

Zero-Based Budget Report - Program Detail

Department of Water Resources (3860) Budget Year 2012-2013 Staff and Resource Needs

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| Program Area (Total Positions & Resources) | WATER USE EFFICIENCY 2.0 Positions - \$482,000 | |
| Legal Authority | Proposition 204 (Water Code, Div 24, Ch 6, Art 2, Sec 78655); Proposition 50 (Water Code, Div 26.5, Ch 6, Sec 79545(a)); SBX7 7 (Water Code, Div 6, Part 2.55, Ch 3, Sec 10608.43 and 10608.50); Water Code Sec 10004.5 and 10013 | |
| Program Justification | <p>In 1973, DWR published Bulletin 189, WasteWater Reclamation, which examined the potential for beneficial reuse of municipal reclaimed water. Limited water recycling and desalination technical and financial assistance to local agencies has been provided since the 1970s as part of DWR's statewide planning efforts. Desalination studies were focused on solving agricultural drainage issues in the San Joaquin Valley. In 1997, DWR expanded water recycling and desalination/salinity management activities to carry out provisions of Chapter 6, Article 2, of Prop 204. The program provides in-kind, technical, and financial support to regional partnerships or other cooperative efforts undertaken by water, wastewater, or other public agencies to examine the feasibility of water recycling/desalting projects. In 2000 Proposition 50 allocated \$50 million for grants administered by DWR for desalination projects. In 2001, an Evaluation Decision Model to evaluate local, regional and state costs and benefits of recycling projects was developed under a consulting contract. In 2002-03 DWR administered the Recycled Water Task Force called for by AB 331 (2001). SBX7 7 (2009) requires urban and agricultural water use efficiency activities, some of which specifically address water recycling and desalination, including a Commercial, Industrial, and Institutional Task Force and evaluation of statewide targets. DWR conducts on-going California Water Plan updates, which address resource management strategies for water recycling and desalination.</p> | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Engineer, Water Resources (1) | | The Engineer is responsible for evaluating engineering design criteria and providing technical support to statewide water recycling and desalination programs. The position provides technical guidance and expertise to local water and wastewater agencies statewide; coordinates and assists state, federal, and local agencies regarding water recycling and desalination issues. The position will specifically implement and evaluate the water recycling and desalination program and recommend new or revised standards for promoting the use of recycled and desalinated water. DWR conducts on-going California Water Plan updates, which address water recycling and desalination; this position will assist in providing information for the California Water Plan updates. |
| Engineering Geologist (1) | | The Engineering Geologist position assists in drafting resource management strategy chapters on water recycling and desalination in the California Water Plan Update. SBX7 7 activities on water use efficiency include tasks specifically related to water recycling and desalination, including technical support to the Commercial, Industrial, and Institutional Task Force and establishing statewide targets for water recycling, desalination, and urban stormwater runoff capture and use. As part of the statewide target task, this position assists the State Water Resources Control Board on a survey of water recycling in California and conducts an assessment of current water desalination occurring in California. This position also provides technical assistance on other SBX7 7 projects. This position administers 50 grant and technical assistance projects for water recycling and desalination studies, construction projects, and research projects. |
| Program Area (Total Positions & Resources) | ADMINISTRATION WATER USE EFFICIENCY 3.0 Positions - \$362,000 | |
| Legal Authority | Civil Code Section 1353.8. Water Code Section 10004-10013; Water Code Section 79560-79565. | |
| Program Justification | <p>California voters approved the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Proposition 50) in the November 2002. Funds allocated to the Department by the bond measure are subject to appropriation by the Legislature in the state budget. Water Code Section 79560.1 (Chapter 618, statutes of 2002) additionally provides that the department administers 50% of the \$500 million provided in Chapter 8 for integrated regional water management grants for projects to "protect communities from drought, protect and improve water quality, and improve local water security by reducing dependence on imported water." These funds are available for grants for water management projects that include programs for water supply reliability, water conservation, and water use efficiency.</p> | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |

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| Environment Scientists (3.0) | The Environmental Scientist reviews, evaluates, and assists with the selection of proposals for funding through Proposition 50 urban and agricultural water use efficiency grant program; helps with the development and the process of proposal solicitation, develops grant agreements, and manages the subsequent grant agreements and cooperative contracts with local water agencies, universities, non-profits and other entities receiving water use efficiency grants; provide technical assistance with the implementation of grant agreements, monitor and analyze progress, process invoices, and ensure compliance with contract provisions. Positions would also prepare technical summary reports, maintain grant tracking database, and provide relevant data and information pertaining to funding, expenditures and grant program implementation. | |
| Program Area (Total Positions & Resources) | AGRICULTURAL WATER CONSERVATION 4.9 Positions - \$1,327,000 | |
| Legal Authority | Civil Code Section 1353.8. Water Code Section 10004-10013, 10900-10904. | |
| Program Justification | This program was formed in the 1975-76 fiscal year by merging the Water Use Program (created in 1954) and the More Effective Use of Water Program that began in 1973. In the 1981-82 fiscal year, this activity was separated out as an independent component. In the 1990s the Bay-Delta Estuary Proceedings on water quality encouraged public and private water agencies to continue efforts to implement efficient irrigation practices. The development of efficient water management practices (EWMPs) for agricultural water suppliers, as well as for on-farm irrigation management, is a key aspect of this program. The EWMP work is authorized under AB 3616. This work involves implementation as well as evaluation of the effectiveness of EWMPs. Starting in 1994, the planning and irrigation system evaluation elements of the program were coordinated more closely with the California water plan update(Bulletin 160). Water use data and efficiency evaluations are an important aspect of the agricultural assistance program. The Agricultural Water Management Council was formed in 1997 under the Memorandum of Understanding Regarding Efficient Water Management Practices by the agricultural water suppliers in California. As a signatory of the MOU, DWR provides administrative and technical assistance to the Council. In June 2000, the Governor's "California Water Future: A Framework for Action," was signed and a Programmatic Record of Decision was signed on August 28, 2000. Environmental, agricultural, urban, commercial, and industrial water users in California face increasing limited water supplies. The ROD identifies and required that DWR, as a lead agency and in cooperation and partnerships with other local, state, federal agencies, and private interests, provide technical assistance to agricultural, urban, commercial and industrial communities as well as recycling to improve water quality. The Department of Water Resources' Water Use and Efficiency Branch programs are required to implement CALFED's Water Use Efficiency program. The work includes implementation of practices and measures that are locally cost-effective as well as practices and measures that are cost-effective from a regional and statewide perspective to achieve the goals of the CALFED Water Use Efficiency Program. The Water Conservation Act of 2009 and Proposition 84 specify DWR as the state agency responsible for completion of the specified tasks including: quantification of agricultural water use, adoption of regulations providing a range of options for agricultural water measurement, updating the EWMPs, revising the requirements for Agricultural Water Management Plans, and revising the agricultural funding criteria . | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Senior Land and Water Use Scientist (2.0) | 200 | <p>One scientist plans, organizes, and directs staff and activities of the Agricultural Water Use Efficiency Unit. The position specifically implements the Department's Agricultural Water Use Efficiency activities and legislative mandates including: updating efficient water management practices, adoption water measurement regulations, and developing a methodology for quantifying the efficiency of agricultural water use. The position also oversees the review and evaluation of water management plans, assists with the implementation of efficient water management practices, and provides technical and financial assistance to the California Agricultural Water Management Council. The position also manages the Department's Water Use Efficiency Grant Program to help improve efficiency of water use statewide through initiation and implementation of locally cost-effective water use efficiency programs and projects with municipalities, water purveyors, and urban and agricultural water users.</p> <p>One scientist plans and manages the California Irrigation Management Information Systems statewide; supervises CIMIS staff; plans and manages the program budget; and works closely with the public and local agencies on issues related to CIMIS projects. This position serves as the DWR lead technical expert for CIMIS projects; initiates, plans, and develops partnership, technical guidance and expertise with federal, state, private, public and local water agencies and their representatives to implement, and promote innovative CIMIS technologies; and develops practices, formulates plans of action with agricultural and urban water users, academic experts, urban retail water users, and environmental organizations to incorporate CIMIS weather irrigation scheduling and other innovative practices. The position organizes, conducts, and oversees scientific investigations, research, and methodologies for calculating irrigation and evapotranspiration factors; develops new non-traditional partnerships for CIMIS implementation; coordinates workshops on CIMIS based irrigation scheduling, and expand local dissemination of CIMIS data through specific agricultural commodity groups, water districts, and landscape and golf course entities.</p> |

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| Associate Land and Water Use Scientist (1.0) | | The Associate Land and Water Use Scientist researches and initiates the coordination of technical studies with other government agencies when considering the evapotranspiration (ETo) adjustment factor for updating of the model ordinance water budget; and develops agricultural methodologies and tools and works with other department staff, the public, and private entities to implement SBX7 7 agriculture budget calculations. This position assists counties to develop and incorporate the use of a landscape water budget component that establishes the maximum amount of water to be applied through the irrigation system, based on climate, landscape size, irrigation efficiency, and plant needs. This position independently conducts training and assembles educational materials for classes, seminars, and workshops for updating the model landscape ordinance plans; prepares technical reports, articles, and other promotional materials such as brochures for the updated model landscape ordinance project; and reviews and compiles material updates for the Model Ordinance Technical Manual and CIMIS program. This position focuses and updates reference ETo tables for the updated model landscape ordinance project; performs scientific studies and methodologies for non-ideal site ETo estimation study and analysis, and explores landscape coefficient refinement; interprets, writes, and responds to legislative bills and policies related to the program; and researches and conducts investigations to respond to constituent concerns. |
| Associate Land and Water Use Scientist (1.9) | | These scientists review and evaluate agricultural water management plans and prepare technical and critical reports on completeness and adequacy of those plans. They also develop and maintain databases and spreadsheets for information regarding agricultural water management plans, provide assistance to agricultural communities on the water management planning process, and review, document, and report on agricultural water use efficiency activities and implementation of efficient water management practices. |

Program Area
(Total Positions & Resources) PRC Section 1, Division 43, Section 75029 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection

Legal Authority
Civil Code Section 1353.8. Government Code Section 65591-65596. Water Code Section 10004-10013; Water Code Section 10610 - 10656; Water Code Section 10800-10817, 10820-21, 10825-10829,10840-10845, 10850-10853; Public Resource Code Section 25401.9.

Program Justification

The Urban Water Conservation program was established in fiscal year 1975-76 to focus on action programs to more efficiently use water, thereby stretching existing supplies as an important element in meeting California's water needs. During the 1976 drought, DWR began a significantly expanded water conservation effort offered primarily to urban users. Bulletin 191, with eight supporting appendices, reported on those programs. The first model urban water conservation demonstration garden was planted in Sacramento. After the drought, the Urban Water Conservation program emphasis shifted to a continuing effort carried out in cooperation with local water districts. Assistance was provided to water districts and local communities in the planning, development, and implementation of voluntary, cost-effective programs. As a result of a contract with the State Water Resources Control Board, grants were made to local districts for the detection of water distribution system leaks which the local districts repaired. This contract also assisted water rights applicants and Clean Water Grant recipients preparing water conservation plans. Beginning in 1984-85, pilot projects were begun to demonstrate the effectiveness of landscape water conservation. These included economic analyses of the costs and benefits of reducing water use on existing residential landscapes, new residential landscapes, and large turf areas. In 1985-86, those pilot landscape projects were continued and a water audit program for large, flat turf areas was started. By December 1985, urban water agencies that had either 3000 or more connections or that delivered 3000 or more acre feet were to submit water management plans to the department in response to the Urban Water Management Planning Act of 1983. By 1991 California was in a fifth consecutive year of drought. The program produced a sample water shortage contingency plan, Water Recycling 2000: California's Plan for the Future, and a Memorandum of Understanding for Best Management Practices for Urban Water Conservation. Commercial and Industrial water conservation activities in the districts were augmented in FY 1996/97 including a focus on landscape water management in the commercial sector. Primary activity included review and comment on over 300 Urban Water Management Plans. In 1998, the urban water industry began requesting a refinement of urban water management plan review under criteria developed cooperatively with them. In FY00/01, under the CALFED "Programmatic Record of Decision," DWR took the lead in implementing the Water Use Efficiency element of the CALFED Program that was to be funded partly through Program 10 funds. The Water Conservation Act of 2009 and Proposition 84 specify DWR as the state agency responsible for completion of the specified tasks which include a review of Urban Water Management Planning and the development of guidelines for implementation of the state's goal of reducing urban water use by 20% by 2020.

| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
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| Senior Land and Water Use Scientist (1.0) | \$100 | The scientist manages the urban water management plan program, the urban water use efficiency technical assistance program, AB 1420 compliance, and manages contracts. The urban water management plan program provides guidebooks, methodologies, workshops and technical advice to water suppliers in developing urban water management plans and SBX7 7 compliance. |
| Associate Land and Water Use Scientist (1.0) | | Develops guidebooks, methodologies and workshops to assist water suppliers in writing urban water management plans (UWMP), leads the effort in collecting data from urban water management plans into a DWR database for use in state, regional and local planning, reviews submitted plans, and assists in writing legislative reports related to the UWMPs. |

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| Land and Water Use Scientist (1.0) | | Provides technical assistance to local suppliers, landscape professionals and residential homeowners on improving landscape water use efficiency. Assistance is provided through the development of brochures, workshops and other events. Technical assistance is also provided on the use and implementation of the landscape model water efficient ordinance. |
| Associate Land and Water Use Scientist (1.9) | | Regional DWR staff review urban water management plans and provide technical assistance to local water suppliers on water use efficiency. |
| Program Area (Total Positions & Resources) | URBAN AGRICULTURAL 2.5 Positions, \$535,000 | |
| Legal Authority | Civil Code Section 1353.8. Water Code Section 10004-10013. Public Resource Code Section 75041. Government Code 65595 (a) (1), 65596 (e). | |
| Program Justification | Proposition 84, Chapter 4 made funds available to the Department of Water Resources specifically for the purpose of conducting statewide water planning and project feasibility studies for California's existing and future needs related to water supply, conveyance and flood control systems. The projects specified in the bond language specifically include evaluation of climate change impacts to water supplies, surface storage planning studies related to the CALFED program, and modeling studies for improving flood protection and water supply. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Senior Engineer, Water Resource (0.75) | | Provides technical support on climate change and water and energy use, focusing specifically on water use efficiency; assists local agencies in producing and improving urban and agricultural water plans in light of climate change; identifies connections for those plans to energy efficiency and greenhouse gas emissions reductions. Specifically assists with the development of water-energy saving technology advancement and knowledge distribution as well as develops new and improved Best Management Practices for urban and agricultural water use that incorporate energy efficiency. |
| Engineer, Water Resource (0.75) | | Inspects, evaluates, and addresses the feasibility of design issues concerning the facilitation and implementation of plans for water recycling and desalination of seawater or brackish water projects. Identifies problems associated with recycling and desalination, and develops successful practices to address the problem. Reviews recycling and desalination treatment plants and other facilities construction plans, reviews pilot and demonstration studies, researches and develops projects, and plans feasibility studies for technical soundness, cost-effectiveness, long-term state benefits, and potential for state funding. Proposes new statewide targets for review and updates existing statewide targets for regional water resources management practices including, but not limited to, recycled water, brackish groundwater desalination and direct use of urban stormwater runoff. Updated targets should be included in the California Water Plan. |
| Associate Land and Water Use Scientist (1.0) | | Provides assistance to local agencies and helps agencies retrieve reference evapotranspiration (ET) data from the California Irrigation Management Information System website. This position specifically assists with implementing satellite ET calculations technologies utilizing remotely sensed data coupled with ground interpolated CIMIS data, with a 2 kilometer grid spatial coverage of the state, and disseminated via the web to ET controllers to allow for automated water budgeting irrigation. The position would assist implementing and web client services into the CIMIS system for the support of the weather based automated ET controllers. Provides technical support and maintenance for the data bases and the infrastructure is responsible for the quality assurance and quality control spell out of the data from this service, and provides technical support to the end user on the utilization of this data. |
| Program Area (Total Positions & Resources) | URBAN WATER CONSERVATION 1.6 Positions, \$275,000 | |
| Legal Authority | Civil Code Section 1353.8; Water Code Section 10004-10013, 10608.42 | |

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| Program Justification | <p>The Urban Water Conservation program was established in fiscal year 1975-76 to focus on action programs to more efficiently use water, thereby stretching existing supplies as an important element in meeting California's water needs. During the 1976 drought, DWR began a significantly expanded water conservation effort offered primarily to urban users. Bulletin 191, with eight supporting appendices, reported on those programs. The first model urban water conservation demonstration garden was planted in Sacramento. After the drought, the Urban Water Conservation program emphasis shifted to a continuing effort carried out in cooperation with local water districts. Assistance was provided to water districts and local communities in the planning, development, and implementation of voluntary, cost-effective programs. By December 1985, urban water agencies that had either 3000 or more connections or that delivered 3000 or more acre feet were to submit water management plans to the Department in response to the Urban Water Management Planning Act of 1983. By 1991 California was in a fifth consecutive year of drought. The program produced a sample water shortage contingency plan, Water Recycling 2000: California's Plan for the Future, and a Memorandum of Understanding for Best Management Practices for Urban Water Conservation. In FY00/01, under the CALFED "Programmatic Record of Decision," DWR took the lead in implementing the Water Use Efficiency element of the CALFED Program that was funded partly through Program 10 funds. The Water Conservation Act of 2009 and Proposition 84 specify DWR as the state agency responsible for completion of the specified tasks, which include a review of Urban Water Management Planning.</p> | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Environment Scientist (1) | | <p>Assists in developing and applying scientific methods and technical principles in the identification, research, and solution of Best Management Practices (BMP) for implementation of a 20% urban water use reduction by year 2020, and for the SBX7 7 project; develops customized scientific tools (information summaries, spreadsheets, sample reports) to assist local water agencies in BMP reporting. Reviews urban water management plans and environmental project reports, and assists in administering technical assistance through comparative analyses and monitoring procedures for urban water management planning. Provides consultative and technical assistance to water agencies and urban water suppliers. The position assists in updating urban water management planning databases, conducts data analysis, and reports findings regarding urban water use efficiency throughout California; prepares preliminary reports based on quantitative and qualitative water resource data from local water agencies.</p> |
| Associate Land and Water Use Scientist (0.6) | | <p>This position will focus on reviewing urban water management plans. The position assists water suppliers that have questions associated with UWMP, and communicates with them to help them readily identify the changes in the 2010 UWMP Guidebook. The guidebook assists urban water suppliers with 3,000 or more service connections or supplying 3,000 or more acre-feet of water per year in preparing their UWMPs</p> |
| <p>Program Area WATER CONSERVATION CH 2 (Total Positions & Resources) 8.5 Positions, \$1,757,000</p> | | |
| <p>Legal Authority Civil Code Section 1353.8; Water Code Section 10004-10013; Water Code Section 10610 - 10656; Water Code Section 10800-10817, 10820-21, 10825-10829, 10840-10845, 10850-10853.</p> | | |
| Program Justification | <p>The Water Conservation Act of 2009 (SBX7 7), requires DWR to complete specified tasks related to expanding urban water use and efficiency programs statewide. The department is tasked with, in conjunction with the CUWCC, convening a task force consisting of academic experts, urban retail water suppliers, environmental organizations, commercial, industrial, and institutional water users to develop alternative best management practices for the CII water sector. DWR, through a public process and in consultation with CUWCC, shall develop and post on its website technical methodologies and criteria for baseline daily per capita use, baseline commercial, industrial and institutional water use, compliance daily per capita water use, gross water use, service area population, indoor residential water use, landscaped area water use, and others as needed. DWR shall also develop a method for calculating urban water use targets that identify per capita use targets that cumulatively result in a statewide 20 percent reduction. The act requires the department to update the Urban Water Management Planning Guidebook to address legislative and procedural changes to the urban water management planning process that have occurred since 2005. SBX7 7 requires urban and agricultural water use efficiency activities, some of which specifically address water recycling and desalination, including a Commercial, Industrial, and Institutional Task Force and evaluation of statewide targets. The act requires DWR; to adopt regulations providing a range of options for water measurements that agricultural water suppliers may use to measure the volume of water delivered to customers with sufficient accuracy to comply with farm-gate delivery measurement requirements and to implement a pricing structure; to update the Efficient Water Management Plans in consultation with Agricultural Water Management Council, United State Bureau of Reclamation, and State Water Resources Control Board, and to consult with the SWRCB and revise the requirements for AWMPs if necessary. DWR will develop grant/loan criteria including eligibility requirements for receiving state funds.</p> | |

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| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
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| Senior Engineer, Water Resource (1) | 657 | This position oversees the Recycling and Water Desalination Section with three additional staff. The section is responsible for administering Proposition 204 and 50 grant and technical assistance funds for water recycling and desalination studies, construction projects, and research projects. The section is responsible for drafting two resource management strategy chapters on water recycling and desalination in the California Water Plan Update. SBX7 7 activities on water use efficiency includes tasks specifically related to water recycling and desalination, including technical support to the Commercial, Industrial, and Institutional Task Force and establishing statewide targets for water recycling, desalination, and urban stormwater runoff capture and use. As part of the statewide target task, DWR assists the State Water Resources Control Board on a survey of water recycling in California and conducts an assessment of current water desalination occurring in California. This section also provides technical assistance on other SBX7 7 projects to meet the critical timelines specified in the law. Assists in the tasks of the section as well as supervising staff in these tasks and performing administrative functions of budgeting, program development and management. |
| Engineer, Water Resources (1) | | Evaluates the feasibility and economic justification of large and complex water use efficiency commercial, industrial, and institutional (CII) projects. Works with CII representatives, state, federal and public officials and stakeholders, contractors, and local agencies to develop economic and water efficient technological criteria for present and future facilities and to design and implement SBX7-7 water efficiency projects that contribute to best management practices (BMP). Develops approaches and calculates water savings for long range water use efficiency for the state and the urban regions for reaching the 2020 objectives. Reviews UWMP's and quantifies water conservation to assure that water conservation measures are met in the UWMP. Initiates the development and the continuous review of system calculations and quality control assurances for the online database submittal 20 percent water reduction reporting program. Reports to the Legislature and DWR management on the progress of the UWMP reporting. |
| Staff Land & Water Use Scientist (1) | | Provides initiative, guidance, and technical expertise and assistance in implementing and reviewing Agricultural Water Management Plans (AWMP) and reviews and update Efficient Water Management Practices and Demand Management Measures as required by SBX7 7. Conducts urban and agricultural irrigation system and other water use efficiency research, scientific investigations, and prepares methodologies pertaining to the Water Conservation Act of 2009. Reviews and compiles Geographic Information System (GIS) database material derived from AWMP, UWMP and the water use efficiency online submittal program; and performs data analysis. |
| Assoc Land & Water Use Scientist (5.5) | | These positions at headquarter and in the regional offices update targets through the Water Plan Update, and develops technical methodologies for consistent implementation of the Act including reviewing Urban Water Management Plans for compliance with the above requirements. Develops quantification methodologies for agricultural water use efficienc; reviews Agricultural Water Management Plans for compliance with the Act; creates standardized forms for water use reporting, streamlines, coordinates, and automates data collection to reduce long-term state costs and to reduce the reporting burden placed on local agencies; and improves data accessibility. Develops alternative best management practices for agriculture and for CII and reviews and revises UWMP, Integrated Regional Water Management Plans, and other permitting requirements; conducts studies, and provide incentives. Develops grant eligibility requirements, initiates new landscape water conservation programs, and provides technical assistance to local agencies and regions to help ensure achievement of the 20 percent goal. Prepares periodic reports to the Legislature. |
| Program Area (Total Positions & Resources) | WATER CONSERVATION CH 4 1.0 Positions, \$620,000 | |
| Legal Authority | Water Code Section 10004-10013, Water Code Section 10608.40 | |
| Program Justification | The Water Conservation Act of 2009 and Chapter 4 of Proposition 84 specify DWR as the state agency responsible for completion of the specified tasks related to expanding urban water use and efficiency programs to achieve the 2020 targets. This proposal is consistent with the 20 percent per capita water use reduction target, and with the Act and DWR's mission to manage the water resources of California, in cooperation with other agencies, to protect, restore, and enhance the natural environment. The Water Conservation Act directs DWR to work with other agencies and prepare a plan to reduce water use in the urban sector. The draft plan has been developed and its content to a large extent has been incorporated into the Act. However, the Act not only requires the state to achieve the 2020 goal, but requires DWR to take specific actions to help California reduce urban and agricultural water use. DWR works with State Water Resources Control Board, Department of Public Health, California Urban Water Conservation Council (CPUC), and Agricultural Water Management Council (AWMC) and other stakeholders and experts. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |

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| Senior Engineer, Water Resources (1) | 450 | <p>Establishes an online Urban Water Management Plan and Ag Water Management Plan data submittal program. This position establishes, in consultation with the Delta Stewardship Council, California Department of Health, California Public Utilities Commission, and SWRCB, a single standardized water use reporting form to meet the water use information needs of each agency. The form will be used by urban water suppliers to report on their progress in meeting their targets on an individual or regional basis, at a minimum, and by agricultural water suppliers to report compliance with implementation of EWMPs. Manages a contract to initiate development of new landscape water conservation programs, including a landscape architecture curriculum, training materials for landscape maintenance contractors, training and certification for landscape water auditors, gray water and rain water programs, and programs with multiple benefits of landscape water conservation: water quality, energy, habitat, solid waste and storm water.</p> <p>This position also manages contracts.</p> |
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| Program Area (Total Positions & Resources) | WATER USE EFFICIENCY 0.1 Positions, \$46,000 |
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| Legal Authority | Civil Code Section 1353.8. Water Code Section 10004-10013; Water Code Section 10610 - 10656 |
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| Program Justification | <p>Energy supply is a major concern for Californians as well as state government. Increasing occurrences of rolling blackouts and the economic impact of energy shortages are major issues. The energy shortages are becoming more acute in the agricultural communities because groundwater pumping and the majority of the pressurized irrigation systems depend on electrical energy. As a result, energy efficiency in Commercial Industrial and Industry and landscape communities is of paramount importance to help manage energy shortages. The Water Efficiency and Efficiency budget has been augmented to provide a continuing comprehensive program to develop energy and water efficiency policies, programmatic and administrative recommendations, and technical assistance. A program to identify and analyze evolving technologies to improve efficiencies in water, wastewater and energy, and document water and energy savings has been initiated. Targeted partnerships have been developed that include energy conservation.</p> |
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| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
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| Associate Land and Water Use Scientist (0.1) | | <p>Build partnerships with local, state, federal, private entities to implement the water use efficiency program as described in the Framework Agreement. This will be done through a comprehensive technical and financial assistance program. Build partnerships with local, state, federal, private entities to implement comprehensive energy efficiency measures in the agricultural community. This position analyzes and evaluates retrofitting and installation of efficient sanitary fixtures and appliances and reviews California Urban Water Conservation Best Management Practices (BMPs) related to CII.</p> |
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| Program Area (Total Positions & Resources) | AGRICULTURAL WATER CONSERVATION 4.6 Positions, \$932,000 |
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| Legal Authority | Civil Code Section 1353.8. Water Code Section 266E, 10015-10016. Ab 2717 of 2004, AB 1881 of 2006 Government Code 65596 (e) |
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| Program Justification | <p>This program was formed in the 1975-76 fiscal year by merging the Water Use Program (created in 1954) and the More Effective Use of Water Program that began in 1973. In the 1981-82 fiscal year, this activity was separated out as an independent component. California Irrigation Management Information System was developed in 1982 by the California Department of Water Resource and the University of California at Davis. CIMIS was developed to assist California irrigators to manage their water resources efficiently. Efficient use of water resources benefits Californians by saving water. In the 1990s the Bay-Delta Estuary Proceedings on water quality encouraged public and private water agencies to continue efforts to implement efficient irrigation practices. The development of efficient water management practices (EWMPs) for agricultural water suppliers, as well as for on-farm irrigation management, is a key aspect of this program. The EWMP work is authorized through AB 3616. This work involves implementation as well as evaluation of the effectiveness of EWMPs. Starting in 1994, the planning and irrigation system evaluation elements of the program were coordinated more closely with the California water plan update (Bulletin 160). Water use data and efficiency evaluations are an important aspect of the agricultural assistance program. In June 2000, the Governor's "California Water Future: A Framework for Action," was signed and a Programmatic Record of Decision was signed on August 28, 2000. Environmental, agricultural, urban, commercial, and industrial water users in California face increasing limited water supplies. The ROD identifies and required that DWR, as a lead agency and in cooperation and partnerships with other local, state, federal agencies, and private interests, provide technical assistance to agricultural, urban, commercial and industrial communities as well as recycling to improve water quality. The Department of Water Resources' Water Use and Efficiency Branch programs are required to implement CALFED's Water Use Efficiency program. The work includes implementation of practices and measures that are locally cost-effective as well as practices and measures that are cost-effective from a regional and statewide perspective to achieve the goals of the CALFED Water Use Efficiency Program. AB 2717 Task Force recognizes the California Irrigation Management Information System (CIMIS) as an important program for water use efficiency and recommends CIMIS upgrade and the development and implementation of new services. For CIMIS to meet the obligations of AB 1881 and the AB 2717 Task Force Recommendations, DWR should fully fund the CIMIS program to improve the quality, reliability, and stability of data and to expand its services.</p> | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Staff Land and Water Use Scientist (1.0) | 50 | <p>The scientist leads the effort to increase public awareness of California Irrigation Management Information System data as a water demand-side management tool, and promote its use in water demand management decisions. This position increases CIMIS awareness by increasing visibility of CIMIS and CIMIS data in news and information media such as television, newspapers, newsletters, radio, and the web; cooperates with local, state, federal, and private agencies; expands CIMIS to help more agricultural, urban, and large turf owners irrigate more efficiently, reduce energy consumption, reduce applied water, and reduce potential surface runoff and pollutants. This position independently develops methodologies for refining the Spatial CIMIS model to improve data accuracy and user interface; designs and implements methodologies to convert the Spatial CIMIS model from GRASS to ESRI GIS and from Postgres to Oracle database; coordinates with NASA Ames on a project that is designed to create Spatial maps of crop coefficients (Kc) to be used with Spatial CIMIS. Serves as a technical expert in developing and presenting short courses, workshops, and training on the use of CIMIS data in irrigation scheduling and other related fields; serve as a project leader for CIMIS Division of Technology Services, and contractors to improve the operation of the CIMIS database and web application; investigates and validates the scientific methods that CIMIS uses to estimate reference evapotranspiration (ETo) and other intermediate parameters; correlates CIMIS ETo with measured and/or estimated ETo.</p> |
| Associate Land and Water Use Scientist (0.5) | | <p>The position conducts climatological research related to evapotranspiration and the irrigation of agricultural land, and landscapes that use weather based automated ET controllers and water budget methodologies; follows established procedures for CIMIS data quality assurances; assists DWR regional offices CIMIS personnel with weather station problems including data acquisition and data logger programming; and calibrates weather sensor.</p> |
| Associate Land and Water Use Scientist (2.6) | | <p>These positions are located in DWR, Integrated Regional Water Management, regional offices. The positions assist local agencies to install, maintain and calibrate the California Irrigation Management Information System weather stations; develops, through contracts, crop coefficients for major crops each year; cooperates with local, state, federal, and private agencies; and conducts workshops on CIMIS based irrigation scheduling, and expands local dissemination of CIMIS data through specific agricultural commodity groups, water districts, and landscape and golf course entities. The positions improve the capabilities of the Department's CIMIS environmental observational system.</p> |
| Water Resource Engineer Associate (Spec) (0.5) | | <p>This engineer coordinates the installation, maintenance and calibration of the California Irrigation Management Information System station while working closely with DWR regional offices. The position would assist the AL&WUS to calibrate and repair climate measuring sensors, and maintain necessary supplies.</p> |

Zero-Based Budget Report - Program Detail

Department of Water Resources Budget Year 2012-2013 Staff and Resource Needs

* State Water Project funds are non-Budget Act continuous appropriations that are not subject to legislative approval. These amounts are included in the zero-based budget as information only.*

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| Program Area (Total Positions & Resources) | BDCP 10 Positions, \$3,214,000 |
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Legal Authority **Legal Signed Agreement:** BDCP Planning Agreement: On October 6, 2006, DWR and DFG, along with the California Natural Resources Agency, Reclamation, USFWS, the NMFS, seven water agencies and other Delta water users, and four non-governmental organizations, signed the BDCP Planning Agreement. • Delta Reform Act (85320) – Chapter 2. Bay Delta Conservation Plan – shall be considered for inclusion in the Delta Plan in accordance with this chapter.

Program Justification This Program element provides direct support for the development and oversight of the Bay Delta Conservation Plan (BDCP) comprised of a Habitat Conservation Plan (HCP), and likely a Natural Community Conservation Plan (NCCP). BDCP is a current effort by DWR, the Bureau of Reclamation, Mirant Energy, and the state and federal water contractors to attain long term take authorization under the California Endangered Species Act (CESA) and Federal Endangered Species Act (FESA) while providing for the conservation and management of covered species in the Sacramento-San Joaquin Delta. When complete, the BDCP will provide a plan to restore and protect water supply, water quality, and ecosystem health within a stable regulatory framework. This program supports DWR environmental, engineering, and legal staff; outside counsel from the Attorney General’s Office; and environmental consultant support for BDCP preparation.

| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
|-----------------------------------|---------------------------|---|
| Staff Environmental Scientist (2) | | These positions directly support the Department of Water Resources for the development and oversight of the Bay Delta Conservation Plan (BDCP) comprised of a Habitat Conservation Plan (HCP), and a Natural Community Conservation Plan (NCCP). BDCP is a current effort by DWR, the Bureau of Reclamation, and the state and federal water contractors to attain long-term take authorization under the California Endangered Species Act (CESA) and Federal Endangered Species Act (FESA) while providing for the conservation and management of covered species in the Sacramento-San Joaquin Delta. When complete, the BDCP will provide a plan to restore and protect water supply, water quality, and ecosystem health within a stable regulatory framework. This program supports DWR environmental, engineering, and legal staff; outside counsel from the Attorney General’s Office; and environmental consultant support for BDCP preparation. |
| Environmental Scientist (6) | | These positions directly support the Department of Water Resources for the development and oversight of the Bay Delta Conservation Plan (BDCP) comprised of a Habitat Conservation Plan (HCP) and a Natural Community Conservation Plan (NCCP). These positions assist with developing conservation strategies, biological monitoring, and coordinating regional and statewide conservation priorities for research, species, and land protection. Review, comment compilation, and meeting attendance to discuss issues relating to the documents is required. |
| Sr. Environmental Scientist (2) | | Responsible for the supervision of employees assigned to prepare and review the Bay Delta Conservation Plan and related tasks and requests. Coordinates and participates in regular project meetings with BDCP Committees and teams, management, and fish and wildlife agencies. Reviews project schedules and conducts regular status meetings. Ensures that comments on documents are complete and provides staffing for the compilation meetings. |

Zero-Based Budget Report - Program Detail

Department of Water Resources Budget Year 2012-2013 Staff and Resource Needs

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| Program Area | DELTA FACILITIES PLANNING | |
| (Total Positions & Resources) | 5.14 Positions, \$1,200,000 | |
| Legal Authority | CWC Section 12934(d)(3), CALFED ROD, SWP Water Rights Orders, and Delta Reform Act | |
| Program Justification | The Delta Facilities Planning fund center has historically been used to complete planning for projects related to SWP Delta operations. While this includes the South Delta Improvement Program, most activities associated with that program were suspended in 2009 under a National Marine Fisheries Service (NMFS) Biological Opinion governing the operation of the SWP (OCAP BiOp) until south Delta predation studies are completed. However, field data acquisition in the south Delta, including flow monitoring and scour surveys, has continued uninterrupted. The NMFS OCAP BiOp requires implementation of numerous actions, some of which will be funded by this funds center. For example, an evaluation is being done under this funds center of engineering solutions to exclude out-migrating juvenile salmon and steelhead from the central and south Delta where they can be exposed to export facilities, predation, and unscreened pumps. The effort includes planning, evaluation, and testing a non-physical barrier (NPB) to exclude juvenile salmon from Georgiana Slough. A third year of NPB testing, including acoustic fish tracking, is scheduled to occur in FY 2012-13. Additionally, the planning for the evaluation and testing of additional solutions may possibly occur as a result of a related feasibility study of solutions for Georgiana Slough and other Delta locations prepared during FY 2011-12. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Supervising Engineer, Water Resources (0.9) | | Oversee planning, evaluation, testing and manage and direct study activities to meet requirements of the NMGS OCAP BiOp and SWP Water Rights permits. Planning and coordination of activities with other partners include: scientific decision support for the SDIP and other Delta projects through the use, development, and maintenance of the DSM2 models for the evaluation of water stage and flow for planning and operation of the SWP/CVP; and field data acquisition through water quality monitoring, scour and sedimentation bathymetry monitoring, flow monitoring; real estate support, survey support, and engineering support for the 2012 Georgiana Slough project and other south Delta projects; technical and field support, including fish tagging and monitoring, for the 2012 Georgiana Slough project; and technical and field support for the 2012 Georgiana Slough project |
| Senior Engineer, WR (2.25) | | Conduct planning, evaluation, testing and manage and direct study activities to meet requirements of the NMGS OCAP BiOp and SWP Water Rights permits. Planning and coordination of activities with other partners include: scientific decision support for the SDIP and other Delta projects through the use, development, and maintenance of the DSM2 models for the evaluation of water stage and flow for planning and operation of the SWP/CVP; scientific decision support for the SDIP and other Delta projects through the use, development, and maintenance of the CALSIM models for the evaluation of planning and operation of the SWP/CVP; field data acquisition through water quality monitoring, scour and sedimentation bathymetry monitoring, flow monitoring; real estate support, survey support, and engineering support for the 2012 Georgiana Slough project and other south Delta projects; technical and field support, including fish tagging and monitoring, for the 2012 Georgiana Slough project; and technical and field support for the 2012 Georgiana Slough project |
| Engineer WR (2) | | Support the planning, evaluation, testing and direct study activities to meet requirements of the NMGS OCAP BiOp and SWP Water Rights permits. Support for planning and coordination of activities with other partners include: scientific decision support for the SDIP and other Delta projects through the use, development, and maintenance of the DSM2 models for the evaluation of water stage and flow for planning and operation of the SWP/CVP; scientific decision support for the SDIP and other Delta projects through the use, development, and maintenance of the CALSIM models for the evaluation of planning and operation of the SWP/CVP; field data acquisition through water quality monitoring, scour and sedimentation bathymetry monitoring, flow monitoring; real estate support, survey support, and engineering support for the 2012 Georgiana Slough project and other south Delta projects; technical and field support, including fish tagging and monitoring, for the 2012 Georgiana Slough project; and technical and field support for the 2012 Georgiana Slough project |
| Program Area | Hydrogeologic - SWP | |
| (Total Positions & Resources) | 0.3 Positions, \$4,547,000 | |
| Legal Authority | State Water Project | |
| Program Justification | The Department of Water Resources (DWR) on behalf of the State Water Project is working to improve conveyance of State Water Project water through the Delta. This requires hydrodynamic and fish studies in the north Delta. These studies also help with other projects including non-physical barrier at Georgiana Slough, operations of Delta Cross Channel Gates, | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |

Zero-Based Budget Report - Program Detail

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| Supervising Engineer, W.R. (0.3) | | The 0.3 Supervising Engineer position manages the USGS contract work remaining on the Salmon Outmigration Study. USGS contract number 46-7677 has \$587,200 encumbered from previous FYs. |
| | \$100 | Funds for Internal State contracts as needed. |
| | \$2,950 | funds for External consultant contracts as needed. |
| Program Area (Total Positions & Resources) | Conveyance Prog Plan-CalFed 0.2 Positions, \$98,000 | |
| Legal Authority | State Water Project | |
| Program Justification | The Department of Water Resources (DWR) as one of the CalFed agencies participates in the CalFed conveyance program as needed to help convey water through the Sacramento San Joaquin Delta. Delta Stewardship Council took over for CALFED. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Supervising Engineer, W.R. (0.2) | PRC Section 1, Division 43, Section 75029 Safe Drinking | Coordinating with the Delta Stewardship Council on Delta projects as needed. |
| Program Area (Total Positions & Resources) | Delta Fish Facility Improvements Project (CHTR) 1.3 Positions, \$710,000 | |
| Legal Authority | State Water Project | |
| Program Justification | The Department of Water Resources (DWR) is improving the collection, handling, transportation, and release of fish entering the Skinner Fish Facilities. This will help reduce the State Water Project's effect on threaten and endangered fish species. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Staff Environmental Scientist (0.5) | | 0.5 Staff Environmental Scientist position would manage the CHTR lab work, help determine the equipment needs and layout for the new Fish Science Building, and provide day to day Bay-Delta support for Skinner fish facility including coded wire tagging and review fish facility reports. |
| Engineer, W.R. (0.4) | | 0.4 Engineer position would help with the engineering aspects of designing and obtaining permits for the Fish Science Building. |
| Scientific Aid (0.3) | | 0.3 Scientific Aid position to provide support for coded wire tagging at Skinner fish facility. |
| Senior Engineer, W.R. (0.4) | | 0.4 Senior Engineer position would manage task orders in an AECOM contract. |
| | \$10 | Funds for Internal State contracts as needed. |
| | \$100 | Funds for External consultant contracts as needed. |
| Program Area (Total Positions & Resources) | South Delta Hydrodynamic Study 0 Positions, \$498,000 | |
| Legal Authority | State Water Project | |
| Program Justification | The Department of Water Resources (DWR) studied low flow screens near Clifton Court Forebay in the south Delta. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| | \$198 | Funds for Internal State contracts as needed. |
| | \$300 | Funds for External consultant contracts as needed. |

Zero-Based Budget Report - Program Detail

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| Program Area (Total Positions & Resources) | Temporary Barriers Program 18.8 Positions, \$8,478,000 | |
| Legal Authority | State Water Project | |
| Program Justification | The implementation of the Temporary Barrier Program was in response to a 1982 lawsuit filed by the South Delta Water Agency claiming that the operations of the State Water Project and the Central Valley Project negatively impact the water levels and water quality in the South Delta. The head of Old River fish barrier was later authorized under the 1992 Central Valley Project Improvement Act and serves to keep juvenile salmonids in the San Joaquin River. The temporary agricultural barriers are also serve as mitigation for the reduction in Old River flow caused by the installation of the head of Old River fish barrier. The Temporary Barriers Program is critical to the continued operations of the State Water Project. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Classification: Principle Engineer, WR (0.5 PY) | | Overall Program management. To plan manage, organize, negotiate and control the activities of the Temporary Barriers Program. Oversee and direct all program activities for participants throughout DWR. This 0.5PY is essential to the continued operation of the State Water Project and provides the link between Executive and the ever changing and complicated environmental and legal challenges associated with the Temporary Barriers Program and State Water Project South Delta Exports. |
| Classification: Supervising Engineer, WR (2.0 PY) | | Program Manager: Manage day to day program activities such as; 1) program planning, budgeting, cost control, and staff management; 2) assigning and distributing work, monitoring and evaluating performance; 3) determining training need, preparing staff appraisal and development; 4) supervising and administering contracts to ensure contract compliance with contract specifications; and, 5) reviewing report prepared by staff. The Supervising Engineering positions oversee the development of required engineering and environmental studies, permits, and designs necessary for the continued operations of State Water Project. |
| Classification: Senior Engineer (2.5 PY) | | Project Manager: Project planning, construction and operation. Activities include: 1) to design project to meet project goals; 2) to obtain permits for construction; 3) to operate the project according to plan and schedule; 4) to comply with permits and Biological Opinions conditions and measures; and, 5) to mitigate for project impacts. |
| Classification: Engineer, WR (7.0 PY) | | Project Engineer: Implement all project components. Activities include: 1) engineering design, calculation, and drawings; 2) prepare study, project description, installation and operation schedule for permit application; 3) construct project according to plans, conduct pre and post-construction survey; 4) operate, inspect, and maintain project; 5) ensure project activities are in compliance with permit conditions; 6) collect flow data, water level data, water quality data, and groundwater data; 7) comply with project mitigation requirements; 8) prepare contracts and task orders, and ; 9) prepare engineering reports and findings. |
| Classification: Environment Scientist (3.0) | | Biologist: Implement and enforce all environmental measures required by project. Activities include: 1) Biological assessment for the project; 2) conduct biological survey throughout the project including the pre and post construction periods; 3) conduct environmental tailgate sessions before construction; 4) prepare compliance report, and; 5) conduct scientific studies as required. |
| Classification: Fish and Wildlife Scientific Aid (1.0 PY) | | Fish and Wildlife Scientific Aid: Assist in carrying out field activities to implement fish study. Activities include: 1) setting up fish monitoring equipment; 2) collect fish sample and tagging fish; 3) collect fish monitoring data. |
| Classification: Water Technician (1.0 PY) | | Water Technician: Assist in carrying out field activities to implement water sampling. Activities include: 1) setting up water sampling equipment; and, 2) collect water sample data such as turbidity and DO. |
| Classification: Utility Craftsworker (1.0 PY) | | Utility Craftsworker: Assist in carrying out field activities to operate the rock barriers. Activities include: 1) operating barrier culvert flap-gates; and, 2) provide boat portage service for recreational boaters affect by the operation of the rock barriers. |
| Classification: Office Tech (0.8 PY) | | Office Technician: Provide clerical support. Activities include: 1) Type drafts and final copies of wide variety of correspondence, reports, and miscellaneous written material; 2) answering telephone and directing calls to appropriate staff, making photocopies, sending faxes, distributing mail, ordering and maintaining office supplies, creating and maintaining office files. This position provides critical support in assuring that documents, correspondence, and the administrative record are in order. This essential position deals with a very high volume of correspondence. |
| Program Area (Total Positions & Resources) | Delta Habitat Conservation and Conveyance Program (DHCCP) 23 PYs, \$66,585,000 | IMPORTANT INFORMATION |
| Legal Authority | Legal signed MEMORANDUM OF AGREEMENT REGARDING COLLABORATION ON THE PLANNING, PRELIMINARY DESIGN AND ENVIRONMENTAL COMPLIANCE FOR THE DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM IN CONNECTION WITH THE DEVELOPMENT OF THE BAY DELTA CONSERVATION PLAN on May 12, 2009. Other signatories included US Department of Interior's Bureau of Reclamation, and contractors for water from the State Water Project and federal Central Valley Project. Funding agreements and supplemental agreements were executed following the MOA. | |

Zero-Based Budget Report - Program Detail

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| Program Justification | The Delta Habitat Conservation and Conveyance Program (DHCCP) was established in 2008 in response to Governor Schwarzenegger's letter to legislators directing DWR to implement new programs to address Delta issues including exploring conveyance alternatives. The DHCCP provides the means to evaluate, plan, and construct new facilities and habitat restoration projects to sustain a healthy ecosystem and provide water delivery reliability within the Sacramento-San Joaquin Delta. This program provides direct support from the Department of Water Resources for the development and oversight of the Bay Delta Conservation Plan's Environmental Impact Report and Environmental Impact Statement as well as program management, engineering analysis, legal, right of way, operations planning, design, and construction for conveyance and restoration projects. | |
| Position Classification | Contract Funding (\$1000) | Itemized Justification (These positions work on portions of the DHCCP and are not exclusively dedicated to the DHCCP.) |
| Associate Cost Estimator WR | | In support of the DHCCP, will prepare cost estimates for the construction of tunnels, dams, pipelines, canals, bridges, levees, cofferdams, pumping and power plants, buildings, and roads. |
| Associate Electrical Engineer HS (used Electrical Engr.) | | In support of the DHCCP, will perform limited technical analysis, design, and design review of electrical components of intake facilities (including fish screens and pumping plants), and associated buildings. |
| Associate Governmental Program Analyst | | In support of the DHCCP, will be responsible for contracts including architectural and engineering services, consulting services, and other related services. |
| Associate Land Agent | | In support of the DHCCP, will be meeting with property owners that will be impacted by the preferred conveyance alternative and restoration opportunity areas; obtaining temporary and permanent rights for construction purposes; preparing for negotiating and obtaining encroachment rights for construction purposes; preparing documents for public utility relocations; preparing for land acquisition such as obtain property appraisals; and participating in legal processes and public outreach, as needed. |
| Engineer, WR | | In support of the DHCCP, will perform limited technical analysis, design, and design review of structural intake facilities (including trash racks, gates, sedimentation basins, fish screens, and pumping plants), canals, pipelines, tunnels, and rock barriers. |
| Engineering Geologist | | In support of the DHCCP, will be responsible for collecting, evaluating, and providing geologic information to engineers for inclusion into design. |
| Environmental Program Manager I | | In support of the DHCCP, will assist in planning, organizing, and directing work necessary to provide environmental compliance services. |
| Environmental Scientist | | In support of the DHCCP, will be coordinating acquisition of permits, and performing site surveys for potential mitigation projects. |
| Fish & Wildlife Scientific Aid | | In support of the DHCCP, will assist project leaders in the collecting, organizing and maintaining ecological information. |
| Mechanical Engineer | | In support of the DHCCP, will perform limited technical analysis, design, and design review of mechanical structures including intake facilities (trash racks, gates, fish screens, pumping plants), and pipelines. In addition, will be coordinating with the environmental staff to incorporate fishery and environmental concerns into the design. |
| Mechanical Engineering Technician I | | In support of the DHCCP, will assist mechanical engineering staff with mechanical design and drafting work, prepare cost estimate, prepares layout of mechanical equipment and systems, and integrate mechanical layouts into contract drawings. |
| Office Assistant (Typing) | | In support of the DHCCP, will be typing, filing, answering phones, delivering mail, and performing other duties required to support the program. |
| Office Technician (Typing) | | In support of the DHCCP, will be typing, filing, records managing, document handling, and performing other duties required to support the program. |
| Photogrammetrist II | | In support of the DHCCP, will be responsible for the more complex photogrammetric projects, including Scan aerial photographic negatives for conversion to digital imagery; utilize photogrammetric software on a high-end workstation, and maintain and update aerial photography archive including indexing and retrieval of data. |
| Program Manager III | | In support of the DHCCP, serves as the environmental compliance specialist and is responsible for program development and implementation for the Bay-Delta Conservation Strategy (BDCP) and Delta Habitat Conservation and Conveyance Program (DHCCP) related to climate change mitigation and adaptation, water management, and statewide planning. |
| Research Analyst II (GIS) | | In support of the DHCCP, will be responsible for GIS mapping, data gathering and analysis, maintenance of geographic related computer files and its operation, and performing basic technical research and statistical work involving various types of digital spatial data and the techniques and methodologies associated with geographic information systems. |
| Senior Architect | | In support of the DHCCP, will supervise the design and review of contract drawings and specifications for new facilities. |
| Senior Engineer, WR | | In support of the DHCCP, will supervise staff that perform technical analysis, design, and design review of structural intake facilities (including trash racks, gates, sedimentation basins, fish screens, and pumping plants), canals, pipelines, tunnels, and rock barriers. |
| Senior Engineering Geologist | | In support of the DHCCP, will supervise staff responsible for collecting, evaluating, and providing geologic information to engineers for inclusion into design. |
| Senior HEP Utility Engineer (Spec) | | In support of the DHCCP, will be responsible for managing and coordinating power transmission implementation with staff, power companies and consultants. |

Zero-Based Budget Report - Program Detail

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| Senior Land Agent (Spec) | | In support of the DHCCP, will be responsible for planning and organizing work activities of consultants and other participating units in negotiating for the acquisitions of all types of real property rights statewide to meet rigid construction schedules, and in the proper documentation of such acquisitions and utility relocations. |
| Senior Land Agent (Supv) | | In support of the DHCCP, will be responsible for planning, organizing, and directing the work activities of consultants and other participating units in negotiating for the acquisitions of all types of real property rights statewide to meet rigid construction schedules, and in the proper documentation of such acquisitions and utility relocations. The Senior Land Agent will also coordinate land acquisition processes with the State Attorney General's Office, Project Managers, and consultants. |
| Senior Land Surveyor | | In support of the DHCCP, will be responsible for planning, organizing, and directing staff in analyzing land title; determining land ownership and right of way areas; and preparing appraisal maps, legal descriptions, and document packages. |
| Senior Legal Analyst | | In support of the DHCCP, will provide consultative and support services to attorneys, perform extensive legal research and analysis, and prepare legal memoranda in response to attorneys' requests regarding complex legal issues. |
| Staff Council III | | In support of the DHCCP, will advise on complex regulatory laws regarding the planning, design, construction, operation, and maintenance of water conveyance facilities and restoration projects. |
| Staff Council | | In support of the DHCCP, will advise on regulatory laws regarding the planning, design, construction, operation, and maintenance of water conveyance facilities and restoration projects. |
| Staff Environmental Scientist | | In support of the DHCCP, will assist with development of construction contracts by incorporating environmental laws into construction methods. |
| Student Assistant (E+A) | | In support of the DHCCP, will draft layouts and details for civil engineering-related drawings and figures using computer aided drafting and design software. |
| Student Assistant | | In support of the DHCCP, will assist with review of invoices received from DHCCP consultants for adherence to contract provisions, maintenance of the DHCCP database by reviewing, collecting and analyzing data, scanning documents, updating table of contents and organizing incoming information accordingly. |
| Supervising Engineer WR | | <p>In support of the DHCCP, will coordinate acquisition of permits, authorizations, and approvals for environmental and engineering activities (including coordination with the U.S. Army Corps of Engineers, California Department of Transportation, and California State Water Resources Control Board), and reporting on progress of permits to DWR's Management.</p> <p>In support of the DHCCP, will be responsible to manage staff that perform technical analysis, design, and design review of structural intake facilities (including trash racks, gates, sedimentation basins, fish screens, and pumping plants), canals, pipelines, tunnels, and rock barriers.</p> <p>In support of the DHCCP, will provide oversight of many architectural, engineering, and environmental consultants including preparing and reviewing contracts and contract amendments, preparing and reviewing task orders, reviewing and approving invoices, reviewing documents and submittals, and other tasks to ensure compliance with existing and new contracts.</p> |
| Supervising Land Agent | | In support of the DHCCP, will be responsible to plan, organize and direct the work of Senior Land Agents, subordinate staff and consultant staff responsible for negotiating for the acquisition of property rights needed for planning, designing, and construction projects, recreation programs and mitigation purposes. |
| Transportation Surveyor (Caltrans) | | In support of the DHCCP, will conduct land surveying. |

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Department of Water Resources Budget Year 2012-2013 Staff and Resource Needs

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| Program Area (Total Positions & Resources) | DELTA FISH AGREEMENT 03 Positions, \$4,003,000 | |
| Legal Authority | Legally binding Signed Agreement and Required Compliance: The 1986 Delta Fish Agreement: On December 30, 1986, the Directors of the California Department of Water Resources (DWR) and the California Department of Fish and Game (DFG) signed an agreement to provide for offsetting direct losses of fish caused by the diversion of water at the Harvey O. Banks Delta Pumping Plant (Delta Pumping Plant). | |
| Program Justification | <p>On December 30, 1986, the Directors of the California Department of Water Resources (DWR) and the California Department of Fish and Game (DFG) signed an agreement to provide for offsetting direct losses of fish caused by the diversion of water at the Harvey O. Banks Delta Pumping Plant (Delta Pumping Plant). The Agreement is commonly known as the Delta Fish Agreement. Because it was adopted as part of the mitigation package for four additional pumps at the Delta Pumping Plant, it has also been referred to as the "Four Pumps" Agreement. The 1986 Delta Fish Agreement offsets direct losses of striped bass, Chinook salmon, and steelhead.</p> <p>The 1986 DFA has been amended four times to extend the period for expenditure of the \$15 million lump sum funding component of the original agreement, with the most recent extension through December 31, 2012. The other funding component of the 1986 DFA is the Annual Mitigation funding, which has no termination date. Since 1986, approximately \$60 million in combined funding from the Annual Mitigation and \$15 million Lump Sum components were approved for over 40 fish mitigation projects through December 2007. About \$47 million of the approved funds have been expended to date and the remaining approved funds are allocated for new or longer term projects. Examples of the types of projects that are ongoing, have been completed, or will be implemented in future years that are funded under the existing 1986 Delta Fish Agreement are: fish screens in Butte Creek, San Joaquin River tributaries, and Suisun Marsh; enhanced law enforcement projects to reduce illegal harvest in the Bay Delta and upstream in the Sacramento-San Joaquin basins; a seasonal fish barrier on the San Joaquin River; fish ladders in Butte Creek; cost-share funding for Chinook salmon production at the Merced River Fish Hatchery; habitat enhancement and river restoration projects in San Joaquin River tributaries and the upper Sacramento River; and water exchange projects on Deer Creek and Mill Creek.</p> | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Staff Environmental Scientist (1) | | <p>This position directly supports the development and implementation of the mitigation projects required through the Delta Fish Agreement (DFA). This position coordinates and administers the Delta Pumping Plant Fish Protection Agreement program to offset fish losses at the Banks Delta Pumping Plant, and implements fish mitigation projects, such as gravel and habitat restoration, fish barriers and screens, and other fishery improvement projects in the Central Valley and Bay-Delta. Position coordinates implementation of the Delta Fish Agreement (DFA) program and projects with DFG, the Fish Advisory Committee, and other sections of DWR; coordinates funding proposals and evaluates the biological benefits and costs of proposed fish mitigation projects; coordinate DWR's engineering review and oversight of project proposals, construction, operation, and maintenance; and coordinate project permitting. These activities include extremely complex field surveys and field inspections of proposed and implemented projects. This position prepares and reviews budget documents/forms and requests for the Fish Restoration Program Agreement (FRPA) and the DFA, including contracts, work authority revisions, and program work order assignments, and tracks and manages program and project expenditures in SAP to implement the agreements and associated fish mitigation/habitat restoration projects. Prepares and distributes DFA Advisory Committee meeting notes and materials, and periodic reports or other updates of fish mitigation funding and obligations. When needed, this position prepares and makes oral and written presentations to the Advisory Committee, DWR and DFG management, and others regarding program progress and accomplishments.</p> |
| Environmental Scientist (2) | | <p>These positions directly support the development and implementation of the mitigation projects required through the Delta Fish Agreement (DFA). These positions assist DWR and DFG with implementation of the DFA Program, which includes but isn't limited to restoration planning, proposal review and assistance, environmental document review and preparation, and permitting. These positions also directly support the DFA Staff Scientist position with meeting coordination, note taking, and meeting package preparations. These positions must also assist in interim management of projects prior to restoration, restoration implementation, operation and maintenance activities and monitoring to evaluate project's success in meeting the planned restoration objectives- which includes report writing and review as well.</p> |

Zero-Based Budget Report - Program Detail

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| Program Area (Total Positions & Resources) | DFA Cap 2 Positions, \$1,642,385 | |
| Legal Authority | Legally binding Signed Agreement and Required Compliance: The 1986 Delta Fish Agreement: On December 30, 1986, the Directors of the California Department of Water Resources (DWR) and the California Department of Fish and Game (DFG) signed an agreement to provide for offsetting direct losses of fish caused by the diversion of water at the Harvey O. Banks Delta Pumping Plant (Delta Pumping Plant). | |
| Program Justification | <p>On December 30, 1986, the Directors of the California Department of Water Resources (DWR) and the California Department of Fish and Game (DFG) signed an agreement to provide for offsetting direct losses of fish caused by the diversion of water at the Harvey O. Banks Delta Pumping Plant (Delta Pumping Plant). The Agreement is commonly known as the Delta Fish Agreement. Because it was adopted as part of the mitigation package for four additional pumps at the Delta Pumping Plant, it has also been referred to as the "Four Pumps" Agreement. The 1986 Delta Fish Agreement offsets direct losses of striped bass, Chinook salmon, and steelhead.</p> <p>The 1986 DFA has been amended four times to extend the period for expenditure of the \$15 million Lump Sum funding component of the original agreement, with the most recent extension through December 31, 2012. The other funding component of the 1986 DFA is the Annual Mitigation funding, which has no termination date. Since 1986, approximately \$60 million in combined funding from the Annual Mitigation and \$15 million lump sum components was approved for over 40 fish mitigation projects through December 2007. About \$47 million of the approved funds have been expended to date and the remaining approved funds are allocated for new or longer term projects. Examples of the types of projects that are ongoing, have been completed, or will be implemented in future years that are funded under the existing 1986 Delta Fish Agreement are: fish screens in Butte Creek, San Joaquin River tributaries, and Suisun Marsh; enhanced law enforcement projects to reduce illegal harvest in the Bay Delta and upstream in the Sacramento-San Joaquin basins; a seasonal fish barrier on the San Joaquin River; fish ladders in Butte Creek; cost-share funding for Chinook salmon production at the Merced River Fish Hatchery; habitat enhancement and river restoration projects in San Joaquin River tributaries and the upper Sacramento River; and water exchange projects on Deer Creek and Mill Creek.</p> | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Environmental Scientist (1) | | These positions directly support the development and implementation of the mitigation projects required through the Delta Fish Agreement (DFA). This position assists DWR and DFG with implementation of the DFA Program, which includes but isn't limited to restoration planning, proposal review and assistance, environmental document review and preparation, and permitting. These positions also directly supports the DFA Staff Scientist position will meeting coordination, note taking, and meeting package preparations. These positions must also assist in interim management of projects prior to restoration, restoration implementation, operation and maintenance activities and monitoring to evaluate project's success in meeting the planned restoration objectives- which includes report writing and review as well. |
| Engineer Position (1) | | This position directly supports the development and implementation of the mitigation projects required through the Delta Fish Agreement (DFA). This position assists DWR and DFG with implementation of the DFA Program, which includes but isn't limited to restoration planning, proposal review and assistance, environmental document review and preparation, and permitting. This position must also assist in interim management of projects prior to restoration, restoration implementation, operation and maintenance activities and monitoring, engineering surveys and assessments, to evaluate project's success in meeting the planned restoration objectives- which includes report writing and review as well. |
| Program Area (Total Positions & Resources) | Fish Restoration Program Agreement 05 Positions, \$16,000,000 | |
| Legal Authority | Legally binding Signed Agreement and Required Compliance: The Fish Restoration Program Agreement signed Oct. 2010 between DFG and DWR. Federal Biological Opinions for the Operations and Criteria and Plan (OCAP): On December 15, 2008, the USFWS issued a Biological Opinion on Delta Smelt and the Coordinated Operations of the CVP and SWP (Delta Smelt BiOp); On June 4, 2009, the NMFS issued a Biological Opinion on Salmonids, Green Sturgeon, and Killer Whales for the Long-term Operations of the CVP and SWP (Salmon BiOp); and F. On February 23, 2009, DWR received from DFG incidental take authorization of longfin smelt for the SWP operations pursuant to section 2081 of the Fish and Game Code (SWP Longfin Smelt Incidental Take Permit (ITP No. 2081-2009-001-3))- DFG Longfin Smelt Incidental Take Permit (ITP). | |

Zero-Based Budget Report - Program Detail

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| Program Justification | The Fish Restoration Program Agreement (FRPA) is an agreement between the Department of Fish and Game (DFG) and the Department of Water Resources (DWR) that addresses satisfying the requirements of the USFWS, NMFS Biological Opinions and DFG Incidental Take Permit (ITP). Pursuant to FRPA DFG commits to work cooperatively with and assist DWR in establishing the management and financial framework necessary to implement a fish restoration program that will meet the federal Biological Opinions and the DFG ITP. Through FRPA, DWR, with assistance from DFG, will begin the process to implement actions, including aquatic habitat restoration, for winter-run Chinook salmon, spring-run Chinook salmon, delta smelt, and longfin smelt to mitigate impacts to these species caused by the State Water Project (SWP) Delta Pumping Facilities. Measures provided under the FRPA will likely benefit non-target fish species as well. Prior to implementing specific projects, DWR, with DFG's assistance, will obtain any necessary permits and complete environmental compliance, such as preparing documents required pursuant to the California Environmental Quality Act (CEQA). | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Sr. Environmental Scientist (1) | PRC Section 1, Division 43, Section 75029 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection | This position directly support the development and implementation of the Fish Restoration Program Agreement (FRPA)- Fish Restoration Program. This position supervises a team of environmental scientists responsible for planning and implementation of fish mitigation actions, focused on aquatic habitat restoration, to mitigate impacts of State Water Project operations in the Delta under agreement with the DFG. Supervise and direct the planning, evaluation, selection, and implementation of mitigation actions and habitat restoration for the Fish Restoration Program Agreement (FRPA) program and projects with the DFG, other agencies, consultants, and other sections of DWR. Supervise the preparation and/or finalization of an Implementation Strategy and adaptive management plan. Coordinate and lead FRPA Coordination Team and other FRPA meetings and Cache Slough Complex Technical Team Meetings. Supervise and coordinate the preparation and review of annual, financial, and status reports on FRPA programs and projects. This work will include: planning, analysis, and implementation of aquatic habitat restoration projects in the Delta and Suisun Marsh, pursuant to the Delta Smelt and Salmonid biological opinions, focusing on the Cache Slough Complex and lower Yolo Bypass; managing contracts and developing task orders; coordinating with other agency staff and stakeholders; assist with planning, analysis, and review of the draft Bay Delta Conservation Plan and associated EIR/S as it relates to aquatic habitat restoration; coordinating with DFG on execution of the FRPA Agreement, including conducting meetings, reporting, and other requirements specified in the Agreement. Supervise and review preparation of budgets, contracts, and related forms and reports to track and manage program and project cost expenditures to implement mitigation projects. Act as lead for the staff services analyst tasked with branch program support. Provide cost and status reports to the Delta Compliance Program, as needed. |
| Environmental Scientist (3) | | These positions directly support the development and implementation of the Fish Restoration Program Agreement (FRPA)- Fish Restoration Program. These ES positions assist in preparation and review of the FRPA Implementation Strategy. The Implementation Strategy will identify restoration actions, costs, targeted acreage, and a timeline for DWR's implementation over the term of this agreement; work with DWR and DFG staff to collect necessary data and prepare required Environmental Documentation to assure compliance with CESA, FESA, CEQA, and NEPA for mitigation actions implemented through the FRPA. Work with DFG and federal agencies to acquire necessary environmental permits and assure compliance; assist DFG and DWR staff with tasks necessary to accomplish full implementation of the FRPA Fish Restoration Program mitigation actions, which may include, but is not limited to, restoration planning, environmental review and documentation, permitting, interim management prior to restoration, restoration implementation, operation and maintenance activities, and monitoring to evaluate project success in meeting the planned restoration objectives; and assist DFG and DWR staff jointly in preparing annual reports on programs and projects being implemented by each department. These reports will include financial reporting, the progress of each project towards meeting the intended mitigation goals and Implementation Strategy, and the current status, barriers, and relative accrued benefits of those projects. |
| Scientific Aide (1) | | Assisting staff in researching information and reporting in support of mitigation actions development and evaluation, compiling materials for meetings and workshops, database analyses and spreadsheet work, library organization, scanning, filing, copying and other routine administrative functions as necessary. |
| Program Area (Total Positions & Resources) | Delta Fish Agreement POD \$4,962,000 | |
| Legal Authority | Legally binding Signed Agreement and Required Compliance: The Fish Restoration Program Agreement signed Oct. 2010 between DFG and DWR. Federal Biological Opinions for the Operations and Criteria and Plan (OCAP): On December 15, 2008, the USFWS issued a Biological Opinion on Delta Smelt and the Coordinated Operations of the CVP and SWP (Delta Smelt BiOp); On June 4, 2009, the NMFS issued a Biological Opinion on Salmonids, Green Sturgeon, and Killer Whales for the Long-term Operations of the CVP and SWP (Salmon BiOp); and F. On February 23, 2009, DWR received from DFG incidental take authorization of longfin smelt for the SWP operations pursuant to section 2081 of the Fish and Game Code (SWP Longfin Smelt Incidental Take Permit (ITP No. 2081-2009-001-3))- DFG Longfin Smelt Incidental Take Permit (ITP). | |

Zero-Based Budget Report - Program Detail

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| Program Justification | This POD Fund Center - supports contract expenditures for the mitigation of impacts of the operations of the SWP Delta Pumping Plant on pelagic and listed fish species, such as delta smelt, longfin smelt, and winter-run and spring-run salmon. This account was originally established to cover the Pelagic Organism Decline (POD) identified in the Delta Smelt Action Plan (October 2005). These funds are accounted for under the Delta Fish Agreement on terms to be negotiated between DWR and DFG. Mitigation required under the Fish Restoration Program Agreement (FRPA) for direct and indirect fisheries impacts due to operations of the State Water Project for delta smelt, longfin smelt, and winter-run and spring-run salmon. This FRPA mitigation is currently being negotiated with the Department of Fish and Game. FRPA is an agreement between the Department of Fish and Game (DFG) and the Department of Water Resources (DWR) that addresses the requirements of the USFWS, NMFS Biological Opinions and DFG Incidental Take Permit (ITP). Pursuant to FRPA DFG commits to work cooperatively with and assist DWR in establishing the management and financial framework necessary to implement a fish restoration program that will meet the federal biological opinions and the DFG ITP. Through FRPA, DWR, with assistance from DFG, will implement actions, including aquatic habitat restoration, for winter-run Chinook salmon, spring-run Chinook salmon, delta smelt, and longfin smelt to mitigate impacts to these species caused by the State Water Project (SWP) Delta Pumping Facilities. Measures provided under the FRPA will likely benefit non-target fish species as well. Prior to implementing specific projects, DWR, with DFG's assistance, will obtain any necessary permits and complete environmental compliance, such as preparing documents required pursuant to the California Environmental Quality Act (CEQA). | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| | | |
| Program Area (Total Positions & Resources) | Suisun Marsh Planning 4 Positions, \$1,408,000 | |
| Legal Authority | Code and Section | |
| Program Justification | Title 23, California Code of Regulations and the California Water Code give the State Water Resources Control Board (SWRCB) the authority to regulate water quality within the state. SWRCB Decision 1641 (D-1641) specifies water quality standards and certain actions necessary to sustain water quality and the aquatic life within the Delta and Suisun Marsh and to report on compliance. The Sacramento-San Joaquin Delta Reform Act of 2009 further defines DWR goals. This fund center provides funding for the Suisun Marsh Planning section that does the extensive planning necessary to meet state and federal requirements. The planning includes SWP operations planning and habitat restoration planning to the Suisun Marsh Program, Delta Field Division, and SWP Operations. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Senior Engineer, WR (1) | | The Senior Engineer manages the section and provides technical guidance and direction for the planning staff. The engineer has significant experience and knowledge in the areas of modeling, GIS, and land use and leads in the planning effort. |
| Engineer, WR (3) | | These engineers provide the civil engineering, hydrologic modeling, and GIS support to the planning function of the unit. Their analysis provides the direction and the options which the Suisun Marsh Program can pursue. |
| Program Area (Total Positions & Resources) | Suisun Marsh Compliance and Monitoring 6 Positions, \$2,289,000 | |
| Legal Authority | Code and Section | |
| Program Justification | Title 23, California Code of Regulations and the California Water Code give the State Water Resources Control Board (SWRCB) the authority to regulate water quality within the state. SWRCB Decision 1641 (D-1641) specifies water quality standards and certain actions necessary to sustain water quality and the aquatic life within the Delta and Suisun Marsh and to report on compliance. The Sacramento-San Joaquin Delta Reform Act of 2009 further defines the goals. This fund center provides funding for the Suisun Marsh Compliance and Monitoring Section. The section provides permitting with numerous state and federal partners which is necessary to fulfill D-1641 requirements and goals as well as permitting for the actions that come out of the Suisun Marsh Planning Section. The section also provides and reports the water quality and stage data from monitoring stations in the Suisun Marsh. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |

Zero-Based Budget Report - Program Detail

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| Senior Engineer, WR (1) | | The Senior Engineer manages the section and provides engineering guidance to the monitoring, operations, and permitting personnel. This position also provides the administrative support to the EPI Branch. |
| Engineer, WR (1) | | The Engineer provides the expertise and support for operations and/or maintenance in the Suisun Marsh by the Suisun Marsh Program and Delta Field Division. |
| Staff Environmental Scientist (2) | | These scientists acquire the permits to support operations and/or maintenance in the Suisun Marsh by the Suisun Marsh Program and Delta Field Division. They also write reports for the state and federal regulatory agencies. |
| Water Resources Technician, II (1) | | The Water Resources Technician II gathers the data and maintains/calibrates the monitoring stations in the Suisun Marsh. |
| Water Resources Technician, I (1) | | The Water Resources Technician I gathers the data and maintains/calibrates the monitoring stations in the Suisun Marsh. |
| Program Area (Total Positions & Resources) | Implementation of Biological Opinions 3 position, \$1,845,000 | |
| Legal Authority | 16 U.S.C. §1531 et. seq. (Federal Endangered Species Act of 1973), Ca. Fish & Game Code §2050 | |
| Program Justification | <p>Operation of the Harvey O. Banks Pumping Plant facilities includes the diversion of water through a fish salvage facility to protect fish from entrainment in the pumps. The activities at DWR's John E. Skinner Delta Fish Protective Facility includes the collection, handling, transport, and release of fish, including species that have been listed for protection under both the California and federal Endangered Species Acts.</p> <p>In accordance with Section 7 of the Endangered Species Act, the National Marine Fisheries Service issued a Biological Opinion on 6/4/2009 (amended on 4/7/2011). Action IV.4.1 of the Biological Opinion requires DWR to implement specific measures for the protection of sensitive fish species, including the collection of fish tissue samples for genetic analysis.</p> | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Staff Environmental Scientist (1) | | The Staff Environmental Scientist ensures DWR's compliance with the "Reasonable and Prudent Alternatives" (RPAs) listed in the Federal Biological Opinion (BiOp) that apply to genetics. This includes the compilation, analysis, and dissemination of the previous 10 years of genetic data, author and manage contracts for current and future genetic analysis, and serves as DWR's expert in this field. This scientist also represents DWR on the BiOp-mandated Interagency Ecological Program - Genetics Project Work Team. These duties also include participating in the fourteen BiOp work groups as their discussions relate to genetics research and identification of species and populations. |
| Environmental Scientists (2) | | The two Environmental Scientist positions are authorized and are currently being filled. Once filled, they will provide the necessary biological expertise to perform the habitat restoration, mitigation, and maintenance planning. |

Zero-Based Budget Report - Program Detail

Department of Water Resources Budget Year 2012-2013 Staff and Resource Needs

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| Program Area | | |
| FLOODSAFE | | |
| (Total Positions & Resources) | | |
| 4 Positions, \$988,000 | | |
| Legal Authority | | |
| <ul style="list-style-type: none"> • Authorized under SBX2 1, Section 5096.821 of the Public Resources Code • The Delta Reform Act of 2009 amended Section 29702 (d) of the Public Resources Code to read as follows: "Improve flood protection by structural and nonstructural means to ensure an increased level of public health and safety." | | |
| Program Justification | | |
| This FloodSAFE FloodER program provides staff resources to support the development and implementation of the Delta Flood Preparedness, Response & Recovery Program. Program activities include: development of new emergency response decision and mapping tools; new and enhanced emergency response preparedness, response and preparedness plans for the department's Flood Operations Center; development of an integrated multi-agency flood emergency response plan, emergency drills and exercises to test tools, training and plans and procedures. These activities are mission critical to implement nonstructural measures to increase the public health and safety in the Delta region. | | |
| Position Classification (number) | | |
| Contract Funding (\$1000) | | |
| Itemized Justification | | |
| Engineer, Water Resources (4) | | The 4 engineers are engaged in the: (1) development and technical review of new preparedness procedures for emergency response and recovery in the Delta; (2) creation of new Delta emergency response protocols; (3) creation and testing of candidate strategies for recovery of the Sacramento-San Joaquin Delta after a catastrophic flood or seismic event; (4) crafting and executing a multi-agency, integrated outreach strategy that will reach the department's emergency response partners in the Delta; (5) developing and implementing new training scenarios, drills and exercises that will engage the department's emergency response partners and the public in order to protect the public safety, environment, and critical infrastructure in the Delta. |
| Program Area | | |
| DELTA LEVEES SYSTEM INTEGRITY | | |
| (Total Positions & Resources) | | |
| 2 positions, \$750,000 | | |
| Legal Authority | | |
| Water Code Part 4.8., Delta Flood Protection, Sections 12300-12318 and Water Code Part 9 Delta Levee Maintenance, Sections 12980-12995 | | |
| Program Justification | | |
| The Sacramento San-Joaquin Delta is of critical importance to the state and plays a major role supporting California's economy. Virtually all of the Delta's assets are protected by an extensive system of levees which, in turn, rely on local reclamation districts for regular maintenance and improvement. The Delta Flood Protection Program funds 26 engineering and 6 environmental support positions in addition to an interagency contract to support Department of Fish and Game's staff participation. Program staff provides planning, engineering, financial management, scientific research, and monitoring to address flood protection and environmental enhancement needs in the Delta. Funding made available to local reclamation districts is used for levee maintenance, planning and building levee improvements and habitat-related projects. This includes mitigation associated with Delta levee upgrades and projects that develop net long-term habitat improvements and benefit aquatic species in the Delta and Suisun Marsh. Another primary program goal is to reduce risk of catastrophic levee failures that impact water conveyance to 25 million Californians through improved emergency response and improved analysis of risks. This program has been funded continuously since major funding commitments began in 1988. | | |
| Position Classification (number) | | |
| Contract Funding (\$1000) | | |
| Itemized Justification | | |
| Senior Engineer (1) | | The Senior Engineer supports the Delta Levee Maintenance Subventions and Special Projects' program. Leads staff in program management associated with activities by local reclamation districts to maintain and improve levees in the Delta. Management of funding contracts; inspection, and coordination with local entities, plans, reviews, and coordinates projects with local sponsors. |
| Engineer (1) | | The engineer supports the Delta Levee Maintenance Subventions and Special Projects' programs. Supports activities related to project management of Special Projects Program Solicitation Proposal Projects and monitoring, review and approval. |
| | 220 | Funds are used for interagency agreements in support of the Delta Levees Program. Every three to four years DWR and the Department of Fish and Game enter into agreements to support Seven positions that work in monitoring levee work to ensure the environmental mandates as required by the enabling legislation are met. In addition DFG works in partnership with Delta Levee Program environmental staff to develop habitat enhancement projects in the Delta and to ensure impacts from levee maintenance and rehabilitation work are mitigated. This funding is supplemented with other available bond funds to support up to \$1.2 million in estimated annual costs. A contract with Chico State supports the management of geographic information related to levee habitat. |

Zero-Based Budget Report - Program Detail

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| Program Area | | PIE FESSRO Delta Levees GF Switch |
| (Total Positions & Resources) | | 16 Positions, \$3,860,000 |
| Legal Authority Water Code Part 4.8., Delta Flood Protection, Sections 12300-12318 and Water Code Part 9 Delta Levee Maintenance, Sections 12980-12995 | | |
| Program Justification | The Sacramento San-Joaquin Delta is of critical importance to the state and plays a major role supporting California's economy. Virtually all of the Delta's assets are protected by an extensive system of levees which, in turn, rely on local reclamation districts for regular maintenance and improvement. The Delta Flood Protection Program funds 26 engineering and 6 environmental support positions in addition to an interagency contract to support Department of Fish and Game's staff participation. Program staff provides planning, engineering, financial management, scientific research, and monitoring to address flood protection and environmental enhancement needs in the Delta. Funding made available to local reclamation districts is used for levee maintenance, planning and building levee improvements and habitat-related projects. This includes mitigation associated with Delta levee upgrades and projects that develop net long-term habitat improvements and benefit aquatic species in the Delta and Suisun Marsh. Another primary program goal is to reduce risk of catastrophic levee failures that impact water conveyance to 25 million Californians through improved emergency response and improved analysis of risks. This program has been funded continuously since major funding commitments began in 1988. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Supervising Engineer (2) | | Manages staff performing activities under the Delta Levees Program. These activities include work under the Delta Levees Subventions and Delta Levees Special Projects programs including managing program solicitation proposals for levee improvement. In addition the Supervising Engineers oversee Delta Knowledge Improvement, Beneficial Reuse of Dredged Material, Emergency Response elements of the Levee Program, and coordination with the US Army Corps of Engineer for development of future projects in the Delta. As part the of FloodSAFE program staff coordinates with other divisions in DWR to ensure functional areas are efficiently managed. |
| Senior Engineer (5) | | The Senior Engineers lead staff and perform engineering work in support of Delta Levees Program elements including Delta Knowledge Improvement, Beneficial Reuse of Dredged Material, and Delta Emergency Response. They support management of Delta Levee Maintenance Subventions, manage program solicitation proposals and supervise project managers working on local funding agreements to improve Delta Levees. Staff leads development of a geographic information database , manages Delta Knowledge Improvement contracts, and participates in developing accurate tidal datum for use by local levee districts and government planners. |
| Engineer (7) | PRC Section 1, Division 43, Section 75029 Safe Drinking Water, Water Quality and Supply, Flood | The engineers perform project management and program management functions for the Delta Levee Special Projects and Delta Levee Subventions Program. Staff prepares annual funding agreements and manages claims for reimbursement submitted under the Delta Levee Maintenance Subventions Program. Staff prepares funding agreements and manages grant advances and payments for the Special Projects' Program Solicitation Proposals including inspecting and reviewing work claims. Staff maintains geographic information, coordinates with Corps of Engineers on feasibility of future projects in the Delta, and coordinates project issues with local agencies and the Department of Fish and Game. |
| Technician 2, (1) | | Technician 2 works in support of the Delta Levee Maintenance Subventions and Special Projects programs. The Technician 2 actively monitors the Delta and Suisun Marsh levees and documents work completed in cooperation with local district superintendents and coordination with Department of Fish and Game staff. |
| | 90 | These funds are used for operational support for the Delta Levees Program including travel, training, office,equipment, and other general expenses needed for meeting the needs of engineering and environmental staff. |
| Program Area | | DELTA LEVEES |
| (Total Positions & Resources) | | 0 Positions, \$511,000 |
| Legal Authority Water Code Part 4.8., Delta Flood Protection, Sections 12300-12318 and Water Code Part 9 Delta Levee Maintenance, Sections 12980-12995 | | |
| Program Justification | The Sacramento San-Joaquin Delta is of critical importance to the state and plays a major role supporting California's economy. Virtually all of the Delta's assets are protected by an extensive system of levees which, in turn, rely on local reclamation districts for regular maintenance and improvement. The Delta Flood Protection Program funds 26 engineering and 6 environmental support positions in addition to an interagency contract to support Department of Fish and Game's staff participation. Program staff provides planning, engineering, financial management, scientific research, and monitoring to address flood protection and environmental enhancement needs in the Delta. Funding made available to local reclamation districts is used for levee maintenance, planning and building levee improvements and habitat-related projects. This includes mitigation associated with Delta levee upgrades and projects that develop net long-term habitat improvements and benefit aquatic species in the Delta and Suisun Marsh. Another primary program goal is to reduce risk of catastrophic levee failures that impact water conveyance to 25 million Californians through improved emergency response and improved analysis of risks. This program has been funded continuously since major funding commitments began in 1988. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |

Zero-Based Budget Report - Program Detail

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| | 511 | Funds are used for interagency agreements in support of the Delta Levees Program. Every three to four years DWR and the Department of Fish and Game enter into agreements to support seven positions for monitoring levee work to ensure the environmental mandates as required by the enabling legislation are met. In addition DFG works in partnership with Delta Levee Program environmental staff to develop habitat enhancement projects in the Delta and to ensure impacts from levee maintenance and rehabilitation work are mitigated. This funding is supplemented with other available bond funds to support up to \$1.2 million in estimated annual costs. A contract with Chico State supports the management of geographic information related to levee habitat. |
| Program Area (Total Positions & Resources) | DELTA LEVEES 6 Positions, \$1,311,000 | |
| Legal Authority | Water Code Part 4.8., Delta Flood Protection, Sections 12300-12318 and Water Code Part 9 Delta Levee Maintenance, Sections 12980-12995 | |
| Program Justification | The Sacramento San-Joaquin Delta is of critical importance to the state and plays a major role supporting California's economy. Virtually all of the Delta's assets are protected by an extensive system of levees which, in turn, rely on local reclamation districts for regular maintenance and improvement. The Delta Flood Protection Program funds 26 engineering and 6 environmental support positions in addition to an interagency contract to support Department of Fish and Game's staff participation. Program staff provides planning, engineering, financial management, scientific research, and monitoring to address flood protection and environmental enhancement needs in the Delta. Funding made available to local reclamation districts is used for levee maintenance, planning and building levee improvements and habitat-related projects. This includes mitigation associated with Delta levee upgrades and projects that develop net long-term habitat improvements and benefit aquatic species in the Delta and Suisun Marsh. Another primary program goal is to reduce risk of catastrophic levee failures that impact water conveyance to 25 million Californians through improved emergency response and improved analysis of risks. This program has been funded continuously since major funding commitments began in 1988. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Environmental Program Manager (1) | | The Environmental Program Manager 1 leads Delta Levee Program environmental staff in managing project environmental documentation and permitting, leads efforts regarding endangered species issues related to implemented levee projects, and develops priorities for habitat improvement and enhancement projects. In addition the EPM guides staff in programmatic habitat project development and managing the Meins Landing property for environmental enhancement and mitigation in the Suisun Marsh. The EPM manages the Department of Fish and Game funding agreement. |
| Senior Engineer (1) | | The Senior Engineer leads staff and performs engineering work in support of Delta Levees Program Suisun Marsh element. The Senior Engineer works with local Suisun Marsh agencies and marsh reclamation districts to ensure the Delta Levees Program is consistent with planning activities for Suisun Marsh restoration. The engineer leads in developing the Meins Landing land that was purchased jointly with Coastal Conservancy, Delta Levees, and State Water Project funding. |
| Staff Environmental Scientist (1) | | The Staff Environment Scientists works on issues regarding endangered species related to implementing levee projects funded by the Delta Levees Program. The SES assists in developing priorities for habitat improvement and enhancement projects. The SES helps develop Delta Levee Program Geographic information database, including tracking habitat losses and gains, land use changes and mitigation development. Staff provides technical assistance to reclamation districts in developing habitat improvement proposals, coordinates with the districts on meeting habitat protection requirements, and assists in developing habitat mitigation and enhancement in a programmatic way. |
| Environmental Scientist (1) | | The Environmental Scientist works on issues regarding endangered species related to implementing levee projects funding by the Delta Levees Program. The ES assists in developing priorities for habitat improvement and enhancement projects. The ES provides input to the Delta Levee Program geographic information database related to the tracking of habitat losses and gains, land use changes, and mitigation development. The ES coordinates with the districts on meeting habitat protection requirements, and assists in developing habitat mitigation and enhancement in a programmatic way. |
| Engineer (2) | | The engineers perform project management and program management functions for the Delta Levee Subventions, Delta Levee Special Projects and Suisun Marsh Program. Staff prepares annual funding agreements and manages claims for reimbursement submitted under the Delta Levee Maintenance Subventions Program. Staff prepares funding agreements and manages grant advances and payments for the Special Projects' Program Solicitation Proposals including inspecting and review work claims. Staff supports activities in Suisun Marsh and Mein Landing, coordinates with Corps of Engineers on the feasibility of future projects in the Delta, and coordinates on project issues with local agencies and the Department of Fish and Game. |

Zero-Based Budget Report - Program Detail

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| | 149 | Funds are used for interagency agreements in support of the Delta Levees Program. Every three to four years DWR and the Department of Fish and Game enter into agreements to support seven positions for monitoring levee work to ensure the environmental mandates as required by the enabling legislation are met. In addition DFG works in partnership with Delta Levee Program environmental staff to develop habitat enhancement projects in the Delta and to ensure impacts from levee maintenance and rehabilitation work are mitigated. This funding is supplemented with other available bond funds to support up to \$1.2 million in estimated annual costs. A contract with Chico State supports the management of geographic information related to levee habitat. |
| Program Area (Total Positions & Resources) | Habitat Restoration 2 Positions, \$415,000 | |
| Legal Authority | Water Code Part 4.8., Delta Flood Protection, Sections 12300-12318 and Water Code Part 9 Delta Levee Maintenance, Sections 12980-12995 | |
| Program Justification | The Sacramento San-Joaquin Delta is of critical importance to the state and plays a major role supporting California's economy. Virtually all of the Delta's assets are protected by an extensive system of levees which, in turn, rely on local reclamation districts for regular maintenance and improvement. The Delta Flood Protection Program funds 26 engineering and 6 environmental support positions in addition to an interagency contract to support Department of Fish and Game's staff participation. Program staff provides planning, engineering, financial management, scientific research, and monitoring to address flood protection and environmental enhancement needs in the Delta. Funding made available to local reclamation districts is used for levee maintenance, planning and building levee improvements and habitat-related projects. This includes mitigation associated with Delta levee upgrades and projects that develop net long-term habitat improvements and benefit aquatic species in the Delta and Suisun Marsh. Another primary program goal is to reduce risk of catastrophic levee failures that impact water conveyance to 25 million Californians through improved emergency response and improved analysis of risks. This program has been funded continuously since major funding commitments began in 1988. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Staff Environmental Scientist (2) | | The Staff specialists are developing a habitat restoration plan to address Delta levee mitigation needs on a programmatic basis. In order to help facilitate a program wide mitigation plan, staff analyzes data with respect to current habitat condition, land use and projected sea level rise. Specific tasks include developing habitat needs assessments, providing restoration design concepts and determining priority acquisition properties, and working with property owners to develop mutually agreeable property management strategies. A substantial part of the work includes coordination with the Delta Levees Program, Department of Fish and Game, National Oceanic and Atmospheric Administration, National Marine Fisheries, California Regional Water Quality Control Board and others on habitats of concern. Staff oversees work agreements with local agencies to develop potential programmatic mitigation and enhancement sites. |
| Program Area (Total Positions & Resources) | Dutch Slough Tidal Marsh 1 Positions, \$94,000 | |
| Legal Authority | Water Code Part 4.8., Delta Flood Protection, Sections 12300-12318 and Water Code Part 9 Delta Levee Maintenance, Sections 12980-12995 | |
| Program Justification | The Sacramento San-Joaquin Delta is of critical importance to the state and plays a major role supporting California's economy. Virtually all of the Delta's assets are protected by an extensive system of levees which, in turn, rely on local reclamation districts for regular maintenance and improvement. The Delta Flood Protection Program funds 26 engineering and 6 environmental support positions in addition to an interagency contract to support Department of Fish and Game's staff participation. Program staff provides planning, engineering, financial management, scientific research, and monitoring to address flood protection and environmental enhancement needs in the Delta. Funding made available to local reclamation districts is used for levee maintenance, planning and building levee improvements and habitat-related projects. This includes mitigation associated with Delta levee upgrades and projects that develop net long-term habitat improvements and benefit aquatic species in the Delta and Suisun Marsh. Another primary program goal is to reduce risk of catastrophic levee failures that impact water conveyance to 25 million Californians through improved emergency response and improved analysis of risks. This program has been funded continuously since major funding commitments began in 1988. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Staff Environmental Scientist (1) | | The Staff Environmental Scientist manages the implementation of the \$32 million Dutch Slough Restoration Project. The Dutch Slough property is located near the mouth of the San Joaquin River in eastern Contra Costa County and is an ideal site of restoring tidal marsh to benefit native fish in the Delta. The SES manages project contracts associated with the development of Dutch Slough. The SES coordinates activities with other agencies and stakeholders including, but not limited to the Department of Fish and Game, Coastal Conservancy, City of Oakley, Ironhouse Sanitation District, and Contra Costa Water District. Other duties include securing necessary environmental permits, and facilitating the completion of the long-delayed restoration project. |
| Program Area (Total Positions & Resources) | DELTA LEVEE PROGRAM 5 Positions, \$1,020,000 | |

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| Legal Authority | Water Code Part 4.8., Delta Flood Protection, Sections 12300-12318 and Water Code Part 9 Delta Levee Maintenance, Sections 12980-12995 | |
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| Program Justification | The Sacramento San-Joaquin Delta is of critical importance to the state and plays a major role supporting California's economy. Virtually all of the Delta's assets are protected by an extensive system of levees which, in turn, rely on local reclamation districts for regular maintenance and improvement. The Delta Flood Protection Program funds 26 engineering and 6 environmental support positions in addition to an interagency contract to support Department of Fish and Game's staff participation. Program staff provides planning, engineering, financial management, scientific research, and monitoring to address flood protection and environmental enhancement needs in the Delta. Funding made available to local reclamation districts is used for levee maintenance, planning and building levee improvements and habitat-related projects. This includes mitigation associated with Delta levee upgrades and projects that develop net long-term habitat improvements and benefit aquatic species in the Delta and Suisun Marsh. Another primary program goal is to reduce risk of catastrophic levee failures that impact water conveyance to 25 million Californians through improved emergency response and improved analysis of risks. This program has been funded continuously since major funding commitments began in 1988. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Senior Engineer (2) | | The Senior Engineers lead staff and perform engineering work in support of Delta Levees Program elements including Subsidence Studies and Carbon Sequestration, Delta Emergency Response, Beneficial Reuse of Dredged Material, West Delta management, and Dutch Slough management. The work in Carbon Sequestration includes managing grants with Twitchell and Sherman Islands to construct, operate, and research rice and wetlands in the west Delta as a means to reverse land subsidence. The work in beneficial reuse includes coordinating with the State Regional Water Quality Control Board and the US Army Corps of Engineers to develop projects to safely use reused dredging spoils for levee material. The work in Dutch Slough management consists of managing the Dutch Slough reclamation district including operating and maintaining land while the Tidal Restoration Project is being developed. |
| Engineer (3) | | The engineers perform project management and program management functions for the Delta Levee Special Projects specifically related to Subsidence Studies and Carbon Sequestration, Delta Emergency Response and Beneficial Reuse of Dredged Materials. Staff prepares annual funding agreements and manages projects related to carbon sequestration and the beneficial reuse of dredged materials. Staff prepares funding agreements and manages grant advances for districts participating in these program elements. Staff prepares plans and participates in Delta Emergency Response tabletop exercises. |
| | 100 | These funds are used for operational support for the Delta Levees Program including travel, training, office, equipment, and other general expenses needed for meeting the needs of engineering and environmental staff. |

Zero-Based Budget Report - Program Detail

Department of Water Resources Budget Year 2012-2013 Staff and Resource Needs

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| Program Area (Total Positions & Resources) | | IEP - Baseline Science 1.6 Positions, \$828,000 | |
| Legal Authority SWRCB Water Rights Decision D-1641 - FESA, and CESA | | | |
| Program Justification | | The IEP program was initiated in 1971 in compliance with State Water Resources Control Board (SWRCB) Water Right Decision D-1379 and continued from 1978 through 1999 under D-1485. Currently it is required under by Water Right Decision D-1641. Additional compliance and Pelagic Organism Decline activities under IEP programs are in response to requirements from D-1641 as well as court rulings on various Biological Opinions for the Delta and tributaries. This includes both the state and federal Endangered Species Acts. | |
| Position Classification (number) | | Contract Funding (\$1000) | Itemized Justification |
| Environmental Scientist (1) | | | The environmental scientist conducts routine field surveys and collects data associated with fisheries research studies in the Sacramento-San Joaquin Delta. All work is mandated under D-1641 or under the FESA or CESA. These projects include but are not limited to assessment of fish abundance and sampling other biota, as well as understanding migration timing for key fish species in the delta and the Yolo Bypass. The scientist performs and conducts field sampling with a rotary screw trap, fyke trap, and beach seine net; extensive fish identification; work aboard or around boats; work cooperatively with state and federal agency personnel and consultants to accomplish field sampling; and design and construct, repair, and maintain sampling equipment. |
| Senior Environmental Scientist (.6) | | | The Senior Environmental Scientist is Chief of the Aquatic Ecology Section in the Environmental Water Quality and Estuarine Studies Branch of the Division of Environmental Services (DES). The scientist is responsible for ensuring that Delta research, data collection, reduction, analysis, management, and reporting are conducted in a professional and thorough manner and the findings help meet the compliance requirements of D-1641, and the FESA and CESA. The scientist is also a member of IEP Management Team and Pelagic Organism Decline Management Team. Also develops, coordinates, and administers ecological studies project agreements between DWR and various principal investigators. |
| | | 300 | Contracts (estimated for 2013) |
| Program Area (Total Positions & Resources) | | IEP - POD Science 6.6 Positions, \$7,378,000 | |
| Legal Authority SWRCB Water Rights Decision D-1641 - FESA, and CESA | | | |
| Program Justification | | The IEP program was initiated in 1971 in compliance with the State Water Resources Control Board (SWRCB) Water Right Decision D-1379 and continued from 1978 through 1999 under D-1485. Currently it is required under Water Right Decision D-1641. Additional compliance and Pelagic Organism Decline activities under IEP programs are in response to requirements from D-1641 as well as court rulings on various Biological Opinions for the Delta and tributaries. | |
| Position Classification (number) | | Contract Funding (\$1000) | Itemized Justification |
| Environmental Scientist (6) | | | The Environmental Scientists are responsible for assisting in the collection, reduction, analysis, management, and reporting of water quality and biological data. These scientific studies are focused on meeting the requirements of Water Rights Decision D-1641, which requires an assessment of the water projects impacts on the health of the Sacramento-San Joaquin Delta. As staff members, or as part of a combined Interagency Ecological Program (IEP) field crew, the scientists collect and preserve biological, chemical, and physical field samples from the Bay-Delta in a monitoring van or vessel, and perform routine chemical, physical, and biological field and laboratory analyses. When acting as lead person, the scientists will ensure that field samples are properly collected and processed, and preliminary findings and concerns are summarized in a report provided to the Section Chief upon completion of field monitoring. Besides conducting studies these scientists (1) ensure that quality assured data are made available for public display in a timely manner; (2) maintain high quality long-term storage of monitoring data on the IEP website; (3) respond to data requests and field data related questions from public and private sector data users; and,(4)provide a synthesis of the data and an annual report to the SWRCB. |
| Senior Environmental Scientist (.6) | | PRC Section 1, Division 43, Section 75029 Safe Drinking Water, Water | This Senior Environmental Scientist is Chief of the Bay-Delta Monitoring and Analysis Section in the Environmental Water Quality and Estuarine Studies Branch of the Division of Environmental Services (DES). The Senior ES ensures that the data collection, reduction, analysis, management, and reporting mandates of water rights decisions issued by the Department by the State Water Resources Control Board (SWRCB) are fulfilled, and that follow up special studies are conducted in response to monitoring findings and the needs of management. |

Zero-Based Budget Report - Program Detail

Department of Water Resources Budget Year 2012-2013 Staff and Resource Needs

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| Program Area (Total Positions & Resources) | CALIFORNIA STATEWIDE GROUNDWATER ELEVATION MONITORING (CASGEM) PROGRAM 4.6 Positions, \$1,194,000 | |
| Legal Authority | Water Code § 10920 et seq. & § 12924 | |
| Program Justification | SBX7 6 added provisions to the Water Code and directs DWR to establish permanent, locally managed, groundwater-elevation monitoring and reporting in California's 515 groundwater basins. To implement SBX7 6, DWR developed the California Statewide Groundwater Elevation Monitoring (CASGEM) program. The purpose of CASGEM is to establish regular and systematic monitoring of groundwater elevations and to track seasonal and long-term trends in groundwater elevations statewide. The law directs DWR to rely and build upon established, local, long-term groundwater monitoring and management programs conducted by local entities. Statewide groundwater elevation data is an important fundamental step toward improving groundwater management. SBX7 6 requires DWR to report findings to the Governor and the Legislature in years ending in "5" or "0" and requires DWR to conduct groundwater basin assessments, identify regional trends, and investigate existing patterns of groundwater pumping and groundwater recharge to identify basins subject to overdraft. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Senior Engineering Geologist (Specialist) (1) | | One Senior Engineering Geologist (Specialist) would lead the CASGEM team in on-going review and evaluation of Monitoring Entity notifications and designations; ensure compliance with legislative intent regarding maintenance of submitted groundwater elevation data in a manner that is readily and widely available to the public; and monitor, report, and analyze seasonal and long-term trends in groundwater elevations statewide. In cooperation with CASGEM team members, this position would conduct a statewide prioritization of basins based on water supply, water demand, and other factors identified in the Water Code. The Senior Engineering Geologist is also responsible for preparing the initial report to the Legislature, conducting outreach on the program, and taking the lead with training and resolving issues with the CASGEM Online system. |
| Senior Engineering Geologist (.9) | | One Senior Engineering Geologist would continue to work cooperatively with local Monitoring Entities to achieve monitoring programs that demonstrate seasonal and long-term trends in groundwater elevation; investigate existing general patterns of groundwater pumping and groundwater recharge within certain basins to identify those that are subject to critical conditions of overdraft; and conduct groundwater basin assessments statewide. This position will develop the process and criteria to conduct a statewide prioritization of basins based on water supply, water demand, and other factors identified in the Water Code and then downscale the ranking process for each of the DWR region offices. The Senior Engineering Geologist will work with other CASGEM staff to ensure consistent implementation of the program throughout the state. |
| Engineering Geologist (2.7) | | Three Engineering Geologists, one in each of three region offices throughout California, would represent DWR and the state in ongoing public outreach associated with CASGEM; continue to work cooperatively with local Monitoring Entities to achieve monitoring programs that demonstrate seasonal and long-term trends in groundwater elevations; conduct groundwater basin assessments, concentrating in assigned service area(s); work with local agencies to become the Monitoring Entities for basin lacking monitoring, perform groundwater elevation monitoring as needed in basins where no local party has agreed to perform monitoring functions, and investigate existing patterns of groundwater pumping and groundwater recharge to identify basins subject to overdraft. |

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Department of Water Resources Budget Year 2012-2013 Staff and Resource Needs

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| Program Area | | AG DRAINAGE WATER MANAGEMENT |
| (Total Positions & Resources) | | 2.1 Positions \$369,000 |
| Legal Authority | | California's Public Resources Code section Division 43, §75029 (a) Delta Water Quality Program - San Joaquin River Water Quality Improvement Component. |
| Program Justification | This program came about to fulfill the state's obligation to meet the objectives of Proposition 84, the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act; which allocates the sum of \$40 million for grant projects that reduce or eliminate discharges of subsurface agricultural drain water from the west side of the San Joaquin Valley for the purpose of improving water quality in the San Joaquin River and the Delta. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Sr. Engineer Water Resources (1) | | The Sr. Engineer W.R will develop work plans to meet the objectives of the program. Prepare formal solicitation documents; guidelines, request for proposals (RFP) including all requirements in order for the proposers to understand what the state needs and how DWR will evaluate responses. Organize and prepare RFP workshops. Review and monitor contracts deliverables. Review and approve invoice payments. Implement a monitoring program to evaluate performance of grant projects. |
| Engineer Water Resources (1) | | Assist in the development of a detailed work plan and a detailed proposal solicitation package for the program. Assist the Technical Review Committee with the selection and revision of proposals, implement, modify and monitoring contractual agreements as needed, monitor work performed, approve and publish progress and final reports to the public on our website. Develop mailing lists for agencies responding to RFP notice. Develop and prepare contracts for selected proposals. Maintain contract documentation. Verify compliance with federal and state rules and regulations pertaining to contracts. Review invoices and verify the delivery of services prior to payment by agency. Assist in the implementation of the monitoring program described above, collect and analyze data on a set schedule, prepare progress reports and final report after a determined period of time. |
| Temporary Help (.1) | | Assist the Engineer Water Resources in the assignments described above. |
| Program Area | | DRINKING WATER QUALITY |
| (Total Positions & Resources) | | 1 Position, \$169,000 |
| Legal Authority | | PRC Section 1, Division 43, Section 75029 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection |
| Program Justification | Agricultural diversions and returns affect the amount of agricultural drainage released into the Delta which tends to degrade quality of water exported via SWP and CVP. The amount of water diverted and returned also affects the net Delta outflow which, in turn, affects the amount of salinity intrusion from the ocean. Delta Modeling Section staff has been working on improving models that account for this exchange of water. Improved modeling of these values will help understand the impacts to the day-to-day operation of the projects, understand the impacts to the Delta environment, and also help in planning longer term operational and structural changes in the Delta. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Prop50/Engineer, WR (PY1) | | This year the project focused on improving the Delta Island Consumptive Use in the Delta. Next year we will study the impact of the upper San Joaquin River on water quality of the Delta. |
| Program Area | | DRINKING WATER QUALITY |
| (Total Positions & Resources) | | 1 position, \$78,000 |
| Legal Authority | | PRC Section 1, Division 43, Section 75029 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection |
| Program Justification | Agricultural diversions and returns affect the amount of agricultural drainage released into the Delta which tends to degrade quality of water exported via SWP and CVP. The amount of water diverted and returned also affects the net Delta outflow which, in turn, affects the amount of salinity intrusion from the ocean. Delta Modeling Section staff has been working on improving models that account for this exchange of water. Improved modeling of these values will help understand the impacts to the day-to-day operation of the projects, understand the impacts to the Delta environment, and also help in planning longer term operational and structural changes in the Delta. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |

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| GF/Engineer, WR (PY0.5) | | Understanding nutrient dynamics in the Delta is critical for keeping water quality healthy and drinkable. This requires continuous enhancement of tools such as DSM2 water quality models. Models help determine management alternatives to minimize municipal and other human impact to water quality. An ongoing study by Delta Modeling Section staff is making progress on this project. |
| Program Area (Total Positions & Resources) | DRINKING WATER QUALITY 1.3 Positions, \$450,000 | |
| Legal Authority | PRC Section 1, Division 43, Section 75029 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection | |
| Program Justification | The Proposition 84 Delta Water Quality Program authorizes the use of funds by local public agencies to implement Delta water quality improvement projects that reduce or eliminate discharges of salt and pollutants, including projects that relocate drinking water intakes within the Delta. The Bay-Delta Office (BDO) is responsible for developing grant guidelines, preparing proposal solicitation packages (PSP)s, and administering agreements and funds to eligible grantees. The guidelines and first PSP were developed and vetted through a public process. The final guidelines and first proposal solicitation were released in Summer 2010. Awards totaling \$45.8 million were made for eligible projects from the first solicitation in Fall 2010. Grant agreements were developed and contract management is on-going. Development and release of a second PSP is planned for Summer 2012. A total of up to \$36.6 million in local assistance awards is planned under the second solicitation. The Proposition 84 Delta Water Quality Program requires 1.3 PYs (partial PYs for 3 engineers and 1 environmental scientist) to develop PSPs, award and evaluate grant funding, manage contracts, and analyze CEQA compliance. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Supervising Engineer, WR (0.15) | | Provides program oversight and direction to BDO staff on the Proposition 84 Delta Water Quality Program for the planning, development, and administration of guidelines, PSPs, workshops, and local assistance grant agreements, including California Environmental Quality Act (CEQA) review, for eligible water quality projects of qualified grantees which reduce or eliminate discharges of salt and pollutants, including projects that relocate drinking water intakes within the Delta. |
| Senior Engineer, WR (0.75) | | Plans, develops, and administers guidelines, PSPs, workshops, and local assistance grant agreements, including CEQA review, for eligible water quality projects of qualified grantees which reduce or eliminate discharges of salt and pollutants, including projects that relocate drinking water intakes within the Delta. Reviews and approves grantee invoices and provides regular reports on program status. Leads and directs engineer, water resource, environmental scientists and administrative staff who provide program support. |
| Engineer WR (0.25) | | Under the lead and direction of the Senior Engineer, WR assists in the planning, development, and administration of guidelines, PSPs, workshops, and local assistance grant agreements for eligible water quality projects of qualified grantees which reduce or eliminate discharges of salt and pollutants, including projects that relocate drinking water intakes within the Delta. |
| Environmental Scientist (0.15) | | Under the lead and direction of the Senior Engineer, WR assists in the review of CEQA compliance for eligible water quality projects of qualified grantees which reduce or eliminate discharges of salt and pollutants, including projects that relocate drinking water intakes within the Delta. |
| | \$51 | Funding for external contracts. AECOM is the consultant currently working on the project. |
| Program Area (Total Positions & Resources) | WTR QA-FRANKS TRACT 1.5 Positions, \$911,000 | |
| Legal Authority | State Water Project | |
| Program Justification | The Department of Water Resources (DWR) on behalf of the State Water Project, and the US Bureau of Reclamation, on behalf of the Central Valley Project, are responsible for water quality in the Sacramento San Joaquin Delta (Delta). The Franks Tract Project is a project designed to help improve water quality in the interior Delta. | |
| Position Classification (number) | Contract Funding (\$1000) | Itemized Justification |
| Senior Engineer, W.R. (1) | | Two Senior Engineer positions working half time each on this project would provide the planning needed for the Franks Tract Project including design, surveying and geotechnical surveys, computer modeling, environmental documents, and permits. |
| Supervising Engineer W.R. (0.5) | | One Supervising Engineer position working half time on managing this project including coordination with Reclamation, the project federal partner, and other state and federal agencies as needed. |
| | \$51 | Funding for external contracts. AECOM is the consultant currently working on the project. |

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