fox Revocable Trust	1/7/69	4.30	Mariposa	UNST
			John C. Fox Revocable Trust Total		4.30		
A017496	11036	7522	JOHN H WELCH	3/5/57	25.70	Mariposa	UNSP, UNST
			JOHN H WELCH Total		25.70		
A022076	14930	9082	JOSEPH C LODGE	3/18/65	19.00	Mariposa	LONG CANYON CREEK
			JOSEPH C LODGE Total		19.00		
A017011	10888	7626	KAO CHAO	4/17/56	1.60	Mariposa	UNST
			KAO CHAO Total		1.60		
A011614	7943	3955	Kelsey Ranch LP	4/4/47	1,002.60	Mariposa, Merced	SOUTH FORK DRY CREEK, UNST
			Kelsey Ranch LP Total		1,002.60		
A016348	10903	7813	KENNETH J PULVINO	4/27/55	50.00	Mariposa	BEAN CREEK
			KENNETH J PULVINO Total		50.00		
A016969	10676	5309	LAUREL L ANDERSON	3/26/56	2.70	Mariposa	CANBERRY SPRING
			LAUREL L ANDERSON Total		2.70		
A013954	8963	4323	LAUREL HUNSON BOYERS	9/20/50	0.20	Mariposa	CRANE CREEK
			LAUREL HUNSON BOYERS Total		0.20		
A016444	12134	7529	LEONARD SYNKOWICZ	12/24/58	1.20	Mariposa	UNST
			LEONARD SYNKOWICZ Total		1.20		
A021760	14875	9687	LLOYD MYERS	5/1/84	16.00	Mariposa	SAXON CREEK
			LLOYD MYERS Total		16.00		
A016736	11046	9275	LYLE TURPIN	11/16/55	55.50	Mariposa	UNST, WILLOW CREEK
			LYLE TURPIN Total		55.50		
A023731	10851	10498	MARGERY M DE LA MARE	3/22/71	1.00	Mariposa	UNSP
			MARGERY M DE LA MARE Total		1.00		
A020427	13968	8553	MARK HAYNES	3/18/69	16.70	Mariposa	EAST FORK RINEY CREEK
			MARK HAYNES Total		16.70		
A024212	16807	11733	MELBA WRIGHT	10/18/72	22.00	Mariposa	UNST
A027198	19304	12739	MELBA WRIGHT	3/3/82	8.20	Mariposa	UNST
			MELBA WRIGHT Total		30.20		
A020954	13735	8385	MERCED COMMUNITY COLLEGE DISTRICT	12/13/61	3.40	Mariposa	UNSP
			MERCED COMMUNITY COLLEGE DISTRICT Total		3.40		
A001221	912	990	MERCED IRRIGATION DISTRICT	3/26/19	850,773.00	Mariposa	MERCED RIVER
A001222	913	2664	MERCED IRRIGATION DISTRICT	3/26/19	491,040.20	Mariposa	MERCED RIVER
A001224	914	2668	MERCED IRRIGATION DISTRICT	6/20/03	345,440.00	Mariposa, Merced	MERCED RIVER
A016186	12825	11395	MERCED IRRIGATION DISTRICT	6/20/03	605,000.00	Mariposa	MERCED RIVER
A016187	12826	11396	MERCED IRRIGATION DISTRICT	12/23/54	1,861,824.90	Mariposa	MERCED RIVER
			MERCED IRRIGATION DISTRICT Total		4,172,118.10		
A019859	13044	8192	MIGUEL FLORES JR	11/28/60	2.50	Mariposa	UNXX
			MIGUEL FLORES JR Total		2.50		
A017204	10846	5918	MI OAKS LLC	7/31/56	0.80	Mariposa	UNST
			MI OAKS LLC Total		0.80		
A016443	10443	2282	OLIVER HAYCRAFT	7/13/55	18.00	Mariposa	UNST
			OLIVER HAYCRAFT Total		18.00		
A025842	17639	11876	P DAD HATTON	10/5/78	34.00	Mariposa	UNST
			P DAD HATTON Total		34.00		
A009056	5056	2555	PacificUS Real Estate Group	7/29/37	47.10	Mariposa	UNSP
A016646	10487	10522	PacificUS Real Estate Group	10/4/55	21.00	Mariposa	UNSP
			PacificUS Real Estate Group Total		68.10		

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
A016994	10556	6534	PHILIP M HOULIHAN	4/9/56	48.00	Mariposa	DUTCH CREEK
A017786	11217	6535	PHILIP M HOULIHAN	8/19/57	27.00	Mariposa	DUTCH CREEK
			PHILIP M HOULIHAN Total		75.00		
A016559	11045	7366	RICHARD FERRY	8/30/58	72.40	Mariposa	FORATH GULCH
			RICHARD FERRY Total		72.40		
A020476	13787	8658	ROBERT W KINGMAN	11/6/61	16.00	Mariposa	DUTCH CREEK
			ROBERT W KINGMAN Total		16.00		
A016431	10264	6363	ROBERTA G FLANAGAN	6/21/55	2.50	Mariposa	UNXX
			ROBERTA G FLANAGAN Total		2.50		
A012906	7809	3778	ROD KENNEC	9/17/49	17.80	Mariposa	LITTLE BEAR CREEK
			ROD KENNEC Total		17.80		
A016653	10486	6321	RODNEY A BAKER	10/10/58	17.10	Mariposa	SMITH CREEK
			RODNEY A BAKER Total		17.10		
A028636	19785	13775	RONALD B LUFFY	9/5/06	4.30	Mariposa	UNST
			RONALD B LUFFY Total		4.30		
A030969	14119	8707	ROSEMARY H GAMBLIN	10/5/62	31.50	Mariposa	DUTCH CREEK, UNST
			ROSEMARY H GAMBLIN Total		31.50		
A017012	10889	7827	RUSSELL BOCKHOP	4/17/56	8.00	Mariposa	UNST
			RUSSELL BOCKHOP Total		8.00		
A017833	11236	7136	THE BARRIER	9/22/57	9.30	Mariposa	UNST
			THE BARRIER Total		9.30		
A020765	13763	8358	The Estate of William Rottenkolber	5/3/62	10.00	Mariposa	UNST
			The Estate of William Rottenkolber Total		10.00		
A019306	12551	6891	THERAN L BALMAIN	3/14/60	0.60	Mariposa	UNXX
			THERAN L BALMAIN Total		0.60		
A018430	11877	9147	Tidal Virginia	12/9/58	46.00	Mariposa	BEAN CREEK
			Tidal Virginia Total		46.00		
A014939	9336	6392	TRAJAN MICU	8/19/52	180.00	Mariposa	SMITH CREEK
A011125	21122		TRAJAN MICU	1/10/01	60.00	Mariposa	SMITH CREEK
			TRAJAN MICU Total		240.00		
A018097	11726	7117	Transition Mountain Properties	4/21/58	4.20	Mariposa	MILLER GULCH
			Transition Mountain Properties Total		4.20		
A029559	20669	13768	U S BUREAU OF LAND MANAGEMENT	6/10/08	2.40	Mariposa	UNSP
			U S BUREAU OF LAND MANAGEMENT Total		2.40		
A006739	3549	6117	U S NATIONAL PARK SERVICE	7/11/30	170.60	Madona	UNSP (2)
A010488	6036	2973	U S NATIONAL PARK SERVICE	7/3/42	7.30	Mariposa	CRANE CREEK
A019116	12387	11233	U S NATIONAL PARK SERVICE	12/2/59	76.50	Mariposa	MOSS CREEK
			U S NATIONAL PARK SERVICE Total		254.40		
A019671	12991	8390	U S SIERRA NATL FOREST	8/18/60	0.30	Madona	UNSP
A027715	10740	13206	U S SIERRA NATL FOREST	4/12/83	0.10	Mariposa	UNST
A027717	19741	13707	U S SIERRA NATL FOREST	4/12/83	0.10	Mariposa	UNST
A027718	19742	13155	U S SIERRA NATL FOREST	4/12/83	0.10	Mariposa	UNST
			U S SIERRA NATL FOREST Total		0.60		
A011772	6642	3408	U S STANISLAUS NATL FOREST	3/12/47	0.90	Mariposa	UNSP
A017904	11347	6441	U S STANISLAUS NATL FOREST	12/4/57	1.00	Mariposa	PROUDY SPRING
A027229	15102	10349	U S STANISLAUS NATL FOREST	7/19/69	3.30	Mariposa	JORDAN CREEK
			U S STANISLAUS NATL FOREST Total		5.20		
A028321	19652	13486	US BUREAU OF LAND MANAGEMENT	11/9/94	0.40	Mariposa	UNST
A028322	19653		US BUREAU OF LAND MANAGEMENT	11/9/94	0.10	Mariposa	UNSP
			US BUREAU OF LAND MANAGEMENT Total		0.50		

Mered River Watershed - Post-1914 Appropriative Right Holders

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD23074	15746	10295	VERE GEARY	6/26/69	22.00	Mariposa	UNST
			VERE GEARY Total		22.00		
AD14721	9760	6166	W B STURTEVANT	3/20/52	80.00	Mariposa	EAST FORK RINEY CREEK
			W B STURTEVANT Total		80.00		
AD29615	20574		WALTER K BUNT & DOROTHY L BUNT TRUST ETAL	11/15/69	8.00	Mariposa	UNST
			WALTER K BUNT & DOROTHY L BUNT TRUST ETAL Total		8.00		
AD29012	20643	13861	Wendy L Garrish	9/10/03	0.70	Mariposa	PINEY CREEK
			Wendy L Garrish Total		0.70		
AD18244	11854	7131	YOSEMITE-MARIPOSA KOA	7/30/58	4.50	Mariposa	UNST
			YOSEMITE-MARIPOSA KOA Total		4.50		
			Grand Total		4,175,203.90		

No comments

- n/a -

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD15789	9819	5884	ALLISON S FAHEY	3/22/54	597	Stanislaus	DRY CREEK
			ALLISON S FAHEY Total		597		
AD26622	28118	19057	ANITA SERRANO	1/1/885	200	Merced	DUTCHMAN CREEK
			ANITA SERRANO Total		200		
AD17775	11410	7344	ANTHONY VALLELUNGA	8/16/57	44	Merced	DEADMAN CREEK
			ANTHONY VALLELUNGA Total		44		
AD13816	7777	6132	ANTHONY J DUTRA	4/5/89	361.1	Stanislaus	STANISLAUS RIVER
			ANTHONY J DUTRA Total		361.1		
AD28959	19943	13034	ARMEUM DE SOUSA	8/19/85	293	Stanislaus	UNST (AKA VIVIAN SLOUGH)
			ARMEUM DE SOUSA Total		293		
AD13679	6224	4313	ARTHUR BRIGHT	4/7/50	1,592.80	Merced	DEADMAN CREEK
			ARTHUR BRIGHT Total		1,592.80		
AD23257	16003	10399	AUGUST KNITTEL	4/10/69	4.00	Fresno	UNST
AD23256	28002	10356	AUGUST KNITTEL	4/10/69	16.10	Fresno	UNST
AD23113	16004	10360	AUGUST KNITTEL	7/15/69	1.70	Fresno	UNST
			AUGUST KNITTEL Total		23.80		
AD24900	17080	13099	BASS LAKE SCHOOL DISTRICT	10/14/75	2.70	Madera	UNSP
			BASS LAKE SCHOOL DISTRICT Total		2.70		
AD03730	1697	2927	BASS LAKE WATER COMPANY	5/20/54	217.20	Madera	North Fork Willow Creek
AD11270	6514	3826	BASS LAKE WATER COMPANY	1/30/46	36.20	Madera	North Fork Willow Creek
AD15566	11072	9993	BASS LAKE WATER COMPANY	10/5/53	355.00	Madera	North Fork Willow Creek
			BASS LAKE WATER COMPANY Total		608.40		
AD20649	13814	8403	BIG CREEK COMMUNITY SERVICE DISTRICT	3/9/62	57.90	Fresno	BIG CREEK
			BIG CREEK COMMUNITY SERVICE DISTRICT Total		57.90		
AD09573	5483	2847	BILL J LYONS JR	5/1/39	4,781.80	Stanislaus	TUOLUMNE RIVER
			BILL J LYONS JR Total		4,781.80		
AD12634	8701	5875	BILLY D GRISSOM	8/6/46	1,467.80	Merced	DUCK SLOUGH
			BILLY D GRISSOM Total		1,467.80		
AD01750	683	1661	BORBA FAMILY HOME & STEVINSON RANCH LP	3/22/20	955.1	Merced	MERCED RIVER
			BORBA FAMILY HOME & STEVINSON RANCH LP Total		955.1		
AD15835	9925	2796	BRENDA KNUTSON	4/14/54	11.8	Stanislaus	DRY CREEK
			BRENDA KNUTSON Total		11.8		
AD13697	8179	4470	BRICHETTO TRUST	4/19/50	1,463.60	Stanislaus	UNCR
			BRICHETTO TRUST Total		1,463.60		
AD21823	14972	9360	BRIGHT'S NURSERY INCORPORATED	5/8/70	885	Merced	DEADMAN CREEK
			BRIGHT'S NURSERY INCORPORATED Total		885		
AD06967	3885	5495	BROCCHINI FARMS INC	5/19/31	4,096.80	Stanislaus	STANISLAUS RIVER
			BROCCHINI FARMS INC Total		4,096.80		
AD18526	11677	8400	BRUCE AVERY	2/10/59	333.8	San Joaquin	STANISLAUS RIVER
			BRUCE AVERY Total		333.8		
AD11741	6924	4420	CALIF DEPARTMENT OF TRANSPORTATION	7/21/47	204.7	Stanislaus	STANISLAUS RIVER
			CALIF DEPARTMENT OF TRANSPORTATION Total		204.7		
AD01935	846	349	Camp Sierra Improvement Association	3/31/34	29.40	Fresno	ALDER CREEK
			Camp Sierra Improvement Association Total		29.40		
AD11047	7583	6706	CHOWCHILLA WATER DISTRICT	5/9/45	6,195.70	Madera	ASH CREEK, BERENDA SLOUGH
AD13175	9136	8577	CHOWCHILLA WATER DISTRICT	6/27/49	77,312.80	Madera	CHOWCHILLA RIVER
			CHOWCHILLA WATER DISTRICT Total		83,508.50		
AD18718	12939	6287	CHRISTOPHER H GALFO	11/20/67	47.00	Fresno	LITTLE SANDY CREEK
AD19193	12940	7814	CHRISTOPHER H GALFO	1/26/80	28.00	Fresno	UNST
			CHRISTOPHER H GALFO Total		75.00		

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD04102	1816	2683	City of Modesto WQC Primary	10/22/47	1,219.90	Stanislaus	SAN JOAQUIN RIVER
			City of Modesto WQC Primary Total		1,219.90		
AD13541	9076	4689	COSTA VIEW FARMS #2, A CA GEN PARTNERSHIP	9/20/57	21,689.60	Madera	FRESNO RIVER
AD13541	9076	4689	COSTA VIEW FARMS #2, A CA GEN PARTNERSHIP	9/20/57	21,689.60	Madera	FRESNO RIVER
			COSTA VIEW FARMS #2, A CA GEN PARTNERSHIP Total		43,379.20		
AD23231	18200	10592	COTTONWOOD CREEK VINEYARDS PARTNERSHIP	2/6/69	920	Madera	COTTONWOOD CREEK
			COTTONWOOD CREEK VINEYARDS PARTNERSHIP Total		920		
AD12674	7675	7556	Couchman Brothers	9/2/48	1,622.70	Stanislaus	TUOLUMNE RIVER
			Couchman Brothers Total		1,622.70		
AD24296	16636	11097	COUNTY OF MERCED	2/2/73	5	Merced	UNST
			COUNTY OF MERCED Total		5		
AD27544	16910	12372	Cynthia A. Downing	9/30/82	0.30	Fresno	UNSP
			Cynthia A. Downing Total		0.30		
AD26192	19732	12955	D & D LAND & WATER INC	7/16/64	907	Merced	SAN JOAQUIN RIVER
			D & D LAND & WATER INC Total		907		
AD29966	20960		D.M. BRYANT FARMS INC	8/17/91	21.50	Madera	UNST
			D.M. BRYANT FARMS INC Total		21.50		
AD23214	15689	10375	DAMAN PITTS	1/28/69	33.00	Fresno	UNST
			DAMAN PITTS Total		33.00		
AD14104	8683	4081	DEER CREEK WATER ASSOCIATION	12/14/50	2.60	Fresno	DEER CREEK
			DEER CREEK WATER ASSOCIATION Total		2.60		
AD26121	19395		DIRK J VLOT	10/27/79	2,534.00	Madera	EASTSIDE BYPASS
			DIRK J VLOT Total		2,534.00		
AD27261	19160	12667	DM BRYANT FARMS INC	3/9/82	30.00	Madera	UNST
AD27242	19141	12668	DM BRYANT FARMS INC	3/9/82	30.00	Madera	UNST
AD27243	19142	12669	DM BRYANT FARMS INC	3/9/82	6.00	Madera	UNST
AD27244	18143	12670	DM BRYANT FARMS INC	3/9/82	13.00	Madera	UNST
AD27245	19144	12671	DM BRYANT FARMS INC	3/9/82	4.00	Madera	LITTLE PINN GOLD CREEK
			DM BRYANT FARMS INC Total		63.00		
AD10465	10407	5578	DONALD HARCCKSEN	7/14/55	19.6	Merced	MERCED RIVER
			DONALD HARCCKSEN Total		19.6		
AD14455	9568	4428	DONALD L SMITH	8/30/51	171.10	Madera	UNST
			DONALD L SMITH Total		171.10		
AD13071	8703	4456	Donald L. Smith, Trustee	5/3/48	301.5	Merced	DUCK SLOUGH
			Donald L. Smith, Trustee Total		301.5		
AD06467	3448	1295	DONALD H HEINY	10/28/29	190.2	Stanislaus	SAN JOAQUIN RIVER
			DONALD H HEINY Total		190.2		
AD24520	19876	12836	DOROTHY R AYERS FAMILY TRUST	1/7/74	19.50	Madera	ARNOLD CREEK
			DOROTHY R AYERS FAMILY TRUST Total		19.50		
AD25872	17656	11870	Double A Ranches	11/16/78	70	Stanislaus	UNST
			Double A Ranches Total		70		
AD12396	7348	4949	EAST STANISLAUS RESOURCES CONSERVATION DISTRICT	3/11/48	487.9	Stanislaus	TUOLUMNE RIVER
			EAST STANISLAUS RESOURCES CONSERVATION DISTRICT Total		487.9		
AD19738	12923	7494	EDWIN DANIELS	9/14/60	1.30	Madera	UNSP
			EDWIN DANIELS Total		1.30		
AD17653	11484	6136	EL CAJON RETIREMENT RESIDENCE LP	5/31/57	77.4	Merced	UNST
AD17812	11485	6139	EL CAJON RETIREMENT RESIDENCE LP	9/4/57	8.7	Merced	CANAL CREEK, UNST
AD17813	11486	6140	EL CAJON RETIREMENT RESIDENCE LP	9/4/57	33.1	Merced	UNST

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD18329		11781	6141 EL CAJON RETIREMENT RESIDENCE LP	9/13/58	1.3	Merced	UNST
AD18330		11782	6142 EL CAJON RETIREMENT RESIDENCE LP	9/13/58	3.2	Merced	UNST
AD24071		10681	10681 EL CAJON RETIREMENT RESIDENCE LP	5/12/72	7	Merced	UNST
			EL CAJON RETIREMENT RESIDENCE LP Total		129.7		
AD18993		12472	9790 ELSIE KING	9/18/99	590	Stanislaus	VIVIAN SLOUGH
			ELSIE KING Total		590		
AD20244		13495	7096 EST OF D E JACKSON & DIXIE R JACKSON	6/7/81	4.50	Madera	UNSP
			EST OF D E JACKSON & DIXIE R JACKSON Total		4.50		
AD16317		10209	7574 FORD RANCH INC	4/19/85	50.00	Fresno	UNST
AD19577		13771	7631 FORD RANCH INC	7/20/80	26.00	Fresno	UNST
AD19578		13772	7632 FORD RANCH INC	7/20/80	19.50	Fresno	UNST
AD19581		13773	7635 FORD RANCH INC	7/20/80	13.10	Fresno	UNST
			FORD RANCH INC Total		108.60		
AD11555		6782	3459 FRANK J GOMES DAIRY	9/17/86	941.2	Merced	MERCED RIVER
			FRANK J GOMES DAIRY Total		941.2		
AD18329		11480	10393 GALLO CATTLE COMPANY, A PARTNERSHIP	4/21/85	9,020.00	Merced	LIVINGSTON DRAIN
AD16604		11121	7220 GALLO CATTLE COMPANY, A PARTNERSHIP	9/15/95	7,239.80	Merced	UNSL
			GALLO CATTLE COMPANY, A PARTNERSHIP Total		16,259.80		
AD12715		8354	4948 GALLO VINEYARDS, INC. (LIVINGSTON RANCH)	9/17/86	493.7	Merced	MERCED RIVER
			GALLO VINEYARDS, INC. (LIVINGSTON RANCH) Total		493.7		
AD12867		7734	10045 GARY M BARTON	3/18/89	1,506.00	San Joaquin	STANISLAUS RIVER, UNSL
AD12099		7768	9123 GARY M BARTON	5/17/89	87	San Joaquin, Stanislaus	STANISLAUS RIVER
AD15100		7769	6120 GARY M BARTON	5/17/89	170.8	Stanislaus	STANISLAUS RIVER
AD18715		12116	9960 GARY M BARTON	5/18/99	66	Stanislaus	STANISLAUS RIVER
			GARY M BARTON Total		1825.6		
AD10255		5965	8445 GEORGE C JONES III	8/21/41	1,423.40	Merced	DRY CREEK
			GEORGE C JONES III Total		1,423.40		
AD15680		8749	5653 GERTRUDE PELUCCA	1/11/54	273.7	Stanislaus	STANISLAUS RIVER
			GERTRUDE PELUCCA Total		273.7		
AD20975		14129	9545 GIN FLATS LLC	10/9/82	2.30	Fresno	UNSP
			GIN FLATS LLC Total		2.30		
AD18466		8084	3479 GIRARDI FARMS	5/25/82	1,279.40	San Joaquin	STANISLAUS RIVER
AD14716		8011	4539 GIRARDI FARMS	3/17/92	474.5	San Joaquin	STANISLAUS RIVER
			GIRARDI FARMS Total		1753.9		
AD23031		18060	GRAVELLY FORD WATER DISTRICT	4/18/88	5,000.00	Madera	COTTONWOOD CREEK
			GRAVELLY FORD WATER DISTRICT Total		5,000.00		
AD08664		2300	1307 GRAVELSTONE RANCH LP	10/5/23	365	Merced	MERCED RIVER
AD06603		3561	2429 GRAVELSTONE RANCH LP	3/17/30	660.6	Merced	MERCED RIVER
			GRAVELSTONE RANCH LP Total		1025.6		
AD1262		7309	8883 Gregory B. Reed	1/28/88	2,171.90	Stanislaus	TWOLUNNE RIVER
			Gregory B. Reed Total		2,171.90		
AD17206		12313	10673 HARRY H BAKER JR	8/3/86	580	Madera	FRESNO RIVER
			HARRY H BAKER JR Total		580		
AD16662		10345	9816 HARRY H BAKER JR TRUST	10/10/55	230	Stanislaus	SAN JOAQUIN RIVER
			HARRY H BAKER JR TRUST Total		230		
AD09702		3001	1880 HOOGENDAM FAMILY LIMITED PARTNERSHIP	9/29/27	426.5	Merced	NGRTH SLOUGH MARIPOSA CREEK

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD05703	3002	1881	HOOGENDAH FAMILY LIMITED PARTNERSHIP	9/19/77	1,279.40	Merced	NORTH SLOUGH MARIPOSA CREEK
			HOOGENDAH FAMILY LIMITED PARTNERSHIP Total		1,279.40		
AD16934	10634	5993	JACK J GARDELLA JR	3/13/56	15	Toolumne	UNST
AD19042	12593	6945	JACK J GARDELLA JR	10/21/59	55	Toolumne	UNST
AD20976	14123	8248	JACK J GARDELLA JR	10/9/62	19	Toolumne	UNST
			JACK J GARDELLA JR Total		89		
AD20271	13380	6124	JAMES CURTONI	6/20/61	9	Stanislaus	UNST
			JAMES CURTONI Total		9		
AD20364B	13428	008351B	JAMES R CHANCE	3/18/88	8	Merced	UNST
AD22977B	15637	009776A	JAMES R CHANCE	3/18/88	50.5	Merced	UNST
			JAMES R CHANCE Total		58.5		
AD09301	5192	4578	JAMES R DEMARTINI	5/20/38	1,066.10	Stanislaus	TUOLUMNE RIVER
			JAMES R DEMARTINI Total		1,066.10		
AD01195	580	493a	JAMES S CODDINGTON	2/26/19	15,897.80	Stanislaus	SAN JOAQUIN RIVER
			JAMES S CODDINGTON Total		15,897.80		
AD2546	19615		JEFF A LION	8/5/96	15,700.00	Madera	EASTSIDE BYPASS (AKA CHOWCHILLA CANAL)
			JEFF A LION Total		15,700.00		
AD26629	18359	12028	Jerry Hollingshead	5/11/61	0.20	Fresno	UNSP
			Jerry Hollingshead Total		0.20		
AD26679	20259	13270	JIMMY W LIPE	12/23/65	3.40	Fresno	UNST
AD26908	20258	13271	JIMMY W LIPE	9/25/66	3.60	Fresno	UNST
			JIMMY W LIPE Total		6.00		
AD20364C	13428	008351C	JOHN SMALLEY	3/18/88	1	Merced	UNST
AD22977C	15637	009776A	JOHN SMALLEY	3/18/88	11.3	Merced	UNST
			JOHN SMALLEY Total		12.3		
AD06748	3880	2549	JOHN VANDERSCHAAF JR	7/24/30	729.9	San Joaquin	LOWE TREE CREEK
			JOHN VANDERSCHAAF JR Total		729.9		
AD11003A	007582A	9073	JOHN HANCOCK LIFE INS. CO.	3/9/85	5,727.40	Madera	FRESNO RIVER
			JOHN HANCOCK LIFE INS. CO. Total		5,727.40		
AD01442F	940	000388F	JOHN J SHAW	9/10/19	40.6	Merced	MERCED RIVER
			JOHN J SHAW Total		40.6		
AD29373	17070	11286	JOHN M LASGOTTY	5/31/77	24	Madera	UNST
			JOHN M LASGOTTY Total		24		
AD00539	3403	2044	JOSE DA SILVA	1/20/30	27.1	San Joaquin	UNCR
			JOSE DA SILVA Total		27.1		
AD01322	890	311	JOSEPH E GALLO	6/11/19	182.5	Merced	MERCED RIVER
			JOSEPH E GALLO Total		182.5		
AD16095	10696	6421	JOSEPH J CARDOZA	2/15/56	45.8	Merced	MERCED RIVER
			JOSEPH J CARDOZA Total		45.8		
AD13414	7929	5274	Karlene H Bert	10/24/49	799.2	Stanislaus	STANISLAUS RIVER
			Karlene H Bert Total		799.2		
AD11614	7943	3955	Kelsey Ranch LP	4/4/47	1,002.80	Mariposa, Merced	SOUTH FORK DRY CREEK, UNST
AD18344	11767	6736	Kelsey Ranch LP	9/29/58	6.8	Merced	UNCR
AD18345	11788	6480	Kelsey Ranch LP	9/29/58	5.6	Merced	UNCR
AD18346	11789	6481	Kelsey Ranch LP	9/29/58	4.2	Merced	UNCR
AD18347	11790	6482	Kelsey Ranch LP	9/29/58	8.1	Merced	UNCR
AD18348	11791	6739	Kelsey Ranch LP	9/29/58	9	Merced	UNCR
			Kelsey Ranch LP Total		1036.5		
AD22294	15580	10429	L EUGENE MONDO	9/24/85	26	Stanislaus	STANISLAUS RIVER

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
			L EUGENE MONDO Total		78		
A026888	18077	12047	LEWIS MATHIS	9/13/79	188	Madera	UNST
			LEWIS MATHIS Total		188		
A027159	19031	12557	LINDA OUIMETTE	5/26/83	0.10	Madera	UNSP
			LINDA OUIMETTE Total		0.10		
A019746	12982	8031	LIVE OAK TRUST	9/20/60	17.00	Fresno	UNST
			LIVE OAK TRUST Total		17.00		
A016540	11215	8522	LURINE S TOPHAM	2/19/59	37.50	Fresno	UNST
A019805	12999	8523	LURINE S TOPHAM	9/26/59	45.00	Fresno	UNST
A020689	13897	8524	LURINE S TOPHAM	7/25/82	20.00	Fresno	UNST
A021951	8093	8525	LURINE S TOPHAM	1/14/84	10.00	Fresno	UNST
A022268	15084	9153	LURINE S TOPHAM	8/20/85	20.00	Fresno	UNST
A027159	19743	13026	LURINE S TOPHAM	12/23/81	3.10	Fresno	UNST
A027160	19744	13029	LURINE S TOPHAM	12/23/81	3.20	Fresno	UNST
			LURINE S TOPHAM Total		138.80		
A010710	6741	5077	M & R ZOLEZZI A PARTNERSHIP	9/11/43	273.7	San Joaquin	STANISLAUS RIVER
			M & R ZOLEZZI A PARTNERSHIP Total		273.7		
A017311	11172	9229	MADERA IRRIGATION DISTRICT	10/4/56	4,700.00	Madera	FRESNO RIVER
			MADERA IRRIGATION DISTRICT Total		4,700.00		
A013344	8385	6418	MAGNESON REVOCABLE TRUST	9/8/49	1,122.30	Mered	MERCED RIVER
			MAGNESON REVOCABLE TRUST Total		1,122.30		
A005316	2937	4917	MC MULLIN RECL DISTRICT # 2075	12/24/26	35,293.90	San Joaquin	STANISLAUS RIVER
A017966	14674	10403	MC MULLIN RECL DISTRICT # 2075	1/29/58	490	San Joaquin	STANISLAUS RIVER
			MC MULLIN RECL DISTRICT #2075 Total		35783.9		
A016138	10115	7561	MENEFEE RIVER RANCH COMPANY	11/15/54	856.9	Mered	FRESNO RIVER
A026875	18669	13106	MENEFEE RIVER RANCH COMPANY	6/16/81	4,470.00	Mered	SAN JOAQUIN RIVER
			MENEFEE RIVER RANCH COMPANY Total		5,326.90		
A028626	20066	13378	MERCED COUNTY FIRE DEPARTMENT	11/25/85	0.4	Mered	MERCED RIVER
			MERCED COUNTY FIRE DEPARTMENT Total		0.4		
A001224	914	2083	MERCED IRRIGATION DISTRICT	6/20/03	345,440.00	Mariposa, Merced	MERCED RIVER
A006807	5732	5727	MERCED IRRIGATION DISTRICT	9/27/30	1,251.20	Mered	DEADMAN CREEK
A008258	4893	6032	MERCED IRRIGATION DISTRICT	2/11/35	5,066.00	Mered	DUCK SLOUGH
A010571	6800	6047	MERCED IRRIGATION DISTRICT	6/20/03	63,719.00	Mered	MERCED RIVER
A016774	13058	9429	MERCED IRRIGATION DISTRICT	6/6/59	5,000.00	Mered	DUCK SLOUGH
			MERCED IRRIGATION DISTRICT Total		420,477.10		
A005269	2727	1173	MICHAEL PASSALAJUA	11/15/26	635.4	Stanislaus	TUOLUMNE RIVER
			MICHAEL PASSALAJUA Total		635.4		
A004223	2261	1616	MICHAEL J KNAPP	2/28/36	255.5	Madera	CHOWCHILLA RIVER
A004133	2261	1616	MICHAEL J KNAPP	2/28/36	255.5		
			MICHAEL J KNAPP Total		511		
A025117	17393	11417	MICHELLE MIDBOE	7/27/76	0.30	Fresno	UNSP
			MICHELLE MIDBOE Total		0.30		
A000393	1386	3044	MOONSHINE DAIRY	8/3/29	888.8	Stanislaus	SAN JOAQUIN RIVER
			MOONSHINE DAIRY Total		888.8		
A017729	11214	8782	MUIR TRAIL RANCH, INC	7/19/57	271.70	Fresno	SENGER CREEK
			MUIR TRAIL RANCH, INC Total		271.70		
A013218	6180	5170	Myers Ranch, LLC	7/6/99	1,630.40	Mered	SNAKE SLOUGH
			Myers Ranch, LLC Total		1,630.40		
A011046	7584	5753	N & W Land Co, LLC	6/30/59	1,979.70	Madera	FRESNO RIVER
			N & W Land Co, LLC Total		3,678.70		

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Fice Amt	County	Source
AD020148	13372	7960	NANCY GASSETT	5/25/61	5.90	Fresno	UNST
			NANCY GASSETT Total		5.90		
AD10957	6373	3036	NORTH FORK COMMUNITY DEVELOPMENT COUNCIL	1/15/45	44.70	Madera	SOUTH FORK WILLOW CREEK
			NORTH FORK COMMUNITY DEVELOPMENT COUNCIL Total		44.70		
AD00892	4924	2634	OAKDALE IRRIGATION DISTRICT	2/2/37	1,663.90	Stanislaus	STANISLAUS RIVER
AD09666	5421	2706	OAKDALE IRRIGATION DISTRICT	7/17/39	616.5	Stanislaus	STANISLAUS RIVER
			OAKDALE IRRIGATION DISTRICT Total		2280.4		
AD25686	17834	11824	PATRICIA J MANNING	3/3/78	1,471.00	Madera	SAN JOAQUIN RIVER
			PATRICIA J MANNING Total		1,471.00		
AD11324	4615	3051	PATRICK DAVID MARTIN	3/25/46	4.50	Fresno	UNSP
			PATRICK DAVID MARTIN Total		4.50		
AD27777	19139		PHIL MUELLER	6/23/83	85	Merced	DUTCHMAN CREEK
AD27880	19591		PHIL MUELLER	9/16/83	85	Merced	DUTCHMAN CREEK
			PHIL MUELLER Total		170		
AD01633	784	2072	PHILIP DICKERSON	1/20/20	1,518.30	Stanislaus	TUOLUMNE RIVER
AD04607	2357	2071	PHILIP DICKERSON	5/26/25	356.6	Stanislaus	TUOLUMNE RIVER
			PHILIP DICKERSON Total		1874.9		
AD23551	16184	10646	PREMIERE AGRICULTURAL PROPERTIES LLC	7/20/70	720	Madera	COTTONWOOD CREEK
			PREMIERE AGRICULTURAL PROPERTIES LLC Total		720		
AD14464	9229	5249	RANCHERIA WATER & IMPROVEMENT ASSN	9/14/51	3.90	Fresno	POTTER CREEK
			RANCHERIA WATER & IMPROVEMENT ASSN Total		3.90		
AD15919	10316	6496	RAY GENE VELOHUIS	6/16/54	815.2	Merced	JONES DRAIN
			RAY GENE VELOHUIS Total		815.2		
AD04945	2593	1306	RECLAMATION DISTRICT #2039	3/5/26	56,004.60	San Joaquin	MIDDLE RIVER, TRAPPER SLOUGH
			RECLAMATION DISTRICT #2039 Total		56,004.60		
AD10365	5942	3035	REDEVELOPMENT AGENCY OF THE COUNTY OF MADERA	1/19/42	36.20	Fresno	SOUTH FORK WILLOW CREEK
			REDEVELOPMENT AGENCY OF THE COUNTY OF MADERA Total		36.20		
AD01442C	940 000389C		RICCI THORESON	9/10/19	123.7	Merced	MERCED RIVER
			RICCI THORESON Total		123.7		
AD26674	18416	12251	RICHARD LIAL	12/23/80	10.3	Stanislaus	UNST
AD29133	20326	13324	RICHARD LIAL	1/19/87	6	Stanislaus	UNST
			RICHARD LIAL Total		16.3		
AD11390	6631	7451	RICHARD MARCHY	5/4/46	816.2	Stanislaus	TUOLUMNE RIVER
			RICHARD MARCHY Total		816.2		
AD04460	2277	8897	RIVER JUNCTION RECL DIST NO 2064	2/14/25	30,626.30	San Joaquin	SAN JOAQUIN RIVER, STANISLAUS RIVER
			RIVER JUNCTION RECL DIST NO 2064 Total		30,626.30		
AD09834	5333	2827	Robert Albert Brocchini Trust	2/21/40	2,129.60	San Joaquin	STANISLAUS RIVER
AD13628	8140	4918	Robert Albert Brocchini Trust	3/10/80	366	Stanislaus	STANISLAUS RIVER
			Robert Albert Brocchini Trust Total		2495.6		
AD25168	17474	11416	ROBERT B FITZGERALD	10/5/76	0.40	Fresno	UNSP
			ROBERT B FITZGERALD Total		0.40		
AD20364A	13428 008351A		ROBINSON CATTLE COMPANY	3/18/88	16	Merced	UNST
AD22976	15636	9777	ROBINSON CATTLE COMPANY	1/31/66	37	Merced	UNST
AD22977A	15637 009776A		ROBINSON CATTLE COMPANY	3/18/88	1.9	Merced	UNST
			ROBINSON CATTLE COMPANY Total		54.9		
AD04628	.692	2089	Roger K Beaman	1/18/20	281.8	Stanislaus	STANISLAUS RIVER
AD25116	1620	2009	Roger K Beaman	4/1/40	901.5	Stanislaus	STANISLAUS RIVER
			Roger K Beaman Total		1183.3		
AD20135	13652	8479	ROY H RICHARDS	5/17/61	48.9	Merced	UNST

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Fee Amt	County	Source
			ROY H RICHARDS Total		48.9		
A017362	10979	6834	ROY H TALLMAN	1/19/56	10.00	Fresno	UNXX
A017363	10980	6835	ROY H TALLMAN	1/19/56	48.00	Fresno	UNXX
A017364	10981	6836	ROY H TALLMAN	1/19/56	4.00	Fresno	UNXX
			ROY H TALLMAN Total		66.00		
A004061	1901	937	Sharon D. Naraghi	3/9/82	182	Stanislaus	DRY CREEK
A009225	5177	2374	Sharon D. Naraghi	1/13/88	477.6	Stanislaus	DRY CREEK
			Sharon D. Naraghi Total		659.6		
A004709	2381	2131	SHEILA KLIEWER	7/21/75	0.70	Madera	UNSP
			SHEILA KLIEWER Total		0.70		
A015924	10002	5636	SHIRLEY M WELDON	6/21/54	48.00	Fresno	LITTLE DRY CREEK, UNST
A015925	10003	5637	SHIRLEY M WELDON	6/21/54	48.00	Fresno	LITTLE DRY CREEK, UNST
			SHIRLEY M WELDON Total		96.00		
A020138	13359	9235	SIERRA LINDA MUTUAL WATER COMPANY INC	5/19/81	16.60	Madera	UNSP
			SIERRA LINDA MUTUAL WATER COMPANY INC Total		16.60		
A005271	2761	741	SIERRA PINES YOUTH CAMP, INC	11/16/76	14.50	Madera	UNSP (2)
			SIERRA PINES YOUTH CAMP, INC Total		14.50		
A017751	11504	6780	SPRING CREEK IMPROVEMENT ASSN	8/1/57	2.80	Fresno	SPRING CREEK
			SPRING CREEK IMPROVEMENT ASSN Total		2.80		
A018950			STATE WATER RESOURCES CONTROL BOARD	8/18/89	0	Madera	FRESNO RIVER
			STATE WATER RESOURCES CONTROL BOARD Total		0		
A028166	10456	12734	STEVE FIELDS	8/21/84	10	Stanislaus	UNST
			STEVE FIELDS Total		10		
A001685	893	5987	STEVENSON WATER DISTRICT	1/14/59	16,716.90	Merced	MERCED RIVER
A005274	5726	5940	STEVENSON WATER DISTRICT	10/17/77	79,834.40	Merced	BEAR CREEK, OWENS CREEK
A006111	5729	5941	STEVENSON WATER DISTRICT	11/5/78	56,582.90	Merced	ARENA SPILLWAY, BEAR CREEK, MCCOY SPILLWAY, OWENS CREEK
A007812	5733	6222	STEVENSON WATER DISTRICT	7/20/81	35,619.70	Merced	ARENA SPILLWAY, BEAR CREEK
			STEVENSON WATER DISTRICT Total		190,423.90		
A0273288		12759	SUSIE MOODY	4/26/91	0.70	Fresno	UNST
A027469	19383	12763	SUSIE MOODY	8/10/82	29.00	Fresno	UNST
			SUSIE MOODY Total		29.70		
A020049	13203	8939	TAMAR V ARMSTRONG	3/24/81	10.60	Madera	UNSP
			TAMAR V ARMSTRONG Total		10.60		
A001925	838	366	The Irrevocable Flying M Ranch Trust	7/15/74	424.5	Merced	BURIS CREEK
			The Irrevocable Flying M Ranch Trust Total		424.5		
A029279	20627		THE PROTESTANT EPISCOPAL BISHOP OF S J	6/24/88	11	Madera	LEWIS FORK FRESNO RIVER, UNST
			THE PROTESTANT EPISCOPAL BISHOP OF S J Total		11		
A010197	8505	5402	THE VANDER WOUDE FAMILY REVOCABLE TRUST OF NOV 25 2003	4/11/84	223.1	Merced	NORTH SLOUGH MARIPOSA CREEK
A024973	7419	11808	THE VANDER WOUDE FAMILY REVOCABLE TRUST OF NOV 25 2003	1/13/75	394	Merced	NORTH SLOUGH MARIPOSA CREEK
			THE VANDER WOUDE FAMILY REVOCABLE TRUST OF NOV 25 2003 Total		617.1		
A015626	11092	12268	U S FISH & WILDLIFE SERVICE	12/2/53	6,868.00	Merced	BRAVEL SLOUGH, DEEP SLOUGH
A020246	14323	10189	U S FISH & WILDLIFE SERVICE	8/5/61	360	Merced	DUCK SLOUGH
A027586	19473		U S FISH & WILDLIFE SERVICE	11/17/82	3,000.00	Merced	DEADMAN CREEK
			U S FISH & WILDLIFE SERVICE Total		10,228.00		
A012416	7383	5342	U S SIERRA NATL FOREST	3/16/48	2.40	Fresno	BEAR CREEK, HONO CREEK
A013804	8636	4608	U S SIERRA NATL FOREST	8/18/50	96.00	Madera	MCCURE LAKE CREEK
A013907	8659	4609	U S SIERRA NATL FOREST	8/18/50	155.00	Madera	LILLIAN LAKE CREEK
A014150	8661	4664	U S SIERRA NATL FOREST	2/8/51	0.30	Fresno	RANCHERIA CREEK

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Face Amt	County	Source
AD16424	10498	6203 U S SIERRA NATL FOREST		6/20/55	9.20	Madera	UNSP
AD16426	10270	6263 U S SIERRA NATL FOREST		6/20/55	5.70	Fresno	COON CREEK
AD17208	0992	6266 U S SIERRA NATL FOREST		8/3/56	100.00	Madera	RUTHERFORD LAKE CREEK
AD17439	11009	7270 U S SIERRA NATL FOREST		1/26/57	29.00	Madera	UNST
AD17594	11166	7587 U S SIERRA NATL FOREST		3/10/57	0.50	Madera	UNSP
AD17595	11167	7588 U S SIERRA NATL FOREST		5/10/57	0.20	Madera	UNSP
AD16245	12266	7274 U S SIERRA NATL FOREST		7/30/58	8.00	Fresno	BEAR CREEK
AD18318	12297	6388 U S SIERRA NATL FOREST		9/15/58	16.10	Fresno	BIG CREEK
AD19420	12420	7325 U S SIERRA NATL FOREST		5/6/60	103.00	Madera	MCCLEURE LAKE
AD19634	12729	7568 U S SIERRA NATL FOREST		8/1/60	0.10	Fresno	UNSP
AD19635	12730	7590 U S SIERRA NATL FOREST		8/1/60	0.30	Fresno	UNSP
AD19636	12731	6696 U S SIERRA NATL FOREST		8/1/60	0.40	Fresno	UNSP
AD19637	12732	6697 U S SIERRA NATL FOREST		8/1/60	0.40	Fresno	UNSP
AD19638	12733	6698 U S SIERRA NATL FOREST		8/1/60	0.10	Fresno	UNSP
AD19639	12734	6699 U S SIERRA NATL FOREST		8/1/60	0.10	Fresno	UNSP
AD19640	12735	6700 U S SIERRA NATL FOREST		8/1/60	0.40	Fresno	UNSP
AD19841	12736	6914 U S SIERRA NATL FOREST		8/1/60	0.10	Fresno	UNSP
AD19876	12738	7781 U S SIERRA NATL FOREST		8/18/60	0.40	Madera	UNSP
AD19839	13175	6145 U S SIERRA NATL FOREST		11/3/60	8.60	Fresno	LINE CREEK
AD19930	13148	9121 U S SIERRA NATL FOREST		1/24/61	11.20	Madera	UNSP
AD21107	14247	9089 U S SIERRA NATL FOREST		1/21/63	0.70	Madera	HOUSE TRAP SPRING
AD23979	16611	10078 U S SIERRA NATL FOREST		2/10/72	0.20	Fresno	UNSP
AD27719	19882	13043 U S SIERRA NATL FOREST		4/12/83	0.20	Fresno	UNST
U S SIERRA NATL FOREST Total					546.10		
A000023	273	198A U.S. BUREAU OF RECLAMATION		3/27/15	44,340.00	Madera	SAN JOAQUIN RIVER
A000234	11885	U.S. BUREAU OF RECLAMATION		6/29/59	2,124,466.50	Madera	SAN JOAQUIN RIVER
A001465	11886	U.S. BUREAU OF RECLAMATION		6/29/59	2,124,466.50	Madera	SAN JOAQUIN RIVER
A005636	11887	U.S. BUREAU OF RECLAMATION		6/29/59	3,917,477.50	Madera	SAN JOAQUIN RIVER
AD14858B	20245	U.S. BUREAU OF RECLAMATION		7/18/68	1,000,000.00	Calaveras, San Joaquin	STANISLAUS RIVER
AD18714	16301	U.S. BUREAU OF RECLAMATION		5/15/59	143,000.00	Madera	CHOWCHILLA RIVER
AD18733	16584	13836 U.S. BUREAU OF RECLAMATION		8/25/11	21,600.00	Madera	FRESNO RIVER
U.S. BUREAU OF RECLAMATION Total					9,425,390.50		
AD13345	8356	6419 UHRHAMMER PROPERTIES		9/6/48	405	Merced	MERCED RIVER
UHRHAMMER PROPERTIES Total					405		
AD11438	6672	3314 V A RODDEN INC		8/17/46	1,273.40	Stanislaus	UNION SLOUGH
AD20813	21156	V A RODDEN INC		7/10/03	3,769.60	Stanislaus	UNION SLOUGH
V A RODDEN INC Total					5,043.00		
A006160	5731	4638 VANDER WOUDE FARMS		1/14/29	138.7	Merced	NORTH SLOUGH MARIPOSA CREEK
VANDER WOUDE FARMS Total					138.7		
A009386	2847	1516 VANDER-WOUDE DAIRY		3/21/27	14,479.60	Merced	DUCK SLOUGH
VANDER-WOUDE DAIRY Total					14,479.60		
AD13496	6037	4747 VERNIA M MURRAY		12/2/49	63.9	Stanislaus	TUOLUMNE RIVER
VERNA M MURRAY Total					63.9		
A004479	3582	1443 VISTA LIVESTOCK COMPANY		11/6/29	36.6	Merced	DRY CREEK
VISTA LIVESTOCK COMPANY Total					36.6		
A006114	5730	2911 W P RODUNER CATTLE & FARMING COMPANY		11/9/28	2,945.50	Merced	DUCK CREEK
AD11653	7585	4910 W P RODUNER CATTLE & FARMING COMPANY		12/10/46	14,519.20	Madera	ASH CREEK
AD12635	6707	4909 W P RODUNER CATTLE & FARMING COMPANY		8/8/48	12,810.20	Merced	DWENS CREEK
W P RODUNER CATTLE & FARMING COMPANY Total					30,274.90		

San Joaquin River Watershed - Post-1914 Appropriative Rights

No comments

- n/a -

Application ID	Permit ID	License ID	Holder Name	Date	Acce Amt	County	Source
AO20268	13377	7963	WALTER D HARRIS TRUSTEE OF THE WALTER D HARRIS TRUST DATED SEPTEMBER 29 2005	6/20/61	28.69	Fresno	UNST
AO20269	13378	7964	WALTER D HARRIS TRUSTEE OF THE WALTER D HARRIS TRUST DATED SEPTEMBER 29 2005	6/20/61	26.00	Fresno	UNST
AO20270	13379	7965	WALTER D HARRIS TRUSTEE OF THE WALTER D HARRIS TRUST DATED SEPTEMBER 29 2005	6/20/61	45.00	Fresno	UNST
			WALTER D HARRIS TRUSTEE OF THE WALTER D HARRIS TRUST DATED SEPTEMBER 29 2005 Total		99.69		
AO16936	10636	5995	WILLIAM J FOGARTY	3/13/66	22.7	Stanislaus	UNST
AO16044	15595	6947	WILLIAM J FOGARTY	10/21/59	40	Stanislaus	UNST
AO20928	14122	8247	WILLIAM J FOGARTY	9/5/62	20	Stanislaus	UNST
			WILLIAM J FOGARTY Total		72.7		
AO15371	9576	5478	WILLIAM J HALL	6/6/53	91.2	Stanislaus	TUOLUMNE RIVER
			WILLIAM J HALL Total		91.2		
AO25861	16610	10928	WILLIAM J JAWIEN	9/3/71	0.70	Fresno	UNSP
			WILLIAM J JAWIEN Total		0.70		
AO19227	12707	7808	William O Jamison	2/9/60	61.50	Madera	UNST
AO22724	15563	9796	William O Jamison	5/26/71	20.3	Madera	UNST
AO22727	15566	9846	William O Jamison	3/13/67	11.60	Madera	UNST
			William O Jamison Total		93.40		
AO014426	940 0003658		WILMA R THOMPSON	9/10/19	119.1	Merced	MERCED RIVER
			WILMA R THOMPSON Total		119.1		
AO26152	16151	12012	WILSHIRE ALEC	12/26/79	0.40	Fresno	UNSP
			WILSHIRE ALEC Total		0.40		
			Grand Total		10,484,617.10		

No comments

- n/a -

Appendix D

Section D.7

Priority Rankings for Sacramento River Water Rights Claimants

Sacramento + Trinity + East and West Creeks Above Feather River Confluence by Priority - Post-1914 Appropriative Water Rights

No comments

- n/a -

Post-1914 Water Right Holder Name	Priority Date	Face Amount
Reclamation District 1004	4/2/1915	56.0
Reclamation District 108	1/25/1917	97.5
River Garden Farms Company	1/25/1917	29.3
Sutter Mutual Water Company	2/1/1917	21.9
Tisdale Irrigation & Drainage Co	7/26/1917	12.5
Reclamation District 108	8/27/1917	270.7
Oji Brothers	1/3/1918	1.9
Sutter Mutual Water Company	1/3/1918	265.7
Provident Irrigation District	1/18/1918	40.1
Stanford Vina Ranch Irrigation Co	8/5/1918	4.6
Natomas Central Mutual Water Co	8/22/1918	16.2
Lomo Cold Storage	9/10/1918	2.0
Meridian Farms Water Company	9/10/1918	67.3
Sutter Mutual Water Company	1/24/1919	19.7
Conaway Preservation Group LLC	3/1/1919	43.6
Natomas Central Mutual Water Co	3/5/1919	58.4
Natomas Central Mutual Water Co	8/27/1919	36.7
Provident Irrigation District	9/2/1919	3.4
Glenn-Colusa Irrigation District	12/3/1919	28.1
Glenn-Colusa Irrigation District	1/14/1920	10.8
Rancho Esquon, Inc	2/5/1920	3.7
Sycamore Mutual Water Company	2/9/1920	42.5
Reclamation District 999	2/11/1920	58.4
Sutter Mutual Water Company	4/9/1920	1.5
US Bureau of Reclamation	2/17/1921	50.2
Butte Valley Irrigation District	2/28/1921	17.2
Rancho Esquon, Inc	10/9/1921	1.8
Rancho Esquon, Inc	3/4/1922	3.8
Gorrell Land Company	3/6/1922	4.6
Rancho Esquon, Inc	6/27/1922	3.0
Hot Springs Valley Irrigation District	4/12/1923	48.4
Sacramento River Ranch II	5/17/1923	2.6
Reclamation District 999	7/18/1924	3.9
Gorrell Land Company	6/30/1925	4.5
Rancho Esquon, Inc	6/30/1925	4.6
Sutter Mutual Water Company	6/22/1926	3.3
M & T Incorporated	7/17/1926	5.1
Parrott Investment Company	7/17/1926	5.1
Sacramento River Ranch II	2/17/1927	1.8
Subtotal Before Initial State Filings in 1927		1,352.4
US Bureau of Reclamation	7/30/1927	11,153.8
US Bureau of Reclamation	7/30/1927	3,349.9
Sutter Mutual Water Company	1/31/1928	0.1
Lomo Cold Storage	11/14/1929	20.3
Conaway Preservation Group LLC	4/18/1930	5.4
Natomas Central Mutual Water Co	5/28/1931	15.4
County of Sacramento	6/6/1931	2.7
Lomo Cold Storage	3/21/1932	0.7
South Fork Irrigation District	3/5/1934	17.0
Reclamation District 883	5/1/1934	2.2
M & T Incorporated	12/1/1934	5.1
Parrott Investment Company	12/1/1934	5.1
M & T Incorporated	2/27/1936	3.1
Parrott Investment Company	2/27/1936	3.1
Maxwell Irrigation District	4/8/1936	29.0
Glenn-Colusa Irrigation District	5/28/1936	0.7
Subtotal Before Second State Filings in 1938		14,613.5
US Bureau of Reclamation	8/2/1938	7,818.8

Sacramento + Trinity + East and West Creeks Above Feather River Confluence by Priority - Post-1914 Appropriative Water Rights

Post-1914 Water Right Holder Name	Priority Date	Face Amount
Calif Dept of Fish & Game	6/19/1939	5.5
M & T Incorporated	9/22/1939	13.6
Parrott Investment Company	9/22/1939	13.6
Sutter Mutual Water Company	11/3/1939	0.6
Gorrill Land Company	3/13/1942	3.9
Sutter Mutual Water Company	6/16/1943	3.7
Oji Brothers	1/11/1945	2.9
Oji Brothers	3/6/1946	0.6
Reclamation District 108	5/26/1947	27.4
River Garden Farms Company	5/29/1947	6.3
Sutter Mutual Water Company	6/23/1947	2.7
Conaway Preservation Group LLC	9/8/1947	70.1
Glenn-Colusa Irrigation District	10/8/1947	3.4
Sycamore Mutual Water Company	3/17/1948	2.2
Pelger Mutual Water Company	4/13/1948	22.8
Sutter Mutual Water Company	4/13/1948	15.3
Sycamore Mutual Water Company	3/25/1949	2.3
US Fish & Wildlife Service	1/12/1950	44.2
Oji Brothers	2/20/1950	1.0
Reclamation District 108	2/24/1950	78.0
Maxwell Irrigation District	8/25/1950	4.9
Maxwell Irrigation District	6/28/1951	1.6
Subtotal Before Feather River Project Rights Filed in 1951		8,145.4
CA DWR	8/25/1951	1,575.2
Natomas Central Mutual Water Co	10/8/1953	11.8
M & T Incorporated	5/10/1954	0.5
Parrott Investment Company	5/10/1954	0.5
Lomo Cold Storage	11/28/1955	0.2
Tisdale Irrigation & Drainage Co	4/3/1956	1.4
Princeton-Cadora-Glenn Irrig Dist	5/2/1956	15.1
US Bureau of Reclamation	11/28/1956	1,335.4
US Bureau of Reclamation	11/28/1956	1,230.8
CA DWR	3/15/1957	1,100.0
Maxwell Irrigation District	6/24/1957	34.6
Calif Dept of Fish & Game	10/24/1957	5.3
US Fish & Wildlife Service	10/25/1957	8.0
US Bureau of Reclamation	4/30/1958	160.0
US Bureau of Reclamation	9/16/1959	3,030.8
South Fork Irrigation District	3/14/1960	2.2
US Bureau of Reclamation	7/28/1960	1,335.4
US Bureau of Reclamation	4/12/1961	9,032.0
US Fish & Wildlife Service	7/3/1961	21.7
Subtotal of Most Feather River and CVP Filings 1951-1961		18,901.0
Rancho Esquon, Inc	2/5/1965	5.5
US Fish & Wildlife Service	7/19/1965	14.5
Gorrill Land Company	10/25/1965	2.5
Hot Springs Valley Irrigation District	3/17/1966	20.0
Reclamation District 999	4/1/1966	35.6
Sutter Mutual Water Company	9/7/1967	2.0
Butte Valley Irrigation District	4/10/1968	10.0
Calif Dept of Fish & Game	7/24/1968	5.2
Reclamation District 1004	12/26/1968	21.0
Pelger Mutual Water Company	3/13/1972	1.7
Calif Dept of Fish & Game	12/21/1972	5.5
Sycamore Mutual Water Company	12/22/1972	1.0
Sacramento River Ranch II	3/1/1973	12.7
Calif Dept of Fish & Game	4/10/1974	7.4
Gorrill Land Company	4/12/1978	4.4

No comments

- n/a -

Sacramento + Trinity + East and West Creeks Above Feather River Confluence by Priority - Post-1914 Appropriative Water Rights

Post-1914 Water Right Holder Name	Priority Date	Face Amount
Reclamation District 1004	12/1/1978	36.0
County of Sacramento	8/19/1982	0.5
Pelger Mutual Water Company	9/16/1994	5.0
Maxwell Irrigation District	2/17/1995	13.6
Princeton-Codora-Glenn Irrig Dist	11/19/1998	24.4
Provident Irrigation District	11/19/1998	26.7
Glenn-Colusa Irrigation District	2/18/1999	182.9
City of Sacramento	10/30/2000	81.8
Provident Irrigation District	2/27/2001	124.5
Princeton-Codora-Glenn Irrig Dist	12/17/2001	71.8
US Bureau of Reclamation	7/29/2002	2,203.1
Glenn-Colusa Irrigation District	5/3/2006	53.7
Sacramento County Water Agency	2/15/2008	71.0
Reclamation District 108	10/18/2010	36.0
Woodland-Davis Clean Water Agency	4/14/2011	45.0
Subtotal Since 1963		3,125.0
Total		46,137.3
Source: State Water Resources Control Board; California Water Impact Network.		

No comments

- n/a -

Appendix E

Water Availability Analysis Model Assumptions and Methodology

Analysis of water supply availability must account for water rights claims in addition to the variability contained within watershed hydrology. C-WIN's method of water supply availability has three components: watershed hydrology, known water rights claims, and yield estimation from the interaction of hydrology and water claims. All analytic methods contain assumptions.

Hydrology and Instream Flow Assumptions:

- The State Water Resources Control Board adopts a Delta inflow criterion for the major tributaries of the San Joaquin River Basin of 60 percent of unimpaired flow. This implies a diversion cap not to exceed 40 percent of unimpaired flow in the San Joaquin River Basin.
- The State Water Resources Control Board adopts a Delta inflow criterion for the major tributaries of the Sacramento River Basin of 75 percent of unimpaired flow. This implies a diversion cap not to exceed 25 percent of unimpaired flow in the San Joaquin River Basin. As with the San Joaquin, C-WIN is well aware that this is an assumption, not a foregone conclusion.
- C-WIN's water supply availability analysis relies on the 82-year unimpaired flow hydrology prepared for water years 1922 through 2003 by the California Department of Water Resources (2007). These data are arrayed by major watershed of the Central Valley and Delta. C-WIN calculated monthly decile, quartile and median flows by month and year, and then calculated the subtotals for key regulation periods: November through June for the Sacramento River Basin, and February through June for the San Joaquin River Basin. The percent of regulated period to total flows in the unimpaired hydrology was also calculated for each year, from which deciles, quartiles, medians, averages, and minima and maxima were calculated.
- The annual total and regulated period subtotals were then employed in the water rights yield analysis component. Remaining flows in the non-regulation season (July to October in the Sacramento Basin, July to January in the San Joaquin Basin) are estimated by simply subtracting regulation season flows from annual totals.
- All non-regulated flows are assumed to be fully available for diversion by water right holders; no instream flow requirements are assumed for the unregulated flow period. This assumption inflates the amount of water that junior water right holders would be allocated during this period of the year, and may ignore temperature restrictions for fish protection.
- No monthly breakdown of flows and diversion allocations is attempted.
- Use of an 82-year unimpaired flow hydrology accounts for inter-annual flow variations in assessing the potential for paper water.

Water Rights Claims Assumptions:

- C-WIN sought to gather water rights information from a variety of sources. Using the Public Records Act, C-WIN requested from nearly 100 different public water districts and agencies information concerning any and all pre-1914 water rights they may have. Many had no pre-1914 water rights. Others provided copies of pre-1914 notices, copies of adjudication decrees, operation agreements, diagrams, statements of diversion and use, and other

Appendix E

information that described their early water rights claims. C-WIN wishes to express our gratitude for their helpful responses, which are too numerous to mention here.

- C-WIN also gathered from the State Water Resources Control Board's web site copies of adjudication decrees from the Pit River watershed, the Stanislaus River, Butte Creek, and the Indian Creek and Middle Fork Feather River watersheds.
- State law requires that pre-1914 and riparian water right holders file Statements of diversion and use with the State Water Resources Control Board annually. The Board has made most, but not yet all SDUs available online. The Board's eWRIMS database search engine itemizes each SDU but does not provide usage quantities when query answers are returned in the vast majority of cases. Consequently, C-WIN staff downloaded as many as possible to study and record the highest usage claims, as well as year of first usage. C-WIN includes only SDUs with cumulative usage claims by the same claimant that exceed 1,000 acre-feet. This kept the research scope manageable, while also capturing statistically significant cumulations of water usage.
- C-WIN's reliance on SDUs assumes that each usage report they contain is accurately measured. The highest amount claimed is employed to represent the maximum claim that might be exerted by the water right holder on behalf the right under which the reported diversion was made. This is assumed to be the case regardless of whether the type or right claimed is riparian or pre-1914.
- Many SDUs do not provide adequate usage information, however, and were ignored. Therefore, it is quite possible that C-WIN's use of SDU data in this analysis understates the magnitude and location of riparian and pre-1914 water rights claims throughout the Sacramento and San Joaquin river basins.

Yield Analysis Assumptions:

- The water rights priority system would operate subordinate to the application of water quality instream flow objectives.
- The obverse of the Board's instream flow objectives is referred to in our method as a "diversion cap." a 75 percent of unimpaired flow criterion thus is converted to a 25 percent of unimpaired flow diversion cap for Sacramento River Basin rivers in this analysis. In other words, if 75 percent of unimpaired flow is available for fish and aquatic beneficial uses, the 25 percent of unimpaired flow is available for diversion to consumptive uses. For the San Joaquin River Basin, a 60 percent of unimpaired flow objective is reflected in the analysis as a 40 percent of unimpaired flow diversion cap.
- Under the diversion cap, paramount riparian water rights are given first diversion rights, followed by senior pre-1914 water right holders, based on highest usage claimed, the cumulative face amount of water rights claim notices, adjudications, or other water rights claim source. For some river models, riparian and pre-1914 water rights claims are bundled together to simplify the analysis when the pre-1914 rights are senior to all other succeeding rights. Only after major pre-1914 water rights claims are any post-1914 appropriative water rights granted by the State of California provided with any remaining flows. Post-1914 water rights that are not shown in a specific river model's results are left off because no flows are left for these rights to divert given the model's operation.
- SDU highest use claims, adjudication allocations, and pre-1914 water right notice claims by the same entities are summed. While this appears to be double-counting, we believe it is important to cumulate them on the assumption that when the Board or a court undertakes

No comments

- n/a -

Appendix E

to adjust water rights, the Board or court must be aware of all claims (both in notices as well as in uses) made in order to remove clouds from their titles.

- As noted above, the unimpaired flow hydrology data is analyzed to determine an average percent of regulated period to total flow for each river. This average indicates that share of the hydrograph's overall flows that occur during the regulated period. We assume that water right claimants claim their supplies under the diversion in a manner that is directly proportional to the regulated period's share of the overall total flow for that river. (This is a water diverter's way of "mimicking the natural hydrograph.") For all riparian and many pre-1914 water right holders, this seemed a reasonable assumption; for post-1914 water right holders whose rights may have limited seasons of diversion or contributions to storage, this assumption may break down. However, but this assumption might only come into play during the wettest portions of each river's overall unimpaired flow hydrology, if at all. The factors used for each river system is shown in Table E-1:

San Joaquin River System		Sacramento River System	
System	Percentage Applied to "Excess" Total Unimpaired Flow	System	Percentage Applied to "Excess" Total Unimpaired Flow
Trinity	94%	Stanislaus	85%
Sacramento River at Feather River Confluence	87%	Tuolumne	76%
Feather	90%	Merced	81%
Yuba	94%	San Joaquin	77%
Bear	97%		
American	95%		

Sources: California Department of Water Resources 2007; California Water Impact Network.

- Default calculation method for pre-1914 water rights notices are often expressed in cubic feet per second (cfs) without seasonal limitation are to multiply the cfs by 3600 (seconds per hour), then by 24 (hours in a day), then by 365.25 days per year. The result is then divided by 43,560 square feet to the acre to obtain the face amount expressed in acre-feet.
- Default calculation method for pre-1914 water rights notices expressed in miners inches is to divide the miners inches by 50 to convert the claim to cubic feet per second, then follow the calculation for converting cfs claims to acre-feet of face amount. We see this as a conservative conversion assumption. Some pre-1914 water right holders may have legal documents that suggest that the conversion should be 40 miners inches to 1 cubic feet per second. This would increase the face value of such pre-1914 water rights by 20 percent.

No comments

- n/a -

Appendix E

- Default calculation method for water rights claims (particularly in SDUs) expressed in gallons per day was to divide the gallons by 325,851 gallons per acre-foot, then multiply by the number of days in the usage season disclosed in the SDU.
- These calculation methods are employed for estimating the quantity of rights administered under adjudication decrees as well. Diversion seasons mandated under the decrees were used as well.

No comments

- n/a -

No comments

- n/a -

Appendix F
California Water Code Article 1.3
Declaration of Fully Appropriated Streams

1205. (a) Following notice and hearing, the board may adopt a declaration that a stream system is fully appropriated. As used in this article, "stream system" includes stream, lake, or other body of water, and tributaries and contributory sources, but does not include an underground water supply other than a subterranean stream following through known and definite channels.

(b) A declaration that a stream system is fully appropriated shall contain a finding that the supply of water in the stream system is being fully applied to beneficial uses where the board finds that previous water rights decisions have determined that no water remains available for appropriation.

(c) Upon its own motion or upon petition of any interested person, and following notice and hearing, the board may revoke or revise a declaration that a stream system is fully appropriated.

1206. (a) From and after the date of adoption of a declaration that a stream system is fully appropriated, and subject to subdivision (b), the board shall not accept for filing any application for a permit to appropriate water from the stream system described in that declaration, and the board may cancel any application pending on that date.

(b) Notwithstanding subdivision (a), the board may provide, in any declaration that a stream system is fully appropriated, for acceptance for filing of applications to appropriate water under specified conditions. Any provision to that effect shall specify the conditions and may contain application limitations, including, but not limited to, limitations on the purpose of use, on the instantaneous rate of diversion, on the season of diversion, and on the amount of water which may be diverted annually. The board may make those limitations applicable to individual applications to appropriate water, or to the aggregate of the applications, or to both.

(c) Subdivision (a) shall not apply to applications for temporary permits made pursuant to Chapter 6.5 (commencing with Section 1425) or to any provision of this code respecting change in point of diversion, place of use, or purpose of use.

1207. Notice of hearing pursuant to this article shall be given as follows:

(a) The notice shall be published at least once a week for four consecutive weeks in one or more newspapers of general circulation published in each county in which any part of the stream system is situated, and publication shall be complete at least 60 days prior to the date of hearing.

(b) At least 60 days prior to the date of the hearing, the notice shall be mailed to all persons known to the board who own land that appears to be riparian to the stream system, who divert water from the stream system, or who have made written request to the board for special notice of hearing pursuant to this article.

Appendix G
Selected Fully-Appropriated Rivers and Creeks
of the Bay-Delta Estuary's Central Valley Watershed

No comments

- n/a -

River	Fully-Appropriated Season	Critical Reach
Trinity	1/1 to 12/31	North Fork from Salmon-Trinity Primitive Area to Helena at river mouth (W&S)
	1/1 to 12/31	South Fork Trinity from State Route 36 to river mouth at Salver (W&S)
	1/1 to 12/31	Main stem from 100 yards below Lewiston Dam to river mouth at Weitchper (W&S)
Pit River	4/1 to 11/30	North and South Forks, Franklin Creek, and Pit River in Big Valley adjudications
	3/15 to 10/31	Ash Creek from confluence with Pit River upstream (adjudication)
McCloud	1/1 to 12/31	Mainstem from Algonia to Lake McCloud, mainstem from McCloud Dam to Shasta Lake (W&S)
Squaw Creek	1/1 to 12/31	Squaw Valley Creek from Section 14, T38N, R3W to confluence with McCloud River
Feather	1/1 to 12/31	Middle Fork from confluence of its tributary streams 1 KM south of Beckwourth, CA. (W&S)
	5/15 to 9/30	Middle Fork at Beckwourth, CA upstream (D-831)
	4/1 to 11/30	Indian Creek from North Fork Feather upstream (adjudication)
	3/1 to 10/31	South Fork Feather from confluence of Oroville Dam and Middle and South Forks of Feather River upstream (D-25)
	7/1 to 9/30	From confluence of Feather with Sacramento River upstream (D-1275)
	4/15 to 9/30	Sierra Valley channels from the confluence of Middle Fork Feather River at Beckwourth upstream (D-1391)
Yuba	7/1 to 11/30	West Branch of Feather River from upper Miocene Canal Head Dam located in Section 30, T23N R4E, upstream (D-844)
	8/1 to 10/31	From Englebright Dam upstream (D-934)
Yuba	4/1 to 11/30	From Shady Creek within Section 17, T17N R7E and upstream of South Fork Yuba River (adjudication)
	5/1 to 11/30	From Camp Far West Reservoir upstream (D-1091)
Bear	4/15 to 11/30	From Wolf Creek upstream (above Bear River, D-1059, D-1091)
	1/1 to 12/31	North Fork of American River from source to Iowa Hill Bridge (W&S)
American	1/1 to 12/31	North Fork of American River from point 0.3 miles above Heath Springs to 1,000 feet upstream of Gofax-Iowa Hill Bridge, including Gold Run Addition area. (W&S)
	1/1 to 12/31	North Fork of American River from source to Iowa Hill Bridge (W&S)
	7/1 to 10/31	From the Sacramento River upstream (D-1108)

Appendix G
Selected Fully-Appropriated Rivers and Creeks
of the Bay-Delta Estuary's Central Valley Watershed

No comments

- n/a -

River	Fully-Appropriated Season	Critical Reach
	5/1 to 10/31	White Rock Creek from the confluence with South Fork American upstream (D-1522, D-1211)
	7/1 to 12/31	Silver Creek from confluence with South Fork American upstream (D-163, D-1211)
	6/15 to 10/31	Sugar Loaf Creek from confluence with South Fork American upstream (D-776)
Butte Creek	4/1 to 11/30	Butte Creek from confluence with Butte Sink in T17N R1E (adjudication)
	6/1 to 9/30	Butte Creek from confluence of Butte Slough upstream (D-1329)
Stony Creek	4/1 to 11/30	Stony Creek from confluence with Sacramento River upstream (adjudication)
Cache Creek	4/15 to 10/31	Cache Creek from confluence with Yolo Bypass upstream (D-1506)
Putah Creek	1/1 to 12/31	Putah Creek from Monticello Dam upstream (D-869, WR Order 96-002)
Stanislaus River	4/1 to 11/30	From confluence with San Joaquin River upstream (adjudication)
	7/1 to 10/31	From confluence with San Joaquin River upstream (D-1422)
Tuolumne	1/1 to 12/31	From source on Mount Lyell and Mount Dana to Don Pedro Reservoir (W&S)
	7/1 to 12/31	From Don Pedro Reservoir upstream (D-995)
Merced	1/1 to 12/31	From south side of Mount Lyell in Yosemite National Park to 300 feet upstream of confluence with Bear Creek (W&S)
	1/1 to 12/31	South Fork Merced River from Triple Divide Peak to confluence with mainstem of Merced River (W&S)
Chowchilla	1/1 to 12/31	From confluence of Chowchilla River with San Joaquin River upstream (D-1365)
Fresno River	5/1 to 11/30	From Hidden Dam and Fresno River upstream (D-1407)
San Joaquin	1/1 to 12/31	From confluence with Mendota Pool upstream (D-935)
Fresno Slough	1/1 to 12/31	From confluence with San Joaquin River upstream to Kings River and including upstream watershed of Kings River (D-1290)
Sacramento-San Joaquin Delta	6/15 to 8/31	From the Delta upstream - allowing no diversions from the Delta less than 1 cubic foot per second or less than 100 acre-feet in storage. (D-1594)

Source: State Water Resources Control Board, 1998. Key: W&S = Wild & Scenic Designation; adjudication = decree issued adjudicating water rights in that critical reach; D-[Some number]" refers to a Board Water Rights Decision.

Order
L2622
J

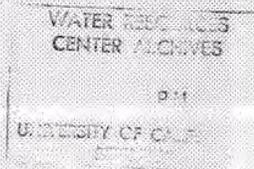
California Senate Interim Committee
On Water Projects

(Senator Stephen P. Teale, Chairman)

OPINION OF ATTORNEY WALTER M. GLEASON
REGARDING VARIOUS LEGAL ASPECTS OF
BURNS-PORTER ACT (SB 1106)
(PROPOSITION ONE)

(In response to a request of Chairman Teale
by letter dated October 4, 1960)

WALTER M. GLEASON,
533 Montgomery Street,
San Francisco 4, California.
Dated: October 28, 1960.



No comments

- n/a -

No comments

- n/a -

Subject Index

	Pages
Letter of Senator Stephen P. Teale to Walter M. Gleason, Esq. (dated October 4, 1960) (requesting opinion)	(foreword)
Letter of Walter M. Gleason, Esq., to Senator Stephen P. Teale (dated October 28, 1960) (transmitting opinion)	(foreword)

OPINION

QUESTION NO. 1. DOES SB 1106 FULLY PROTECT NORTHERN CALIFORNIA'S VESTED WATER RIGHTS?	1-13
I. OPINION	1
II. SUPPORTING ANALYSIS AND ARGUMENT	1-13
1. Nature and importance of these "vested water rights"....	2
2. The "open-ended" nature of these water rights.....	2
3. The controlling criterion of "beneficial use".....	4
4. A "junior appropriator" can, in the absence of any binding adjudication of the quantitative extent of the senior water rights, freely litigate the quantitative scope of such prior "vested" rights	5
Lindsay-Strathmore Irrigation District Litigation with the Kaweah Delta "vested water rights" (Tulare County)	6
City of Fresno and Kings River	7
5. Relevancy of foregoing legal considerations to Brown Water Plan (SB 1106)	9
Does SB 1106 contain any provisions or restrictions to prevent such an attack by the South on these Northern "vested" rights?	9
6. Paragraph 12931 of SB 1106 (i.e., the so-called exclusionary clause)	12
Prior opinions and memoranda	13
QUESTION NO. 2. CAN THESE VESTED WATER RIGHTS BE IMPAIRED OR SERIOUSLY INVOLVED UNDER THE WATER PLAN ENVISAGED BY SB 1106?.....	14-25
I. OPINION	14
II. SUPPORTING ANALYSIS AND ARGUMENT	14-25
1. The New Central Valley "Water Picture"	14
a. The South's direct interest in establishing and preserving as much "surplus" water in the "Delta Pool" as possible	15
b. Determination of "surplus"	16
The completely unprecedented role of the State.....	19

SUBJECT INDEX

	Pages
c. The Brown Water Plan provides absolutely no effective "controls" of any kind to so regulate or control this Delta "export pumping" that it will not invade or affect vested water rights of the Delta and the rest of the Central Valley	20
d. There is a grave doubt as to whether any dependable and sizeable "surplus" of water exists in the Central Valley	21
e. California's frequent "dry cycles"	23
f. Fair Play, Justice, etc.	24
 QUESTION NO. 3. DOES THIS WATER PLAN ADEQUATELY SERVE AND PROTECT THE SO-CALLED "AREA OF ORIGIN RESERVATIONS" OF NORTHERN CALIFORNIA (i.e., "COUNTY OF ORIGIN" AND "WATERSHED OF ORIGIN" PROTECTION)?, 26-38	
I. OPINION	26
II. SUPPORTING ANALYSIS AND ARGUMENT	26-38
1. Nature of these "preferential rights"	26
a. County of Origin Statute (Sections 10500-10505 of Water Code)	26
b. "Watershed of Origin" Provisions (Sections 11460 to 11463 of Water Code)	27
2. Vital Importance to the North of these "Reservations"	27
3. Deficiencies in SB 1106 on this phase	27
a. These "reservations" should have been made a permanent feature of this new Water Plan.	28
Justice and propriety of this request for permanent preservation and protection of these reservations.	29
b. The Brown Water Plan (SB 1106) will place both the South and the State in a position directly antagonistic to these important "preferential water rights" of the North. This will lead to future serious involvement and possible impairment thereof (as well as much trouble and confusion for the North)	31
c. The various existing ambiguities and uncertainties in this "area of origin protection" should have been corrected and eliminated as a part of this new water legislation. This was not done	32
County of Origin Statute	33
Watershed Protection Statute	34
General vs. Specific Reservations	35
4. The impossibility of subsequently "correcting" these deficiencies by future legislation	38

No comments

- n/a -

SUBJECT INDEX

iii

	Pages
QUESTION NO. 4. DOES SB 1106 AFFORD PROPER PROTECTION FOR THE SACRAMENTO-SAN JOAQUIN DELTA (SALINITY CONTROL, LEVEE PROTECTION, ETC.)?	39-48
I. OPINION	39
II. SUPPORTING ANALYSIS AND ARGUMENT	39-48
Summary statement	39
The Sacramento-San Joaquin Delta	40
1. SB 1106 neither requires nor provides for any mandatory effective solution of the already critical "salinity problem." In fact, the Brown Water Plan will substantially aggravate this problem, with possible huge losses to the Delta landowners and water users	41
Central Valley Project	42
The Brown Water Plan	43
2. SB 1106 fails to legally protect, in any way, the vested water rights of the Delta. Moreover, it actually exposes such rights to a very real danger of infringement and impairment	44
3. The Brown Water Plan (as now formulated) will seriously and adversely imperil the intricate levee systems so vital to the Delta. SB 1106 contains no legal protection against this	44
A physical solution	46
Senate Bill No. 1327	48
QUESTION NO. 5. COULD SB 1106 BRING ABOUT THE "LEGAL FRANKENSTEIN" FEARED BY THE ENGLE COMMITTEE	49-57
I. OPINION	49
II. SUPPORTING ANALYSIS AND ARGUMENT	49-57
The Engle Committee's appraisal of the "litigation potential" in the Central Valley	49
Conflict between Federal Government (CVP) and State (FRP)	50
The utter "water-right" complexity in the Central Valley which the Brown Water Plan will bring about	51
The nature of this probable litigation	53
Litigation by the water right owners in the Central Valley to protect their vested rights against excessive "export" pumping from the Delta	53
Litigation by the State to protect the "surplus" water in the Delta Pool	55
Third alternative	56

No comments

- n/a -

	Pages
QUESTION NO. 6. DOES SB 1106 CONTAIN ADEQUATE LEGAL SAFEGUARDS TO PROTECT THE TAXPAYERS OF THIS STATE AGAINST THE POSSIBILITY OF DEFICITS IN CONNECTION WITH THIS PROPOSED MULTI-BILLION DOLLAR BOND ISSUE?	58-63
I. OPINION	58
II. SUPPORTING ANALYSIS AND ARGUMENT.....	58-63
1. Absence of any legal safeguards to prevent expenditures of bond proceeds fund before sufficient "water contracts" are first consummated	60
2. Absence of any requirement of a proper determination of "surplus" before physical facilities are built	61
3. Absence of any adequate provisions in SB 1106 to ensure that these vital water contracts will contain all necessary protective provisions (e.g., price formulas, etc.).....	62
QUESTION NO. 7. WILL THE GOVERNOR AND HIS EXECUTIVE OFFICIALS HAVE THE AUTHORITY AND POWER (IF SB 1106 IS APPROVED) TO FIX AND DETERMINE, IN THEIR SOLE DISCRETION, THE TERMS AND CONDITIONS OF THE "WATER CONTRACTS" WHICH WILL BE THE SOLE SOURCE OF REVENUES (OTHER THAN THE GENERAL FUNDS OF THE STATE) TO PAY OFF THIS HUGE BOND ISSUE? WILL THE LEGISLATURE HAVE ANY VOICE IN SUCH MATTERS?.....	64-67
I. OPINION	64
II. SUPPORTING ANALYSIS AND OPINION	64-67
1. Pertinent provisions of SB 1106	64
2. Pending litigation	65
3. Our interpretation of these "contract provisions" of SB 1106	65
"Policy statements" of the administration	66
CONCLUSION	68

No comments

- n/a -

No comments

- n/a -

Members

Senator Edwin J. Regan
Vice Chairman
Seaverville, California
Senator Randolph Collier
Trekka, California
Senator Hugh E. Donnelly
Turlock, California
Senator Luther S. Gibson
Vallejo, California
Senator Richard J. Dolwig
Redwood City, California

California Legislature
SENATE INTERIM COMMITTEE
on
PROPOSED WATER PROJECTS
(Senate Resolution No. 180)

Senator Stephen P. Teale
Chairman
Box E
West Point, California
or
State Capitol
Sacramento, California

Members

Senator Harold T. Johnson
Roseville, California
Senator George Miller, Jr.
Martinez, California
Senator Alan Short
Stockton, California
Senator Ed.C. Johnson
Marysville, California
Senator Nelson S. Dilworth
Hemet, California

4 October 1960

Mr. Walter M. Gleason
Attorney at Law
333 Montgomery Street
San Francisco, California

Dear Mr. Gleason:

The People of California will soon be called upon to vote upon the Burns-Porter Act (Senate Bill 1106) (Proposition One on the November ballot). Unfortunately, there seems to be a rather widespread lack of understanding on the part of many people as to the real significance of this very important proposed Bond Act, especially its legal aspects and implications.

As you are aware, our Committee has been working diligently in an effort to study these various phases and to acquaint the People of California with them. However, we find ourselves seriously handicapped in having varied, and to some extent, conflicting legal analysis from various water lawyers as to the various legal facets of this proposed multi-billion dollar Bond Act and the Water Plan which it will finance.

Having in mind your long and distinguished record in the field of water law and water litigation, and also your past invaluable service to legislators in their effort to protect the interests of all California in connection with California's water planning, I desire to now take advantage of your kind offer some time ago to furnish our Committee with an analysis of the legal aspects of SB 1106, which is now Proposition One.

We would particularly like to have your views with respect to the following salient points which have given various members of our Committee serious concern, to wit:

No comments

- n/a -

-2-

1. DOES SB 1106 FULLY PROTECT NORTHERN CALIFORNIA'S VESTED WATER RIGHTS?
2. CAN THESE VESTED WATER RIGHTS BE IMPAIRED OR SERIOUSLY INVOLVED UNDER THE WATER PLAN ENVISAGED BY SB 1106 ?
3. DOES THIS WATER PLAN ADEQUATELY PRESERVE AND PROTECT THE SO-CALLED "AREA OF ORIGIN" RESERVATIONS OF NORTHERN CALIFORNIA (i. e., "COUNTY OF ORIGIN" AND "WATERSHED OF ORIGIN") PROTECTION?
4. DOES S, B, 1106 AFFORD PROPER PROTECTION FOR THE SACRAMENTO - SAN JOAQUIN DELTA (SALINITY CONTROL, LEVEE PROTECTION, ETC.) ?
5. COULD SB 1106 BRING ABOUT THE "LEGAL FRANKENSTEIN" FEARED AND PREDICTED BY THE ENGLE COMMITTEE?
6. DOES SB 1106 CONTAIN ADEQUATE LEGAL SAFEGUARDS TO PROTECT THE TAXPAYERS OF THIS STATE AGAINST THE POSSIBILITY OF DEFICITS IN CONNECTION WITH THIS PROPOSED MULTI-BILLION DOLLAR BOND ISSUE?
7. WILL THE GOVERNOR AND HIS EXECUTIVE OFFICIALS HAVE THE AUTHORITY AND POWER (IF SB 1106 IS APPROVED) TO FIX AND DETERMINE, IN THEIR SOLE DISCRETION, THE TERMS AND CONDITIONS OF THE "WATER CONTRACTS" WHICH WILL BE THE SOLE SOURCE OF REVENUES (OTHER THAN THE GENERAL FUNDS OF THE STATE) TO PAY OFF THIS HUGE BOND ISSUE? WILL THE LEGISLATURE HAVE ANY VOICE IN SUCH MATTERS?

No comments

- n/a -

- 3 -

We would appreciate it if you will try to express your views on these several legal points in language which will be readily understandable to laymen. We fully appreciate that some of these phases are highly technical in nature but hope that you can cover them in as nontechnical a manner as possible.

I might add that we will desire to submit your opinion on these phases to other legal experts for their appraisal and comments. If you have any objection to such procedure please so advise us.

With kindest personal regards,

/s/ STEPHEN P. TEALE

Senator Stephen P. Teale

No comments

- n/a -

never been fixed or determined by any comprehensive adjudication. * For historical and other reasons it has generally been unnecessary, up to now, to adjudicate in any comprehensive way the quantitative extent of this vast maze of vested water rights. The "rate of flow" ** schedules governing these water rights have adequately served their purpose in Northern California. *** However, this new water planning

* The monograph submitted by Henry Holsinger, Esq., in his testimony before the Engle Congressional Committee in 1951 (entitled "Necessity for Comprehensive Adjudication of Water Rights on the Sacramento and San Joaquin Rivers in aid of the Central Valley Project") contains an excellent explanation (by this outstanding water expert) of this "un-adjudicated characteristic" of these Central Valley water rights. His testimony is contained in the voluminous report published by the Engle Committee (in 1956) (House Document No. 416 - Volume 1, pp. 765-784). This official publication will be cited herein by the designation "Engle ¹³".

Mr. Holsinger (long time chief attorney for the Division of Water Resources and, subsequently, Chairman of the State Water Rights Board) summed up this absence of any comprehensive adjudication in the Central Valley as follows:

"In substantial degree existing rights to the use of water on the San Joaquin River has been litigated but not in such manner that each might be enforced against the other. On the Sacramento and in the delta, however, comparatively few rights have been litigated at all, and only a small proportion of these rights on both rivers are of record anywhere." (Engle 772)

** For the benefit of persons not acquainted with "water measurement terminology" there are two distinct "dimensions" to a water right. The first is rate of flow. This means the rate at which a given diversion flows (ordinarily expressed in terms of "cubic feet per second"). Such a "rate of flow" does not denote any quantity of water (any more than "miles per hour" in automotive travel gives any indication of the distance traveled). To get quantity (in water measurement) another "dimension" must be known which is the length of time such flow has persisted. For example, a rate of flow of one cubic foot per second (1 cfs) past a given point for 24 hours will produce a total quantity of water of approximately 1.98 acre feet (commonly and roughly expressed as approximately two acre feet). An acre foot of water is the amount of water necessary to cover one acre a foot in depth.

*** The phrase "Northern California" as used in this "Opinion" is intended to include all of California north of the Tehachapi Mountains; and principally the great Central Valley and its adjacent watersheds.

completely changes this situation. If the Brown Water Plan (SB 1106) * is put into effect, a comprehensive determination of the quantitative scope of all these water rights will become necessary because of the peculiar nature of this plan and the failure of this legislation to adequately "insulate" these vested water rights against involvement under this water plan.

3. The Controlling Criterion
of "Beneficial Use".

All water rights in California are controlled and limited by the yardstick of "beneficial use". In other words, this criterion pervades all California water rights. It is embedded in our California Constitution (Art. XIV, Section 3) which makes it mandatory that the "water resources of the State be put to beneficial use to the fullest extent of which they are capable" and forbids "unreasonable use" and any "unreasonable method of use" of water.

This means, in so far as our Northern California irrigation water rights are concerned (which comprise the great bulk of the North's water rights), that they are limited to the amount of water reasonably needed, from time to time (i. e., month to month and year to year) for the proper irrigation of the lands in question (with reasonable allowances for conveyance losses).

This problem as to how much water a given area of land can beneficially use is not a simple one. To the contrary, it is a complex one. "Water duty" (which is an expression used to denote "beneficial use") varies from parcel to parcel. Soil conditions and many other technical facets of climatology and hydrology (e. g., ground water depths) must be considered. **

* SB 1106 has no precedent in our prior California water planning. It is a completely new piece of legislation, formulated entirely by the Brown Administration. Therefore, I will (for sake of identification) refer to the water project therein authorized (State Water Resources Development System) as the "Brown Water Plan."

** The complexity of "water duty litigation" can be illustrated by one such case (beginning in the late 20's) in which the writer was counsel for the defendants. Although it was only a localized controversy, its actual trial required in excess of two years.

No comments

- n/a -

No comments

- n/a -

One of the corollaries of this basic legal doctrine of "beneficial use" is that no matter how long (i. e., for how many years or decades) a given diversion of water has taken place and irrespective of how continuously this amount of water has been used on the land involved, the water right in question is restricted (under said controlling yardstick) to the actual amount of water which some court may determine (in a "water duty adjudication") to be necessary properly to irrigate such land. *

4. A "junior appropriator" can, in the absence of any binding adjudication of the quantitative extent of the senior water rights, freely litigate the quantitative scope of such prior "vested" rights.

*Did Person
petition in his
name of CA
water law?*

One of the necessary consequences of the aforementioned controlling criterion of beneficial use is that any person who desires to acquire the right to use allegedly "surplus" water in a given stream or water basin can (unless prevented by a prior adjudication binding upon him) throw into question the quantitative extent of any and all "vested water rights" on said stream (no matter how long established). In short, a covetous "water exporter" (a proposed junior appropriator) can thus litigate any and all "senior" rights by simply resorting to the expedient of questioning the water duty of the senior diversion rights.

I should also mention, in order to indicate that this is a "hard reality" (as distinguished from a purely theoretical aspect) in California water right administration that our water history is replete

* One of the many enunciations by the California Supreme Court of this settled legal principle is:

"In so far as the diversion exceeds the amount reasonably necessary for beneficial purposes, it is contrary to the policy of the law and is a taking without right and confers no title no matter for how long continued." (citing authorities) (Tulare Irrigation District v. Lindsay-Strathmore Irrigation District, 3 C 2d 489, 45 P 2d 972) The Court also stated therein: "In determining what is a reasonable quantity for beneficial uses, it is the policy of the State to require within reasonable limits the highest and greatest duty from the waters of the State."

with just such episodes. * I will cite but two thereof.

The first is the famous:

Lindsay-Strathmore Irrigation District
Litigation with the Kaweah Delta
"vested water rights" (Tulare County)

This involved the Kaweah River and the "vested" water rights of the Kaweah Delta in Tulare and Kings Counties, California. Over a period of many decades the water right owners (irrigation districts, mutual water companies, riparianists, etc.) along said Kaweah stream system settled their respective water rights by a multitude of local adjudications and agreements. The end result was a complex river schedule to govern the diversions from the two main branches of the Kaweah River (Kaweah and St. Johns). These scheduled water diversions covered all of the normal flows of the river. Naturally, these water right owners felt that at long last they had finally and completely settled their water rights. However, in 1916 along came Lindsay-Strathmore Irrigation District, a large irrigation district situated to the south of (and outside) the Kaweah Delta. It was desperate for water. Its supply of "residual" underground water was fast nearing exhaustion due to inordinate pumping brought on by extensive and excessive planting of citrus and other groves during the preceding decade of prosperity. The District was faced with either eliminating much of this planted acreage or of obtaining an "outside" source of water. It therefore "invaded" the Kaweah Delta and established a series of large pumping plants in the heart of this Delta. It then proceeded to pump and "export" large quantities of water to the South (i. e., to the District). Litigation ensued. It went to the California Supreme Court twice. **

* If the writer has learned anything from his several decades of exposure to California water right problems and practices it is that there is a fundamental difference between a purely theoretical approach to such matters and a realistic and pragmatic understanding of the "hard realities" of such water problems and practices. I might add that it is my impression that far too much of the current water planning at Sacramento (including some of the legal phases) has been by theoreticians rather than by pragmatists schooled by adequate experience with the "hard realities" of irrigation practices and problems.

Incidentally, Mr. Holsinger reviewed many of the "hard realities" of California water practices (from a legal viewpoint) in his aforementioned testimony before the Engle Committee.

**A glance at the voluminous decision of the Supreme Court on the second appeal (Tulare Irr. Dist. v. Lindsay-Strathmore Irrigation District, 3 C 2d 489, 45 P 2d 972) will indicate the complicated nature of this lawsuit. The main case also generated a number of collateral disputes and lawsuits (in some of which the writer participated as counsel for Kaweah Delta interests in the late 20's and early 30's.)

No comments

- n/a -

No comments

- n/a -

it lasted for about fifteen years and its cost (fees of attorneys, engineers, court costs, etc.) ran into millions of dollars. The defense of Lindsay-Strathmore consisted principally of a resort to the aforementioned relatively simple device of questioning the "water duty" of the Kaweah Delta water right owners and users. Lindsay claimed, for example, that these Delta farmers were using far too much water to irrigate their alfalfa and other crops, and that under an "optimum" method of irrigation (expounded at length over a period of many months of trial by various engineering and irrigation experts)* the actual amount of water reasonably needed by the Delta was far less than the amount claimed and diverted pursuant to the Kaweah River schedules. This litigation finally was settled after both sides were pretty much exhausted. The irony and tragedy of the whole affair was that the expenditure of these millions of dollars did not produce a single drop of "new" water.

A second and more recent example of this involves the:

City of Fresno and Kings River

The Kings River rises in the Sierra Nevada Mountains in Fresno County and flows through the County of Fresno into Kings County where it terminates in Tulare Lake. In a part of its course, it is quite near the City of Fresno. As is well known, a vast and highly developed agricultural area (orchards, vineyards, extensive cotton acreages, etc.) depends (almost entirely) for its irrigation upon the waters of Kings River. Many irrigation districts, mutual water companies, and other irrigation units own water rights in this stream. The writer represents some of these Kings River water right owners.

During a period of about seventy years these water right owners, by a long series of adjudications and agreements, finally settled their respective water rights and priorities.** The end result was a complicated

* One of the principal features of such "water duty" litigation is the widely disparate and conflicting testimony of the opposing able hydraulic engineers and other irrigation experts concerning this subject of how much water is needed properly to irrigate the area of land in question. An examination of the lengthy testimony of these experts in any of these cases will confirm this. I mention this aspect not to reflect on the good faith of these eminent experts but simply to further point up one of the many facets of the complexity of such litigation.

** Our engineers estimate that upwards of eighty millions of dollars have been invested by these various irrigation units in developing their water rights and diversion systems.

No comments

- n/a -

river compact specifically setting forth these various and interrelated rights and priorities. All of the flows of the river (high and low) are thus scheduled and apportioned among and between these units. These river schedules occupy many printed pages in the current issue of this controlling water right compact. A few years ago a large dam (Pine Flat) was built in the upper reaches of Kings River to provide storage and a regulated river flow. This project was promoted over a period of years by these irrigation units with a considerable expenditure of time and money. All of the available irrigation storage space in Pine Flat Reservoir has been contracted for and allotted to these units. However, the final contract covering this aspect (as distinguished from the interim contract) has not been finally signed by the Federal government (Dept. of the Interior) at Washington.

Now, to turn to the City of Fresno. This city has been expanding in every direction and it is predicted by responsible authorities that during the next few decades it will experience another almost phenomenal growth. Consequently it needs an additional and dependable water supply (mainly for domestic use). However, instead of planning and building its own mountain project (such as San Francisco's Hetch Hetchy, or the Mokelumne project of EBMUD) the City of Fresno is now casting covetous eyes upon the waters of Kings River. Among other things, it has petitioned the Federal government to allocate to it a large block of storage space in the Pine Flat project notwithstanding that all thereof has been allocated to the irrigation interests who own or control these waters of Kings River. Furthermore, to obtain water to fill any such storage space which it hopes to thus secure, Fresno is now asserting that there is a "surplus" of water in Kings River and that, under its domestic priority, it is entitled to this "surplus". This means that unless Fresno abandons this attack on the water rights of the Kings River irrigationists, a lengthy and costly legal proceeding will ensue, the chief feature of which will probably be an extended examination into the subject of the proper "water duty" of the lands in the Kings River service areas. This comes as a dismal surprise, of course, to the farmers along Kings River who thought (up until this attack by the City of Fresno) that they had finally and at long last settled their water rights (after decades of litigation, etc.).

Incidentally, is it any exaggeration to apply the phrase "hard realities" to this earlier Lindsay-Strathmore episode or to this current Kings River problem?

No comments

- n/a -

5. Relevancy of foregoing legal considerations to Brown Water Plan (SB 1106).

This phase may be summed up very simply. Under the Brown Water Plan the South will acquire a completely novel and unprecedented "contract water right" out of the Central Valley water resources (i. e., at the Delta). In the absence of any safeguards, once the South acquires this "water right" it will be in an excellent position to question and litigate all of the vested water rights in the Central Valley (and its adjacent watersheds most of which are tributary in one way or another to the Delta). I will deal more fully with this phase in a subsequent section of this memorandum. At this juncture, I wish to answer the question:

Does SB 1106 contain any provisions or restrictions to prevent such an attack by the South on these Northern "vested" rights?

The clear and indisputable answer is that it does not. This is one of the basic defects in this illy-conceived legislation. I might also mention, in this connection, that some of us strongly urged Governor Brown to include in SB 1106 appropriate provisions so that the South could not thus question and litigate these "vested water rights" of the North. In short, we sought proper provisions to fully "insulate" these vital rights against such unfair attacks. For example, several of us met with the Governor at an evening conference on February 25, 1959, and endeavored to emphasize the importance (to the North) of thus "insulating" these water rights. This was followed the next day by a lengthy letter from me to the Governor in which various phases (necessary for the protection of the North) were explained at length, including such topics as:

1. Necessity for the "insulation" and full protection of Northern water rights.
2. Adequate protection for Northern "Areas of Origin".
3. Protection of the Delta.

As to the first point (i. e., the "insulation" of Northern water rights) this letter stated:

"This phase is of vital importance to us. It is fully reviewed in earlier memoranda prepared by the writer for the California Water Development Council and other organizations (with which you may already be familiar, . . .) (giving dates thereof, etc.)

Feb 26
1959
Allen
G. Brown

No comments

- n/a -

In any event, I will do no more herein than to sketchily review this phase and then repeat our suggestions made the other evening.

"If the CWP is authorized without full and adequate protection for Northern vested water rights these rights can be seriously affected and jeopardized by this water plan. Why? Because practically all of these rights are "open-ended". What does this mean? It means, among other things, that the quantitative extent of these rights has never been fixed or settled. Historically, and because of the flow regimens of our Northern streams and other practical considerations, it has not been necessary that these rights be quantitatively determined. The writer cited last evening, as one example of this, our complex water right schedule (Water Right Indenture, etc.) on Kings River. Not one of these many important water rights has ever been quantitatively determined or fixed.

"Presently, none of these valuable rights is subject to any question or attack by Southern California water interests. Why? Because geography and topography preclude this. In other words, the South might as well be in Mexico, from the standpoint of any present ability it may have to concern itself with, or attack these rights (or litigate the quantitative scope thereof).

"With the advent of the California Water Plan, however, this whole picture changes. From a water right standpoint, the effect will be the same as if Southern California were to be physically moved up to and placed next to the Delta. Unless proper safeguards are incorporated in the fundamental CWP legislation, the South will then be in a perfect position to question and litigate (in Lindsay-Strathmore type litigation) the quantitative extent of all these vested Northern water rights. We then would have the "Legal Frankenstein" which the Engle Committee worried so much about.

Legal Frankenstein

"It should be remembered, in this connection, that the South would enjoy various preponderant advantages in such litigation. One of these would be that to the South a given quantity of water would be many times more valuable than to the Central Valley farmer. Therefore, the South could spend much more 'to win the water' than the farmer could. In other words, this water to the farmers is worth X dollars (per acre foot). To the South it will be worth at least 10-X, and probably a great deal more. All the South would have to do (in such Lindsay-Strathmore type 'water duty' litigation) would be to spend 2-X (or more) and they would end up with most of the water. In short, the farmers could not sustain the expense of such a 'Legal Frankenstein.'"

Again, under date of May 1, 1959, the writer sent a lengthy memorandum to the Governor urging the inclusion (in SB 1106) of five different elements of protection for the North (including adequate protection for Northern "vested" water rights). The Governor's personal reply (dated May 8, 1959) stated, among other things, that:

Hand to
View
That
correspondence
7

"I think it is vital to California that we move ahead in this water program, and I agree with you in all five fundamentals in every particular.* We may disagree as to how we reach them, but not in objective.

"I would direct your attention to the fact that at this time we are only drawing the 'physical works'. We are not drawing conclusions or allotting water. When we come to that, which will be after the bond issue is passed, then you and I can sit down and discuss some of the other things mentioned in your letter."

Unfortunately (and in connection with the last suggestion of the Governor) there are two serious roadblocks in the way of any "post-election patching up" of SB 1106. The first is that if the People approve SB 1106 in its present form, it will be legally impossible (in the opinion of the writer as well as many other lawyers) for the Legislature to subsequently amend it in any substantial way. Secondly, the Governor and his water staff are now engaged in somewhat frenetic efforts to consummate a vital "water contract" with The Metropolitan Water District of Southern California (i. e., even before the People approve SB 1106.)** If this is consummated, it would likewise be impossible (in our opinion) to correct (by subsequent legislation) some of these basic defects in SB 1106. This phase is also dealt with in a subsequent portion of this Opinion.

In any event, we were unsuccessful in our efforts to have these protective provisions incorporated in SB 1106.***

* All emphasis in this Opinion, either by underlining or otherwise, is mine, unless otherwise noted.

** A contract with an initial term of seventy-five years, and renewable at the option of Metropolitan.

*** It is my personal opinion (from a rather close observation of the processing of this legislation through the Legislature, with its many drafts and counter-drafts) that the omission of these necessary and salutary protective provisions was not at all accidental. I might add that it is an "open secret" that various of the South's water lawyers and other experts closely collaborated with the Administration in the drafting and processing of this legislation.

No comments

- n/a -

No comments

- n/a -

This brings me to its so-called "exclusionary clause", viz:

6. Paragraph 12931 of SB 1106

This paragraph contains a provision that nothing contained in SB 1106 shall

"affect or be construed as affecting vested water rights"

The administration spokesmen have been pointing with pride to this simple statement as being "full protection" for our Northern vested water rights. This contention is, in my humble opinion, specious. In fact, it is little short of fatuous.

There are several reasons why this is so:

The first one is that this provision will not in any manner whatsoever prevent or preclude the South (or any other Delta water "exportee") from questioning, by litigation and otherwise, the quantitative extent of these Northern vested water rights. As shown above, these "junior appropriators" (once they are placed in a position, under SB 1106, to receive water out of the so-called Delta Pool) will have, because of the aforementioned principles of water law, the unfettered power to do exactly that (acting through the State). Nothing in SB 1106 precludes or prevents them from doing so.

In other words, the mere statement in SB 1106 that "nothing herein" shall affect "vested water rights" does not at all meet the issue or cure the evil. The South will not derive its right or power to thus "raid" Northern water rights by virtue of anything expressed in SB 1106. Rather, it will acquire that opportunity and power by virtue of being placed in an excellent position (physical and legal) to do so by this Brown Water Plan (SB 1106).

Stating this differently, the use of the phrase "vested water rights" still leaves open the all-important question as to the quantitative extent of these vested water rights, a vital dimension which (as shown above) has never been fixed by any comprehensive adjudication which would in any manner be binding upon the South (or any other Delta "exportee"). In short, the South will be in the same position as was Lindsay-Strathmore which (in invading the Kaweah Delta) somewhat piously proclaimed, in effect, to the Kaweah Delta vested water right owners:

"Gentlemen of the Kaweah Delta, we do not intend to impair your vested water rights, but we most assuredly desire and intend to dispute and, if necessary, to litigate the quantitative extent thereof."

In conclusion, the foregoing are the principal considerations, factual and legal, on which is based my aforesaid answer to your first question.

Incidentally, in leaving this phase I desire to note that some of these aspects (i. e. , as to the "open-ended" nature of these Northern water rights, etc.) are more fully covered in other opinions and memoranda previously prepared by the writer, including the following:

Opinion dated February 8, 1957, to Mr. Bert Phillips,
President of California Water Rights Protective Association.

Opinion dated March 13, 1957, to California Water Rights
Protective Association (re ACA #38).

Opinion dated April 13, 1957, to Senator Edwin J. Regan.

Opinion dated December 31, 1959, to Mr. Gordon Garland,
Executive Director of California Water Development Council,
("The California Water Plan - The Two Divergent Roads
Ahead and their Litigation Potential").

---oOo---

No comments

- n/a -

No comments

- n/a -

QUESTION NO. 2. CAN THESE VESTED WATER RIGHTS BE IMPAIRED OR SERIOUSLY INVOLVED UNDER THE WATER PLAN ENVISAGED BY SB 1106 ?

I - OPINION: My answer is yes. My firm opinion is that this Brown Water Plan will not only expose these vested water rights to the danger of impairment but that it is inevitable, under the "hard realities" of the new hydrological situation which will be brought about by this Water Plan, that this involvement will occur.

II - SUPPORTING ANALYSIS AND ARGUMENT: The foregoing analysis in support of my answer to your Question No. 1 also applies herein. The essence of said discussion above is that because of the presently "open-ended" nature of these Northern "vested" rights, the South will be placed by this Water Plan in a perfect position to question and involve, by litigation and otherwise, these Northern "vested rights". However, and in order to demonstrate that this is not a fanciful and unrealistic appraisal of the new situation which will be brought about by this plan I will now touch upon some additional salient facts and considerations.

1. The New Central Valley "Water Picture"

Water-rightwise, the end result of this new Water Plan will be exactly the same as if all of Southern California were to be physically uprooted and set down at Tracy (i. e., next to Delta). In short, the length of the aqueduct between the Tracy Pumping Plants and Southern California is immaterial.

This end result will therefore mean that the South will, for all practical and legal purposes, be sitting next to the Delta with a right to receive water out of the Delta (through its "water contract" with the State).*

* As has been frequently pointed out by the writer (and many others) the name "Feather River Project" (which until recently was widely used in labelling this Water Plan) is a complete misnomer; and a deceptive and misleading one. This is and always has been a Delta Project. Under all this water planning the Feather River was to contribute but a relatively small fraction (approximately 1/4th) of the water to be exported from the Delta. (See Gleason letter of April 23, 1957 to Senator Edwin J. Regan). However, it is interesting to note, in this connection, another facet. Apparently, some of the State's own independent engineering consultants, (who are checking the feasibility of this Water Plan) have recently concluded that it is dubious as to whether even this "Feather River Phase" can be built (i. e., out of the funds to be provided by Proposition One).

A direct consequence of this new "hydrology" is that for the first time in history the South will become directly and legally interested in the water resources of the Central Valley and the water rights (existing and prospective) in connection therewith. Up to now the South has had, of course, no interest in or any ability to interfere with or involve any of these Northern rights. Why? Because geography and topography have taken care of this. In other words, Southern California might as well be in Mexico insofar as any present ability to take or interfere with any water or water rights in Northern California is concerned. For these reasons, it would seem that the South would be only too ready, in reciprocation of this very important privilege of thus being put into a position (by a State project) of receiving water from Northern California, to agree to any and all proper restrictions and provisions needed to prevent any involvement or impairment of these long standing "vested" water rights. Unfortunately, this has not proven so. The South has resisted (and I might add successfully resisted) all such efforts on our part to secure such protection.

The great practical importance and perilous nature to the North of this new "hydrological picture" can, I believe, be demonstrated by several "hard realities" implicit in this situation. The first is:

- a. The South's direct interest in establishing and preserving as much "surplus" water in the "Delta Pool" is possible.

Theoretically, the South (and the other Delta Pool "exportees") are only supposed to receive "surplus" waters in the so-called Delta Pool. What is "surplus"? How and when will it be determined? And by whom?

To properly determine what is "surplus" water one must first measure and determine "non-surplus". Over-simplifying the matter, the latter concept (i. e., "non-surplus") is the amount of water belonging to the vested water right owners. In short, these two things are correlatives. They are opposite sides of the same coin.*

* These "surplus" and "non-surplus" concepts are more fully treated in the writer's aforementioned "Letter Opinion" dated Feb. 8, 1957. As explained therein, this "water allocation" process can be likened to the slicing of a huge watermelon representing, in its totality, all of the capturable Northern California water (i. e., in the Central Valley and its adjacent watersheds). One slice thereof is the quantity which is now and will be needed (through the endless decades to come) to adequately service these presently existing vested water rights, including many "latent" riparian water rights. A second slice is the quantity which will be needed in the future for the "areas of origin". The third slice is the "surplus" available for export (i. e., to Delta "exportees").

No comments

- n/a -

b. Determination of "surplus"

Now, one naturally would assume and expect that before any "water export contracts" would be entered into between the State and the South for export of water from the Delta Pool, there would be a proper and comprehensive determination by appropriate legal procedure of the quantitative extent of any such "surplus" under this water planning. This would include, among other things, a proper determination of the quantitative needs and extent of this vast multitude of vested water rights in Northern California.

Incidentally, Mr. Holsinger emphasized (in his aforementioned testimony before the Engle Committee) the vital necessity for and importance of a comprehensive determination and adjudication of such vested rights before project construction or operation, viz:

"It has in fact long been widely recognized that full adjustment of water rights should precede not only project operation but also project construction". (Engle 776)

"In the absence of a comprehensive definition, interminable conflicts, disputes, and litigation will be necessarily ensue." (Engle 774)

"If this is not accomplished, the result will necessarily be uncertainty, doubt and conflict." (Engle 772)

This (and other) testimony of Mr. Holsinger was fully concurred in by then Governor Earl Warren and other State officials in their testimony before the Engle Committee. For example, Governor Warren testified:

"We have felt in State Government for many years that there should be a complete adjudication of the water rights on the Sacramento River, and we believed that it should be done before the Central Valley project was completed and in operation."

"As a matter of fact, on May 1, 1939, Walker R. Young, supervising engineer of the Bureau in Sacramento, recommended this adjudication of water rights of the two rivers. A copy of the letter also went to the then Commissioner of Reclamation, John C. Page. The letter said in part:

"I concur in the opinion of the State Engineer that a judicial determination of existing rights on the Sacramento and San Joaquin Rivers is necessary in order to operate the Central Valley project efficiently and successfully and such determination should be effected before the project is placed in operation." (Engle 710)

No comments

- n/a -

No comments

- n/a -

While the then Attorney General (Edmund G. Brown) apparently did not recommend such litigation, he did point out (in a memorandum submitted to the Engle Committee) the advantage of such proposed litigation:

"The advantage of such a suit appears to be that the judgment, when reached, would furnish an encyclopedic ranking of water rights in the Sacramento stream system according to quantity divertible and priority. Such ascertainment of rights would aid orderly administration of the Central Valley project and related projects. Whether such suit should extend to the ascertainment of water rights in the Sacramento-San Joaquin delta has not been made clear but such extension might be found logical. The ascertainment of rights in the delta to the flow of Sacramento River water would be complicated by the fact that some portion of the water enjoyed by the delta region is derived from the San Joaquin River as well as the Sacramento." (Engle 714)

The Brown Water Plan, however, makes no provision for any such comprehensive legal determination and adjudication of the existence and extent of surplus water. In other words, under this Water Plan no such prerequisite determinations of "surplus" and "non-surplus" will be made before project construction or operation. To the contrary, the Brown Administration proposes to proceed immediately with the consummation of "export water contracts" and the allocation thereby of huge amounts of water out of the Delta for export to the South. In fact, the Governor and his water advisers are now rather feverishly attempting to consummate such a contract with Metropolitan Water District.

No determination of surplus waters in Prop 2

Furthermore, not only has there not been any such requisite comprehensive judicial adjudication planned or provided for, but the truth is that there has not even been any accurate or proper administrative determination by the State (or any of its departments or officials) of the extent of the "surplus" water which is or will be available in the Central Valley for export. In fact, the Department of Water Resources does not even know the identity (let alone the quantitative scope) of many of these multiple thousands of vested water rights in the North. For example, in its recent publication: "Water Facts for Californians" (1958) this Department stressed one facet of this situation as follows:

"Since some water rights have existed from early mining days and some were acquired before the laws requiring the posting of notices and recordation of evidence of the rights were codified in 1872, and since riparian rights attach without any legal record being required, it is virtually impossible to determine the total water rights which exist without inventorying them by walking each stream in the State and noting all the diversions of stream flows which are in operation." (p. 7)

DWR quote

No comments

- n/a -

Mr. Holsinger's aforementioned testimony before the Engle Committee also confirms this absence of any accurate knowledge by the Department of many of these Northern "water rights," viz:

"Only a small proportion of these rights on both rivers are of record anywhere." (Engle 772)

The further truth is that the computations heretofore made by the State's water experts as to the probable extent of the "surplus" water which they hope will be available for export from the Delta Pool are, at best, rough estimates (i. e., little more than educated guesses). Furthermore, they are legally binding upon no one.

Incidentally, the Engle Committee had before it similar "estimates" by State officials (in connection with the planning of the Central Valley Project) and it was shocked to learn how erroneous they proved to be:

"Instead of an increased use of 300,000 acre-feet in the Sacramento Valley beyond that which existed when the project plan was first published the 'increased valley use' is 945,914 acre feet and the estimated amount of 'surplus water' for transfer to the San Joaquin Valley must be reduced accordingly.

"Such an error reduces the amount of available 'surplus water' by about 650,000 acre-feet if the Sacramento Valley uses are valid as was claimed by witnesses in the recent hearings at Sacramento. (Engle 690)

"Chairman Engle has received information indicating present uses are about 1,000,000 acre-feet greater than they were when project plans were made and the 300,000 acre-feet was originally allocated to meet probable increased uses in the Sacramento Valley." (Engle 694)

Now, what is the relevancy of all of this to the problem before us? It is that once the South enters into these "water export contracts" with the State the South:

- a. will become (and continue to be) directly and financially interested in the extent (from time to time through the decades to come) of the amount of "surplus" water in the Delta Pool; and

} relevancy
if the
legal
Frankenstein
("surplus")

No comments

- n/a -

- b. will take (or compel the State to take) all possible steps (including litigation) to preserve and increase the amount of "surplus" in the Delta Pool; and
- c. will inquire into and question the quantitative extent of every diversion right on the San Joaquin River System and the Sacramento River System (including all tributaries); and
- d. will insist upon continued deliveries out of the Delta Pool of these huge quantities of water thus allocated to the South under any "export water contracts" and
- e. will resist any attempt to reduce this "export pumping" out of the Delta.

When we add to the foregoing the indisputable consideration that the State will obligate itself (under the Brown Water Plan) to deliver these large quantities of water to the respective Delta Pool "exportees", the implications of this water plan become even more alarming to those of us who have spent years in the defense of Northern vested water rights, viz:

The completely unprecedented
role of the State

It is evident from the foregoing considerations that, water-rightwise, the State and the South will be "on the same side of the fence." They will be bedfellows. Their mutual interest, at all times through the endless decades to come, will be to build up "surplus" and to cut down "non-surplus." In fact, the very financial solvency of the State in future years may very well hinge upon the success of these efforts to thus secure enough water out of the Delta to fully service these vital water contracts which will be the only source (i. e., apart from general taxation) of the large sums which the State will have to pay, each year for many decades, to amortize the billions of dollars of bonded indebtedness which Proposition One proposes to create.

In brief, this new "water posture" of the State under the Brown Water Plan augurs no good for the Northern water right owners.

It should also be remembered, in all of this, that the State has already filed on practically all of the surplus water still remaining in Northern California. In short, it has thus put itself in a position (water-rightwise) directly adverse to and inconsistent with these vested water rights of Northern California (i. e., the "non-surplus").

No comments

- n/a -

It is interesting to note, in this connection, that Metropolitan inserted in its draft of proposed water contract (dated June 9, 1960) a paragraph (4-a) as follows:

"The State shall proceed with diligence in the acquisition and perfecting of water rights required for servicing all contracts, and shall protect with vigor the integrity of rights so obtained."
(p. 4/1)

This was slightly "toned down" in a subsequent draft submitted by the State (September 3, 1960) as follows:

"The State shall make all reasonable efforts to perfect and protect water rights necessary for the System and for the satisfaction of water supply commitments under this contract".
(Par. 16-b; page 16/1)

*What does
control
mean in my
copy?*

Therefore, the complete mutuality of interest between the State and the South (in thus preserving, protecting and increasing these "export waters" in the Central Valley) is clear and indisputable.

Now, with this as a background we will next deal with another and to me one of the most ominous aspects of this novel water plan, viz:

- c. The Brown Water Plan provides absolutely no effective "controls" of any kind to so regulate or control this Delta "export pumping" that it will not invade or affect vested water rights of the Delta and the rest of the Central Valley.

Once these huge pumping plants start pumping water out of the Delta for export to the South, what will stop them? When and under what conditions will these pumping operations cease or be curtailed? Who will determine and control this? Under what criteria?

The Brown Water Plan is absolutely silent as to all of this!

The answer to these several questions is, in my reasoned opinion, that these pumps will continue to operate unless and until they are stopped by litigation by the Valley farmers to protect their vested water rights.

The primary reason for this conclusion is that this Water Plan (SE 1106) contains absolutely no such "controls". *

* This "void" reminds one of the current international disarmament talks in which it is stressed that without effective controls agreements to disarm are meaningless.

No comments

- n/a -

Furthermore, in the absence of a comprehensive determination and a completely binding adjudication (i. e., binding upon the State and all other interested parties) there will be no effective and readily ascertainable demarcation (i. e., "boundary line") between "surplus" (on the one side) and "non-surplus" on the other. In the absence of such an obligatory definition of these two correlatives, there can be no effective (i. e., automatic) controls to delimit this "export" of water. When this "hard reality" is coupled with the indisputable fact that it will be directly to the mutual interest of both the State and the South to maintain this "export flow to the South" as continuously and on as large a scale as possible, the inevitability of direct and serious conflict between these vested water rights of the North and these "export allocations" is, I believe, patent. *

The serious import of all of this to Northern California is further indicated, I believe, when consideration is given to another "hard reality" of existing Central Valley hydrology:

- d. There is a grave doubt as to whether any dependable and sizeable "surplus" of water exists in the Central Valley.

about now thoroughly complicated by Est. CWP, Wild & Scenic Rivers Act, among other eminent to laws.

There are, of course, two major stream systems in the Central Valley, the San Joaquin River and the Sacramento.

It is indisputable that the San Joaquin River has no surplus. In fact, due to the huge inter-basin transfers of water under the Central Valley project, the San Joaquin River no longer exists (in large part) as a natural stream. ** Under the CVP it is, in the main, an artificial stream supplied with supposedly "surplus" water from the Sacramento River (by the Delta-Mendota Canal, Mendota Pool, etc.).

* It should be stressed that the serious involvement and possible impairment of vested water rights which is being discussed in this Opinion will not be limited to the Delta Area or the other nearby "water areas". To the contrary, all vested water rights, including those in the various "water-rich sections" in the San Joaquin Valley (Merced River, Kings River, etc.) will be exposed to these same dangers.

** Its flows are impounded in its upper reaches by Friant Dam. Most of this water is sent southward to Tulare and Kern Counties by the Friant-Kern Canal. Some is sent to Madera County through the Madera Canal.

No comments

- n/a -

Furthermore, even the present existence of any substantial "surplus" water in the Sacramento River is questionable. In fact, the Engle Committee (after its exhaustive 1951 investigation of this very subject of "surplus" in the Central Valley) was surprised to learn that this alleged "surplus" was rapidly disappearing, if not actually non-existent, even then (i. e., as far back as 1951). In its formal "findings" that Committee concluded (*inter alia*):

"Only one answer can be obtained from the foregoing testimony That one logical answer is: If diversions continue at the rate they were being made in 1951, and there is no reason to believe they will be reduced, then the developed waters of the Sacramento River are overcommitted and oversubscribed.

"The obvious result is that much less water is available for transfer to the San Joaquin Valley than was originally contemplated." (Engle 692)

"Findings - (a) That for all practical purposes, the developed water supplies of the Sacramento River are overcommitted and oversubscribed;

1951

(b) Increased uses of water from the Sacramento River from the beginning of project construction in 1935 to the present are about three times the expected increase of 300,000 acre feet which was estimated by the State of California and Bureau of Reclamation officials in their original plans for operation of the Central Valley project;

(c) Testimony indicated diversions from the Sacramento River would have caused the river to be dry for about 40 miles in July 1951 if stored water had not been available from Shasta Reservoir for Sacramento Valley use, and a large part of this water is destined for the San Joaquin Valley under the proposed Central Valley project operation;

(d) Applications for use of American River water to be developed by Folsom Dam, an additional storage unit of the project now under construction, exceed by 'several times' the probable supply that can be made available through this source."* (Engle 679)

* It is interesting to note that Congressman Poulson (now Mayor of Los Angeles) participated in the hearing and thereby learned of this "paucity" of "surplus" water in the North. He also concurred in these Findings. Yet this same gentleman is a very vocal advocate of the Brown Water Plan, the basic predicate of which is the aforementioned unwarranted assumption that a large amount of "surplus" water exists in the Central Valley.

No comments

- n/a -

Another interesting statistic pertinent on this "surplus" phase is the explicit statement in the "Preview of the California Water Plan" (published by the State in 1956) that there is only enough water in the Central Valley to take care of the needs of this Valley (i. e., present and future), viz:

"As regards the Central Valley Area, it is coincidental that with 48 per cent of the State's run-off this area should ultimately require almost exactly 48 per cent of the developed water supplies." (Preview, p. 6)

What more cogent confirmation could there be of the fact that there is no "surplus" water in the Central Valley available for permanent export over the Tehachapi Mountains to Southern California!

Furthermore, the dangerous nature (to the North) of this new "hydrological picture" which the Brown Water Plan will create becomes even more manifest when another "hard reality" of our California hydrology is noted, viz:

e. California's frequent
"dry cycles"

drought

An unfortunate characteristic of California hydrology is, of course, the very irregular regimen of the flows in our stream systems, particularly those draining into the Central Valley from the Sierra watersheds. These flows vary radically, not only from month to month but from year to year. This aspect is summed up in the aforementioned "Preview of the California Water Plan" as follows:

"In addition to the characteristic variation in its natural water supply within the year, California is subject to extended wet and dry periods. In the late 20's and early 30's we suffered a severe drought--one of a great many in the past--during which runoff in the streams throughout the State for a 10-year period averaged only a little more than 50 percent of the long-time mean. In this connection, while the state-wide runoff has averaged some 71,000,000 acre-feet per season, the actual seasonal flows have varied from as little as 18,000,000 acre-feet to more than 135,000,000 acre-feet."

"The normal monthly variations in occurrence of the water supplies of California, as well as the periodic droughts, create a most basic problem relative to the development and use of water. . . ." (Preview, pp 7-8)

No comments

- n/a -

Now, when these dry cycles recur in the future (as they undoubtedly will) what will stop (or even slow down) these Tracy pumping plants? What will be the governing or effective legal controls in such a situation? The simple answer is that under the Brown Water Plan there are and will be no such effective controls. Which means (among other things) that (as Henry Hoisinger so aptly expressed it):

"interminable conflicts, disputes, and litigation will necessarily ensue."

f. Fair Play, Justice, etc.

Some persons may endeavor to minimize or explain away this basic defect in the Brown Water Plan by contending, in effect, that we must presume that the State (in its aforementioned novel and unprecedented role as financier, owner, operator and "export right protector") will be fair, just and honorable, and will so operate these Tracy Pumps (and the other facilities of this project) as to preclude any such involvement or impairment of vested water rights.

Any such attempted answer to this legal criticism is, in my humble opinion, patently unsound and specious for several distinct reasons:

The first is that in the absence of any comprehensive adjudication of the legal extent of "surplus" and "non-surplus", the State would not have any effective "control criteria" to apply to this "export pumping", even if it wanted to be fair and just to the vested water right owners.

Secondly, the State's aforementioned direct and vital financial interest in the continuation of this "export pumping" would, of course, be a strong and perhaps preponderant motivation in any such decision by it. As stated above, the very financial stability of the State will directly depend upon such "water exports" and the net revenues produced therefrom. Furthermore, the State must act (under the Brown Water Plan) as the South's "water protagonist" to protect and preserve any allegedly "surplus" water in the Delta Pool.

In other words, any hope or expectation that the State (or its "export ally" - the South) would thus worry about these "open-ended" vested water rights of the North bespeaks, I believe, a naivete and altruism wholly inconsistent with and unconfirmed by the "hard realities" of California water practices. * To borrow an apposite

* Mono County is but one of the many illustrations in California history of the inanity of hoping for or depending upon any such altruism.

No comments

- n/a -

phrase from Mr. Holsinger:

"However, attention to realities should convince any reasonable person that any such anticipation is Utopian and not reasonably possible of fulfillment". (Engle 766)

And, in concluding this chapter, there is a very rough analogy which occurs to me which may point up for laymen unacquainted with the intricacies of water law or water rights, the essence of this new "water picture" which SB 1106 will bring into being (with the so-called Delta Pool as its central feature).

Mr. Pigmy and Mr. Giant find themselves stranded in the Mojave Desert on an arid day. There is but one bottle of water between them (in the possession of Mr. Pigmy). He has "vested" rights therein, which Mr. Giant readily agrees to recognize. Mr. Pigmy therefore generously consents to share this water with Mr. Giant. Each inserts his "sucking straw". Naturally, Mr. Giant's thirst is gargantuan. Likewise, his straw is king-size. The avid draughts begin. Unfortunately, however, for Mr. Pigmy, the quantitative extent of his "vested right" has not been pre-determined, nor agreed upon, nor marked on the bottle. Does it require a water lawyer to envisage the dire results for Mr. Pigmy? Or the resulting impairment of his "vested right"?

And, to carry this homely analogy a step further: Mr. Pigmy, aghast at this impairment, complains to a passing policeman for protection but finds, to his chagrin, that this chap is a close associate (both financial and otherwise) of Mr. Giant! *

--oOo--

* I trust that this Honorable Committee will pardon this digression into the Mojave Desert. Its sole justification is the "aridity" (if not "rigidity") of this "Opinion".

No comments

- n/a -

QUESTION NO. 3. DOES THIS WATER PLAN ADEQUATELY PRESERVE AND PROTECT THE SO-CALLED "AREA OF ORIGIN RESERVATIONS" OF NORTHERN CALIFORNIA (i. e., "COUNTY OF ORIGIN" AND "WATERSHED OF ORIGIN" PROTECTION)?

I - OPINION: SB 1106 does not properly preserve and protect these important "water reservations". To the contrary, the Brown Water Plan exposes them to a serious danger of severe diminishment, and to possible extinction.

II - SUPPORTING ANALYSIS AND ARGUMENT: Before reviewing the several salient legal reasons underlying my said conclusion, I will first briefly describe (for the benefit of any interested layman) the legal nature of these "preferential water rights" in favor of our Northern "areas of origin" and their importance to Northern California.

1. Nature of these "preferential rights"

These important "preferential water reservations" are based on two distinct sets of statutory provisions. The first is the so-called:

a. County of Origin Statute
(Sections 10500-10505 of
Water Code)

These provisions of our law have the effect of reserving for every county all of the water originating in such county which will be needed at any time in the future for the development of any portion of such county (i. e., either by public or private agencies).

This "reservation" or "preferential right" of a county to recapture and use in the future its "surplus" water (i. e., over and above that needed for "vested" water rights in said county) is obviously one of great importance to all Northern California's counties. This affects all counties in the Central Valley, including those in the San Joaquin Valley.*

Incidentally, a more detailed explanation of this "County of Origin" phase is to be found in the writer's aforementioned Opinion of February 8, 1957 (to the CWPA).

* Certain water interests in Fresno County recently learned in a water right proceeding before the State Water Rights Board (Application Nos. 6733, etc.) of the vital importance to them of this "County of Origin" statute.

No comments

- n/a -

b. "Watershed of Origin" Provisions
(Sections 11460 to 11463 of Water
Code)

This is the second (and an entirely distinct) phase of our "area of origin protection." In essence, this "watershed of origin statute" gives our Northern "watersheds" (and the "areas immediately adjacent thereto which can conveniently be supplied with water therefrom") a "preferential right" (for their future water needs) in and to the waters naturally occurring in such "watersheds".

It should be noted that these statutory provisions form a part of the legislation in the Water Code dealing with the Central Valley Project. The "County of Origin Statute" is not a part of the Central Valley Project legislation. The legal significance of this difference will be explained hereinafter.

Context
of area of
origin laws

2. Vital Importance to the North of these
"Reservations"

These "reservations" are obviously of crucial importance to the North. They constitute the prime (if not only) source of water which will be needed for the future expansion and development of Northern California during the endless decades to come. It is apparent, therefore, that this question as to whether the Brown Water Plan (SB 1106) adequately preserves and protects these "area of origin reservations" is a most important one to the North.

3. Deficiencies in SB 1106 on this phase

With the foregoing as a brief background, I will now explain why I firmly believe that SB 1106 fails to adequately protect and preserve these important "preferential water rights" of the North.

Summarily stated, my principal criticisms of SB 1106 from the standpoint of this "area of origin phase", are:

- a. This "area of origin protection" should have been made a permanent feature of the Brown Water Plan, but this was not done. It is now purely statutory and if the South gets control of the Legislature at any time in the future such protection can be entirely wiped out.

No comments

- n/a -

objective of the South which was to acquire a perpetual and irrevocable quantitative allocation out of these already "over-drawn" water resources of the Great Central Valley.

Governor Brown repeatedly promised throughout Northern California that these important "water reservations" would be fully preserved and protected under his water plan. We therefore submitted various proposed legislative provisions to accomplish this. Among other things, we tried to have these "area of origin reservations" expressly recognized and incorporated in SB 1106 so that they would thereby become a permanent feature and condition of this legislation. These provisions would also have made it mandatory for the State to expressly incorporate these "reservations" in every "export water contract" and thus make all "export" of waters from the Delta strictly subordinate thereto.

Unfortunately, we failed to achieve these objectives. One of the reasons for our failure was, I believe, said close collaboration between the Governor's water advisers and legislative draftsmen and various legal and engineering experts of the South. I might add, however, that we at least managed to exact a promise from Mr. Harvey Banks (Director of the Department of Water Resources) that as long as he had anything to do with these "water contracts" (i. e., under SB 1106) he would insist that they contain appropriate provisions expressly recognizing these "area of origin reservations". He made this promise on various occasions. It is regrettable, however, that this is not the present "policy" of the Administration. The proposed contract with Metropolitan is completely silent on this important aspect.

Banks' promise

sub contracts silent

Justice and propriety of this request for permanent preservation and protection of these reservations.

It may be argued by some that inasmuch as this "area of origin protection" is now only statutory (and thus "impermanent"), it should not be made a permanent feature of the Brown Water Plan. I believe, however, that the legal and moral justification for "permanence" can be demonstrated by several considerations.

The first is that (as pointed out in another portion of this Opinion) the South presently has no physical or legal ability to become interested in (or intermeddle with) the water resources in or water rights of the North.

* This "area of origin protection" was one of the five points covered in my letter to Governor Brown of May 1, 1959, with which he agreed in every particular in his letter to me of May 8, 1959 (p. ii, supra)

No comments

- n/a -

One result of this is that these "area of origin reservations" are not now in jeopardy. Under this present state of affairs, they are virtually permanent because there is no reason nor incentive for attacking (or repealing) them. As between the water right owners of the North (i. e., in different sections of the Central Valley) they have worked quite satisfactorily to date and will in all probability continue to do so.

This whole picture will radically change, however, if and when the South is permitted to become physically and legally interested in these Northern waters (under the Brown Water Plan). These "water reservations" will then constitute a constant "thorn in the side" of the South and it no doubt will (unless precluded by appropriate and continuing legal restrictions) make every effort to obviate or vitiate these "water reservations."⁽¹⁴⁾

It would seem only fair and just that if the South is to be given this desired and important privilege of participating in these water resources in the North it should be willing (as a fair price for its "ticket of admission" to such participation) to readily agree that these "area of origin reservations" for the North should be made a permanent feature of any new State Water Plan. It might also be mentioned, in this connection, that Northern California (which has always stood ready to allow the South to participate in these Northern waters under a fair and sound water plan) will, in effect, guarantee (by its large percentage of the assessed values in the State) the huge general indebtedness which the State proposes to assume in order to thus make it possible for the South (for the first time in history) to be put in a position to thus become directly interested in, and gain benefits from these water resources in the North.

Unfortunately, however, despite much importuning by Northern representatives, the Brown Administration did not see fit to make this present statutory protection for these Northern areas of origin a basic and permanent feature of this new water plan. In short, SB 1106 does not contain this vital protection which our group of Central Valley water lawyers deemed so necessary.

but why?

As a matter of actual fact, there are no direct references whatsoever (in SB 1106) to the aforementioned statutory provisions which presently embody this "area of origin protection". Furthermore, the aforementioned

* The detailed monograph prepared by Mr. Samuel B. Morris, one of the South's leading water "experts" and spokesmen (and formerly General Manager and Chief Engineer of the L. A. Dept. of Water & Power) under date of September 17, 1956 and entitled "The Feather River Project and the California Water Plan" shows how clearly and carefully the South's experts have studied these "area of origin reservations" and various means of solving (from the South's viewpoint) the problems created thereby for the South.

No comments

- n/a -

"County of Origin Statute" is not even indirectly referred to in SB 1106. It is not mentioned or incorporated in this legislation either directly or indirectly.

There is, however, a most indirect and quite "left-handed" reference (in SB 1106) to the "Watershed Protection Act." This is to be found in paragraph 12931 of SB 1106 which provides (inter alia) that:

"any facilities heretofore or hereafter authorized as a part of the Central Valley Project or facilities which are acquired or constructed as a part of the State Water Resources Development System with funds made available hereunder shall be acquired, constructed, operated, and maintained pursuant to the provisions of the code governing the Central Valley Project, as said provisions may now or hereafter be amended."

These are the only provisions of SB 1106 to which the Administration can point as incorporating any of this "area of origin protection" in SB 1106. These provisions make it manifest, of course, that if the Central Valley Project Act is subsequently amended so as to eliminate this "watershed reservation" this "protection" in the CVP legislation will vanish and no longer apply to any part of the Brown Water Project (SWRDS). Incidentally, we strenuously but unsuccessfully fought the inclusion (by the Administration's representatives) in this legislation of this short but significant phrase:

"as hereafter amended"

This brings us to my second principal criticism:

- b. The Brown Water Plan (SB 1106) will place both the South and the State in a position directly antagonistic to these important "preferential water rights" of the North. This will lead to future serious involvement and possible impairment thereof (as well as much trouble and confusion for the North.)

As shown in a previous portion of this Opinion, the end result of the Brown Water Plan will be that the South will be "sitting next to the Delta." It will, in effect, be a gigantic and powerful "water octopus" sitting astride of the Delta Pool with its potent tentacles reaching into

Water Octopus

No comments

- n/a -

every nook and cranny of our Northern stream systems, even to the uppermost reaches thereof. Among other things, this will mean that the South (and the State) will be directly interested in and affected by every future water application filed in the North (under these "area of origin preferences"). Why? Because to the extent that any such appropriations of water are hereafter allowed (i. e., in connection with the future growth and development of the North), to that very same extent the "surplus" available in the Delta for export to the South is thereby diminished. This is one of the problems covered at length by Mr. Samuel Morris in his aforementioned 1956 analysis of the so-called Feather River Project.

It should also be stressed, in this connection, that these "water reservations" for the North are not self-executing or automatic. To the contrary, as and when portions of this "reserved water" are needed in the future, the people (public agencies, etc.) seeking to make an appropriation and use thereof will have to file (and duly process) in the Department of Water Resources (in accordance with established procedure) specific applications covering the appropriation and use of this water. They also will have to secure any necessary "assignment" or "release" from the State.

All of these applications will, of course, be subject to protest. Many issues could be raised by a vigorous protestant (including the "fuzzy phases" of this present legislation - some of which are touched upon hereinafter).

I will leave it to your judgment as to whether the South (and its new "water ally" - the State) will sit silent in the face of such future attempts to thus diminish the available "surplus" in the Delta Pool.

Next is my third criticism, viz:

- c. The various existing ambiguities and uncertainties in this "area of origin protection" should have been corrected and eliminated as a part of this new water legislation. This was not done.

Time limitations will not allow any extended analysis herein of the many shortcomings of and uncertainties in this existing "area of origin protection". They are serious and should have been clarified in this new legislation. We tried to accomplish this but failed, due to the

No comments

- n/a -

complete lack of cooperation by the "water spokesmen" and draftsmen of the Administration. I will, however, touch upon but a few highlights in this connection.

"County of Origin Statute"

There could be an extended dispute as to whether this important statute applies at all to this Brown Water Plan (i. e., the State Water Resources Development System). The reason is that this is, of course, a State project. There is a school of thought that this "County of Origin Statute" (and particularly its vital Section 10505) would not apply to the State in its new role as owner and operator of the water project contemplated by SB 1106. In fact, a committee of "water experts" (including eminent lawyers) concluded, in 1956, that this "County of Origin Statute" did not apply to the State. This was a special subcommittee of the State-wide Water Resources Committee of the California State Chamber of Commerce. This subcommittee was appointed for the particular purpose of studying and reporting upon this "area of origin" phase in connection with the California Water Plan. The chairman was Burnham Emersen, Esq. Among its other members were such distinguished water lawyers as Chas. C. Cooper, Jr., Esq. (counsel for Metropolitan); Gilmore Tillman, Esq., (counsel for the Los Angeles Department of Water & Power); Wallace Howland, Esq., (Assistant Attorney General of the State of California); Martin McDonough, Esq., of Sacramento, Mark C. Nosler, Esq. (principal attorney for the California Department of Water Resources). In fact, the entire committee consisted of lawyers except for two ranchers (one of them being Mr. Bert Phillips) and two engineers (one being Mr. Samuel B. Morris). This subcommittee made its report on November 30, 1956. Among other things, it concluded that Section 10505 does not apply to the State as such. This conclusion is expressed as follows in its formal report:

COS might not apply to the State

"Although the section is brief and is expressed in simple terms it has been the subject of much controversy and its meaning and effect have been much misunderstood. The principal and significant features of the section appear to be these:

"(a) The section does not by its terms restrict or otherwise affect the use by the State itself of water appropriated by the State pursuant to the Feigenbaum Act. Rather, it appears to be focussed upon the assignment of State applications to other parties, such as, for example, municipal corporations, districts, private parties or the United States

No comments

- n/a -

Government. Stated very broadly, the section applies primarily to non-state water resource development. (* (p. 6 of Report)

The writer disagrees with this conclusion of said subcommittee. It is quoted, however, to show that (even before SB 1106 was formulated) this "County of Origin Protection" was a subject of conflicting views.

Two other things should be noted in this connection.

The first is that the aforementioned conclusion was reached by said Subcommittee notwithstanding the fact that Section 10504 (as it existed in 1956) contained an "assignee definition" similar to that contained in the present statute.

The second is that this "County of Origin Statute" is not a part of the Central Valley legislation and therefore has not been included (either by reference or otherwise) in SB 1106.

Therefore, the applicability of this important phase of the "Area of Origin Protection" to the Brown Water Plan is thus left in a somewhat "clouded condition". To say the least, the matter is not beyond the possibility of dispute.

"Watershed Protection Statute"

There are various substantial uncertainties in connection with this phase of the "Area of Origin Protection". In fact, some of these were pointed out by then Attorney General Edmund G. Brown in a formal Opinion (No. 53/298, under date of February 5, 1955 - issued in response to a request from Senator Edwin J. Regan). This Opinion covered the subject of "Area of Origin Protection". After discussing various uncertainties in these statutes, the Attorney General concluded:

"However, if litigation and the need for judicial construction is to be minimized, in all candor it must be stated that the certainty of this description leaves something to be desired."

* In all fairness, it should be added that this formal report was not signed by various "Northern" members of the Subcommittee. It did, however, receive the support of Mr. Samuel Morris and other "Southerners".

No comments

- n/a -

I might add that the Governor and his staff were reminded by us (on more than one occasion during the processing of SB 1106 through the Legislature) of this "fuzzy condition" of these statutes; and the need for correction thereof in connection with his new Water Plan. *

Another phase of the present "fuzziness" of this "Area of Origin Protection" should also be touched upon, viz:

General vs. Specific Reservations

There are two schools of thought on the question as to whether these "water reservations" for the areas of origin must be general or specific. There is a vast and important difference between these two concepts. **

A specific reservation means that a definite quantity of water must be fixed and reserved for the future needs of the "area of origin" (i. e., "county", etc.). On the other hand, a "general reservation" would entitle the area in question to all the water it might need in future decades, without any quantitative limit being fixed at the time the reservation is made (i. e., in connection with a proposed "assignment" or "release" of a state filing). This basic difference was pointed out by the Division of Water Resources in its testimony before the California Water Project Authority on August 31, 1954. It stated:

* This was discussed in our meeting on the evening of February 25, 1959 and also adverted to in my letter to the Governor's secretary on February 26, 1959:

"The deficiencies of our present statutory protection for these "areas of origin" are well known to the Governor (as a result of the report of his Attorney General's Water Lawyers Committee, etc.). As epitomized the other evening, this situation is in a 'fuzzy' condition (to say the least).

"It has been generally agreed in the various prior discussions and debates by both Northern and Southern water spokesmen that these 'areas of origin' deserve full and adequate protection under the California Water Plan (when authorized). ←

"Therefore, there should be no great difficulty in working out in the Administration's 1959 CWP legislation a fair formula to cover this phase. We believe that this protection should be firmly embedded, as a basic policy, in such legislation."

** This subject is dealt with fully in my Memorandum Opinion of February 8, 1957, to the California Water Rights Protective Association.

No comments

- n/a -

"The principal advantage to the counties of origin to be gained by having a general reservation is that the general reservation would, in effect, reserve for those areas all the water that may ultimately be needed for reasonable beneficial use in the future. This general reservation would provide for various factors which are unknown at the present time while a specific reservation, being necessarily based on an estimate might provide for either too small or too great an amount. A specific reservation would limit the amount of water that would be available to the counties of origin under the State filings." (See "Answer to Question No. 4, Program For Financing and Constructing the Feather River Project". Appendix H, p. 117)

general
vs. specific
reservation
of water

The various water representatives of the South have been contending and urging for a number of years that these "reservations" should be specific, not general. In fact, the aforementioned "area of origin" subcommittee of the State Chamber of Commerce specifically recommended this in its report dated November 30, 1956. Speaking of the "reservations" to be made under the "County of Origin Statute" this report states:

"Assignments or releases containing such general reservations present the same difficulties as do the present provisions of Section 11460 to 11463 with respect to the operations of State water projects. They leave the rights of the county of origin undefined, and they leave the exported water subject to 'recapture' whenever needed locally. It is the recommendation of the subcommittee, therefore, that the agency which passes upon this question (i. e., the State Water Rights Board) should make a quantitative determination of the water which is to be reserved to the county of origin. The attached proposal contains provisions designed to accomplish this result." (p. 20)

← recapture

The unfairness and impracticability of any such attempts to thus definitively forecast the future quantitative needs of these "areas of origin" (through the many decades to come) was well pointed out in our final report of Attorney General Brown's Water Lawyers Committee (dated January 3, 1957)(Assistant Attorney General Wallace Howland, Chairman). Speaking of the South's desire to thus (i. e., by specific reservations) put quantitative tags and limits upon Northern California's future water requirements, this report states:

"Hence, it is argued that the ultimate future needs of the areas of origin must be determined now, as a necessary mathematical step in placing a quantitative limit on the water reserved for use in such areas and that this, in turn, is a necessary step in the determination of the surplus available for export.

No comments

- n/a -

"On the other hand, from the viewpoint of the areas of origin it must be admitted that there is no crystal ball in which to foresee the future. What the future needs of the areas of origin will be, only time will tell. Present determinations of future needs can only be estimates of the minimum needs made in the light of present day knowledge. Moreover, the most "consistent thing" about California history of the past thirty years has been the extent to which the State has exceeded the best estimates of its rate of growth and the resulting need for expanding services of all types." (p. 15 of Report)*

Incidentally, ample evidence of this quite understandable inability (in public works), to foretell the future, abounds all around us. One good example is our many outmoded and inadequate highways (including some freeways) which were built but a relatively short time ago, presumably adequate to serve us for many decades, but already largely outmoded. And planned and built by able and conscientious engineering staffs!

It would seem evident from the foregoing that, for the proper protection of the North and in all fairness and justice, any and all uncertainties and "fuzzy phases" in connection with this important problem of "general v. specific" reservations for these "areas of origin" should have been definitely resolved and eliminated as a part of this new water planning. In brief, this legislation should have expressly provided for "general reservations" for these "areas of origin". However, despite our repeated efforts to accomplish this (and other proper protection for these areas), this was not done. The "water experts" of the Administration were deaf to such suggestions.

The foregoing comprise some of the reasons why the writer is of the firm opinion that SB 1106 falls far short of any adequate protection for these "area of origin reservations."

* The danger and impracticability of such specific reservations was also pointed out by me in my "Interim Report" as Chairman of the 1956 Water Lawyers Committee of the San Francisco Bar Association (dated December 28, 1956), viz: "In short, this proposed procedure would necessitate a high degree of 'crystal ball gazing' into the future in an effort to guess at many imponderables, a 'determination process' which appears to me to be quite dangerous and impracticable."

Before leaving this subject there is one other facet which I briefly wish to discuss, viz:

4. The Impossibility of Subsequently
"Correcting" these Deficiencies
by Future Legislation

Various Administration spokesmen are now attempting to allay the rather widespread fears arising as a result of the aforementioned and other shortcomings of SB 1106, by representing to the electorate that all such defects can and will be corrected by subsequent legislation. They are proclaiming, in effect, that: "It is better to have a water plan with problems and defects (which can and will be remedied later), than no water plan at all."

From a legal standpoint such "propaganda" is indefensible. The juridical truth is that if SB 1106 is approved by the People, it will be beyond the power of the Legislature to make any substantial changes in it (e. g., to implant therein, as a permanent feature of the Brown Water Plan, this important "area of origin protection"). As Hon. Dion Holm, Esq., stated, in his formal opinion to the City of San Francisco (No. 1426 - dated March 8, 1960) (re SB 1106), viz:

"My purpose in pointing out the foregoing to you is based on the fact that the Legislature will have no power to amend the act once it is approved by the people and no power to repeal if once general obligation bonds are sold."
(p. 5)

--oOo--

No comments

- n/a -

No comments

- n/a -

QUESTION NO. 4. DOES SB 1106 AFFORD PROPER PROTECTION FOR THE SACRAMENTO-SAN JOAQUIN DELTA (SALINITY CONTROL, LEVEE PROTECTION, ETC.)?

I - OPINION: It is my firm opinion (based on a close personal knowledge of the Delta and its multiple and complex hydrological aspects) that SB 1106 does not, from a legal standpoint, properly protect the Delta. On the contrary, this Brown Water Plan (SB 1106) will seriously aggravate and intensify the already existing and critical legal and hydraulic problems of the Delta.

As a legal minimum, this legislation should have required, as a basic and indispensable legal condition precedent to any "export" of water out of the Delta, that which we call in water law a "physical solution" ~~to~~ to ensure complete and effective protection for the Delta in connection with its complicated and perplexing hydrological difficulties. This has not been done (or even hinted at) in SB 1106.

II - SUPPORTING ANALYSIS AND ARGUMENT: It would take a rather large volume (e.g. exceeding the size of the excellent Engle Committee report of almost two thousand pages) to discuss in detail these many serious hydrological and legal problems of the Delta (all of which are relevant to your question). As this Honorable Committee knows, various and voluminous reports have been published over the years by the State and others with respect to these problems of the Delta (e.g., salinity control, etc.). Therefore, and because of time limitations, I will do no more herein than sketchily touch upon some of them with the hope of demonstrating (at least by generalities) the soundness of my foregoing appraisal of SB 1106 (insofar as it relates to the Delta).

Summarily stated, my reasoned conclusions as to the legal inadequacy of SB 1106 on this phase are:

1. It neither requires nor provides for any mandatory and effective "physical" solution of the already critical salinity problem. In fact, the Brown Water Plan will substantially aggravate this serious Delta difficulty with possible huge losses to the Delta landowners and water users.
2. It fails to legally protect, in any way, the vested water rights of the Delta. Moreover, it actually exposes such rights to a very real and imminent danger and probability of infringement and impairment.

No comments

- n/a -

3. The Brown Water Plan (as now formulated) could seriously and adversely affect the intricate levee systems so vital to the Delta.
4. It will bring about serious drainage problems.
5. It does not adequately preserve and protect, from a legal standpoint, the important recreational features of the Delta.

Before briefly dealing with these phases, I will set forth (for the benefit of those interested persons who are not familiar with the Delta) a few "highlights" as to its location and physical characteristics.

The Sacramento-San Joaquin Delta

This area comprises several hundred thousand acres of excellent and highly developed agricultural lands. It is reputed to be one of the prime and richest farming areas in the world. It lies at the confluence of the Sacramento and San Joaquin River; and is situated mainly in San Joaquin, Sacramento and Contra Costa counties.

At the western extremity of the Delta is located a very extensive industrial complex with many large factories and other industrial units, most of which are directly dependent upon the continued availability of fresh water of good quality from these nearby stream systems.

One of the principal hydraulic features of this Delta area is the myriad of natural river channels, sloughs and other watercourses which meander in a highly irregular pattern throughout this entire area. One consequence is that a large part of the Delta consists of many islands entirely surrounded by these water channels.

Another physical feature is that much of the land in the Delta is considerably below the level of the adjacent water channels. Consequently, a vast and intricate system of earthen levees (with an aggregate length of many hundreds of miles) is used to prevent the inundation of these low-lying lands.

In some portions of the Delta (particularly in its westerly reaches) a serious and continuous problem of land subsidence exists, due to the nature and texture of the soils in such areas, etc.

No comments

- n/a -

All of these many disparate but interrelated hydraulic characteristics create for the Delta (as all competent experts concede) an extremely complex "hydrological picture", with numerous interlocking hydraulic and other physical facets, all in close and delicate physical balance. Naturally, this intricate hydrological situation makes the Delta's legal problems (water-right and otherwise) peculiarly difficult and complicated.

In the light of this short "physical background", I will now briefly discuss some of the legal criticisms of SB 1106 set forth above in summary fashion.

1. SB 1106 neither requires nor provides for any mandatory and effective solution of the already critical "salinity problem". In fact, the Brown Water Plan will substantially aggravate this problem, with possible huge losses to the Delta landowners and water users.

The critical nature of this "salinity problem" is, of course, well known. It suffices to state that, due to tidal and other hydraulic phenomena occurring in the San Francisco Bay (and its upper reaches - Suisun Bay, etc.) there is an ever present and extremely serious menace of "salt-water intrusion". In other words, the salt water from the bay (and ocean) thus moves upstream and (unless prevented from doing so) intrudes into these "fresh water channels" of the Delta, with consequent serious injury (if not complete ruin) of these Delta lands and the crops thereon.

From time immemorial, the outflow of "fresh water" (coming down the Sacramento and San Joaquin Rivers) has provided a natural barrier to repel this "salt water intrusion". However, during some periods of the past these river flows of "fresh water" down to and through the Delta have not been adequate. This has been particularly true in several past "dry cycles". The severity of this salinity problem, even in the "pre-project era" (i. e., before the advent of the Central Valley Project) can be illustrated by reference to the following official report:

"Gradually, as reclamation of the Delta and development of the use of water took place upstream, the amount of water available for natural salinity control decreased until in 1924, 1931, and other dry years, the encroachment of saline waters reached serious proportions.

No comments

- n/a -

During the late summers of those years irrigation in a large part of the Delta was made impossible by the degree of concentration of salinity in the waters of the channels." (Report on 1956 Cooperative Study Program, Department of Water Resources, Vol. 1, p. 27)

Another official depiction of this hydrological problem is:

"The greater part of the water diverted for irrigation, from the Sacramento River above Knight's landing, is for rice culture. As a result of these diversions, combined with the natural lack of water following three consecutive years of very low precipitation, the amount of water reaching the city of Sacramento in the summer of 1920 fell to the minimum of 500 to 700 second-feet and in consequence salt water was able to work its way upstream in harmful quantities as far as Grand Island on the Sacramento River and Andrus Island on the San Joaquin and Mokelumne Rivers (see inclosure No. 12 and pp. 85-87 of the Report of Division of Water Rights, inclosure No. 17). The crops of the delta, valued at \$35,730,800 that year, were seriously endangered by the salinity of the river, and the land escaped permanent damage on a large scale only by reason of the heavy sustained rains of the following winter, which effectually flushed the salt out again." (Engle 165)

Central Valley Project
(CVP)

One of the primary objectives of this project was that of providing much better salinity control and protection for the Delta. This objective was supposed to be accomplished by the maintenance (by water "releases" from the upstream reservoirs of the CVP-Shasta Lake, etc.) of sufficient flows of "fresh water" to, through and from the Delta to effectively repel and control this ever threatening "salinity intrusion".

The voluminous official reports (both State and Federal) prepared in the planning of this CVP project make it manifest that this "salinity control" was one of the important phases of the Central Valley Project.

No comments

- n/a -

Surprisingly enough, however, the Federal government has in recent years (i. e., now that the CVP is operating and it appears that the amount of alleged "surplus water" in the Delta is far below the previous official estimates), been indicating that it disclaims any real responsibility (as operator of the CVP) for such salinity control (i. e., as a mandatory feature of the CVP). This is a situation which in my opinion can and probably will lead to extensive litigation (a subject treated in a subsequent section of this Memorandum).

I do wish to stress, however, in connection with this CVP project (which, of course, is already built and functioning) that it involves the storage and detention in its upstream reservoirs (on the Sacramento River, etc.) of large quantities of water which otherwise, in a state of nature, would normally flow down these streams and thereby serve to "repel salinity intrusion"; as well as to periodically "flush out" the saline consequences thereof in the lower reaches of the Delta. It is true that these "stored flows" are subsequently released from these reservoirs and then flow down stream. However, if the Federal government is successful in its aforementioned avowed purpose of not devoting these "delayed flows" primarily to "salinity control" and secondarily to "export" to the San Joaquin Valley, the gravity of the Delta's "salinity problems" (both physical and juridical) created or aggravated by the CVP is, I believe, patent.

The Brown Water Plan

One of the widely publicized purposes of the so-called Feather River Project (as officially proclaimed over a period of years) has been that of providing (among other things) full and effective "salinity control" for the Delta. It would be expected, therefore, that SB 1106 (i. e., this proposed permanent legislative implementation of the FRP) would contain clearcut and effective provisions making such full and effective "salinity control" a mandatory feature of this new water plan. More specifically, this legislation should have made effective "salinity control" a legal condition precedent to any export of water out of the Delta.

Has it done so? It patently has not. This phase will be dealt with further hereinbelow in connection with my discussion of the subject of a "physical solution". However, in leaving this "salinity phase" for a moment, I wish to stress that this Brown Water Plan will also involve (as does the CVP) the impounding and periodical detention, in various upstream reservoirs, of large portions of the flows of the Sacramento River, with a consequent substantial alteration of the regimen of seasonal flows of "fresh water" to and through the Delta; and a resultant aggravation of the Delta's "salt water intrusion" problem.

No comments

- n/a -

This brings me to the second criticism above, viz:

2. SB 1106 fails to legally protect, IN ANY WAY, the vested water rights of the Delta. Moreover, it actually exposes such rights to a very real danger and probability of infringement and impairment.

This subject has been covered in prior portions of this Opinion. It will also be dealt with in a subsequent "litigation section". It suffices to state at this juncture that, from a water-right standpoint, the serious involvement and possible impairment of water rights (which subjects are discussed in prior sections of this Memorandum) will be especially severe and critical for these Delta water right owners. They are, of course, in the immediate "zone of influence" of these huge pumping drafts of water out of the Delta (i. e., both under the existing CVP and the proposed Brown Water Project)

In view of the aforementioned entire absence in SB 1106 of any governing legal criteria or effective and mandatory legal controls to restrict this "export pumping" the inevitable result of this "legally uncontrolled water exportation" will, in my opinion, be acute "water-right problems" for these Delta water right owners.

My third criticism is:

3. The Brown Water Plan (as now formulated) will seriously and adversely imperil the intricate levee systems so vital to the Delta. SB 1106 contains no legal protection against this.

One of the hydrographic features of the Delta which operate in "delicate balance" is the aforementioned extensive system of earthen levees. (and the water diversion facilities incidental thereto)

The writer can testify as to this from long personal experience as a director of one of the large reclamation districts in the Delta. Although our district is supposed to have (according to our engineer) one of the (if not the) finest and strongest levee systems in the entire Delta, the writer and his co-directors have, during the past fifteen years, "sweated out" a number of critical flood crises. One of the physical features of most of these earthen levee systems is the relative shortness (or scarcity) of "freeboard" (i. e., the distance between the normal water

No comments

- n/a -

line and the top of said earthen levees). The hydraulic problems thereby created are quite serious. A couple of them might be noted in passing. The first is that, if, due to the proposed radical alterations in the hydrology of the Delta (under the Brown Water Plan) the water levels in these channels (i. e., thus "contained" by these levees) are held at a higher level in these channels for any substantial additional period (or periods) of the year, severe (if not disastrous) weakening of these earthen levees can and will occur. There is no legal protection against this in the Brown Water Plan.

Another of the important hydraulic features incident to this extensive system of levees is that the diversion facilities and devices (mainly pumps) used to extract and transport water from these channels (through or over these levees) for irrigation of the adjacent farmlands are, in the main, quite critically related to the existing water levels in these water channels. Here again, if any substantial and abnormal alterations in channel flows or channel characteristics occur, the results for these water diversions will be quite serious. There is, in SB 1106, no legal protection against this.

Now, the Brown Water Plan will presumably involve the construction of large new water channels (i. e., the so-called master "water channels", "wasteways" etc.) In short, as now theoretically and tentatively planned on paper, most (if not all) of these Delta levee systems will be radically altered.

In view of this huge proposed "plastic surgery" on the face of the Delta, one would naturally expect that this proposed permanent legislation (SB 1106) would spell out (in clear detail) specific legal requirements to adequately and fully protect these existing and critical levee systems (and the channel flows "corralled" thereby) against any substantial changes which would prove injurious to these reclamation districts, and their extensive acreages of rich farmlands which are so vitally and continuously dependent upon these protective levees.

However, SB 1106 completely fails to do this.

The foregoing remarks also serve, I believe, to confirm the soundness of the other criticisms set forth above of this Brown Water Plan legislation (i. e., insofar as it relates to the Delta). I will therefore conclude this rather hurried discussion of some of the Delta's legal problems (under the Brown Water Plan) with a brief treatment of the subject of:

No comments

- n/a -

"A physical Solution"

Our "water jurisprudence" contains an important legal concept known as a "physical solution". Our modern California water practice is replete with such legal "solutions". In essence, they constitute a legally binding set of predetermined and instantly applicable "legal controls and criteria", which are utilized, among other things:

- a. to prevent any improper or excessive pumping of "export" water from a basin (such as the Delta).
- b. to prevent other improper or illegal hydrological activities (e. g. undue lowering of groundwater tables; inadequate or inordinate drainage of waste waters, etc.).
- c. to make mandatory any required "upstream" releases of stored water or stream flows in order to ensure adequate water supplies for lower diverters; to protect fish, etc.

If there ever was a legal and hydraulic situation requiring a rigid and detailed "physical solution" for the preservation and legal protection of vested water rights (as well as for the preservation of the other juridical aspects of the "water status quo") it is, (in my firm and studied opinion) this Delta situation, with its multiple hydrological and related legal problems. The principal feature of such a solution should be a carefully worked out set of definitive legal provisions (conditions, restrictions, etc.) to make certain (as far as physically and legally feasible) that, (by way of illustration):

1. No water will be "exported" out of the Delta at any time under the Brown Water Plan which is needed for irrigation or other uses by the vested water right owners.
2. No water will be "exported" out of the Delta (under said plan) which is needed, at any time, to fully and effectively control salinity.
3. Before any water is committed by contract for export out of the Delta (under SB 1106), the State must actually build and operate successfully in or near the Delta, for a sufficient number of years of trial operation, suitable physical works and facilities to fully accomplish the various solutions (i. e., salinity control, etc.) which the State's experts now hope they will be able to achieve under their present incomplete and largely theoretical "paper planning."

No comments

- n/a -

I stress, in the foregoing, the theoretical nature of the present planning of the State (in connection with these Delta problems) because although it may come as a surprise to many, the simple truth is that much (if not all) of this "water planning" for the Delta is still quite tentative, tenuous and incomplete. For example, one of the hoped for solutions to the salinity problem is a "bay barrier". Various schemes have been studied and rejected. One thereof (the so-called "Biomond Plan") is still under study. This is made clear by the aforementioned 1958 publication of the Department:

"One of the integral parts of The California Water Plan still under study is a proposed multi-purpose water barrier project for the Sacramento-San Joaquin River Delta known as the Biomond Plan." ("Water Facts for Californians", p. 11)

Now, what is the relevancy of all of this to the legal question before us? It can be epitomized, I believe, by a simple question:

What if all these now purely THEORETICAL "Delta schemes" prove to be unsound or inadequate?

In other words, the Brown Administration now proposes (as soon as Proposition One is approved) to immediately consummate obligatory and long-term "export water contracts" (i. e., for "export" of water out of the Delta), which contracts will impose onerous burdens on the State for many decades. These long-term and serious contractual obligations (for "export" of water, etc.) will be assumed long before the soundness and feasibility of these various theoretical schemes (now under study) (i. e., to solve the Delta's problems) are built and demonstrated by actual operation to be a success. If these proposed schemes are unsuccessful this "export project" will fail.

Furthermore, the bonds to be authorized by SB 1106 will be sold forthwith and the proceeds spent to construct (among other things) the enormously costly aqueduct to Southern California long before such a "physical solution" of the Delta's problems is first achieved and demonstrated to be feasible.

These and other equally cogent considerations which I have not time to review herein, demonstrate, I believe, the absolute necessity for incorporation in this legislation of a requirement of such a "physical solution" as a legal condition precedent to any of the other aforementioned steps in this water plan. The absence of any such a requirement in SB 1106 is, I believe, but another of the numerous deficiencies, from a legal standpoint, in this vital legislation.

No comments

- n/a -

One final point on this "Delta" phase:

Senate Bill No. 1327 (1959)
(Adding Part 4, 5 to Division
6 of the Water Code)

Delta Protection Act

Some may assert that this particular legislation answers the aforementioned need (from both a legal and practical standpoint) of a physical solution. It is my reasoned judgment that any such argument is clearly unsound for various reasons:

One is that this statute neither contains nor makes mandatory any such a "physical solution". Rather, it amounts simply to:

- a. A legal delineation of the boundaries of the Delta (by metes and bounds); and
- b. Legislative findings as to the severity and uniqueness of the "water problems" of the Delta; its importance as a "hub" of the proposed State Water Resource Development System, etc.; and
- c. A generally stated set of legal principles (i. e., "juridical policies" to govern the operation of the Delta as this "hub" of the SWRDS; etc.)

These generalized provisions in SB 1327 (commendable as they are) do not even remotely constitute the requisite "physical solution" which the writer (and others) feel is an absolutely indispensable legislative and legal sine qua non if the Delta is to receive the full legal protection to which it is entitled (either under the Brown Water Plan or any other water plan involving the use of the Delta for "export" operations).

Another significant aspect of SB 1327 is that it is purely statutory. Therefore, unlike SB 1106, it has no assurance of permanence. In short, any and all of its provisions can be repealed at any future session of the Legislature. It is quite significant, I respectfully submit, that these excellent "policy statements" in SB 1327 were carefully omitted from SB 1106. Had they been included in the latter we at least would have had in this Brown Water Plan legislation a permanent (though generalized) juridical statement of the necessity of protecting the Delta, and solving its "unique" problems.

For all of the foregoing reasons, therefore, SB 1106 is, in my opinion, basically and legally deficient insofar as the Delta is concerned.

--o0o--

No comments

- n/a -

QUESTION NO. 5: COULD SB 1106 BRING
ABOUT THE "LEGAL FRANKENSTEIN"
FEARED BY THE ENGLE COMMITTEE?

I - OPINION: My firm opinion is that not only can SB 1106 (if adopted) bring about the almost interminable water litigation in the Central Valley which was so aptly described by the Engle Committee as a "Legal Frankenstein", but that (in all probability) it will have this result.

The absence of any comprehensive adjudication of the vested water rights of the Central Valley; the complete failure of SB 1106 to provide any effective legal controls to regulate this "export pumping"; and the extremely complex and confused hydrological situation in the Delta which the Brown Water Plan will bring about, constitute the principal considerations which impel me to this conclusion as to the probability of this scourge of litigation (i. e., if Proposition One is approved by the People).

II - SUPPORTING ANALYSIS AND ARGUMENT: Before briefly renewing my reasoning with respect to this phase, I desire to touch upon two preliminary aspects. The first is:

The Engle Committee's appraisal
of the "litigation potential" in the
Central Valley.

As indicated in a prior section of this Memorandum, this Engle Congressional Committee held extensive hearings (in 1951) in California, which were devoted almost entirely to this intricate "water right situation" in the Central Valley. One of the specific subjects receiving its attention was the aforementioned recommendation of Governor Earl Warren (and other state officials) that this very confused, unsettled and complex water right situation in the Central Valley should be completely clarified and definitively settled by a comprehensive adjudication of all of these inter-related water rights. The Engle Committee was aghast at the enormity of this proposed litigation, concluding, among other things:

"(b) The State of California and Bureau of Reclamation officials may create a 'legal Frankenstein' which would destroy all hope for State control of Central Valley water rights, especially if the adjudication is in the Federal Court with Department of Justice representation in behalf of the government ;

No comments

- n/a -

(d) The cost of the proposed lawsuit would be enormous and the number of persons who would be involved is indefinite, having said to be 'astronomical' in number by one Federal witness;

(e) Further, it would embroil the Central Valley Project in litigation for decades." (Engle 681)

Another aspect which caused this Engle Committee serious concern (and one which will make the Delta's problems under the Brown Water Plan even more severe, complex and difficult) is the basic legal conflict between the Federal Government (as operator of the CVP) and the State (as proposed operator of the FRP).* Both of these gigantic projects involve, of course, the pumping of huge quantities of "export water" from the Delta. The Committee also made a formal finding as to this:

"Findings - (a) The record clearly shows a conflict between the Bureau of Reclamation and the State of California over the water rights of the Feather River - the Bureau claiming those water rights under an assigned water-right application which is needed for the operation of the Central Valley project, and the State claiming the water is available for the State to construct and to operate the proposed billion and a quarter dollar Feather River Project;

(b) The proposal of the State engineer to utilize the Feather River water resources without proper coordination and consultation with the Bureau of Reclamation impinges on the assignment already made by the State engineer to the Federal Government which is necessary to operate the Central Valley Project." (Engle 684)

The Committee also concluded that: "This conflict is so basic to the operation of the project that it should be resolved as quickly as possible." (Engle 702)

It might also be mentioned that this basic conflict between the Federal government (CVP) and the State (FRP) over the waters of the Central Valley still persists. The recent State-Federal Agreement (May 16, 1960) for a "co-ordinated operation" of these projects (constructive though it may be) does not, in my opinion, eliminate this conflict nor obviate the severe effect these "competitive" "Delta Export Projects" will have upon the Delta, and aforementioned hydrological and

* This subject is dealt with in detail in the writer's Memorandum Opinion of December 31, 1958, to Mr. Gordon Garland, Executive Director of CWDC. (see pp. 29 to 32)

No comments

- n/a -

legal problems. Rather, it underscores and emphasizes the magnitude of the hydrological impact of these huge pumping "drafts" out of the Delta; calling (as it does) for annual "diversion requirements" by the United States of up to 8,300,000 AF, and for the State of up to 5,260,000 AF.

It incidentally should also be noted, in this regard, that a vital and basic condition of this recent Federal-State agreement is that, for all practical purposes, it does not become effective until "after the construction of the major storage facilities of the Feather River and Delta Diversion Projects" (see par. 12, p. 6). When this is coupled with the fact that it now appears probable that the Oroville Dam (i. e., as a major reservoir) will not be built for many years to come, even this phase as to "starting point" of this recent "cooperative agreement" becomes considerably clouded.

The second consideration preliminary to my analysis of this "litigation potential" of the Brown Water Plan is:

The utter "water-right complexity" in the Central Valley which this plan will bring about.

This subject as to the complexity of the Central Valley "water-right situation" is reviewed at length in my aforementioned Memorandum Opinion of December 31, 1958 (to CWDC). I will, therefore, do no more herein than to give a summarization thereof (with cross references to my said earlier Memorandum).

The complexity of this Central Valley water-situation in the pre-project era (i. e., before the CVP), and the completely unsettled and unadjudicated status of this multitude of vested water rights, was excellently portrayed by Mr. Holsinger in his aforementioned testimony before the Engle Committee (Memo of 12/31/58, pp 16-19).

With the advent of the CVP this "water-right situation" became much more complicated (Memo, 12/31/58, pp 19-25). As Mr. Holsinger so succinctly summed up this CVP project (from a water-right standpoint):

"Never in the history of the State has there been an instance where a water conservation project was put in operation which involved such violent and extensive changes in the regimen of any stream". (Engle 765)

The Engle Committee also stressed the unprecedented nature of this mammoth project, viz:

No comments

- n/a -

"The integrated operation of the initial features of the Central Valley project commencing July 5, 1951, brings into being huge man-made transfers of water from one watershed to another. This huge transfer is unprecedented in our State. . ." (Engle 675)

The magnitude of this project is also aptly described in a recent opinion (1956) of the U. S. District Court (at Fresno) in Rank v. Krug, viz:

"As hereinbefore pointed out, the Central Valley Project of California is a colossal undertaking, or as stated by Justice Jackson - 'A big bundle of big projects'. The gigantic dams envisioned, some of which are built, the tremendous canals and diversions of waters of rivers, with the resulting change of diversion and of underground waters affects millions of acres of land, tens of thousands of farmers, and practically all, if not all, of the cities in the valley which secure their water mostly from wells." (142 F. Supp. 98)

The Brown Water Plan (SB 1106)

This enormous project (or series of projects), which has as its "hub" the so-called Delta Pool, with its pumping of huge quantities of water from the Delta, (i. e., in addition to the CVP "drafts") will obviously superimpose upon an already extremely complex water-right situation, tremendous additional hydrological changes and problems, some of which are indicated in earlier portions of this memorandum.

Truly, the hydrological and water-right situation which will then exist will be one of almost incredible complexity. It must be remembered, in all of this, that these huge amounts of so-called "project water" (i. e., the "surplus") will be completely commingled with "vested right" water (i. e., the "non-surplus"), both in transit along the Sacramento River and in the so-called Delta Pool. In other words, their individual identities will, of course, be completely lost. To again borrow a colorful phrase from Mr. Holsinger, none of these several sources of water thus to be commingled have "any distinctive coloring". (Engle 773)

{One of the many adverse results of all of this complexity and this confusion, to the water right owners in the Central Valley (riparianists, etc.) (and especially to those in the Delta) will be that, unless a proper "physical solution" is worked out, they will never know or be able (as a practical matter) to quickly and inexpensively determine (i. e., without litigation) the extent to which their vested water rights are being invaded

No comments

- n/a -

from day to day by this mammoth man-made manipulation of water in the Central Valley. Stephen W. Downey, Esq., lucidly explained this phase in his statement submitted at the hearing before the Engle Committee. Speaking in behalf of Sacramento River water users and with respect to the five water right applications by the Bureau of Reclamation in connection with the CVP, he testified:

"My concern is to explain why every water user in this basin is affected by these applications. . . ."

Such a massive appropriation of water naturally alarms the Sacramento River agriculturists. All normal ways for protecting a valuable water right and for acquiring a right to additional water as it is needed disappear. The river is controlled by a Federal agency through giant reservoirs and canals so that the individual water user cannot tell what has become of his water or how to get it back. There is little wonder that the Bureau's applications have created as much furor as they have." (Engle 787)

*enclosure
and
commodification
by the state*

The Nature of this Probable
Litigation

The litigation which I believe will occur if the Brown Water Plan is put into operation could happen in several different ways. One thereof would be:

Litigation by the water right owners
in the Central Valley to protect their
vested rights against excessive
"export" pumping from the Delta.

It is inevitable, in my opinion, that these Central Valley water right owners (and particularly those in the Delta) will find themselves in a most difficult situation (under this new "hydrological picture") as future dry cycles occur. The Delta is, of course, "at the end of the ditch", in the sense that it lies at the lower end of the Sacramento and San Joaquin Rivers. The heavy burden this physical situation imposes upon these "lower users" is well described by Mr. Holsinger:

"The uppermost user, it is axiomatic in water-right litigation, is in possession of the source of supply and by physical law necessarily the water will become available to the lower users only to the extent he who has control upstream allows it to flow past his point.

No comments

- n/a -

of diversion. The old adage therefore applies that 'possession is nine points of the law.' This position therefore casts a heavy burden upon the lower users," (Engle 768)

Also:

"In the existing condition of human nature, it may be confidently predicted that those intervening users, finding an abnormal increment in the stream, will each for himself define and exercise their rights in their own favor with substantial elasticity." (Engle 773).

The end result will be, in my opinion, that these water right owners in the Delta will find themselves in a gigantic "hydraulic squeeze", resulting from this "upstream" diminution in the flows (i. e. from the North) and the huge CVP and FRP Delta "exports" (i. e., to the South.) In short, they will be "caught in the middle".

It should also be noted (in connection with this "water squeeze") that it now appears that SB 1106 will not finance the Oroville Reservoir and that this unit will be delayed for many years. In other words, the large amount of "conserved water" which this reservoir was supposed to conserve and feed into the Delta will not be available to alleviate this water squeeze in the Delta. Ironically, this was to be the "key unit" of the Brown Water Plan:

financed by reservoir bonds
actually, it was completed by ~1975?

"The key unit of the project is a dam to be constructed on the Feather River, almost five miles above the City of Oroville. This structure will be 730 feet high, which is 20 feet higher than Hoover Dam. Behind the dam will be a reservoir with a storage capacity of 3,500,000 acre-feet of water, and a shoreline of 167 miles". (Water Facts For Californians, 1958, p. 10)

In short, this future "water squeeze" would thus be further aggravated by this important change in "project plans",

The foregoing are some of the "hard realities" which could, and in my opinion will, cause (in future dry cycles) the "legal Frankenstein" depicted by the Engle Committee.

No comments

- n/a -

Incidentally, it should be noted that similar (but far less severe) "hydrological pressures" gave rise to "a flood" of water litigation in the Central Valley during the "dry cycle" of the 20's. This was described by the Engle Committee as follows:

"Throughout 1928, the Joint Legislative Water Problems Committee continued to study the Bulletin No. 12 plan in an increasingly serious situation of ground-water depletion that was intensified by a 2-year drought. The Joint Committee reported to the 1929 Legislature that ground-water levels from the Kings River south were falling to such an alarming extent that Federal farm loans had been discontinued. At the same time, the Joint Committee reported that irrigation, power, and domestic uses had drawn so heavily on summer flows of the Sacramento and San Joaquin Rivers that salt water intrusions were causing damage in the delta, and a vast number of legal controversies had been instituted between cities and others, power companies and other appropriators, and between delta interests and all irrigators or appropriators in the Sacramento and San Joaquin Valleys." (Engle 7)

I might add that in one of these many lawsuits of the 1920's (Town of Antioch v. Williams Irrigation District, etc., Superior Court of Alameda County, No. 62328) there were over six thousand defendants (including those named by fictitious designations.)

This early litigation also confirms one other salient aspect which I wish to emphasize: The Central Valley water right litigation which the writer believes will occur as a result of this Brown Water Plan will not be a "piecemeal" or "localized" affair. To the contrary, it will, ^{as a} necessity, have to be a comprehensive adjudication involving all water rights and water resources in the Central Valley. A partial adjudication would have no more efficacy nor utility than "half a bridge".

1945
WRCT
resulting
from
Recesses

A second "litigation potential" is:

Litigation by the State to protect the "surplus" water in the Delta Pool.

Most of the considerations expressed above apply to this situation. Time will not permit herein any review of the many ramifications of this phase of the "litigation potential" of this proposed new water picture. It suffices to state that it too would necessarily result in the "monstrous lawsuit" described by the Engle Committee.

No comments

- n/a -

Third Alternative

Another "Legal Frankenstein" which could (and the one which I believe will) occur would be a suit by Delta water-right owners (and other Delta water interests) to secure and compel a "physical solution" of the type which I have briefly described above. Burdensome as it may be, this, in my reasoned judgment, is the only logical course for these water interests to follow (if SB 1106 becomes law). In this way, these Central Valley water right owners instead of awaiting and suffering the various adverse and grave consequences above described, would be able to accomplish a sound and legal solution of these many problems before this project is built or operated. Among its advantages, this legal action would, in my opinion, bring about the following salutary results (among various others):

Delta
occurs

1. A legally enforceable set of effective controls to fully and adequately protect these "vested water rights" (at all times) in connection with any "export pumping" out of the Delta.
2. None of these proposed "Delta water exports" (under the Brown Water Plan) could legally occur unless and until satisfactory and adequate "physical works" (e. g. such as a bay barrier, etc.) are first built and operated successfully (for a trial period of years), so as to solve the aforementioned hydrological problems of the Delta.

Among other things, such litigation would directly dispute the existence of the alleged "surplus" water which is the indispensable predicate of the Brown Water Plan. It is my opinion that one result of this will be that no bonds authorized by SB 1106 will be saleable until this litigation is finally resolved.

←

Incidentally, I might add that the writer is already authorized by his clients to institute this type of litigation if Proposition One is passed. I hope it can be avoided. If not, it will ensue.

hmm
what
about
if this

Please also let it be noted for the record that my clients have made every reasonable effort to avoid any such undesirable results by bringing about a sound water plan; one which (on the one hand) would fully "insulate" and protect these vital and indispensable water rights of the North, and, (on the other) would result in the South securing a perpetual and irreducible water right out of the North Coastal Basin, which, as the State's own water statistics show, is the only true source

No comments

- n/a -

and locale in Northern California of substantial amounts of "surplus" water. (see Memorandum of December 31, 1958). The aforementioned "Preview" states:

eg -
Trinity
Klamath
Siskiyou
etc.

"The North Coastal Area with its large natural water supply, 41 per cent of the State's total" (i. e. 71,000,000 AF annual mean) "should ultimately require only about 4 per cent of the water consumptively used throughout California." (p. 6)

Incidentally, the "Statement of Policy" widely circulated in 1958 by the California Water Development Council (a client of the writer) (under the leadership of Gordon Garland, Executive Director) outlined the salient features of a sound water plan. This was submitted for the consideration of Governor Brown and various other interested parties (including the South). This "Statement of Policy" states (as its Point 16) as follows:

"THE ONLY AREA OF UNQUESTIONED SURPLUS IS THE NORTH COASTAL AREA. For this reason a new major water export project from this area should be committed and constructed concurrently with the Feather River Project"

And, in concluding this chapter as to the probability of a "legal Frankenstein", it should be stressed that this "litigation scourge" will also seriously militate against the South's best interests. Among other things, it will, in my opinion, "freeze" the South's (as well as the State's) water planning (at least in so far as "exports" from the Delta Pool are concerned) for a long time to come. This should be contrasted with the sound water plan which the CWDC advocated:

"PART TWO - THE NORTH COASTAL ROUTE"

"This is the solution which your Council has advocated for so long. It is a sound solution. It is a permanent solution. Its 'litigation potential' is practically nil.

"Furthermore, this solution will enable the South to acquire a perpetual right to a huge quantity of water, a right not at all dependent upon "diligence," and one which cannot be eroded away by future increased Northern water uses in the Central Valley. Moreover, this excellent and very desirable 'water right' can be assured to the South by a basic 'water compact', confirmed (if desired) by a constitutional amendment (see p. 9 infra)" (Memo, 12/31/58; p. 6)

No comments

- n/a -

QUESTION NO. 6. DOES SB 1106 CONTAIN ADEQUATE LEGAL SAFEGUARDS TO PROTECT THE TAXPAYERS OF THIS STATE AGAINST THE POSSIBILITY OF DEFICITS IN CONNECTION WITH THIS PROPOSED MULTI-BILLION DOLLAR BOND ISSUE?

I - OPINION: Various important legal safeguards which should have been incorporated in this legislation for the proper protection of the State and its taxpayers are absent therefrom.

These proposed bonds are general obligation bonds and therefore will have to be paid by the California taxpayers if the net revenues from this Water Project are not sufficient to meet the more than four billion dollars (principal and interest) which must be paid by the State in large annual installments over a period of many decades to come. These are not "revenue bonds" (as some people seem to think). To the contrary, if the revenues from this water project are not adequate, the general taxpayer will have "to foot the bill". Therefore, every proper legal safeguard for the protection of the State and its taxpayers should have been included in SB 1106. This was not done.

II - SUPPORTING ANALYSIS AND ARGUMENT: It is not within the purview of this opinion to deal with the many fiscal problems which will arise in connection with the vague and loosely drawn provisions of SB 1106 dealing with this proposed bonded indebtedness.* We will, however, mention two "fiscal facets" as a preliminary to a brief discussion of some of the legal defects in SB 1106 from the standpoint of its lack of proper protection for the California taxpayers.

The first is that this huge proposed bond issue will have a very serious and adverse impact on the bonding capacity of the State for a long time to come. It will make it more difficult and costly to market many other types of bonds which California (and its many local districts - such as school districts, local improvement districts, etc. etc.) will have to sell during the coming decades in order to finance many needed local developments (schools, etc.).

* The legal aspects of many of these doubtful "fiscal phases" are reviewed in the "Interim Report" of Chas. T. Main, Inc. (July, 1960.)

No comments

- n/a -

The second "fiscal fact of life" is that with its already huge bonded and other indebtedness, California must be most careful in incurring further general indebtedness lest the State reach the point of serious financial involvement. As State Treasurer Bert Betts recently (in September 1960) warned (in discussing the already existing saturation of the national bond market with California Veterans bonds), the credit of the State is being dried up and impaired. He flatly stated that "we must look out for the credit of the State now before we go into bankruptcy", *

This same admonition was voiced in a recent issue (July 11, 1960) of Barron's (the national financial journal), in an article entitled "Strained Finances May Jeopardize California's Investment Status".

Now, in the light of these indisputable fiscal considerations (upon which all financial experts seem to be in accord) I will briefly outline a few of the basic legal shortcomings in SB 1196 from the standpoint of its failure to protect the State and its taxpayers against possible huge deficits under the Brown Water Plan.

* "California has to pay higher interest than the national average, largely because of the great volume of bonds we market. I've been East promoting our bonds four or five times since I took office and everywhere I go bond people ask 'when is your veterans program going to end?' Eventually we're going to fill every bond portfolio in the country with Cal-Vet bonds. We are going to reach the point one day where the State of California will not get a bid on a bond sale.

"We must look out for the credit of the State now, before we go into bankruptcy. ... And I happen to be a veteran of the State of California." (S. F. Chronicle, Sept. 25, 1960)

The Governor apparently participated in this same "veterans conference" at Sacramento. He is reported as saying: "Vet bonds glut the market and force higher interest rates on other types of bonds."

No comments

- n/a -

1. Absence of any legal safeguards to prevent expenditures of the bond proceeds fund before sufficient "water contracts" are first consummated.

Under the Brown Water Plan the State officials can proceed (as soon as SB 1106 is approved by the People) to expend these hundreds of millions of dollars on the aqueducts and other facilities comprising the project (State Water Resources Development System) irrespective of whether or not PROPER "water contracts" with financially sound water districts have FIRST been consummated. This is, in my opinion, a basic legal defect. There should be in SB 1106 a clear prohibition against the expenditure of these huge sums (of borrowed money) unless and until the State has first carefully formulated and consummated proper "water contracts" of such a nature (e. g., with a sound price formula, etc.) that the reasonable amortization of this huge debt will be absolutely assured. This, in my humble opinion, is a minimal requisite protection for the general taxpayers. Without such a provision the general taxpayer is entirely at the mercy of these State officials. Any serious mistakes on their part in this respect could prove disastrous to the State.

Metropolitan Water District caught this fundamental defect in SB 1106. In its draft of proposed water contract (Draft of 6/9/60) (which it submitted to the Governor on June 9, 1960) Metropolitan inserted a paragraph (9-f) requiring that no bonds be sold nor funds expended under the Bond Act (SB 1106) for the construction of any aqueduct or other water facilities of the SWRDS (with certain minor exceptions):

"until the State shall have entered into contracts which will provide for repayment of at least 75% of the construction costs thereof, allocated to water supply for reimbursement by the contractors, with contractors having an adequate tax base or other evidence of ability to perform their respective contractual obligations." (p. 9/6)

While this commendable effort to thus "plug" this deficient legislation is cogent confirmation of its basic inadequacy, such "patching by contract" is, in my opinion, an inadequate and dangerous substitute for proper legislation. ✓

No comments

- n/a -

2. Absence of any requirement of a proper determination of "surplus" before physical facilities are built.

The indispensable keystone of the entire Brown Water Plan is these "water and power contracts". Why? Because they are the sole source of revenue to pay off this huge bonded indebtedness (apart from general tax revenues).

Now, these vital "water contracts" are in turn based on the assumption that there will be sufficient "surplus" water available in the Delta Pool through these many decades to come, to properly service these contracts.

But what legal assurance is there that this will be so? Absolutely none. To the contrary, the record (including the State's own data) plainly shows (as above indicated) that there is a grave doubt as whether or not this alleged "surplus" exists or will hereafter exist in the Delta; particularly if the Central Valley is to continue to expand and develop its natural resources (including its invaluable and indispensable water resources),*

However, and entirely apart from the question as to whether or not there is any serious doubt as to the existence of this necessary "surplus", one thing seems crystal-clear to me. It would seem to be simple prudence and plain common sense to determine, in a proper and legal way, the existence or non-existence of adequate "surplus water" before these hundreds of millions of dollars are spent on physical works. Empty reservoirs or aqueducts will not pay off this enormous bond issue.

Covering the same matter from a little different approach, what will happen if these physical works are built and then a "Legal Frankenstein" occurs (as above indicated) and such litigation results in a legal demonstration of the non-existence of an adequate amount of "surplus water" to properly service these "Delta export water contracts"? It does not require a water lawyer to foresee the critical financial situation in which the State would then find itself.

* It should never be forgotten that this future expansion and development is directly dependent upon proper protection of the North's "area of origin" water preferences and reservations." (p. 26 supra)

No comments

- n/a -

Furthermore, it is no answer to this to assert that the State would then be forced to "switch horses" and turn to the North Coastal Basin for a water supply. One fallacy in any such argument is that it overlooks the fact that SB 1106 does not include the funds which will be needed for this admittedly costly North Coast development. In fact, there is now a serious doubt, (in view of the findings of the State's independent consultants), as to whether SB 1106 will provide sufficient funds to complete the Oroville Dam project (on the Feather River), which up until recently has been the widely heralded hydraulic keystone of the Brown Water Plan.

-
3. Absence of any adequate provisions in SB 1106 to ensure that these vital water contracts will contain all necessary protective provisions (e. g., price formulas, etc.)

Governor Brown and his staff have already attempted to construe SB 1106 as conferring upon them the full and unfettered discretion to determine what "terms and provisions" should be incorporated in these vital "water contracts" (which bear so directly on the State's future solvency). As stated above, pursuant to this interpretation, the Governor and his staff have recently been engaged in rather frantic attempts to consummate the aforementioned important water contract with Metropolitan Water District.

This interpretation of SB 1106 is, in our opinion, an unsound one. It is now the subject of litigation recently instituted by us in the Kings County Superior Court, which is briefly discussed in a subsequent section of this Opinion.

However, we will assume in this portion of our Opinion that SB 1106 can be so interpreted. Assuming this, it obviously is a legally defective statute from the viewpoint of proper protection for the taxpayer. Why? Because the very least this law should have done (on this phase) was to provide basic and controlling criteria (including proper "pricing formula") to make certain that these vital water contracts will always yield sufficient revenues to fully pay off this bonded indebtedness.

Time exigencies will not permit any further analysis of this phase herein but I do wish to point out, in leaving it, that your Honorable Committee and other legislative committees have heretofore spent a considerable amount of time studying this very aspect of "water contracts" and

No comments

- n/a -

their basic terms and conditions. One interim result of these studies is the "Report" issued by the Senate Fact Finding Committee (in March 1960) containing many excellent suggestions (e. g., price formulas, conditions of power sales, etc.) for study in connection with these vital "water contracts". The tragedy, however, is that these important protective provisions are no part of this Brown Water Plan legislation. Furthermore, if the Administration's interpretation of SB 1106 is correct, (i. e., that the Department has a full and unfettered power to decide what provisions should go into these "water contracts"), there will be no real opportunity to adopt, by appropriate legislation, any of these necessary safeguards and protective provisions so essential to the future welfare of California and its taxpayers.

--o0o--

No comments

- n/a -

QUESTION NO. 7. WILL THE GOVERNOR AND HIS EXECUTIVE OFFICIALS HAVE THE AUTHORITY AND POWER (IF SB 1106 IS APPROVED) TO FIX AND DETERMINE, IN THEIR SOLE DISCRETION, THE TERMS AND CONDITIONS OF THE "WATER CONTRACTS" WHICH WILL BE THE SOLE SOURCE OF REVENUES (OTHER THAN THE GENERAL FUNDS OF THE STATE) TO PAY OFF THIS HUGE BOND ISSUE? WILL THE LEGISLATURE HAVE ANY VOICE IN SUCH MATTERS?

I - OPINION: My opinion is that the Legislature and not the Executive Branch has the exclusive right and power (and responsibility) of fixing the basic criteria (i. e., the fundamental terms and conditions) of these vital "water contracts", to be executed pursuant to SB 1106.

II - SUPPORTING ANALYSIS AND ARGUMENT: This question goes to the very heart of the Brown Water Plan (SB 1106). Why is this true? Because unless all of the many important aspects of these vital water contracts are carefully and providently planned, the State can and will find itself in serious trouble. Your Honorable Committee is familiar, of course, as a result of your aforementioned detailed studies, with the many ramifications (both legal and fiscal) of this all-important "water contract phase". There is, therefore, no need to detail them herein.

Rather, I will merely summarize the salient aspects relevant to this question as to which branch of the State government has the power to formulate the basic terms and conditions of these "water contracts",

1. Pertinent Provisions of SB 1106

Paragraph 12937-(b)-(4) of the Act provides (in part) that:

"The department, subject to such terms and conditions as may be prescribed by the Legislature, shall enter into contracts for the sale, delivery or use of water or power, or for other services and facilities, made available by the State Water Resources Development System with public or private corporations, entities, or individuals."

No comments

- n/a -

2. Pending Litigation

This question as to what these provisions mean (in the sense of "contract power") is now being litigated in the case of "E. C. Salyer vs. Edmund G. Brown, Harvey O. Banks, Ralph M. Brody, et al." Action No. 14952 in the Superior Court of Kings County, California. A temporary restraining order was issued (and is now in force) enjoining the execution of the proposed contract with Metropolitan. The writer (and the legal firm of Rosson & Pearson of Hanford, California) represent the plaintiff. We have recently filed a brief in support of our position in that case (as outlined hereinafter). Therefore, instead of setting forth a detailed legal analysis herein, I will simply state our conclusions and will incorporate in the "Supplement" the relevant portions of our written argument in this Kings County case.

of Salyer & Brownell



3. Our interpretation of these "contract provisions" of SB 1106.

Our conclusions, based on a careful study of these provisions (in the light of clearly established principles and "canons" of statutory construction) may be summarized as follows:

First: No "water contracts" can be signed until SB 1106 first becomes law (by approval of the People). This conclusion is based on elementary legal principles. These well settled principles of our jurisprudence clearly demonstrate, in our opinion, the illegality of the present efforts of Governor Brown and his staff to consummate the aforementioned vital water contract with Metropolitan.

Second: If Proposition One is approved by the People, the power to formulate the basic terms and conditions of these "water contracts" is a legislative function which resides in the Legislature, and not in the Department of Water Resources.

Third: If SB 1106 is to be construed as delegating this important legislative power to the Department, it is unconstitutional and void as an unlawful delegation of legislative power. It is further defective and vulnerable (constitutionally) because it is completely devoid of the requisite "controlling criteria" (i. e., "guidelines") to limit and control the discretion of the Executive officials.



No comments

- n/a -

competent lawyers will concede, I believe, that such declarations do not and cannot change the controlling legislation (SB 1106).* In brief, such pronouncements have no legal efficacy whatsoever. They are binding upon no one. Legally speaking, they are worthless.

Furthermore, they are patently ephemeral. In other words, insofar as having any 'permanency' they might as well be "written on ice". In this connection, it is also interesting to observe that the authors of most of these "policy statements" are soon to leave the service of the State. Director Banks and Deputy Director Brody have already tendered their resignations to the Governor. Their successors obviously will not be bound by any of these many "policy pronouncements" heretofore made by these gentlemen.

Incidentally, these "personnel facts" (which are but another of the frequent reminders of the rather rapid turnover of administrative officials) constitute, I respectfully submit, cogent confirmation of the wisdom of our "founding fathers" in establishing a "government of laws" and not a "government of men". SB 1106 will be with us for a long while (if approved by the People) whereas these evanescent "policy statements" have no durability whatsoever. In brief, they are no adequate substitute for law.

--000--

* This was ably demonstrated to the San Francisco Board of Supervisors by Hon. Dion Holm (long-time City Attorney of San Francisco and an outstanding water lawyer). In his excellent formal "Opinion" (No. 1426) (under date of March 8, 1960) (re SB 1106) he clearly shows (by extensive citation of California authorities) the inefficacy and worthlessness (from a legal standpoint) of any such "ex post facto declarations" by the Governor (or others).

Incidentally, after reviewing a number of perplexing legal ambiguities in SB 1106, Mr. Holm concluded: "The courts would indeed be called upon to exercise extraordinary mental dexterity in construing the quoted language. Examples (1) to (4) above are not a complete listing of doubtful points in the bill."

No comments

- n/a -

CONCLUSION

Most legal experts who have studied SB 1106 believe that it is a badly drafted statute and that it is replete with material ambiguities which will breed much future litigation. *

In addition to these many ambiguities, SB 1106 contains basic legal defects which could endanger the future fiscal fate of all of California; as well as seriously involve and impair the presently "vested water rights" of Northern California; and also imperil the "area of origin reservations" which are the only substantial source of Northern California's additional water needs in the future.

One of the numerous adverse results of this defective legislation will be, in my sincere and firm opinion, a scourge of almost interminable water controversies; a litigation legacy which could plague California for decades to come.

Respectfully,



WALTER M. GLEASON

* Our 1960 Water Lawyers Committee of the San Francisco Bar Association (Dan Hadsell, Esq., Chairman) (of which the writer is a member) so concluded after an exhaustive analysis of SB 1106. The report of this Committee to the Board of Governors of the San Francisco Bar Association (under date of October 27, 1960) states:

"With one thing members of the Committee are very much impressed. It is that SB 1106 is a badly drafted statute. If enacted it is bound to be productive of litigation which will very much impede administrative progress in implementation of the Act but which will be necessary to clarify meanings or effect of language or to settle many legal problems. True it is that any important new statute will generally provoke litigation over its meanings and effects; but such legal challenges are generally reduced to a minimum by good drafting. That is not so with this measure. Litigation under this Act will likely be excessive."

Bay-Delta Water
Economics of Choice



No comments
- n/a -

January 11, 2013

ECONorthwest
ECONOMICS • FINANCE • PLANNING

99 W. 10th Avenue, Suite 400
Eugene, OR 97401
Phone: 541-687-0051
www.econw.com

©2011 ECONorthwest

No comments

- n/a -

This page intentionally left blank.



CONTACT INFORMATION

This report was prepared by Mark Buckley, Ed MacMullan, Sarah Reich, Bryce Ward, and Ed Whitelaw, with technical support from Philip Taylor, all of ECONorthwest, which is solely responsible for its content.

ECONorthwest specializes in economics, planning, and finance. Founded in 1974, we're one of the oldest independent economic consulting firms in the Pacific Northwest. ECONorthwest has extensive experience applying rigorous analytical methods to examine the benefits, costs, and other economic effects of environmental and natural resource topics for a diverse array of public and private clients throughout the United States and across the globe.

For more information about ECONorthwest, visit our website at <http://www.econw.com>.

For more information about this report, please contact:

Ed MacMullan
ECONorthwest
99 W. 10th Ave., Suite 400
Eugene, OR 97401-3040
541-687-0051

No comments

- n/a -

No comments

- n/a -

This page intentionally left blank.

No comments

- n/a -

TABLE OF CONTENTS

CONTACT INFORMATION	1
SECTION 1: CONTEXT AND ASSIGNMENT.....	1
SECTION 2: ECONOMICS AND THE CHOICES CALIFORNIA FACES	3
SECTION 3: ECONOMICS AND THE STATE WATER BOARD'S BALANCING DECISION IN <i>MONO LAKE</i>	6
SECTION 4: THE EVOLUTION OF THE ECOLOGICAL USES OF PUBLIC-TRUST RESOURCES AND ECONOMIC METHODS	9
A. Ecological Uses of Public-Trust Resources.....	9
B. Evolution of Economic Methods	10
1. Federal Guidelines	10
a. Principles and Guidelines.....	10
b. EPA Guidelines on Economic Analyses.....	12
c. EPA Guidelines on Valuing Ecological Services.....	13
2. Guidelines by the California Department of Water Resources.....	14
a. Multi-Objective Approach to Floodplain Management	14
b. Economic Analysis Guidebook.....	16
SECTION 5: THE PRINCIPLES OF BENEFIT-COST ANALYSIS.....	18
A. Identify the Alternatives	18
B. Identify the Relevant Scope.....	18
C. Assemble Information and Account for Risk and Uncertainty	19
D. Best Practices for BCA	21
SECTION 6: OBSERVATIONS ON THE BURGEONING LITERATURE ON BAY-DELTA FLOWS.....	23
A. BCA without Adequate Data Would Suffer Fatal Flaws.....	23
B. Assessing the Analytical Veracity of Past Studies of Conveyance Structures	25
C. Addressing Environmental Justice Consequences of Water-Management.....	27
D. Describing the Relevant Economies as Dynamic, Not Static	29
E. Describing the Complex Competition for Bay Delta Water Resources.....	31

No comments

- n/a -

SECTION 1: CONTEXT AND ASSIGNMENT

Water flows from the Sierra Nevada into the Sacramento and San Joaquin Rivers, which in turn flow into the San Francisco Bay-Delta, and from the Delta Bay into the Pacific Ocean. In 2009, the California state legislature enacted the Delta Reform Act. As part of that legislation the California State Water Resources Control Board (State Water Board) was instructed to report to the Delta Stewardship Council (Council) the Board's view of what flows would be necessary to protect the Delta ecosystem. In its August 2010 report, *Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem (Flow Report)*¹, the State Water Board expressed its concerns about the Bay-Delta flows.² It concluded that the Bay-Delta flows are inadequate. They threaten native fish³, and thereby violate California's obligations under the public-trust doctrine.⁴ According to the *Flow Report*, changing flow conditions in ways that would support native fish species requires improving the Bay-Delta flows throughout the year.

If we understand the Council's role correctly, then to allocate the Bay-Delta flows well, the Council would seek to balance its obligations to protect public-trust use of the Bay-Delta flows with its obligations to support the dual coequal goals of i) habitat conservation and management, and ii) improving reliability of water supplies. This balancing task includes:

- a. Developing alternatives to increase the efficiency and equity of allocating the Bay-Delta flows among the competing instream and consumptive demands⁵
- b. Describing the economic, biophysical⁶ and other effects of the alternatives
- c. Selecting what it regards as the best of the alternatives and enforcing the efficient allocation of the imputed flow conditions.

Economics, at its core, is the science of choice⁷ or, as it is defined frequently in introductory textbooks, the study of the allocation of scarce⁸ resources among competing

¹ These species include Chinook Salmon, Delta Smelt, and Bay Shrimp. *Flow Report*, p. 5 and 8.

² *Flow Report*, p.1-7; *Flow Report*, p.12: "The purpose of the public trust is to protect commerce, navigation, fisheries, recreation, ecological values, and fish and wildlife habitat. Under the public trust doctrine, the State of California has sovereign authority to exercise continuous supervision and control over the navigable waters of the state and the lands underlying those waters. [citation omitted] A variant of the public trust doctrine also applies to activities that harm a fishery in non-navigable waters. [citation omitted]"

³ Instream demands are water uses that can be carried out without removing the water from its source, such as in navigation and recreation. Consumptive demands are water uses which lessen the amount of water available for other uses, such as in manufacturing, agriculture, and food preparation. [U.S. Bureau of Reclamation, *Glossary*, January 5, 2011. Retrieved June 24, 2011, from <http://www.usbr.gov/library/glossary/>.]

⁴ By 'biophysical,' we mean the biological effects (e.g., on plants and animals), ecological effects (e.g., on ecological systems), and physical effects, e.g., on water, land and air). We do not mean the interdisciplinary science of biophysics that, as Wikipedia tells us, 'uses the methods of physics and physical chemistry to study biological systems.' We apologize for any confusion, and plead only expedience for our lack of precision. [2011. *Biophysics*. May 16. Retrieved June 27, 2011, from en.wikipedia.org/wiki/Biophysical].

No comments

- n/a -

demands.⁹ The State's balancing decision, whether good or bad, would include such an allocation among competing demands. Michael Jackson, an attorney working with Bay-Delta stakeholders, asked ECONorthwest to describe economic issues relevant to the State's balancing of competing demands for Bay-Delta flows. We at ECONorthwest recognize the diverse group of people interested in the Bay-Delta Flows, and have sought to write an accessible yet technically sound report rooted in established economic practices and theory. To that end, we have prepared this report.

⁷ See, for example, <<http://www.google.com/search?client=psy&hl=en&site=&source=hp&q=economics+science+choice&btnG=Search>>

⁸ By "scarcity," we mean situations in which the resources available for producing output are insufficient to satisfy wants. This is different to saying that they are insufficient to satisfy demand since demand relates to an expression of want backed by money. This concept of relative scarcity in relation to wants is widely held to define the central conflict of economics since, otherwise, there would be no need to think about the 'best' allocation of resources. [Pearce, D.W. 1992. *The MIT Dictionary of Economics*, 4th edition. Cambridge, MA: The MIT Press.]

⁹ See, for example, <<http://www.google.com/search?client=psy&hl=en&site=&source=hp&q=economics+allocation+scarce+resources+competing+demands&btnG=Search>>; Field, B.C. 1997. *Environmental Economics*, Second Edition. San Francisco: McGraw-Hill Company, Inc.; Gramlich, E.M. 1990. *A Guide to Benefit-Cost Analysis*. Englewood Cliffs, New Jersey: Prentice Hall; Harberger, A. and G. Jenkins, eds. 2002. *Cost-Benefit Analysis*. The International Library of Critical Writings in Economics: 152. Northampton, Massachusetts: Edward Elgar Publishers; and U.S. Environmental Protection Agency. 2010. *Guidelines for Preparing Economic Analyses*. December.

No comments

- n/a -

SECTION 2: ECONOMICS AND THE CHOICES CALIFORNIA FACES

If the waters flowing from the Sierra Nevada to the San Francisco Bay-Delta had conditions of abundance, the State might not have felt compelled to prepare the *Flow Report*. But scarcity rules the waters and causes fierce competition. The consequences of the competition for these scarce waters lies at the heart of the State Water Board's *Flow Report*.¹⁰

Instream uses of the Bay-Delta flows compete with what the State Water Board describes as "other beneficial uses" of water.¹¹ These *other beneficial uses* include municipal, industrial, and agricultural uses.¹² If, once again, we understand the State role correctly, then in allocating the Bay-Delta flows the State would seek to balance its obligations to protect public-trust use of the Bay-Delta flows, with its obligations to support the "other uses" of the Bay-Delta flows.

To balance its obligations effectively, the State would, as we state in Section 1, seek to develop alternatives to improve the Bay-Delta flows, describe the economic, biophysical and other effects of these alternatives, and then select the best of the alternatives. To serve these ends, a necessary step for the State would be to describe how each alternative would affect economic well-being, power production, human health and welfare, the sustainability of natural resources, habitats and species, and possibly other factors.¹³ Economists have developed tools for describing such effects.

Among the tools economics offers for comparing competing alternatives, the most widely known and frequently used in environmental and natural resource matters is benefit-cost analysis (BCA).¹⁴ As applied in this case by the State, a properly conducted BCA would describe differences in net economic values – economic benefits minus economic costs—across the alternatives. In our experience, stakeholders and decision makers frequently care about other types of economic consequences besides changes in economic values. They want to know how policy alternatives will affect things like jobs and income, which economists describe as economic impacts, and the distribution of changes in economic values and impacts among stakeholders and households, which

¹⁰ For a description and explanation of the economic consequences of a shift from abundance to scarcity in an ecological system, e.g., a watershed, see Courant, P., E. Niemi, and E. Whitelaw. 1997. *The Ecosystem-Economy Relationship: Insights from Six Forested LTER Sites*. Grant No. DEB-9416809. National Science Foundation. November; Hulse, D., G. Gordon, and E. Niemi. 2001. *Establishing Correlations Between Upland Forest Management Practices and the Economic Consequences of Stream Turbidity in Municipal Supply Watersheds*. EPA Grant No. R828822. Environmental Protection Agency. September.

¹¹ In the rest of the report, we will italicize the phrase "other beneficial uses" to signal that these are not all other uses but only those specified by the State Water Board.

¹² *Flow Report*, p.1-7.

¹³ *Flow Report*, p.2-3.

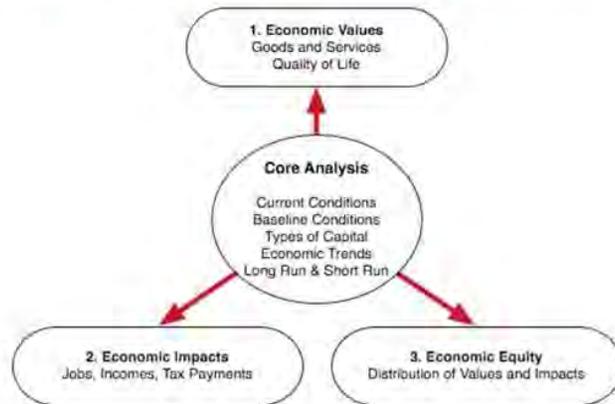
¹⁴ Mishan, E.J. *Elements of Cost-Benefit Analysis*, 3rd Edition. 1972. p.11-13; Turner, R., D. Pearce, and I. Bateman. 1993. *Environmental Economics*, p.93-4; Teitenberg, T. and L. Lewis. *Environmental and Resource Economics*, 8th Edition. 2008. p.28.

No comments

- n/a -

economists generally address as economic equity. Thus, a comprehensive economic assessment from alternative Bay-Delta flows would describe economic consequences that include changes in economic values, changes in economic impacts, and the distributional outcomes for each alternative. Figure 1 shows the three categories of economic effects each alternative would cause.

Figure 1. Categories of Economic Effects



Source: ECONorthwest

The first category, Economic Values, represents *changes in the values of goods and services* available to Californians that result from the market and non-market activities associated with each alternative. Such effects include changes in economic benefits, costs or both, as well as changes in the quality of life. The second category, Economic Impacts, represents changes in jobs and incomes for workers, costs or revenues for private firms, and expenditures or tax revenues for governments. These impacts occur directly, as workers are employed on construction, deconstruction, and restoration, for example, and indirectly, as dollars are spent locally on goods and services, dollars which multiply through the local economy, supporting additional jobs and incomes. The third category, Economic Equity, represents the distribution of the other two categories of effects, Economic Values and Economic Impacts, across income brackets of households, across ethnicities, and across geographic areas. These changes are particularly challenging to describe and evaluate when, say, groups of households who enjoy the benefits, jobs, and incomes, differ from those who bear the costs.

The center of Figure 1 – the Core Analysis – shows the analyses common to characterizing or calculating all three categories of economic effects.

No comments

- n/a -

1. By describing the Current Conditions and Baseline Conditions for each alternative, the analyst can describe the gap between the two. The larger the gap, the larger the problem.
2. By describing the four basic forms of capital (physical capital, human capital, social capital and natural capital)¹⁵ under both Current and Baseline Conditions for each alternative, the analyst can, for example, measure the effects of the alternative on the stocks of economic assets and thereby on the flows of services from those assets.¹⁶
3. By taking economic trends into account, the analyst can apply a with-versus-without approach, which isolates the economic effects (values, impacts, equity) caused by the alternatives from changes that will likely occur unrelated to the alternatives.
4. By addressing both the short- and long-term effects, the analyst can avoid errors of omission and commission through confusing today and tomorrow. The literal differences in effects between today and tomorrow would be trivial. But since the relevant period of time may stretch to a century, the figurative differences would likely be huge.

In 1983, the California Supreme Court issued its opinion in the case of *National Audubon Society et al. v. The Superior Court of Alpine County, et al.*¹⁷ That ruling, commonly called the "Mono Lake decision," (*Mono Lake*) clarified the extent of the State's public-trust obligation to protect water resources. In general, the Court ruled that protecting water resources takes precedence over consumptive water use. The Court's ruling relied in part on economic analyses of the competing demands for Mono Lake water.

The State's analysis of the economic effects of its balancing decision can benefit from applying the widely accepted professional standards applicable to economic analyses in this type of matter, and the precedents set by the *Mono Lake* decision. In this report we examine the relevant professional standards and the *Mono Lake* decision and describe their implications for the State as it seeks a balance.

In the next section, Section 3, we present an economic perspective of the Supreme Court's decision.

¹⁵ These four types of capital affect local economic productivity, which in turn is the source of economic growth in, say, California. Examples of physical capital are private and public machines, buildings, roads, and water and sewage systems. Examples of natural capital are rivers and streams, mountains and valleys, and grasslands and forests. Examples of human capital are workers of all types and their knowledge and skills. Examples of social capital are social networks and the norms, laws, and judicial and political systems.

¹⁶ O'Sullivan, A. 2008. *Urban Economics*, 7th Edition. p.90-91.

¹⁷ Broussard, J. 1983. *National Audubon Society et al., Petitioners, v. The Superior Court of Alpine County, Respondent; Department of Water and Power of the City of Los Angeles et al., Real Parties in Interest*. 33 Cal.3d 419. S.F. No. 24368. Supreme Court of California. February 17.

No comments

- n/a -

SECTION 3: ECONOMICS AND THE STATE WATER BOARD'S BALANCING DECISION IN *MONO LAKE*

In *Mono Lake*, the State Water Board faced a classic public-policy choice, a choice resembling the choice it faces with Bay-Delta flows: allocating a scarce and valuable natural resource— Mono Lake— among competing demands. The State can therefore look to its own history for guidance on balancing its public-trust obligation to protect Bay-Delta flows with the demands from other beneficial uses, and the role that economic information can play in the deliberations. As it balanced competing interests and reached its decision in *Mono Lake*, the State Water Board described the biological significance of the water at issue, developed economic measures of the relevant costs and benefits of alternative water allocations, and considered measures that could mitigate negative economic outcomes.¹⁸ It should take similar steps as it sets criteria for the Bay-Delta flows.

In *Mono Lake*, the State Water Board considered the consequences of the City of Los Angeles (City)— acting through the Los Angeles Department of Water and Power (LADWP)— exercising its right to draw water from Mono Lake for urban-consumption uses, and the resulting impacts on the lake's ecological habitats and affected species. The State Water Board began by considering the biophysical aspects of its decision. It first identified the ecological uses of trust resources at issue and their biological requirements, e.g., the species that depend on Mono Lake and their water requirements. Next, it studied the relationship between water flows out of Mono Lake and the impacts on ecological uses. It then compared the costs of the City acquiring water from sources other than Mono Lake with the economic benefits of protecting the ecological uses of the lake's affected public-trust resources.¹⁹

Dr. John Loomis, a natural-resource economist,²⁰ helped quantify the economic benefits in the State Water Board's analysis. Dr. Loomis surveyed California residents and calculated their willingness to pay to protect Mono Lake's habitats and affected species. Based on this information, Dr. Loomis calculated the economic benefits of protecting the ecological uses of the lake's water at \$1.5 billion to \$3.5 billion annually. This amount significantly exceeded the estimated cost, \$26.5 million per year, of finding alternative sources of water for the City.²¹

¹⁸ Koehler, C.J. 1995. "Water Rights and the Public Trust Doctrine: Resolution of the Mono Lake Controversy." *Ecology Law Quarterly* 22: 451.; Casey, E. 1984. "Water Law—Public Trust Doctrine." *Natural Resources Journal* 24: 809-825.

¹⁹ Koehler, 1995; Casey, 1984.

²⁰ Dr. Loomis conducted this research while at the Department of Agricultural Economics at the Davis campus of the University of California.

²¹ Loomis, J. 1987. "Balancing Public Trust Resources of Mono Lake and Los Angeles' Water Right: An Economic Approach." *Water Resources Research* 23: 1449-1456. August; Loomis, J. 1997. Use of Non-Market Valuation Studies in Water Resource Management Assessments. Colorado State University; Duffield, J. 2010. *Valuing Ecosystem Services in River and Lake Systems: Methods and Western U.S. Case Studies*. Presentation, Salt Lake City, April 28.

No comments

- n/a -

Dr. Loomis conducted his analysis as independent research that was not part of the State Water Board's balancing decision. The State Water Board, however, took notice of Dr. Loomis' work and directed the consultant performing the economic portion of the Environmental Impact Statement for the balancing analysis to adopt and implement Dr. Loomis' approach. The consultant's assessment reached the same conclusion: the economic benefits of protecting the ecological uses of trust resources in Mono Lake significantly exceeded the cost of supplying the City with water from alternative sources. The State Water Board considered other factors along with these economic results and ultimately reduced by half the amount of water that the LADWP could divert from Mono Lake.²²

The State Water Board's *Mono Lake* experience can help inform current deliberations on the relevant economic aspects of balancing competing uses of Bay-Delta flows. Analytical factors from the *Mono Lake* analysis that have relevance to the Delta Stewardship Council's planning decision include:

- *Conduct economic analyses in the context of the biophysical requirements of the ecological uses of public-trust resources.* The State Water Board identified the ecological uses of public-trust resources at issue in *Mono Lake* and the water requirements that support these uses *before* considering the costs and benefits of allocation scenarios. That is, the State Water Board acknowledged its obligation to protect the ecological uses of public-trust resources, and then considered reasonable methods of satisfying this obligation.²³
- *Account for all relevant economic, legal, and other forces and trends.* The LADWP proposed that the State Water Board make its decision based on a worst-case scenario of future water supplies for the City. Such an approach ignored current trends in water policy at the local, state and federal level. For example, the worst-case approach ignored the fact that trends in state and federal water law at the time encouraged water transfers between and among entities. Such transfers meant that LADWP could tap sources other than Mono Lake for future demands. On this point the State Water Board noted, "[T]he LADWP analysis assumes that insufficient replacement water will be available thereby causing high water shortage costs to be imposed on water users in Los Angeles. This assumption does not appear to be realistic in light of the evidence...." The State Water Board took the current trends in water transfers into account when making its decision.²⁴
- *Consider likely mitigating circumstances.* LADWP also asked that the State Water Board assume that the City would take no actions to mitigate the impacts of reduced flows from Mono Lake. That is, the LADWP asked that the State Water Board base its decision on a *static analysis* that assumed conditions would remain fixed over the foreseeable future. The State Water Board, instead, based its decision on a *dynamic analysis*, which assumed the City and others would take appropriate actions, such as

²² Loomis, 1997; Duffield, 2010.

²³ Koehler, 1995; Casey, 1984.

²⁴ Koehler, 1995; Casey, 1984.

No comments

- n/a -

doing more to conserve water, to mitigate the initial effects of a reduction in water supplied from Mono Lake. More broadly, this dynamic analysis took into account relevant economic and other forces and trends, as noted above.

- *Account fully for both values reflected in market prices and values that are not.* In reaching its *Mono Lake* decision, the State Water Board considered estimates of the City's potential costs to acquire water from another source. These estimates derived from data on the prices at which water was bought and sold in the region. No such prices and data existed for the economic value of protecting the ecological uses of public-trust resources. The State Water Board recognized, however, that the absence of prices did not mean that protecting these uses had little or no value, but, instead, that market prices are not an appropriate tool for measuring the value. Hence, the State Water Board looked to the results of research that employed non-market techniques for estimating the value.²⁵ We address this point in more detail in the next section.

²⁵ Loomis, 1987; Loomis, 1997; Duffield, 2010.

No comments

- n/a -

SECTION 4: THE EVOLUTION OF THE ECOLOGICAL USES OF PUBLIC-TRUST RESOURCES AND ECONOMIC METHODS

Stakeholders in the *Mono Lake* case litigated to clarify the relationship between the City's water rights and the State's public-trust obligation to protect water resources. The Supreme Court of California ultimately ruled that, in general, the State's public-trust obligations have precedence over the City's water rights. This ruling helped inform the State Water Board's balancing decision in that case. The Supreme Court's decision emphasized that stakeholders and decision makers should consider public-trust obligations as dynamic and evolving over time, rather than fixed and based exclusively on historical conditions. What constitutes a protected use of public-trust resources can evolve along with changes in understanding of the natural environment and its relationship to the well being of human society.

Methods of describing the economic effects of public policies on ecological uses of water resources have also evolved. Markets do not exist for many of these uses and so economists calculate their economic significance using non-market valuation methods. Years ago, economists and public-policy analysts could reasonably debate the analytical veracity of these methods. Not so today. Analytical methods continue evolving, and areas of legitimate disagreement still exist, however, detailed descriptions of these analytical methods appear in economic textbooks, articles in academic journals, undergraduate and graduate economics courses, and reports by federal and state natural-resource agencies in the U.S. Economists in Europe, Asia and elsewhere also regularly use these methods.

In this section we describe the evolution of thinking on ecological uses of California's public-trust resources. We then summarize methods of describing the economic significance of ecological uses of trust resources, especially those that provide society with ecosystem-services for which markets do not exist. The information in this section provides a context for the sections that follow, in which we describe in more detail the analytical principles relevant to describing the economic effects of the State's balancing decision regarding the Bay-Delta flows.

A. Ecological Uses of Public-Trust Resources

Implementing the public-trust doctrine in California has evolved over time. Early in the state's history, the doctrine protected the public's access to, and use of, tidelands for navigation, commerce and fisheries. More recent court decisions recognized the changing nature of the use of trust resources and expanded the list of protected uses to include recreational uses and ecological uses that support habitats and species. Litigation related to the State Water Board's *Mono Lake* decision help clarify the responsibilities of the State as administrator of the public-trust resources. The Supreme Court of California ruled that the State Water Board must take impacts of allocation decisions on uses of trust resources into account when administering water rights.²⁶

²⁶ Koehler, 1995; Casey, 1984.

No comments

- n/a -

The Court's ruling also emphasized a flexible definition of use, one that responds to changing public needs. The Court also identified ecological resources as one of "the most important" uses of trust resources.²⁷

"[W]e stated that "[t]he public uses to which tidelands are subject are sufficiently flexible to encompass changing public needs. In administering the trust the state is not burdened with an outmoded classification favoring one mode of utilization over another. [citation omitted] There is a growing public recognition that one of the most important public uses of the tidelands—a use encompassed within the tidelands trust—is the preservation of those lands in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments which provide food and habitat for birds and marine life, and which favorable affect the scenery and climate of the area."²⁸

Preservation of water-based natural resources "in their natural state" can affect a wide range of ecosystem services that trust resources provide. An illustrative, though incomplete, list of these ecosystem services includes flood mitigation and groundwater recharge, water filtration, sediment capture, nutrient cycling, gas regulation, provision of habitat for economically important fish and wildlife, and scenic and amenity values. While the natural resources at issue exist independent of human society, ecosystem services only exist insofar as there is human demand for their supply, at a particular place and time, and their value reflects the specific context within which the demand exists. Ecological uses of trust resources are not traded in markets, however, and so we must look to non-market valuation methods for measures of their values. We describe these methods in the next subsection.

B. Evolution of Economic Methods

Methods of measuring the economic effects of water allocation decisions on what the California Supreme Court described as one of the most important uses of public-trust resources—uses by aquatic resources that provide ecosystem services—have evolved over time. In the remainder of this section, we illustrate the evolution of these economic methods using reports by federal and California state agencies. We picked these sources because they help guide federal and state public policies, and because they often incorporate analytical principles or methods only after they have been subject to peer review and debate in academic and professional forums. We begin with federal guidelines.

1. Federal Guidelines

a. Principles and Guidelines

In 1983, the U.S. Water Resources Council published, *The Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (P&G)*.

²⁷ Broussard, J. 1983. *National Audubon Society et al., Petitioners, v. The Superior Court of Alpine County, Respondent; Department of Water and Power of the City of Los Angeles et al., Real Parties in Interest*. 33 Cal3d 419. S.F. No. 24368. Supreme Court of California. February 17.

²⁸ Broussard, 1983.

No comments

- n/a -

This report helps federal agencies, including the Corps of Engineers and Bureau of Reclamation, plan water-related projects. The *P&G* have not been updated since they were introduced. Recently, the National Research Council (NRC) of the National Academies, reviewed proposed changes to the *P&G*. The NRC's review begins by describing some of the significant changes in water-resources planning since the publication of the *P&G* in 1983.

"Since the early 1980s there have been many changes in the national water resources planning landscape. For example, ... [s]cientific understanding and appreciation of the natural functions of aquatic ecosystems have increased, and environmental protection and ecosystem restoration have become primary planning objectives for some projects... Many national water planning challenges involve balancing decisions and resources among a greater number of water resource users and interests."²⁹

"For the Corps of Engineers, new missions have been added ... especially aquatic ecosystem restoration."³⁰

"[Other water-planning issues] such as design of ecosystem restoration projects, reallocating water from traditional users to rapidly growing cities or ecosystem restoration purposes, and controlling nonpoint source pollution reflect more recent changes and needs. Many of today's key national water management issues lie largely outside the missions of the agencies for which the *P&G* was written."³¹

"In light of these developments, many groups – including committees of the National Research Council – have recommended that the *P&G* be reviewed and modernized."³²

The NRC concluded, however, that the proposed changes did not adequately address the many deficiencies in the outdated *P&G*. The proposed revisions "lacked clarity and consistency,"³³ which precluded the NRC from offering specific suggested changes. The NRC did comment on a few areas for improvement.

"...[T]he 2007 Water Resources Development Act requires that the *P&G* revision ensure the use of best available economic principles and analytical techniques. However, the proposed revisions contain concepts, advice, and language that are carryovers from historical practices and documents and are not fully consistent with contemporary best practices in decision science and economics. This relates

²⁹ National Research Council of the National Academies. 2010. *A Review of the Proposed Revisions to the Federal Principles and Guidelines Water Resources Planning Document*. Committee on Improving Principles and Guidelines for Federal Water Resources Project Planning, Water Science and Technology Board, Division on Earth and Life Studies. p.1.

³⁰ National Research Council, 2010, p.5.

³¹ National Research Council, 2010, p.6.

³² National Research Council, 2010, p.1.

³³ National Research Council, 2010, p.2.

No comments

- n/a -

to both how analysis is conducted and the role that it plays informing decisions.”³⁴

For example, the NRC noted that limiting an economic analysis of an environmental policy to costs and benefits would not satisfy current professional standards. An adequate analysis will look beyond costs and benefits to describe all relevant impacts and tradeoffs that affect jobs, income, competitiveness, etc. The *P&G* also separated the analysis of economic effects of environmental changes, which are described qualitatively, from the analysis of economic-development changes, which are described quantitatively. The NRC characterized this approach as a “residue” from the 1983 *P&G* that is inconsistent with current best practices.³⁵

The NRC described the *P&G* as outdated and not representative of current best economic practices. This is especially true for analyses of the economic effects of public policies on environmental resources and ecosystem services. Given the significance of public-trust resources that support ecological habitats and ecosystem services that the Bay-Delta flows support, and given the deficiencies in the *P&G*, this report can offer the State Water Board little useful guidance on economic aspects balancing Bay-Delta flows.

b. EPA Guidelines on Economic Analyses

In December of 2010, the Environmental Protection Agency (EPA) released *Guidelines for Preparing Economic Analyses (Guidelines)*. The 2010 edition of the *Guidelines* represents the third update since the first edition was released in 1983. Unlike the *P&G*, which remain unchanged since first introduced in 1983, EPA anticipated periodically revising the *Guidelines* to account for “new literature published since the last revision” and the “growth and development of economic tools and practices.”³⁶ These revisions and updates help keep the *Guidelines* more consistent with current best economic practices than do the *P&G*.

The 2010 edition includes a number of updates that help make the document a useful planning tool in general, and specifically for the State’s balancing decision in the Delta. These updates include:³⁷

- More detailed recommendations on identifying and describing baseline conditions that would exist without a proposed policy revision or regulation.
- An expanded description of methods of defining and valuing ecological benefits of projects and policies that protect natural resources.

³⁴ National Research Council, 2010, p.12.

³⁵ National Research Council, 2010, p.11-12.

³⁶ National Center for Environmental Economics, 2010. *Guidelines for Preparing Economic Analyses*. U.S. Environmental Protection Agency. EPA 240-R-10-001. December. p.1-1.

³⁷ National Center for Environmental Economics, 2010, p.1-1.

No comments

- n/a -

- A revised and updated description of methods of discounting costs and benefits that occur at different times in the future.
- Directions on presenting the results of benefit-cost studies, including effects that cannot be quantified or expressed in dollar amounts.

c. EPA Guidelines on Valuing Ecological Services

EPA's Science Advisory Board (SAB) released a report titled, *Valuing the Protection of Ecological Systems and Services* in May of 2009. As the name implies, the report describes methods of identifying and describing the economic significance of natural resources and associated ecosystem services affected by policies or projects. The SAB noted the importance of valuing ecosystem services using up-to-date economic methods, and promoting collaboration among social scientists and biophysical scientists.³⁸

"This report describes and illustrates how EPA can use an 'expanded and integrated approach' to ecological valuation. The proposed approach is 'expanded' in seeking to assess and quantify a broader range of values than EPA has historically addressed and through consideration of a larger suite of valuation methods. The proposed approach is 'integrated' in encouraging greater collaboration among a wide range of disciplines, including ecologists, economists, and other social and behavioral scientists, at each step of the valuation process."³⁹

The report describes a number of recommendations that facilitate the "expanded and integrated approach." Many of the recommendations have relevance to assessing the economic effects of water allocations in the Delta. These include:⁴⁰

- Identifying and describing the critical relationships between biophysical aspects of affected natural resources and ecosystem services, and analyses of the economic effects of policies that impact resources and services.
- Choosing appropriate valuation methods.
- Identifying and describing sources of uncertainty in analyses of the economic significance of ecosystem services.

2. Guidelines by the California Department of Water Resources

The California Department of Water Resources (Department) recently produced guidelines for economic analyses of public policies that affect water resources. We describe two of these works in this subsection. The first, a four-part study published in 2005, describes the importance of considering the full range of economic costs and

³⁸ Environmental Protection Agency (EPA) Science Advisory Board. 2009. *Valuing the Protection of Ecological Systems and Services*. EPA-SAB-09-012, May, p.2.

³⁹ EPA, 2009, p.2.

⁴⁰ EPA, 2009, p.1-7.

No comments

- n/a -

benefits of public policies that affect aquatic resources. The Department refers to this as a “multi-objective approach” to floodplain management because it takes into account objectives besides flood mitigation (a single objective) to consider consequences on habitats, water quality, society, etc. The second is a guidebook on conducting economic analysis published by the Department in 2008.

a. Multi-Objective Approach to Floodplain Management

1. Ecosystem Valuation Methods

The first of the four reports in the multi-objective approach, *Ecosystem Valuation Methods (Methods)*, describes a number of up-to-date methods of valuing aquatic-based ecosystem services.⁴¹ The report summarizes ten analytical methods and their advantages and disadvantages. The floodplain focus and the up-to-date descriptions of analytical methods in this and the other three reports, have relevance to, and can help inform, the State’s assessment of the economic significance of ecological uses of the Bay-Delta flows.

2. Natural Floodplain Functions and Societal Values

The second report, *Natural Floodplain Functions and Societal Values (Functions)*, describes biophysical aspects of floodplain habitats and examples of economic values of the ecosystem services that floodplains provide.⁴² The report provides background information on floodplain habitats and the biological and human services they provide, and the importance of considering this information when making decisions that affect floodplains. The report describes economic values of ecosystem services including managing flows, maintaining natural channel processes, water supply, water quality, soil quality, and plant and wildlife habitat. The staff conducting the study applied some of the analytical methods described in the *Methods* report.

3. Middle Creek Restoration Project Case Study: Benefit and Cost Analysis

The third report, *Middle Creek Flood Ecosystem Restoration Project Case Study: Benefit and Cost Analysis (Case Study)*, describes the results of a case study of applying analytical methods and data described in the *Methods* and *Functions* reports to a floodplain restoration project.⁴³ The Middle Creek Ecosystem Restoration Project restored damaged floodplain structure, habitats and functions in the Clear Lake watershed.

The analysis compared the benefits and costs of a no-action alternative and four restoration alternatives. The five alternatives described land use scenarios including maintaining current agricultural and rural-residential uses and flood protection,

⁴¹ California Department of Water. 2005A. *Ecosystem Valuation Methods. Revised Draft*. Multi-Objective Approaches to Floodplain Management on a Watershed Basis. May.

⁴² California Department of Water Resources. 2005B. *Natural Floodplain Functions and Societal Values Revised Draft*. Multi-Objective Approaches to Floodplain Management on a Watershed Basis. May.

⁴³ California Department of Water Resources. 2005C. *Middle Creek Flood Ecosystem Restoration Project Case Study: Benefit and Cost Analysis*. Multi-Objective Approaches to Floodplain Management on a Watershed Basis. May.

No comments

- n/a -

restoring portions of the floodplain, and providing increased flood protection for existing uses and enhanced agricultural production.

4. Floodplain Management Benefit and Cost Framework

The fourth report, *Floodplain Management Benefit and Cost Analysis Framework (Framework)*, describes a framework for analyses of ecological, social and economic consequences of policy decisions that affect aquatic resources.⁴⁴ It emphasizes the importance of including information on ecological consequences in decision-making. The report cites sources that are somewhat dated, though more current than those referenced in the 1983 *P&G*. In spite of this drawback, the document describes analytical concepts relevant to the State's balancing decision on the Bay-Delta flows. These concepts include the following.

- Incorporate environmental and social consequences into management decisions.⁴⁵
- Measure the economic effects of policies on ecosystem services that have value to humans using non-market valuation techniques. The report references the *Methods* report for information on valuation techniques.⁴⁶
- Not all economic effects of management decisions will occur over the same geography and time. Take these differences into account.⁴⁷
- Select the appropriate discount rate for economic effects that will occur in the future.⁴⁸
- Account for analytical uncertainty and risk. The report describes four methods of doing so.⁴⁹
- Consider ecological, social and economic effects of policy decisions on a broad watershed scale. Do not limit economic analyses to the geographic boundaries of an individual project.⁵⁰

State water projects that have a federal nexus must conduct economic analyses using the 1983 *P&G*. The *Framework* notes some of the limitations of the *P&G* and describes analytical principles that will produce more comprehensive assessments of ecological, social and economic effects of management decisions.

⁴⁴ California Department of Water Resources. 2005D. *Floodplain Management Benefits and Cost Analysis Framework. Revised Draft. Multi-Objective Approaches to Floodplain Management on a Watershed Basis*. June.

⁴⁵ California Department of Water, 2005D, p.2.

⁴⁶ California Department of Water, 2005D, p.11-12.

⁴⁷ California Department of Water, 2005D, p.12.

⁴⁸ California Department of Water, 2005D, p.14.

⁴⁹ California Department of Water, 2005D, p.15-17.

⁵⁰ California Department of Water, 2005D, p.22-24.

No comments

- n/a -

"Local agencies seeking federal cost-sharing assistance for multi-objective projects with the [Army] Corps [of Engineers] will still be subject to the [P&G]. However, if the local agencies are able to perform an economic analysis following the framework presented [in this report], they will not only have generated the information necessary to do the Corp's analysis, but more importantly, they will also have developed the information necessary to make a more informed decision about proposed floodplain management projects."⁵¹

b. Economic Analysis Guidebook

Economic analyses conducted by the Department must conform to the Federal P&G because of the significant amount of interactions and partnerships between the Department and Federal agencies. The Department recognized, however, that the outdated P&G could not adequately address the complex nature of water-management challenges that the Department faces. Department staff, therefore, developed the *Economic Analysis Guidebook (Guidebook)* in 2008, to address deficiencies in the P&G, help Department economists conduct economic analyses using up-to-date methods, and describe economic concepts and analyses to non-economists Department staff.⁵²

"It is ... DWR [Department] policy to adopt, maintain, and periodically update its own *Economic Analysis Guidebook*, which is consistent with the P&G but can also incorporate innovative methods and tools when appropriate. This policy is necessary because (a) the P&G has not been updated for more than 20 years, (b) federal and State economic analyses sometimes have different regional analysis perspectives, and (c) water management projects and programs have become more complex."⁵³

"Water resource projects are increasingly becoming more complex, requiring more difficult economic analyses. Projects now tend to have multiple purposes and affect many diverse stakeholders. ... [T]raditional methods of performing economic analysis often do not provide reliable means for quantifying important categories of benefits that these projects may provide (such as, ecosystem restoration)."⁵⁴

The *Guidebook* describes economics as "critical" to describing the environmental consequences, social effects, and costs and benefits of water-management alternatives. Environmental issues include the tradeoffs between "natural" and "human" demands on water resources and should take into account the economic effects of water uses that benefit the natural environment, even if this use adversely impacts agricultural and urban water users. Economics can also help describe effects on social equity or

⁵¹ California Department of Water, 2005D, p.35-36.

⁵² California Department of Water Resources (CDWR), 2008. *Economic Analysis Guidebook*. The State of California. January.

⁵³ CDWR (2008), p.vii.

⁵⁴ CDWR (2008), p.1.

environmental justice. Economic costs and benefits include monetary and non-monetary effects.²⁵

Methods of economic analysis described in the *Guidebook* include cost-effectiveness, benefit-cost, and socioeconomic-impact analysis. As the name implies, cost-effectiveness analyses identify the least-cost option of achieving a given goal. A benefit-cost analysis compares changes in costs to society with changes in benefit and calculates the net change, or net benefits of a proposal or proposals. A socioeconomic-impact analysis describes how a policy change affects factors such as population, employment, income, etc.

No comments

- n/a -

²⁵ CDWR (2008), p.viii.

No comments

- n/a -

SECTION 5: THE PRINCIPLES OF BENEFIT-COST ANALYSIS

In Section 1 of this report, we summarize our understanding of the State's objective to find a balance between the public-trust use of the Bay-Delta flows and, namely, the other beneficial uses of the Bay-Delta flows. In Section 2, we identify benefit-cost analysis (BCA) as the most widely used tool for evaluating alternative approaches to such a balance. In this section, Section 5, we focus on the principles by which the State should calculate and report the benefits and costs of these alternative approaches.⁵⁶

A. Identify the Alternatives

At its most basic level, BCA is simply a tool for comparing alternatives. Whether one is already using one of the alternatives – in which case that alternative serves as the gauge or standard – or not, applying the principles remains the same. One begins by identifying all the alternatives and describing all the elements of each alternative.⁵⁷

Today, the State does not seem to suffer too few alternatives. Rather, its challenge lies in identifying and clarifying the elements of each alternative. That said, prudence dictates ensuring the list of alternatives avoids errors of omission, because the alternatives selected for the BCA could affect the outcome of the analysis. By the same token, elements omitted from the description of an alternative could affect its ranking among the alternatives State evaluates.

B. Identify the Relevant Scope

At the beginning of any BCA, the State should identify the relevant scope of the analysis. That is, the analyst should specify which benefits and costs matter, to whom, over what geography and over what period of time.

"Before you conduct an economic analysis, it is necessary to define its scope (i.e., identify who and what should be included in the analysis and who and what should be excluded)."⁵⁸

Once the State has identified the relevant scope, it then should maintain each of the scope's dimensions throughout the BCA.

⁵⁶ For portions of this Section 5, we relied on material Ed Whitelaw and others at ECONorthwest prepared in a matter involving Methanex Corporation, Claimant/Investor, and the United States of America, Respondent/Party, in the Arbitration Under Chapter 11 of the North American Free Trade Agreement and the UNCITRAL Arbitration Rules Between Methanex Corporation and United States of America. The arbitration occurred in 2004.

⁵⁷ Field, B.C. 1997. *Environmental Economics*, 2nd Edition. San Francisco: McGraw-Hill Company, Inc. p.116-117; U.S. Environmental Protection Agency (EPA). 2010. *Guidelines for Preparing Economic Analyses*. Report No. EPA-240-R-10-001. December. p.A-8.

⁵⁸ U.S. Environmental Protection Agency (EPA). 1995. *Guide for Cost-Effectiveness and Cost-Benefit Analysis of State and Local Ground Water Protection Programs*. U.S. Environmental Protection Agency, Office of Water, and Office of Ground Water and Drinking Water. April. p.11.

No comments

- n/a -

C. Assemble Information and Account for Risk and Uncertainty

Given the relevant scope, the analyst should assemble information on the full range of costs and benefits. Even on topics for which extensive research exists, the published findings would still reflect different levels of understanding. Researchers have grouped these different levels into risk, uncertainty, and ignorance. Risk refers to conditions under which the range of possible outcomes and their probabilities are known. Uncertainty refers to conditions under which the range of possible outcomes is known, but their probabilities are not.⁵⁹ Ignorance applies when we do not know the possible outcomes.

The more that analysts differ on estimates or ranges of important categories of costs and benefits, the more the State should account for the uncertainty clearly and consistently.⁶⁰

"Estimates of costs, benefits and other economic impacts should be accompanied by indications of the most important sources of uncertainty embodied in the estimates, and, if possible, a quantitative assessment of their importance... Ideally, an economic analysis would present results in the form of probability distributions that reflect the cumulative impact of all underlying sources of uncertainty. When this is impossible, due to time or resource constraints, results should be qualified with descriptions of major sources of uncertainty."⁶¹

In interpreting the benefits and costs associated with those elements of the various alternatives that affect environmental assets and ecosystem services, the State should not assume Californians would perceive numerically equal upside and downside risks neutrally. That is, when it comes to environmental matters, individuals tend to exhibit risk aversion.

"...it seems reasonable to advocate that environmental policymakers approach their decisions in a risk-averse manner."⁶²

"If people are risk averse, then we should expect them to give extra weight to measures that avoid environmental disasters ... It seems sensible to many people to take measures today to avoid the possibility of catastrophe in the future, even if the worst-case scenario has a relatively low probability."⁶³

⁵⁹ Knight, F.H. 1921. *Risk, Uncertainty and Profit*. New York, NY: Sentry Press.; Integrated Risk Information System. 2011. *IRIS Glossary*. U.S. Environmental Protection Agency, May 16. Retrieved July 27, 2011, from http://www.epa.gov/risk_assessment/glossary.htm#u.; Camerer, C. and M. Weber, 1992. "Recent Developments in Modeling Preferences: Uncertainty and Ambiguity." *Journal of Risk and Uncertainty* 5:325-370.

⁶⁰ U.S. Environmental Protection Agency (EPA), 2000. *Guidelines for Preparing Economic Analyses*, September, p.27.

⁶¹ EPA, 2010, p.11-12.

⁶² Lesser, J.A., D.E. Dodds, and R.O. Zerbe, Jr., 1997. *Environmental Economics and Policy*, p.A06.

⁶³ Goodstein, 1999. E.S. *Economics and the Environment*, p.150.

No comments

- n/a -

"There are many cases in environmental pollution control where risk-aversion is undoubtedly the best policy ..."⁶⁴

For the State to consider such risk aversion makes economic sense. It should request that in the displays of the usual ranges and probability distributions of the elements of the alternatives, the analysts present not only the expected values or, in the jargon, the central tendencies, but also the downside and upside risks.

"[An evaluation of benefits and costs should] reflect the full probability distribution of potential consequences. Where possible, present probability distributions of benefits and costs and include the upper and lower bound estimates as complements to central tendency and other estimates."⁶⁵

Often, sufficient data simply are not available for fully quantifying certain categories of the costs and benefits of the alternatives. Accepted principles of benefit-cost analysis also prescribe that analysts take into account non-monetized costs and benefits.⁶⁶ In such cases, the analyst should identify the likely sign and size of the effect. For natural assets for which the professional literature offers no direct calculations of value, economics offers the benefit-transfer technique.⁶⁷ With benefit-transfer, the analyst, with appropriate adjustments, imputes to the subject asset values calculable for other assets.

If the information on which the calculation of costs and benefits depends is faulty, then, of course, the calculation itself is faulty. In the best cases, the academic and professional communities reach consensus on the direction and magnitude of a policy's impacts. In the worst cases, they do not, because the information available and the analyst's interpretations of it are faulty or still evolving. Under these conditions, high uncertainty persists. In such cases, the value of BCA is limited, and the analyst has an obligation to report this limitation prominently and the uncertainty causing it.

"When important benefits and costs cannot be expressed in monetary units, BCA is less useful, and it can even be misleading, because the calculation of net benefits in such cases does not provide a full evaluation of all relevant benefits and costs. You should exercise professional judgment in identifying the importance of non-quantified factors and assess as best you can how they might change the ranking of the alternatives based on your estimated net benefits. If the non-quantified benefits and costs are likely to be important, you should recommend which of the non-quantified factors are of sufficient importance to justify consideration in the regulatory decision. This discussion should also include a clear explanation that support[s] designating these non-quantified factors as important. In this case, you should also consider conducting a threshold analysis to help decision makers and

⁶⁴Field, B.C. 1994. *Environmental Economics*. p.129.

⁶⁵Office of Management and Budget (OMB), 2003. *Regulatory Analysis*. Circular No. A-4. October. p.18.

⁶⁶See, Moore, J.L. 1995. *Cost-Benefit Analysis: Issues in Its Use in Regulation*. CRS Report for Congress 95-760 ENR. June 28. Retrieved July 22, 2011, from <http://www.crsie.org/nle/crsreports/risk/rsk-4.cfm>; EPA, 2010, p.7-57.

⁶⁷EPA, 2010, p.7-51.

No comments

- n/a -

other users of the analysis to understand the potential significance of these factors to the overall analysis.”⁶⁸

D. Best Practices for BCA

In preparing this Section 5 on the principles of BCA, we found we had accumulated various techniques or practices that, while perhaps not qualifying as general principles, have proved useful over the years. We view this list as illustrative, not exhaustive.

1. Compare conditions with the alternative to conditions without the alternative: A good BCA avoids comparing conditions before the alternative to conditions after the alternative.

“Calculation of net present value should be based on incremental benefits and costs. Sunk costs and realized benefits should be ignored. Past experience is relevant only in helping to estimate what the value of future benefits and costs might be.”⁶⁹

By comparing the conditions with each of the State’s alternatives to the conditions without that alternative, the analyst can isolate the effects of the alternative alone and thereby increase the accuracy of the comparison among all the State Water Board’s alternatives.

2. Report and Document Methods, Information, and Assumptions: A good BCA should rely on transparent assumptions and allow for straightforward replication by a third-party analyst.⁷⁰
3. Apply Methods and Assumptions Consistently: the analyst should remain consistent throughout the analysis.⁷¹ For example, the analyst should not account for the possibility of uncertainty in underlying assumptions in one aspect of the BCA and ignore it in another.
4. Economic Impacts and Economic Equity Are Complements to BCA: In Section 2, regarding Figure 1, we describe the three categories of economic effects each of the State’s alternatives would cause, economic values (for which the primary tool of analysis is BCA), economic impacts and economic equity. The State should keep in mind that the second and third categories can serve as complements to BCA, but not as substitutes for it. Consider, for example, EPA’s guidance.

⁶⁸ Office of Management and Budget (OMB). 2003. *Informing Regulatory Decisions: 2003 Report to Congress on the Costs and Benefits of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*. Office of Information and Regulatory Affairs. February. p.127

⁶⁹ Office of Management and Budget (OMB). 1992. *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*. Circular A-94. October. p.6.

⁷⁰ OMB, *Informing Regulatory Decisions*, 2003, p.134.

⁷¹ Rossi, P. and H. Freeman. 1982. *Economics*, 13th Edition. New York: McGraw-Hill Book Company. p.275.

No comments

- n/a -

"Counting the number of jobs lost (or gained) as a result of a regulation generally has no meaning in the context of benefit-cost analysis."⁷²

Each of the three categories of economic effects plays a distinct role in a comprehensive economic description and evaluation of the alternatives for improving the Bay-Delta flows. These roles should remain distinct.

5. Address externalities explicitly: In a market transaction, consider the buyer as the first party and the seller as the second party. A good BCA accounts the effects of the transaction on third parties, i.e., those who did not agree to experience the costs or benefits of the transaction.

"Identify the expected undesirable side-effects and ancillary benefits of the proposed regulatory action and the alternatives. These should be added to the direct benefits and costs as appropriate"⁷³.

⁷² EPA, 2010, p.8-8. See also, OMB, 1994, p.6-7.

⁷³ OMB, *Regulatory Analysis*, 2003, p.3.

No comments

- n/a -

SECTION 6: OBSERVATIONS ON THE BURGEONING LITERATURE ON BAY-DELTA FLOWS

In preparing this report, we reviewed roughly 100 studies that address the economic issues associated with managing Bay-Delta flows. There are plenty more studies out there and the number is increasing. In this Section 6, we have chosen to draw the State's attention to some of the salient points raised in or illustrated by 12 of the studies.

We do not claim that the studies we have not yet reviewed are any worse or better than the ones we managed to acquire and review. Furthermore, we do not claim that the 12 studies on which we have based our observations represent the entire 100 studies. We do claim, however, that our observations help illustrate, though not exhaust, the challenges the State will face as it seeks a balance between the public-trust uses and the *other beneficial uses* and must choose among the proffered alternative approaches to managing the Bay-Delta flows.

A. BCA without Adequate Data Would Suffer Fatal Flaws

A widespread lack of basic data on California's water resources constrains the extent to which scientists, stakeholders and decision makers can develop fact-based water plans. Specific to the Board's benefit-cost analysis, describing the economic consequences of changing Bay-Delta flows would be much more challenging without baseline data on the Bay-Delta flows. The less adequate the data, the greater the uncertainty of benefit-cost analyses of the management alternatives.

The Delta Stewardship Council staff (Council Staff) propose achieving the Delta Plan's coequal goals of improving the quantity and quality of the water resources using the best available science.

"Coequal goals means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem."⁷⁴

"The Council is required by law to use the best available science ... as the basis for the Delta Plan. The Delta Plan must include 'a science-based, transparent, and formal adaptive management strategy for ongoing ecosystem restoration and water management decisions.' [citation omitted]"⁷⁵

The Council Staff acknowledge, however, that the body of scientific information on the Bay Delta lacks adequate data on water resources. Council Staff, and others, also acknowledge that this lack hampers water-planning efforts for the Bay Delta Plan.

⁷⁴ Delta Stewardship Council Staff (Council Staff), 2011. *Fourth Staff Draft Delta Plan*. Delta Stewardship Council, June 13, p.3.

⁷⁵ Council Staff, 2011, p.19.

No comments

- n/a -

"The Delta plan requires the development and submission of water use data and other data that are currently unavailable or inaccessible."⁷⁶

The Public Policy Institute of California (PPIC) recently concluded the same.

"Beyond an almost entirely non-technical California Water Plan Update developed by the Department of Water Resources every five years or so, there is little to no statewide organization, prioritization, and synthesis of technical and scientific activity applied to water problems."⁷⁷

"The state's fragmented water rights system has contributed to serious gaps in water measurement and accounting. Most groundwater users have not been required to report water use to the state. Although riparian and pre-1914 appropriative rights holders are required to report their diversions, there was no legal sanction for failure to file an annual statement of diversion and use until the legislature amended the Water Code in 2009 ... Many did not report, and those who did tended to substantially overstate their diversions and use. These gaps have led to difficulties in tracking water use trends, and they impede more effective management of water resources for economic and environmental purposes [citation omitted]."

"As water becomes increasingly scarce, it will become ever more important to measure and keep track of physical stocks and flows and their uses."⁷⁸

"California is almost unique among western states in not collecting information on such diversions. California also lacks water quality information on many of its aquifers and waterways."

"To aid analysis and enforcement, greater and more systematic state efforts are essential to assemble data from local, state, and federal agencies within a coherent framework."⁷⁹

"[W]ithout better reporting, California's water accounting and water rights enforcement will remain approximate at best—an increasingly difficult handicap for policy discussions and water management in a water-scarce state."⁸⁰

Other stakeholders in the Bay Delta agree. For example, the California Roundtable on Water and Food Supply recently reported,

"A clear picture of the factors affecting water distribution and use in California is important to decision-making at the policy and farm levels, but is currently lacking.

⁷⁶ Council Staff, 2011, p.19.

⁷⁷ Hanak, E., et al. (PPIC), 2011. *Managing California's Water from Conflict to Reconciliation*. Public Policy Institute of California. p.128.

⁷⁸ PPIC, 2011, p.330.

⁷⁹ PPIC, 2011, p.353-54.

⁸⁰ PPIC, 2011, p.87.

No comments

- n/a -

There is a need for better data collection and demonstration of water supply and distribution at basin scale, and better baseline data on water use to guide decision-making.⁸¹

Developing science-based water-management plans in the Bay Delta without the missing data on water resources would be challenging. The recent review of the scientific support for the Draft Bay Delta Conservation Plan (BDCP) by the National Research Council of the National Academies (Research Council) illustrates this point. The Research Council criticized the Draft BDCP for lacking basic information on affected water volumes. The Research Council described this as a “major shortcoming” of the Draft BDCP.

“The lack of clarity concerning the volumes of water to be diverted is a major shortcoming of the BDCP. In addition, the BDCP provides little or no information about the reliability of supply for such a diversion or the different reliabilities associated with diversions of different volumes. There is no indication of how the amount of water to be diverted and its associated reliability are to be determined. It is nearly impossible to evaluate the BDCP without a clear specification of the volume(s) of water to be diverted, whose negative impacts the BDCP is intended to mitigate.”⁸²

The missing information impedes well-informed planning and management decisions, and scientists and policy makers would have difficulty developing a science-based Delta Plan without the missing data. This lack of fundamental data on water resources would also likely increase the uncertainty of analytical results from benefit-cost analyses of water-management alternatives.

B. Assessing the Analytical Veracity of Past Studies of Conveyance Structures

The literature on economic analyses of management alternatives for the Bay Delta includes a number of assessments of conveyance structures, such as a peripheral canal or tunnel. Among the most widely cited works in this literature are those by the PPIC. This literature, however, does not include a full benefit-cost analysis of conveyance structures or their alternatives. Most studies focus on certain costs and do not include many of the relevant benefits. In spite of these conditions, these studies illustrate the challenge the Board would face should they conduct a benefit-cost analysis of conveyance structures. We give two examples.

⁸¹ The California Roundtable on Water and Food Supply. 2011. *Agricultural Water Stewardship: Recommendations to Optimize Outcomes for Specialty Crop Growers and the Public in California*. June, p.3.

⁸² National Research Council of the National Academies (Research Council). 2011. *A Review of the Use of Science and Adaptive Management in California's Draft Bay Delta Conservation Plan*. The National. In the PPIC report, *Comparing Futures*, the authors concluded that a peripheral canal would be the least-cost option for maintaining water exports out of the Delta, and that ending exports would have the highest probability of saving threatened or endangered fish in the Bay Delta.⁸² Academies Press: Washington, D.C. May 5, page 4.

No comments

- n/a -

In the PPIC report, *Comparing Futures*, the authors concluded that a peripheral canal would be the least-cost option for maintaining water exports from the Bay Delta, and that ending exports would have the highest probability of saving threatened and endangered fish.⁸³ They estimated that the peripheral canal had an average annual cost of between \$0.25 billion and \$0.85 billion. The three other alternatives – 1) continuing through-Delta exports; 2) dual conveyance of peripheral canal and through-Delta exports; or, 3) no exports – all had higher economic costs. The no-export option had the highest likelihood of achieving viable populations of delta smelt and fall-run Chinook.⁸⁴

Dr. Jeffrey Michael of the University of the Pacific, critiqued some of the major assumptions, data and conclusions described in *Comparing Futures*.⁸⁵

- Regarding the use of discount rates, PPIC did not "... utilize the conventional, scientifically accepted present discounted value approach ..."⁸⁶
- PPIC ignored the market and non-market values of affected fishery species. (In a later report, the PPIC described the importance of including non-market values – or as they describe, the values of ecosystem benefits – in benefit-cost analyses.⁸⁷)
- PPIC relied on out-dated and second-best estimates of population growth, which overestimated population growth and water demand over the time of the analysis (through 2050).
- PPIC also overestimated the costs of water recycling and ignored recent trends in water conservation.
- PPIC did not conduct their analysis in the context of water scarcity. They assumed no advances in water-conservation or desalination technology over the next 40 years. That is, the PPIC assumed a static analysis of an economy with fixed technology rather than a dynamic analysis of an economy that responds to price signals.
- The PPIC results are highly sensitive to analytical assumptions, and thus are not robust.

In another critique, the Research Council had harsh criticism for the quality of the biophysical information in the Draft BDCP in support of a peripheral canal. The Research Council concluded that the analysis underlying the Draft BDCP relied on incomplete or unsupported data, unrealistic assumptions, ignored relevant trends, and, like the PPIC's analysis, the underlying analysis ignored the concept of water scarcity.

⁸³Lund, Jay, et al. 2008 (PPIC 2008). *Comparing Futures for the Sacramento-San Joaquin Delta*. Public Policy Institute of California. Chapter 6 and p.ix.

⁸⁴PPIC, 2008, Table 5.1, p.ix.

⁸⁵Michael, Jeffrey. 2011. *First Administrative Draft Economic Sustainability Plan for the Sacramento-San Joaquin Delta*. Submitted to the Delta Protection Commission, June 16; Michael, Jeffrey. 2008. *The Economics of Ending Delta Water Exports Versus the Peripheral Canal: Checking the Data of the PPIC*. University of the Pacific. December 15.

⁸⁶Michael, 2011, p.65.

⁸⁷Hanak, Ellen, et al. (PPIC). 2011. *Managing California's Water From Conflict to Reconciliation*. Public Policy Institute of California. Pages 99 and 207.

No comments

- n/a -

"The BDCP cannot be properly evaluated if it does not clearly specify the volume of water deliveries whose negative impacts are to be mitigated. The draft BDCP suggests that the water requirements are based on the amount of acreage and crops that contractors have grown, or on the maximum deliveries specified by the SWP [State Water Project] contracts ... There is no mention that quantities diverted may be constrained by various provisions of California water law, by possible changes in the extent of irrigated agriculture south of the Delta, and by potential changes in cropping patterns fueled by globalizing forces of supply and demand for food. The draft BDCP also fails to identify and integrate demand management actions with other proposed mitigation actions. A conservation plan should address issues of water use efficiency and should account for future trends in other variables that drive the demand for agricultural and urban water supplied. ... The BDCP's lack of attention to these issues constitutes a significant omission, given the intensifying scarcity of water in California."⁸⁸

"The lack of an appropriate structure creates the impression that the entire effort is little more than a post-hoc rationalization of a previously selected group of facilities, including an isolated conveyance facility [peripheral canal] ..."⁸⁹

A peripheral canal or tunnel has proponents and detractors. Some of the critiques to date, however, raise serious concerns regarding the veracity of analyses that support a canal or tunnel as the preferred management alternative. Any new analyses of a conveyance structure's benefit and costs would likely be considered incomplete if they do not address the analytical deficiencies raised by these analyses.

C. Addressing Environmental Justice Consequences of Water-Management Alternatives

Past planning efforts in the Bay Delta have not effectively dealt with environmental justice (EJ) aspects of water use and distribution in California's Central Valley. The Delta Plan is an opportunity to change this. Informational resources exist that can help analysts address EJ issues in benefit-cost analyses in meaningful ways so that they go beyond the typically superficial treatment of EJ issues in past analyses.

The Bay Delta Conservation Plan describes EJ as,

"The fair treatment and meaningful involvement of all people regardless of race, color, national origin, educational level, or income with respect to the development, implementation, and enforcement of environmental laws. EJ seeks to ensure that minority and low-income communities have access to public information relating to human health and environmental planning, regulations, and enforcement. EJ ensures that no population, especially the elderly and children, are forced to shoulder a disproportionate burden of the negative human health and environmental impacts of pollution or other environmental hazard."⁹⁰

⁸⁸ Research Council, 2011, p.31-32.

⁸⁹ Research Council, 2011, p.43.

⁹⁰ California Natural Resources Agency, 2010, *Highlights of the Bay Delta Conservation Plan*, December, p.84.

No comments

- n/a -

As described by the California Natural Resources Agency, EJ communities in the Central Valley share a number of characteristics and conditions including:⁹¹

- Mostly minority and low-income households
- Excluded from environmental policy setting
- Subject to disproportionate impacts from environmental hazards
- Residents experience disparate implementation of environmental regulations, requirements, practices and attributes.

A study published in July of 2008, by OxFam America and the Rockefeller Foundation, reported that the 20th U.S. Congressional District, which encompasses Westlands and the southwestern side of the San Joaquin Valley, was the poorest congressional district in U.S.⁹² EJ communities in the San Joaquin Valley face challenges including unsafe drinking water, poor air quality and high incidence of childhood asthma.⁹³ The *Fourth Staff Draft Delta Plan* reported that nitrates and other pollutants contaminate drinking water supplies from groundwater for many low-income communities in the San Joaquin Valley.

“The high cost of accessing water from alternative sources, coupled with the low earnings of these households, often makes safe drinking water in these communities unaffordable [citation omitted].”⁹⁴

A recent report by the Pacific Institute concluded the same.

“Despite the acute health effects of nitrate contamination, some communities in the state have been waiting for more than a decade for measures to restore the safety of their drinking water. ... These communities ... tend to be low-income and have a high percentage of Latino households. Although costs to community water systems and the households they serve are significant and directly tied to nitrate contamination of groundwater, public policy and regulatory programs have to-date failed to incorporate those costs in their policy and regulatory programs.”⁹⁵

As described in the Pacific Institute report, the high costs of addressing nitrate contamination and limited available funds means a significant backlog of unfunded

⁹¹ California Natural Resources Agency, 2003. *Environmental Justice Policy*. www.resources.ca.gov/environmental_justice_policy_20031030.pdf.

⁹² Burd-Sharps, S., K. Lewis, and E. Borgess Martins, 2008. *The Measure of America: American Human Development Report 2008-2009*. OxFam America and the Rockefeller Foundation.

⁹³ Pacific Institute, 2011. *The Human Costs of Nitrate-Contaminated Drinking Water in the San Joaquin Valley*; Carger, Lloyd, 2010. *Reaping Riches in a Wretched Region: Subsidized Industrial Farming and Its Link to Perpetual Poverty*, 3 Golden Gate U. Envtl L.J., <http://digitalcommons.law.ggu.edu/cgi/viewcontent.cgi?article=1033&context=gguelf>.

⁹⁴ Delta Stewardship Council Staff, 2011. *Fourth Staff Draft Delta Plan*, June 13, p.111.

⁹⁵ Moore, E. and E. Matalon, 2011. *The Human Costs of Nitrate-contaminated Drinking Water in the San Joaquin Valley*. Pacific Institute, March, p.7.

No comments

- n/a -

projects. The California Department of Public Health currently has a waiting list of 100 community water projects, with a total cost of \$150 million.⁹⁶

A number of benefit-cost experts describe methods of combining EJ objectives including equity considerations with the economic-efficiency objectives of a benefit-cost analysis.⁹⁷ Such an approach in the Bay Delta could help avoid negative EJ impacts of water-management decisions and promote more equitable distribution of environmental benefits to communities that currently suffer from inequitable distribution of contaminated water resources.

D. Describing the Relevant Economies as Dynamic, Not Static

Economies are dynamic. They grow, develop, change and react over time in response to local, regional, national and international forces and trends. Consumers, workers and business owners make decisions based on how these forces and trends affect them. For example, as gas prices increase, consumers change their driving habits, purchase more fuel-efficient cars, or take mass transit. As the price of apples increases, some consumers will switch to other, less expensive fruits.

The dynamic nature of economies is important to the State Water Board's benefit-cost analysis of their balancing decision for two reasons. The first is because the affected economies will change for reasons unrelated to the new management alternatives. Attributing economic consequences from outside forces to the Bay Delta management alternatives would yield inaccurate results and mask the true consequences of the alternatives.

Recent reports on the Bay Delta describe some of the relevant outside forces likely to affect the region's economy. The PPIC report, *Managing California's Water*, lists what the authors describe as "drivers of change," which will affect future water supply and demand. These drivers include environmental, economic and demographic changes.⁹⁸

- Rising sea levels will cause seawater intrusions into coastal aquifers.
- Climate-change induced warming will reduce snowpacks, increase winter runoff, decrease spring and summer runoff, and increase stream temperatures.⁹⁹
- New urban developments will likely use less water per capita than existing homes.
- Urbanization will increase discharges of urban runoff.¹⁰⁰

⁹⁶ Moore and Matalon 2011, p.8.

⁹⁷ See for example, Bartzhaf, H. S. 2010. *Regulatory Impact Analyses of Environmental Justice Effects*. National Center for Environmental Economics. Working Paper # 10-08. U.S. Environmental Protection Agency. August; Haveman, Robert. 1965. *Water Resources Investment and the Public Interest*. Nashville: Vanderbilt University Press; and Johansson-Stenman, Olof. 2005. "Distributional Weights in Cost-Benefit Analysis—Should we Forget About Them?," *Land Economics*, Vol. 81.

⁹⁸ PPIC, 2011, p.135-136.

⁹⁹ PPIC, 2011, p.135-136.

No comments

- n/a -

- Urbanization of agricultural lands will reduce agricultural water use.¹⁰¹
- Population growth has been, and is expected to continue as, the most important demographic driver of water demand.¹⁰²
- Continued reduction in agriculture's share of the state's economy.¹⁰³
- California's agricultural producers will continue shifting to more permanent and higher-valued tree and vine crops in response to global market forces.¹⁰⁴

Anticipated changes in local and state regulations will also affect future water supply and demand. For example, a recent report by the California Department of Water Resources describes an upcoming change that will affect urban water use. Beginning in 2016, water suppliers must comply with water conservation requirements established by the Water Conservation Bill of 2009 to be eligible for State water grants or loans.¹⁰⁵

One of the challenges of conducting a benefit-cost analysis of Bay Delta management alternatives will be controlling for the economic consequences attributed to the types of biophysical, economic and other forces and trends described above that are unrelated to the management alternatives.

The second reason why the dynamic nature of economies is important to a benefit-cost analysis of Bay-Delta alternatives is that the affected economies will likely respond to the management alternatives. That is, the analysts should not assume a static economy, frozen in time and technology. The management alternatives will affect different sectors of the state's economy differently. Some sectors may experience higher costs, others may have increased employment or revenues. Consumers, workers and business owners will respond to these first-round changes. For example, in response to an alternative that reduces irrigation flows, some growers may idle their land. Others, however, will likely continue producing by switching to less water-intensive crops, increasing irrigation efficiency, engaging in water trades, or all three.

Authors of a recent retrospective analysis of the economic impacts of reduced flows to the San Joaquin Valley describe such reactive behavior.¹⁰⁶ The analysis focused on the changes in agricultural production in response to reduced water supplies from the Bay Delta caused by drought and restrictions on pumping due to environmental concerns.

¹⁰¹ PPIC, 2011, p.164.

¹⁰² PPIC, 2011, p.137.

¹⁰³ PPIC, 2011, p.164.

¹⁰⁴ PPIC, 2011, p.137.

¹⁰⁵ PPIC, 2011, p.166.

¹⁰⁶ Pezzetti, Tonianne: 2011. *Guidebook to Assist Urban Water Supplies to Prepare A 2010 Urban Water Management Plan*. State of California, Natural Resources Agency, Department of Water Resources. March. p.xiii.

¹⁰⁷ Michael, J., et al. 2010. *A Retrospective Estimate of the Economic Impacts of Reduced Water Supplies to the San Joaquin Valley in 2009*. September 28. p.1-5.

No comments

- n/a -

The authors report that growers reacted to the water reductions by engaging in water trades and changing their growing practices.

"[A] significant increase in the amount of water transfers was critically important to reducing the negative impacts of water scarcity. ... Building on these successful transfers will be important in minimizing the losses from future water shortages."¹⁰⁷

"Across the entire San Joaquin Valley, virtually the entire decline in net harvested acreage was in lower-value field and seed crops as farmers rationally directed more of their scarce water resources to protecting high value fruit and nut orchards."¹⁰⁸

Water scarcity in California is not a new phenomenon. Water users react to this scarcity by adjusting their use and adopting new technologies and practices. This trend is expected to continue. A benefit-cost analysis that assumes a static economy, frozen in time and fixed in technology would not reflect the reality of how local and regional economies in the Bay Delta function.

E. Describing the Complex Competition for Bay Delta Water Resources

Much of the debate over Bay-Delta water resources pits in-stream or habitat use against agricultural or municipal use. Some describe this as the "jobs vs. fish" argument. Implicit in this characterization is the assumption that consumptive use of water – water use that supports "jobs" – is more important or has greater economic value than in-stream use – water for "fish." As the PPIC describe in their recent report, *Myths of California Water – Implications and Reality*, the competition for Bay-Delta water resources is much more complex.¹⁰⁹

"Healthy ecosystems provide significant value to California's economy, partially and sometimes fully offsetting their costs to traditional economic sectors. Direct benefits include improvements in recreation, commercial fishing, and drinking and agricultural water quality, and indirect benefits include improvement in the quality of life in California."¹¹⁰

In most times and places there are insufficient resources to satisfy all the demands for all of the goods and services provided by Bay-Delta water resources. Hence, there is competition for the water and, when it is used to produce one set of goods and services, the demands for others go unmet. The characteristics of this competition provide useful insights into the economic consequences of current and future decision-making for Bay-Delta water resources.

¹⁰⁷ Michael et al., 2010, p.1-2.

¹⁰⁸ Michael et al., 2010, p.3.

¹⁰⁹ Hanak, Ellen et al. 2010 (PPIC 2010). "Myths of California Water – Implications and Reality." *West-Northwest*, Vol. 16, No. 1, Winter. p.20-22.

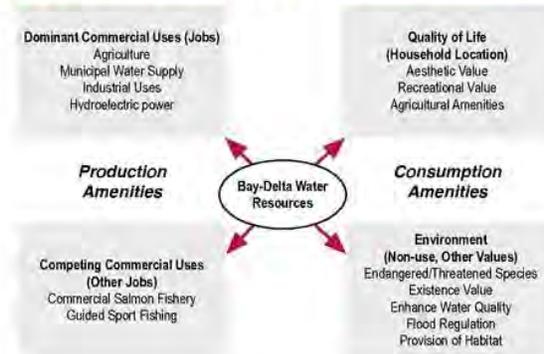
¹¹⁰ PPIC, 2010, p.21.

No comments

- n/a -

One could categorize the competition any number of ways, but we employ a taxonomy that distinguishes among four types of demand, as illustrated in Figure 2. Two of these are called demands for production amenities, i.e., those goods and services that are, or could be, inputs to processes that produce other goods and services. The other two represent demands for consumption amenities, i.e., those goods and services that directly enhance the well being of consumers.

Figure 2. The Competing Demands for Bay-Delta Water Resources



Source: ECONorthwest

Competition for Production Amenities. Demand for Bay-Delta agricultural, municipal, industrial, and hydroelectric production, represented on the left side of Figure 2, comes from private and public enterprises, as well as households, that rely on water resources to conduct commercial activities. We separate the demands for production amenities into two groups – dominant and competing demands – to show that, sometimes, negative effects on other commercial sectors, which are represented in the bottom left of Figure 2, can offset the positive consequences arising from others. Using water for commercial production of crops may, for example, prevent it from being used to support guided sport fishing.

Competition Directly from Consumers. On the left side of Figure 2, water resources are economically important because they are inputs in the production of other things, notably crops and livestock, that consumers want to have. On the right side, the connection to consumers is more direct. Here, consumers consider Bay-Delta water resources economically important for how they directly contribute to their well-being. In economic parlance, these are known as consumption amenities.

Some ecosystem goods and services, such as recreational opportunities and scenic vistas, contribute directly to the well-being of people who have access to them. Their

No comments

- n/a -

contribution to consumers' well-being makes them economically important in their own right, but they have additional economic importance when they also influence the location decisions of households and firms. We show the demands for consumption amenities that influence location decisions of households sensitive to spatial variation in the quality of life, in the upper right portion of Figure 2. In general, the nearer people live to amenities, the lower their cost of using them. Thus, consumers can increase their economic well-being by living in a place that offers recreational opportunities, pleasant scenery, wildlife viewing, and other amenities they consider important.

Quality-of-life values can be powerful. All else equal, if the Bay-Delta's consumption amenities improve, some people already here would tend to stay and additional people would tend to move in. Degradation would have the reverse impacts. One consequence is that the amenities lead to higher demand for housing and consumer-oriented commercial products. The higher demand raises land value for these uses higher than otherwise would exist.¹¹¹ Differences in quality of life also explain about half the interstate variation in job growth during periods of economic growth.¹¹² This relationship also has been found at sub-national perspectives.¹¹³ Some in the Bay-Delta undoubtedly could enjoy higher earnings living elsewhere, but choose not to do so because their overall economic welfare – the sum of their earnings plus quality of life – is higher here. Some aspects of this quality of life – the strength of communities, schools, and churches, for example – are not directly related to water resources, but others are: scenic views, ways of life, and opportunities for fishing and boating, to mention a few.

The lower right portion of Figure 2 represents demands associated with economic values that do not necessarily entail a conscious, explicit use of ecosystem goods and services. We call these environmental values. There are two general categories: non-use values and values of goods and services that generally go unrecognized. Non-use values arise whenever people place a value on maintaining some aspect of the environment, even though they do not use it and have no intention to do so. Research has documented non-use values for maintaining salmon populations, for example, whose survival in the Bay-Delta depends on adequate water flows. Studies have shown that regardless of direct interaction with salmon populations, many Californians hold a positive willingness to pay to ensure the long-term survival of salmon.¹¹⁴

Environmental values also can be important when water resources provide valuable services that people generally consume without being aware of them. Some of these are part of the so-called web of life. Others, such as the ability of wetlands to purify water

¹¹¹ Roback, J. 1982. "Wages, Rents, and the Quality of Life." *Journal of Political Economy* 90: 1257-1278; 1988. "Wages, Rents, and Amenities: Differences among Workers and Regions." *Economic Inquiry* 26: 23-41.

¹¹² Partridge, M. and D. Rickman. 2003. "The Waxing and Waning of Regional Economies: The Chicken-Egg Question of Jobs Versus People." *Journal of Urban Economics* 53: 76-97.

¹¹³ For a more thorough discussion of relevant research, see, for example, Power, T.M. and R.N. Barrett. 2001. *Post-Cowboy Economics: Pay and Prosperity in the New American West*. Island Press, and Kim, K.-K., D.W. Marcouiller, and S.C. Deller. 2005. "Natural Amenities and Rural Development: Understanding Spatial and Distributional Attributes." *Growth and Change* 36 (2): 273-297.

¹¹⁴ Loomis, J., T. Brown, and J. Bergstrom. 2007. "Defining, Valuing, and Providing Ecosystem Goods and Services." *Natural Resources Journal* 47: 329-376.

No comments

- n/a -

and mitigate flood damage, have a more direct link to the well-being of California's residents. For example, San Francisco, which receives its water from the pristine Hetch Hetchy watershed, saves tens of millions of dollars per year in avoided water treatment costs.¹¹⁵ Some scientists and economists believe many services have great economic value, even though people generally are unaware of their importance.¹¹⁶ Environmental values typically increase as people learn more about the environment, the services it provides, and environmental degradation.¹¹⁷ Many people today, for example, consciously consider the economic values associated with the services produced by the global climate in ways that were unknown, even to scientists, just a few years ago.

The demands associated with the consumer amenities represented on the right side of Figure 2 are typically harder to measure, or even to observe, than the commercial demands shown on the left side of the diagram. This difficulty does not diminish their value or impact on jobs and incomes, however. Instead, it merely reflects the lack of tools for measuring them.

As described in the PPIC Report, one of the goals and challenges of the Board's benefit-cost analysis of its balancing decision will be identifying and describing the full range of benefits and costs of the competing demands for Bay-Delta water resources.

"California must find ways to manage water jointly for environmental and commercial benefits. Better accounting of water use and its economic and environmental benefits and costs can help guide policies for watershed management."¹¹⁸

¹¹⁵ Null, S. and J. R. Lund. 2006. "Re-assembling Hetch Hetchy: Water Supply Implications of Removing O'Shaughnessy Dam." *Journal of the American Water Resources Association* 42 (4): 395-408.

¹¹⁶ Daily, G.C. (ed). 1997. *Nature's Services: Societal Dependence on Natural Ecosystems*. Washington, D.C.: Island Press.

¹¹⁷ Blomquist, G.C. and D.R. Johnson. 1998. "Resource Quality Information and Validity of Willingness to Pay in Contingent Valuation." *Resource and Energy Economics* 20:179-196.

¹¹⁸ PPIC, 2010, p.21.

No comments

- n/a -

Dam Safety in California

General description about dam safety issue in California. Dam Safety Guideline Stakeholders, interests, and agencies Case Histories Problems and Promising Solutions Data and Sources

About Me



DONGSOON PARK

Graduate Student (Ph.D course) in UC Davis Senior Engineer and Researcher, Korea Water Resources Corporation
[View my complete profile](#)

SUNDAY, MAY 18, 2008

4.2.1 San Luis Dam

The San Luis Dam (now called the B.F. Sisk Dam) was completed in August 1967. It was built on the Los Banos Creek and is used primarily for agricultural storage for the South Valley farmers. In 1981, on September 4, workers noticed rocks sliding down the upstream face of the dam. The slide occurred in deep seated failure and the failure surface extended through the engineered zones and into the native slopewash material. Investigation of the slide led to the conclusion that the wrong strength parameters for the slopewash material were used for stability analyses.

The slopewash material is deposited primarily by rain dragging small clay particles downslope from the surrounding hills. The construction specifications for excavation to the foundation were that the soil had to be stronger than the fill to be placed over it. In California's Central Valley, the temperatures easily reach over 100 degrees for days at a time, causing significant evaporation losses in surface soils. In its desiccated state, the slopewash material exhibited strength characteristics that would seem

No comments

- n/a -

desirable for a dam foundation. However, after extensive post failure laboratory testing on the slopewash material was performed, it was determined that the residual strength, and not the previously used “fully softened” strength should be used in stability analyses.

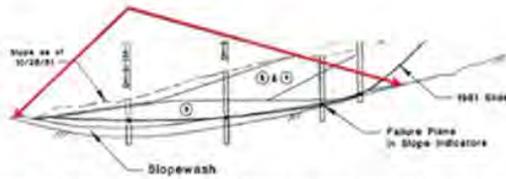
Fortunately, no one was hurt, and no water was lost the slide occurred. The engineering lesson to be learned from this event is that the engineer should have a good understanding of the behavior of the soil zones influenced by the dam under fully inundated conditions as well as the cyclic response of the soil mass due to drawdown.



Deep seated failure of San Luis Dam, Photo by Duncan

No comments

- n/a -



Slopewash: The action of water from rain or melted snow carrying (washing) soil down a slope.

Resource:

- Karl Schwartz, The 1981 Slide at the San Luis (Sisk) Dam, Dam Case History report, 2.06, 2008
- Boulanger, Ross, San Luis Dam Slide, http://cee.ucdavis.edu/faculty/boulanger/geo_photo_album/
- Duncan, J.M., & Stark, T.D. (1989), The Causes of the 1981 Slide in San Luis Dam, Raleigh, North Carolina: Dept. of Civil Engineering, Virginia Polytechnic Institute.



IN REPLY
REFER TO:

MP-241
PRJ-14.00

United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

OCT 18 2007

No comments

- n/a -

All Central Valley Project Water Contractors

Subject: Actions to Address Dam Safety Issues at B.F. Sisk Dam, Central Valley Project (CVP), California

Dear Ladies and Gentlemen:

Part of the Bureau of Reclamation's role in providing water and power is to assure the safety of the public potentially at risk due to dam failure. To accomplish this objective, Reclamation carries out dam safety activities to identify and evaluate potential risks to the public. When it becomes necessary to reduce risk, the Reclamation Safety of Dams Act provides authority to take action to protect the integrity of Reclamation dams and preserve water project benefits.

Through the Dam Safety Program, Reclamation has identified several conditions at B.F. Sisk Dam that require action to reduce risks.

- The dam is located in a seismically active area, very close to the Ortigalita Fault
- Studies and deformation analyses conducted during 2005 indicate that, during a major earthquake, crest settlement greater than freeboard, or cracking associated with embankment deformation, could occur and lead to dam failure
- Failure of the dam could inundate hundreds of square miles including the town of Santa Nella, about 7 miles of Interstate 5, and numerous farms and houses along the San Joaquin River including some areas of Stockton
- An independent consultant review board agreed with Reclamation that the calculated crest settlement is possible for the estimated peak ground accelerations associated with the Ortigalita Fault
- Reclamation has concluded that there is a need to initiate a Corrective Action Study to identify and evaluate risk reduction alternatives

There are several provisions of the Reclamation Safety of Dams Act of which you should be aware:

- The Secretary of the Interior is responsible for determining the need for risk reduction actions and selection of the actions to be implemented
- Any modifications performed may not provide new or additional benefits to the project
- Modifications are not to address reasonable and normal maintenance
- The cost of the modifications must be reimbursed. If the need for modification is due to a change in hydrologic, seismic, or the state-of-the-art conditions, the Act currently limits reimbursement to 15 percent of the total cost
- Reclamation must notify the project water beneficiaries of the need for risk reduction and explain the administrative and legal requirements
- Reclamation must provide opportunities for project beneficiaries to participate in development of plans for risk reduction actions

The process for selecting and implementing risk reduction action is focused on the objective of determining the least total cost alternative for achieving the risk reduction. The process includes the following activities:

- Identifying alternatives for consideration
- Gathering necessary data to develop feasibility designs, cost estimates, and estimates of potential risk reduction
- Developing appraisal level designs for several proposed alternatives
- Evaluating risk reduction effectiveness of proposed alternatives
- Conducting an economic analysis to support repayment negotiations
- Conducting an environmental analysis and identifying mitigation activities associated with the proposed modification
- Preparing a modification report to Congress (where construction costs exceed the authority granted to the Secretary by the Reclamation Safety of Dams Act)
- Preparing final designs and estimates
- Awarding a contract to make the necessary modifications to the dam
- Completing design and construction documentation

No comments

- n/a -

Proposed risk reduction actions will be subject to a number of administrative/legal processes including but not limited to the National Environmental Policy Act (NEPA) compliance, Endangered Species Act (ESA) consultation, cultural resources surveys, and repayment of project costs. Section 3 of the Reclamation Safety of Dams Act specifically prohibits the use of Safety of Dams funds for new or additional benefits. This potentially could include ESA mitigation activities required to obtain the permits necessary for the project. Any mitigation required as a result of ESA consultation will require a determination of the extent to which the mitigation is a direct result of the proposed risk reduction actions. While the provision in the Act does not relieve Reclamation of the responsibility to consult on ESA issues, it does limit Reclamation's authority to address such issues with Safety of Dams funding.

The Reclamation Safety of Dams Act requires repayment of certain reimbursable costs associated with the risk reduction. Reclamation will develop cost estimates as part of the preparation of a modification report. We will seek to enter into repayment negotiations with our water contractors to establish terms for repayment of the reimbursable portion of the costs in accordance with Reclamation law. If we are unable to sign a contract for reimbursement of costs, we will proceed with sending a bill upon a determination of substantial completion or consideration will be given to other alternatives for reducing the risk to the public.

During the process of developing and implementing a preferred risk reduction action, we invite you to participate in the process and share your thoughts and ideas for cost-effective means of achieving the required risk reduction. A Corrective Action Alternative Scoping (CAAS) meeting, which is a brain storming session to identify and evaluate corrective action alternatives, is planned for late 2007 or early 2008. If you have specific risk reduction alternatives that you would like to have considered in determining a preferred alternative we encourage you to submit these alternatives in writing for evaluation prior to the start of the CAAS meeting. We also will be inviting water user representatives to the CAAS meeting. If you are interested in participating in the CAAS meeting or if you would like to submit an alternative for consideration, please contact the project manager, Doug McElhinney, Bureau of Reclamation, MP-241, 2800 Cottage Way, Sacramento, CA 95825 (E-mail: dmcElhinney@mp.usbr.gov). Alternatives submitted prior to the CAAS meeting will be formally evaluated and displayed as alternatives in the modification report. Even if you do not have specific alternatives to be submitted, Reclamation will be providing you with periodic updates at key decision points to keep you informed of progress. We will also be providing you with periodic cost reports with information on safety of dams modification costs.

In an effort to better facilitate communication with the large number of CVP water contractors, Reclamation proposes that the following methods be used to disseminate information and receive feedback:

- Posting cost reports and project information at the Mid-Pacific Region Safety of Dams web page located at <http://www.usbr.gov/mp/sod/>. This web page should be functioning within the next month and would include technical information intended to be helpful in proposing alternatives

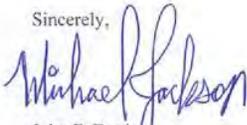
No comments

- n/a -

- Providing periodic briefings to the Central Valley Project Water Association Financial Affairs Committee meetings
- Establishing a small group of water user officials to review and receive documents, to participate in project briefings, and to represent and make available documents to other CVP water users. Interested water contractor officials should contact the Project Manager listed in the preceding paragraph

During the process of identifying and implementing preferred risk reduction actions, you may have access to information that is considered procurement sensitive. Inappropriate sharing of this information could have a significant adverse effect on the cost of contracts and the project. Sharing of procurement sensitive information may also disqualify certain individuals or organizations from participation in contracts to implement the risk reduction action. To assure the protection of this information, we may ask your staff or representatives to sign non-disclosure statements. B.F. Sisk Dam was designed and constructed, and is owned by Reclamation, and operated and maintained by the California Department of Water Resources. Assuring the safety of B.F. Sisk Dam is a key element of assuring that Reclamation continues to deliver the authorized benefits of the project. We look forward to your involvement in identifying and implementing action to reduce the identified risks at the dam. If you have any questions concerning the administrative/legal requirements or the current status of the project, please contact Doug McElhinney at 916-978-5225.

Sincerely,


for John F. Davis
Acting Regional Director

cc: Central Valley Project Water Contractors

No comments

- n/a -

Robert Pyke, Consulting Engineer

No comments

- n/a -

July 12, 2012

The Honorable Edmund G. Brown Jr
Governor of California
State Capitol, First Floor
Sacramento CA 95814

**The Truth About Delta Levees
Or
The Shaky Justification for the BDCP**

Dear Governor Brown,

You must be aware that one of the principal reasons that is advanced for the need for an isolated conveyance as part of the Bay Delta Conservation Plan (BDCP) is that the Delta levees are in a pathetic condition and that there will be multiple failures in a major earthquake followed by saltwater intrusion that will curtail exports from the Delta by the State Water Project and the Central Valley Project for up to three years, forcing up to 25 million people to drink and bathe in whiskey for that period of time. While I think I understand your desire to announce a "preferred project" for the BDCP within the next month, you should not do this without understanding that this reason for constructing an isolated conveyance with intakes in the North Delta is based on a series of misrepresentations and falsehoods - in other words, that the supporters of the BDCP are lying. And they are deceiving themselves - the threat to reliable water supply, the Delta ecosystem and both recreational and commercial fishing posed by a six-year drought is much greater than any threat posed by earthquakes, yet the BDCP does not include storage and does little or nothing to address the drought issue.

The implication that 25 million people are solely dependent on water exported from the Delta is of course false, but that is a relatively minor issue. The two more important issues that I want to focus on in this letter are the repeated use of the doomsday scenario for Delta levees as a scare tactic and the contention that exports might be interrupted for as much as 3 years, both of which are false.

1310 Alma Avenue, No. 201, Walnut Creek, CA 94596
Telephone 925-323-7338 E-mail bobbyke@attglobal.net

No comments

- n/a -

Examples of Scare Tactics by BDCP Proponents

The July 8 editorial in the LA Times, "California's Way Forward on Water," concludes with the following sentence: "Engineers warn that in the event of a major earthquake, Clifton Court could fail and the aqueduct could run dry, leaving much of the state without that water for three years or more."

Another recent example reported by KMTS radio is from the Santa Clarita City Council meeting on June 26th: "The delta is in danger of collapse. If you've ever driven or flown over Northern California and looked at that thing. It's a little terrifying," said City Manager Ken Pulskamp. "It's a 100 year old man-made agricultural levy system that could explode very easily, particularly in an area that's prone to earthquakes, floods, and some of the rising sea levels that we've been seeing," said Pulskamp.

Yet, another example was contained in the letter to John Laird, Ken Salazar and Mike O'Connor dated May 24, 2012, by eighteen members of the California State Legislature "as each day passes, the threat of a major earthquake in the Delta region and the impact of weather changes threaten the water supply ..."

While threats to the Delta levees from floods, earthquakes and possible more rapid sea-level rise are real, statements like this greatly exaggerate their importance. At least, that is my opinion as a registered civil and geotechnical engineer with over 40 years of experience and national and international standing in earthquake geotechnical engineering. As far as I know, neither the editors of the LA Times, the City Manager of Santa Clarita nor the eighteen members of the legislature have any qualifications in these fields, so where do they get their information from? Some clue is provided by the next two examples.

One is a blog posted on the Southern California Water Committee (SCWC) web site <http://socalwater.org/news/scwc-water-blog> which reads in part: "The U.S. Geological Survey says there's a 63 percent chance of a magnitude 6.7 quake in the next 30 years in the Bay Area, home of the Delta—California's water supply hub. Those are some pretty high odds. So what would a seismic event of that size mean for the Delta and those who depend on its water? A 6.7 quake could create a Katrina-like collapse of the 100-year-old levees that channel Delta water, causing saltwater to flood in and contaminate the supply for 25 million people. Water deliveries from the Delta could be interrupted for as long as 1 ½ years. Until we make the needed investments to protect our infrastructure against this scenario, we are simply not prepared for this very real possibility."

The statement by USGS is correct but is being used inappropriately. The 63 percent chance of a magnitude 6.7 earthquake in the next 30 years in the Bay Area is in the right

No comments

- n/a -

ballpark but it includes possible events on three main sources, the Peninsula San Andreas fault, the Hayward fault and the Rogers Creek fault. Only the Hayward fault is of much interest to the Delta and even the Hayward fault is 45 km from the western tip of Sherman Island. The Bay Area is not normally said to be "the home of the Delta". At least the SCWC is now talking about a supply interruption of only 1½ years, down from 3 years in some other articles, but the latest DWR studies suggest that even a very extreme 50 levee breaches, 20 flooded islands scenario would likely only disrupt water exports for several months and in the worst case for six months. And of course the impact is only on a relatively small fraction of the supply for 25 million people.

The second example of a possible source for these scary statements is a video entitled "Seismic Risk in the Sacramento San Joaquin Delta" that can be found on the website of the Metropolitan Water District of Southern California (MWD) <http://mwdh2o.com/mwdh2o/pages/yourwater/supply/Delta/index.html> the introduction to which says: "There are hundreds of miles of unengineered levees that are susceptible to major failures due to flood and seismic risk. This video demonstrates the catastrophic consequences to homes, businesses, farms and habitat in the Delta from a 6.7 magnitude earthquake and how Southern California's water supply could be cut off for up to two years." Note that the interruption is now back to two years in spite of the fact that MWD actually initiated the studies now being conducted by DWR and follows those studies closely.

A further example of exaggeration was given by Dr David Sunding in reporting his preliminary findings of the economic benefits of the BDCP at a public meeting on June 20th. Dr Sunding evaluated the economic impact of outages of six months, one year, two years and three years, even though the scope of work for his contract only specified that he would do this for outages of six months and one year. I will return later to the substance of his evaluation but where did these unrealistic durations of outage come from?

None of this is to say that the Delta levees are in perfect condition. They are not and they need more work, but let's get realistic about their current and likely future condition.

An Independent Assessment of the Condition of Delta Levees

The basis for many of the pessimistic assessments of the condition of Delta levees and their probabilities of failure come from the Delta Risk Management Strategy (DRMS) conducted by outside consultants but tightly managed by DWR. Although led by very competent principal investigators, the DRMS effort was always hampered by being schedule-driven rather than quality driven. The DRMS Phase One report was

extensively reviewed, including a review by an independent review panel (IRP) assembled by the Cal-Fed Science Program. The reviews were generally critical of the study. After revisions had been made to the initial report, the IRP review concluded that "the revised DRMS Phase 1 report is now appropriate for use in DRMS Phase 2 and serves as a useful tool to inform policymakers and others concerning possible resource allocations and strategies for addressing risks in the Delta." But the IRP expressed concerns: *"This conclusion, however, is subject to some important caveats. First, the IRP cautions users of this revised DRMS Phase 1 report that future estimates of consequences must be viewed as projections that can provide relative indicators of directions of effects, not predictions to be interpreted literally ..."*

Although the DRMS developed a nice framework for assessing risks to the Delta levees, the effort had data gaps that were never filled, as acknowledged in the note on page 1-1 of the report. Gaps such of these in data and knowledge tend to drive the estimates of fragilities down, and the risks up. However, despite the warning from the IRP, the numerical results from the DRMS Phase 1 report are widely quoted and used in other studies, painting a more pessimistic picture of the Delta levee system than is warranted. In addition, there are on-going improvements to the levee system under the Delta levees subventions and special projects programs and these improvements are not reflected in the DRMS Phase 1 assessment which was based on 2005 conditions.

The first, and to date only, significant independent study of the condition of Delta levees is included in the Economic Sustainability Plan (ESP) of the Delta Protection Commission, completed in 2011. This study was conducted by the writer and Michael J. Conrad Jr., former commander of the Sacramento District of the Corps of Engineers. Col. Conrad and I had some familiarity with the Delta but our broad engineering experience had been largely accumulated outside the Delta. We conducted extensive interviews with DWR staff and consultants and with reclamation district engineers who work in the Delta. Because DWR at that time had no up-to-date maps of the Delta levee system, with the cooperation of DWR staff who made available various GIS data sets and the results of 2007 LiDAR surveys conducted for DWR, we developed our own map of the Delta levee system and made an assessment of the current condition of the Delta levees. Subsequent to the completion of the ESP, DWR has released the initial version of their own maps which are, not surprisingly because they are based on the same data, generally similar to the ESP map and assessment.

When we commenced our study, there were basically two schools of thought about Delta levees. One, that relied in part on DRMS, that said there were 1,100 miles of levees in poor condition that would fail in a large earthquake, and the other, advanced by engineers who work for reclamation districts, which said that since 1982 significant improvements had been made to many Delta levees and that they were now in

No comments

- n/a -

reasonably good shape. Col. Conrad and I found, amongst other things, that there are in fact only about 1,000 miles of permanently maintained Delta levees, but our principal finding was that both schools of thought had some merit. We found that the reclamation district engineers were correct in claiming that the Delta levee system was now in reasonable condition overall, but that the “doomsday school” was also correct in asserting that the levee system was still not adequately designed to cope with more extreme flood events, large earthquakes or possible more rapid sea-level rise. The reclamation district engineers had never disputed this second conclusion and it turned out that the difference between the two schools was mostly one of emphasis.

In order to provide at least some detail about the current condition of the Delta levees it is necessary to refer to three different levee standards, the HMP “standard”, the Delta-specific PL 84-99 standard, and a higher standard suggested in the ESP that has come to be referred to as the “fat levee” standard.

The HMP “standard” is not an engineering standard but is the minimum geometry specified in the “Short Term Mitigation Plan” as defined in “*State of California, FLOOD HAZARD MITIGATION PLAN, 180- Day Report Prepared in Accordance with Section 406 of Public Law 93-288, August 21, 1986*”. The same report includes a “Long Term Mitigation Plan” based on DWR Bulletin 192-82 and the U. S. Army Corps of Engineers (USACE) companion document, “*Sacramento-San Joaquin Delta, California, Draft Feasibility Report and Draft Environmental Impact Statement, October 1982*”. The Short Term HMP levee geometry was negotiated among FEMA, DWR, and the Delta reclamation districts following Delta disaster declarations resulting from the 1982-83 and 1986 floods. It was rationalized as an interim step with the objective of mitigating and rapidly improving Delta levees on islands (that were then in much worse shape than they are now) so they would be less likely to overtop, or be substantially damaged in the event of another federal disaster event. There was no pretention that the HMP geometry was an adequate long-term technical design standard. The HMP Criteria was solely for the purpose of meeting FEMA Public Assistance eligibility. Levees must protect against water flowing over the levee and water seeping through or below the levee. The HMP “standard” provides a measure of protection against water flowing over the levee but provides no safety requirements for seepage. While the State has been very slow in helping the local reclamation districts complete this interim step, thanks to funding authorized by Propositions 84 and 1E, this goal is now within reach. In fact DWR is currently in the process of administering a round of funding which is expected to bring all Delta levees up to this interim “standard”.

The Bulletin 192-82 Long-Term Mitigation Plan evolved into the USACE Delta-specific guideline for non-project levees to qualify for Public Law 84-99 post-flood rehabilitation assistance that was issued in 1987. The PL 84-99 design criteria, which do constitute an

No comments

- n/a -

engineering standard, are very similar to those in Bulletin 192-82. Under the multi-agency CALFED Bay-Delta Accord (1995 to 2000), the integrity of Delta levees was addressed as a major program area. Part of the resulting Levee System Integrity Program was improvement of all Delta levees to a “base level of protection.” The final EIS/EIR stated this commitment as follows: “The CALFED Levee Program will institute a program that is cost-shared among the beneficial users, to reconstruct Delta levees to the Corps’ PL 84-99 Delta Specific Standard.” This commitment was then reflected in the Record of Decision (ROD) in August, 2000 and was to be implemented through a Memorandum of Understanding between the Corps and DWR executed in July, 2001. While CALFED fizzled out, funds that were generally adequate to cover the State share of improving all Delta levees were included in Propositions 84 and 1E, approved by the voters in 2006. Disbursement of that funding has been delayed for various reasons, including the State’s fiscal crisis, but much progress has been made. Details of the expenditures on Delta levees through 2011 are included in the ESP but total spending since 1982 is approaching \$700 million. After current projects are completed, only about 350 miles of levees will remain that need to be brought up to the PL 84-99 standard. The funds remaining from Propositions 84 and 1E, together with funds from the USACE Levee Stability Program, an outgrowth of CALFED, should be sufficient to upgrade most Delta levees to the PL 84-99 standard, finally achieving a goal that was first set by the State and federal governments thirty years ago.

However, the PL 84-99 standard does not explicitly address seismically-resistant design, or design for greater than 100-year water surface elevations and makes no accommodation for possible sea-level rise. The 1983 Delta Levees Investigation did suggest that Delta levees should be designed for 300-year water surface elevations but that suggestion has not been included in subsequent standards or revisions. Likely, adoption of the new requirement for urban levees of three feet of freeboard over the 100-year water surface elevation coupled with superior flood-fighting would effectively provide 500-year flood protection. Building to this standard and increasing the crown width to a minimum of 22 feet would increase the cost only marginally over the cost of complying with the Delta-specific PL 84-99 standard and this “PL 84-99 plus” standard may be sufficient for many Delta levees long-term. If the levee in question does not contain or is not underlain by loose sands that are susceptible to liquefaction, these “PL 84-99 plus” levees should be considered to be seismically robust. However, in order to more fully address earthquake loadings, possible sea-level rise and to provide the option for adding vegetation on the water side of levees, a higher Delta levees standard is required. This standard should particularly be applied to most of the lowland levees which face the biggest hazard due to possible sea-level rise and are also the most critical to salinity intrusion, but it might be selectively applied to other Delta levees.

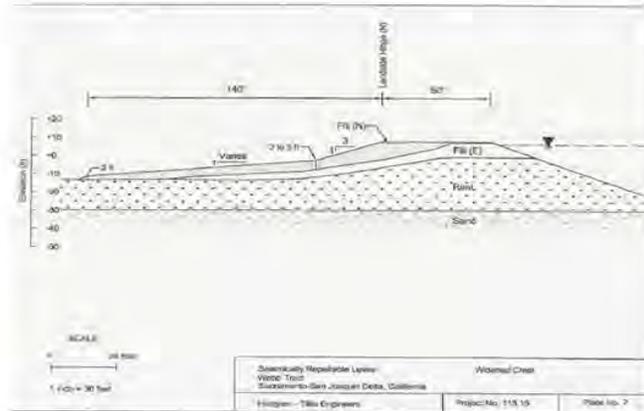
As an example of a levee with increased seismic resistance that also meets other

No comments

- n/a -

objectives, the cross-section of a proposed seismically-resistant levee taken from a report by Hultgren-Tillis Engineers (HTE) for Reclamation District 2026 (Webb Tract) is shown in Figure 1.

Figure 1 - Example “Fat Levee” Cross Section



Even when assuming that some liquefaction might occur both in the embankment and the foundation, this study indicated that deformations would be limited by the addition of a landslide buttress, as shown in the figure. A key feature of the design shown in Figure 1 is the wide crest. Wider crests not only provide a more robust levee, but also allow for more efficient emergency levee patrol and response when it includes an all-weather traffic surface. The fact that the levee section is overbuilt also means that material could be borrowed from the toe as necessary to quickly rebuild the crests of any levees that actually deform during an earthquake. Levees with wider crests are also the most economical way to provide for possible sea-level rise. While it is the policy of the state to plan for 55 inches of sea-level rise by the year 2100, the probability of that magnitude of sea-level rise is actually very small. While it is not cost-effective or rational to construct levees to those elevations today, the provision of a wider crest with an all-weather traffic surface today has at least three benefits: providing a more robust levee immediately; allowing more room and accessibility for patrol, flood-fighting or emergency response following earthquakes; and allowing a choice of methods for raising the crest elevation in the event of need in flood events and in the long term case of actual sea-level rise. In addition, the provision of a wider crest also allows for retaining or

No comments

- n/a -

planting of appropriate vegetation on the waterside of the levee. Such planting, creating shaded riverine habitat, should be an essential component of any comprehensive plan to repair the Delta ecosystem.

HTE estimated that this design would cost approximately \$2 million per mile in 2009. HTE also looked at more elaborate designs which included either or both of a slurry trench wall or an internal drain. Those designs added up to \$5 million per mile to the incremental cost but I believe that the additional features are not generally required and that an average cost of \$2-3 million per mile is a reasonable estimate at this time. If it is assumed that anywhere from 300-600 miles of levees need to be upgraded to this standard, the basic engineering and construction cost would be in the order of \$1-2 billion although the overall program cost might well be higher and the ESP suggested an overall program budget of \$4 billion.

This higher Delta-specific levee standard might be referred to as a “seismically repairable levee” or a “seismically-robust levee” but because it also addresses other issues it has come to be known by the popular name of “fat levee”. The first “fat levees” addressing these multiple issues were constructed on Upper Jones Tract in 2011 as a result of outstanding cooperation between the local reclamation district, the East Bay Municipal Utility District, DWR and the Department of Fish and Game.

Figure 2 – “Fat Levee” on Upper Jones Tract



No comments

- n/a -

While the cost of further improving Delta levees to this “fat levee” standard is non-trivial, as explained in the ESP, that cost can easily be justified because of the value of the infrastructure that the levee system protects and because of the multiple benefits of improved levees. Not only would such a program generate jobs more quickly than the BDCP, but it would reduce the risk to life and property throughout the Delta, protect and enhance the Delta as a place, contribute to ecosystem restoration, and reduce the risk to many kinds of energy and transportation infrastructure in addition to water conveyance.

Are Delta Levees Really Vulnerable to Earthquakes?

The short answer is yes, but not very vulnerable. The two reasons that are normally given for questioning the performance of Delta levees under earthquake shaking are: (1) that they are founded on peat which is a poor foundation material; and (2) that they are founded on or composed of loose sands that are susceptible to the phenomenon of liquefaction.

The first of these assertions is completely wrong. Peat is very compressible under static loads but under cyclic loads peats generate even less excess pore pressures than clays and thus show little or no loss of strength and stiffness. In fact, to the extent that the Delta levees are largely composed of peat, they may be expected to perform better than levees in general under earthquake loadings. Not only is peat expected not to lose strength under earthquake loadings, but, because it is relatively soft, it also might be expected to attenuate ground motions with peak accelerations in the order of 0.2g or more. The relatively good performance of peat under even large amplitude cyclic loadings was demonstrated by a recent test carried out on Sherman Island by researchers from UCLA with funding from the National Science Foundation's NEES program.

Liquefaction might be a problem if loose sands were pervasive in either the foundations or the constructed portion of the Delta levees, but they are not. There are three different situations where loose sands that may be susceptible to liquefaction are found in and under the Delta levees. One possible source of loose sands is the natural levees that underlie some of the present-day levees. The extent of this condition is believed to be limited because few of the present day levees overlie historic natural levees. The second possible source of sands that may be susceptible to liquefaction is hydraulically placed clean sand that has been dredged from the main river channels and placed in adjacent levees without compaction. The actual extent of these materials is unclear and it may be that these materials are sufficiently well drained that most of the excess pore pressures that are generated by earthquake shaking would quickly dissipate so that any deformations would be limited. The third source is the topmost sand layer that underlies the peat. From a geotechnical engineering point of view, the sands that underlie the

No comments

- n/a -

Delta can, with the possible exception of the top 10 feet, be characterized as dense to very dense, and actually constitute a good foundation. Meticulous work by Drexler and others at the USGS indicates that the oldest peat deposits are in the order of 7,000 years old so that the underlying sands are at least this old. That age, when combined with the penetration resistances cited by Hultgren-Tillis Engineers in their report on Webb Tract, suggest that even the surficial sands are not particularly susceptible to liquefaction. Even under the 500-year return period ground motions estimated in DRMS, which range from 0.2 to 0.4g in firm soils, significant or widespread deformations from any of these three kinds of sands should not be expected. The repeated citing of levee deformations that were sustained in the Kobe and Christchurch earthquakes, which had higher ground motions and where levees were founded on very loose and recent alluvial soils, is not particularly helpful. However, although these case histories are not directly applicable to the Delta, they do illustrate that levees do not necessarily breach and release water, even when they are quite badly deformed.

Thus, a fair summary would be that the risk of failure of Delta levees due to earthquake shaking cannot be completely dismissed, but that more detailed studies are required to determine whether it even rises to significant levels. What is clear, even without further study, is that the argument that a peripheral canal is needed because of the threat to Delta levees posed by earthquakes, rests on a very shaky foundation.

The Economic Impact of Conveyance Outages

The economic impact of possible conveyance outages caused by earthquakes has been discussed in a recent report by Dr. Jeffrey Micheal of the University of the Pacific and in the presentation by Dr David Sunding at the public meeting on the BDCP on June 20th.

It is unfortunate that Dr. Sunding's presentation had an alarmist focus on a worse than worst case scenario, and just talked about water supply and ignored the bigger picture that must be discussed in any Delta earthquake discussion. For example, Dr. Sunding was trying to sound reasonable in saying that an earthquake wouldn't result in a "refugee" situation due to water shortages. However, the low-probability catastrophic quake and flood he is discussing would result in widespread homelessness and loss of life in the Delta itself, not to mention interruptions of energy and transportation. There would, in fact, be refugees and the water conveyance tunnels would do nothing to prevent it. "Fat" levees are the only viable proposal that truly protects the lives and the economy from a major seismic catastrophe in the Delta.

However, as acknowledged by Dr. Sunding in his verbal comments, for the more realistic periods of outage there is little difference between his estimates and Dr.

No comments

- n/a -

Michael's estimates. Limiting the discussion to the more realistic but still conservative outages of 6 to 12 months, Dr. Sunding presented an expected present value of \$722 million to \$2,093 million for these outage durations. This can be converted to an expected annual value that can be compared to Dr. Michael's annual estimate of \$50 million. If the effect of discounting is eliminated, the expected values for 6 and 12 month outage increase to \$970 million and \$2,812 million. For an expected annual value, this would be multiplied by an annual probability of such a seismic event and failure occurring. According to DRMS Phase 1, the annual probability of 10+ islands failing from earthquake is about 3%, and the annual probability of 30 or more islands failing is about 1%. These failure probabilities are far too high, but I use them to make a point. The expected annual values if you apply a probability range of 1-3% to the expected costs of a 6-12 month outage are as follows:

Annual Probability	6 Month Outage	12 Month Outage
.03	\$29.1 million	\$84.4 million
.02	\$19.4 million	\$56.3 million
.01	\$9.7 million	\$28.1 million

These values are very comparable to the \$50 million annual earthquake risk reduction benefit Dr. Michael included in his June 14 report – in fact the median value in the table is only about \$30 million. So that even if you use conservative estimates of the likely length of any outage and very conservative estimates of the probability of those outages, the economic impact of an earthquake-induced outage is less than one-twentieth of the estimated annual financing and operating costs of the BDCP, which is over a billion dollars. This goes beyond shaky. It is ludicrous that it is put forth as a principal argument for the BDCP.

Conclusion

There is a real need for an improved system to convey any surplus water from the Sacramento River to users in the San Joaquin Valley and Southern California, but it is not the BDCP as presently planned. If the BDCP as presently planned was justified, it would not be necessary to resort to phony arguments such as there will be widespread failure of Delta levees in a major earthquake and supply will be interrupted for up to three years. Even using very conservative values for the expected duration of outages and the probability of those outages, the economic impact of those outages is trivial when compared with the cost of financing and operating the BDCP.

Furthermore, since the probability of these outages given the current and expected future condition of the Delta levee system is likely characterized by a return period of

No comments

- n/a -

something greater than 1000 years, why are the lobbyists and flacks for the San Joaquin /Southern California Water Lobby more concerned about earthquakes than they are about a six-year drought which has a return period in the order of 100 years. A six-year drought would decimate farmers and fishermen alike, and force very tight rationing for urban water users, but the BDCP includes no storage and makes no provision for a six-year drought.

I am a professional engineer rather than a politician, but even if I do not fully understand California politics, it seems to me that you are not getting the best possible advice on this important issue and I would urge you seek input from a wider circle of advisors so that you can make a decision about the BDCP based on facts rather than misinformation.

Let's get California working again!

Sincerely,

A handwritten signature in cursive script that reads "Robert Pyke". The signature is written in black ink on a white background.

Robert Pyke Ph.D., G.E.

No comments

- n/a -