

NORTH-OF-THE-DELTA OFFSTREAM STORAGE

Delta Stewardship Council

April 24, 2014

***NORTH-OF-THE-DELTA
OFFSTREAM STORAGE***



Sites Joint Powers Authority

JPA Members

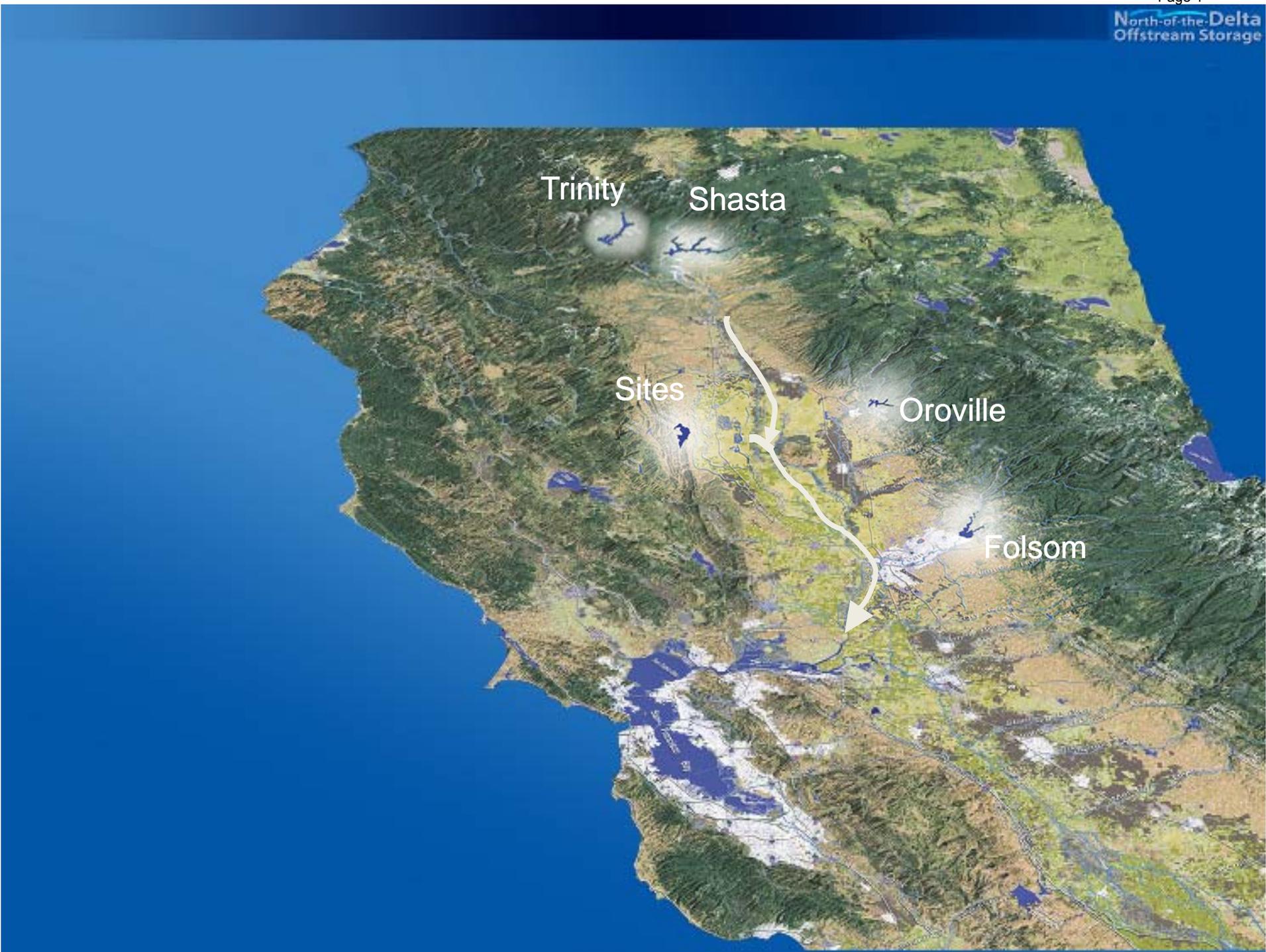
- Glenn County
- Colusa County
- Glenn-Colusa Irrigation District
- Tehama Colusa Canal Authority
- Reclamation District 108
- Maxwell Irrigation District
- Yolo County Flood Control and Water Conservation District
- DWR – non voting member



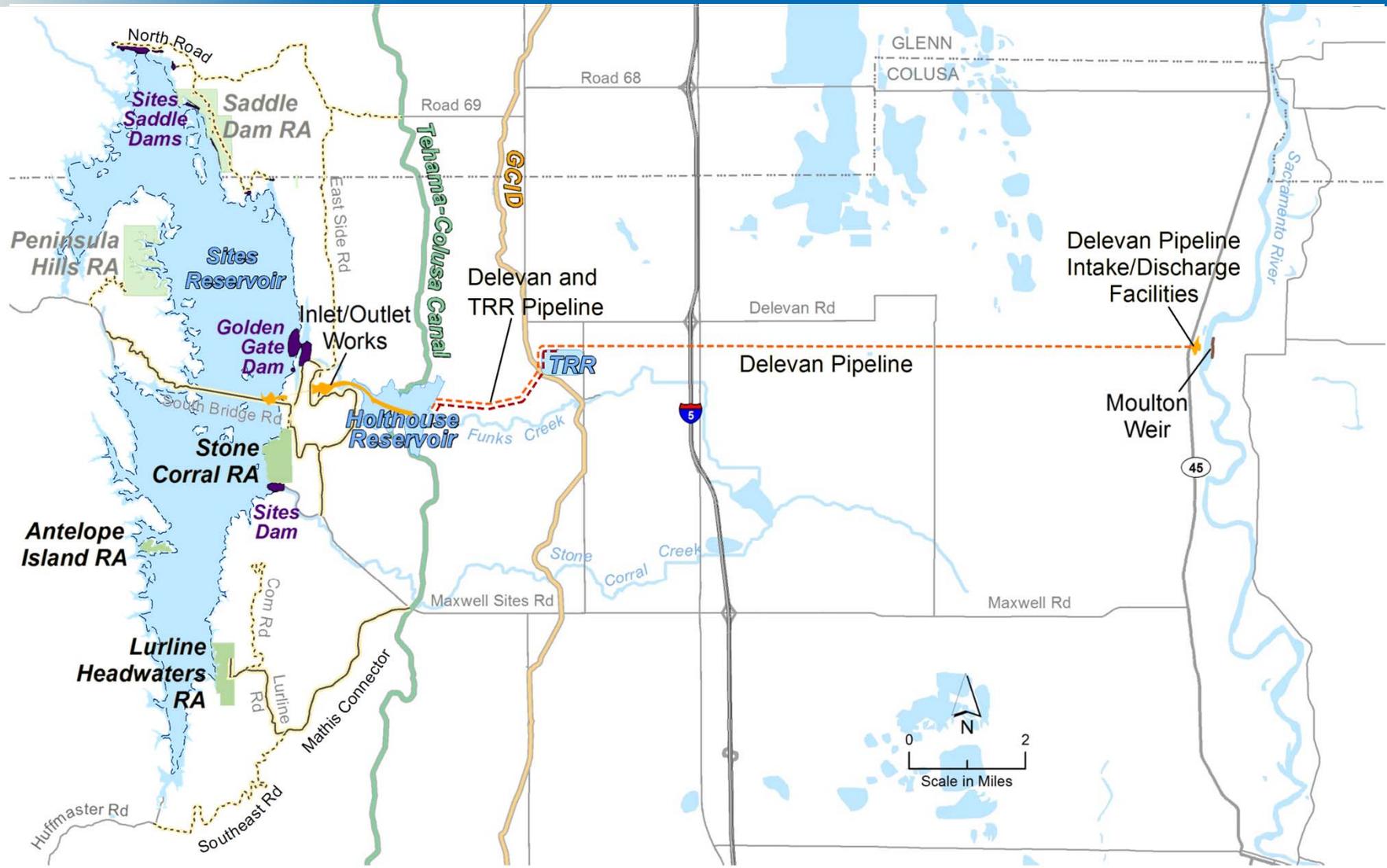
Sites Joint Powers Authority (JPA)

- Authorized under Section Water Code 79749(a).
 - The purpose of JPA is to establish a public entity to design, acquire, manage and operate Sites Reservoir and related facilities to improve the operation of the state's water system and provide improvements in ecosystem and water quality conditions the Sacramento River system and in the Bay-Delta as well as provide flood control and other benefits for the State of California.
- HR4300 – LaMalfa/Garamendi





Proposed Sites Reservoir Elements



2013-14 Action Plan

- ✓ Identify Yield & Benefits (with, w/o conveyance)
- ✓ Cost Evaluation
- ✓ Address Affordability & Funding Options
- Conduct Public Outreach
- Identify Beneficiaries and Cost/Benefit Evaluation



Alternative C



- 1.8 MAF
- 500 TAF/Year yield
- 1 MAF of increased upstream storage
- Water Supply
- Ecosystem Benefits
- Renewable Power
- Recreation



RECLAMATION

Managing Water in the West

CALFED Storage Program April 5, 2014

Facts

► Shasta

- **1938 -1945** – Reclamation constructs Shasta Dam and Reservoir
- **1980s** – Reclamation studies 200 foot raise; feasible but no partners to implement
- **2000** – Reclamation resumes feasibility studies in accord with CALFED ROD

► Upper San Joaquin

- **1942** – Reclamation completes Friant Dam and Millerton Lake
- **2003** – Reclamation and DWR fund studies to increase storage in the upper basin

► North of Delta

- **1996** – DWR initiates studies in the Sacramento Basin with Prop 204 funds
- **2003** –DWR and Reclamation fund studies in accord with CALFED ROD
- **2010** – Local agencies and counties form Sites Project Joint Powers Authority and fund continued studies with State grant

The CALFED Bay-Delta Program Storage Program Element is advancing, and feasibility studies for four potential surface storage projects are nearing key milestones. Two proposals include on-stream alternatives, enlarging Shasta Dam and Reservoir on the Sacramento River, and constructing a new dam and reservoir on the San Joaquin River, upstream of Friant Dam. Two other proposals include off-stream alternatives, further expanding Los Vaqueros Reservoir, south of the Delta, and constructing a new reservoir in the vicinity of Sites north of the Delta. These projects were identified in the CALFED Bay-Delta Program Record of Decision (ROD) outlining a series of interrelated programs to provide comprehensive solutions to the problems of ecosystem quality, water supply reliability, water quality, and Delta levee and channel integrity.

The ongoing feasibility studies will culminate in Feasibility Reports and related environmental documentation that will address the potential effects of alternatives; determine the technical, environmental, economic, and financial feasibility of increasing surface storage; support recommendations, if any, for Federal involvement and/or investment in such projects; and describe related implementation and operations, maintenance, relocations, and replacement responsibilities for Federal and non-Federal partners. The studies are being conducted in cooperation with the State of California, Department of Water Resources (DWR), other interested agencies, and the public.

Common Objectives

Primary and Secondary:

- Increase anadromous fish survival



Features & Estimated Costs

- **Shasta** *Report final FR Dec 2014*
- New Storage: 634 thousand acre-feet (TAF)
 - New Inundation Area: 2,500 acres
 - Dry-Year Deliveries: 133.4 TAF
 - Average Annual Deliveries: 76.4 TAF
 - Time to Construct: ~5 years
 - Feasibility: High
 - Cost to Construct: \$1.1 Billion

- **Upper San Joaquin**
- New Storage: 1,300 TAF
 - New Inundation Area: 5,700 acres
 - Dry-Year Deliveries: 21 TAF
 - Average annual Deliveries: 61 TAF
 - Time to Construct: ~8 years
 - Feasibility: High
 - Cost to Construct: \$2.5 Billion

- **North of Delta**
- New Storage: 1,800 TAF
 - New Inundation Area: 14,000 acres
 - Dry-Year Deliveries: 246 TAF
 - Average Annual Deliveries: 383 TAF
 - Time to Construct: 10-13 years
 - Feasibility: Low
 - Cost to Construct: \$5-6.3 Billion

- **Los Vaqueros**
- New Storage: 115 TAF
 - New Inundation Area: 600 acres
 - Dry-Year Deliveries: to be determined (TBD)
 - Average Annual Deliveries: TBD
 - Time to Construct: TBD
 - Feasibility: TBD
 - Cost to Construct: \$0.85 Billion

Schedules

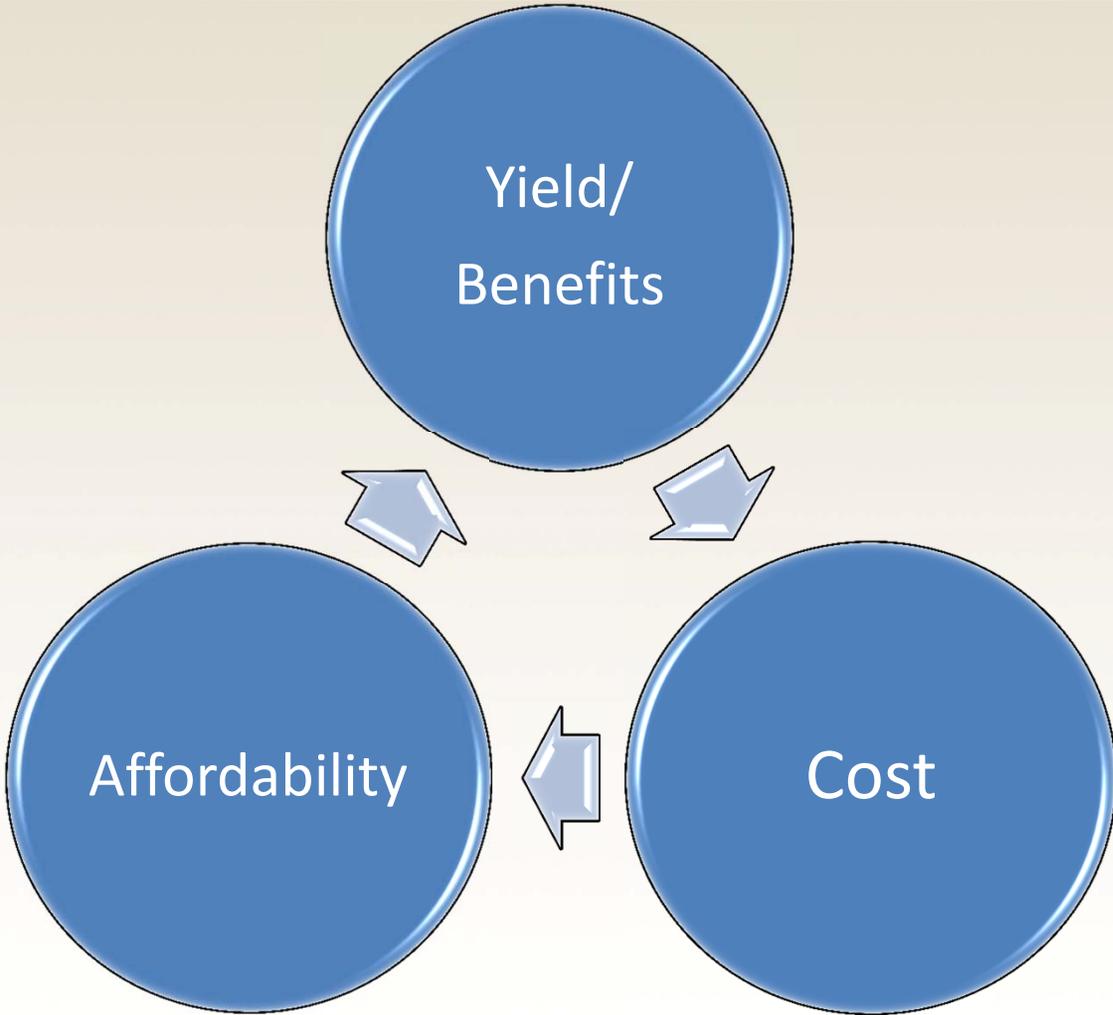
- **Shasta:** Final Reports, December 2014
- **Upper San Joaquin:** Final Reports, July 2015
- **North of Delta:** Draft Reports, TBD
- **Los Vaqueros:** Draft Reports, TBD

Contact Info

- **Shasta**
Katrina Chow, (916) 978-5067 kchow@usbr.gov;
www.usbr.gov/mp/slwrj

- **Upper San Joaquin**
Sharon McHale, (916) 978-5086 smchale@usbr.gov;
www.usbr.gov/mp/scca0/storage

- **North of Delta**
Ron Ganzfried, (916) 978-5060 rganzfried@usbr.gov;
www.usbr.gov/mp/nodos



Alternative “D”

- Smaller Reservoir – 1.3 MAF
- Fewer facilities, lower cost risks
- 2 Anchor tenants – Ecosystem and Water Supply
- Affordable, Containable
- Implementable, Buildable
- Simple Operations
- Expandable
- Other tenants welcome bring \$\$\$

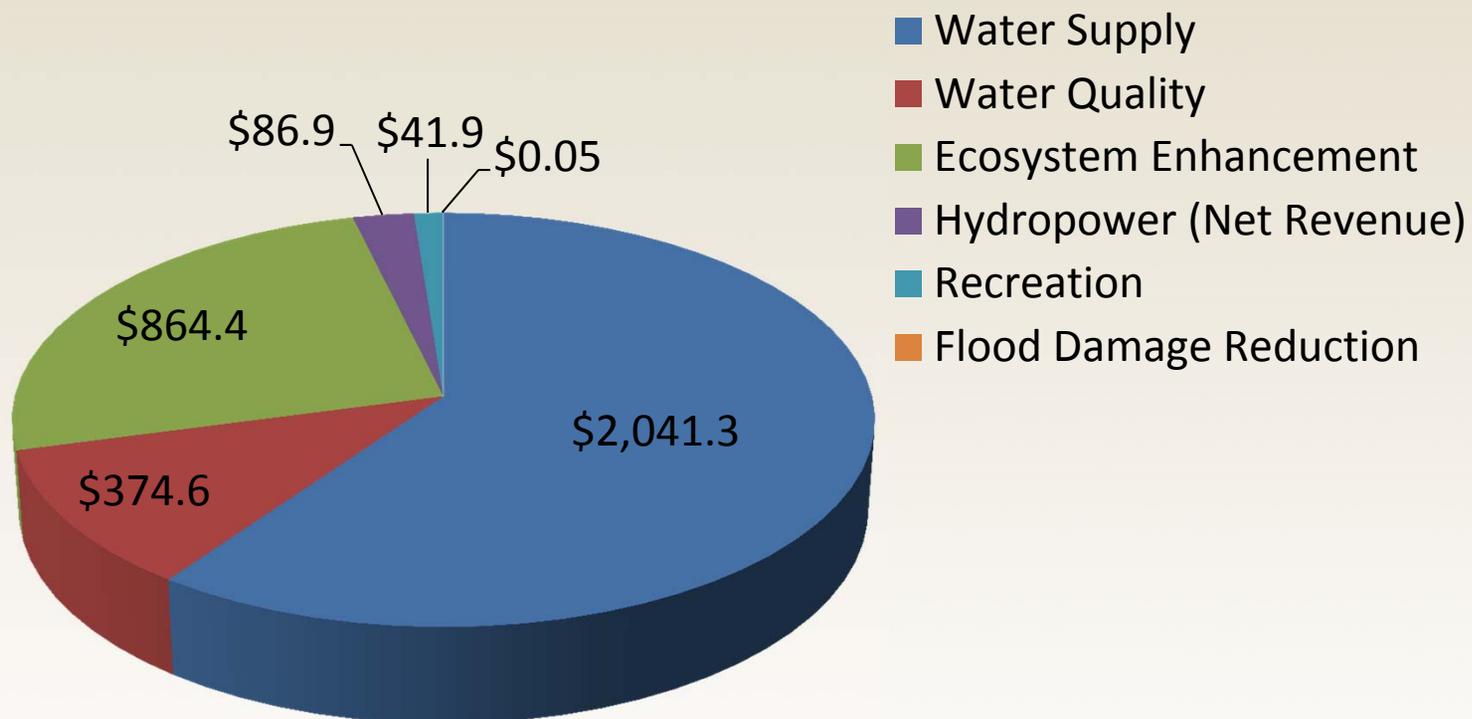


Identify beneficiaries and cost/benefit evaluation

- “What will I get, and what will it cost me?”
- How do I finance my share? Local bonding or Project bonding?
- How does Sites perform without and with BDCP?
 - Without BDCP, operations provide dry and critical year water supply.
 - With BDCP, could meet new outflow requirements and water supply reliability
- How do we value reoperation benefits?
- JPA developing a financial modeling tool to evaluate different funding and payment scenarios



Cost Allocation Alternative



Values in \$millions

Closing Thoughts

- Project not Process
- Financing not Feasibility
- Delays are Deadly
- Free money costs

