



El Dorado County Water Agency Mission Statement:

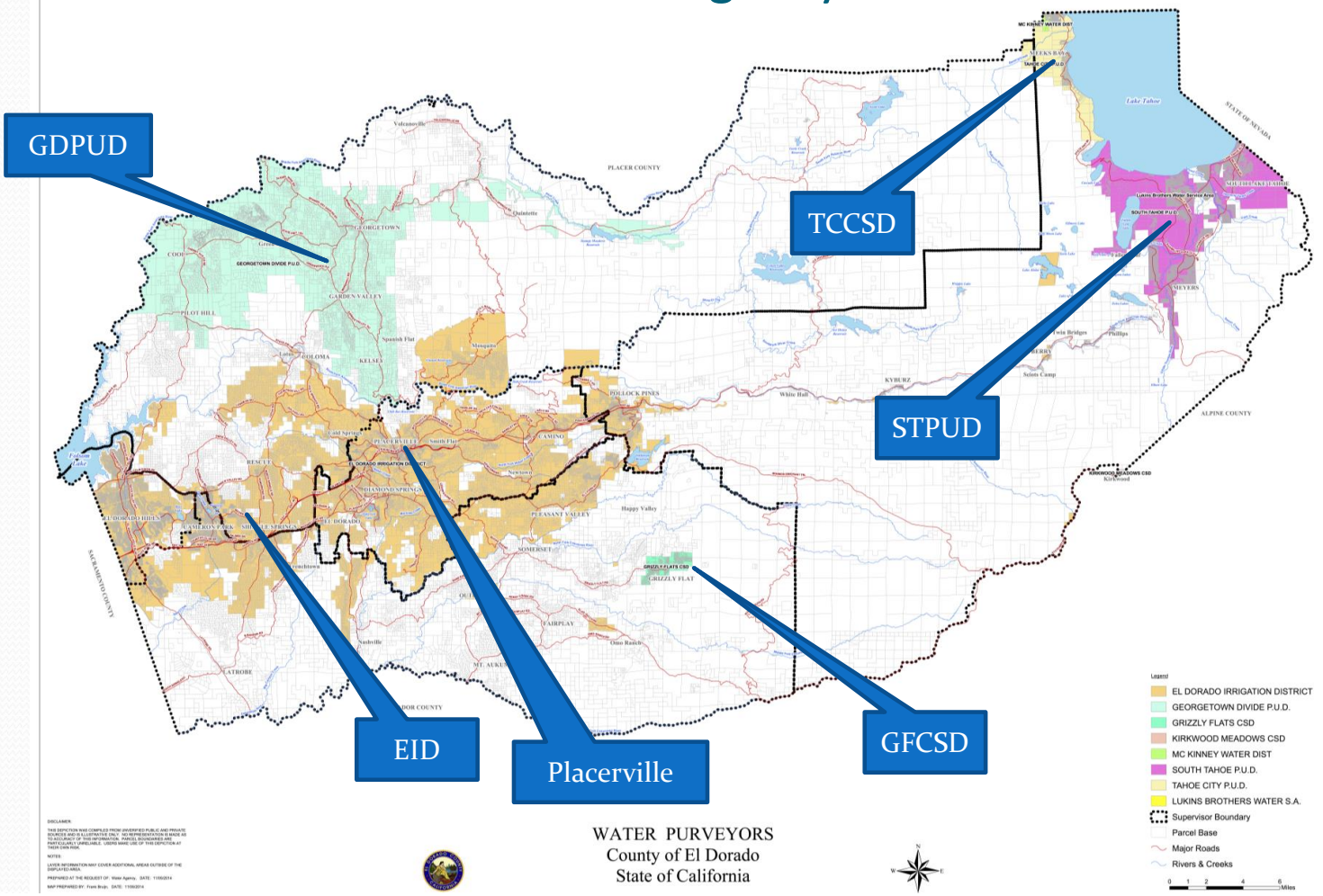


"Ensure that El Dorado County has adequate water for today and in the future."

The El Dorado County Water Agency is authorized by Chapter 96 of the 1959 Water Agency Act

1. Develop a countywide water plan
2. Participate in statewide water planning
3. Negotiate contracts for water management and facility construction:
 - a) Department of Water Resources
 - b) U.S. Bureau of Reclamation and
 - c) Other local, state and federal agencies.

EDCWA is not a retail water agency.

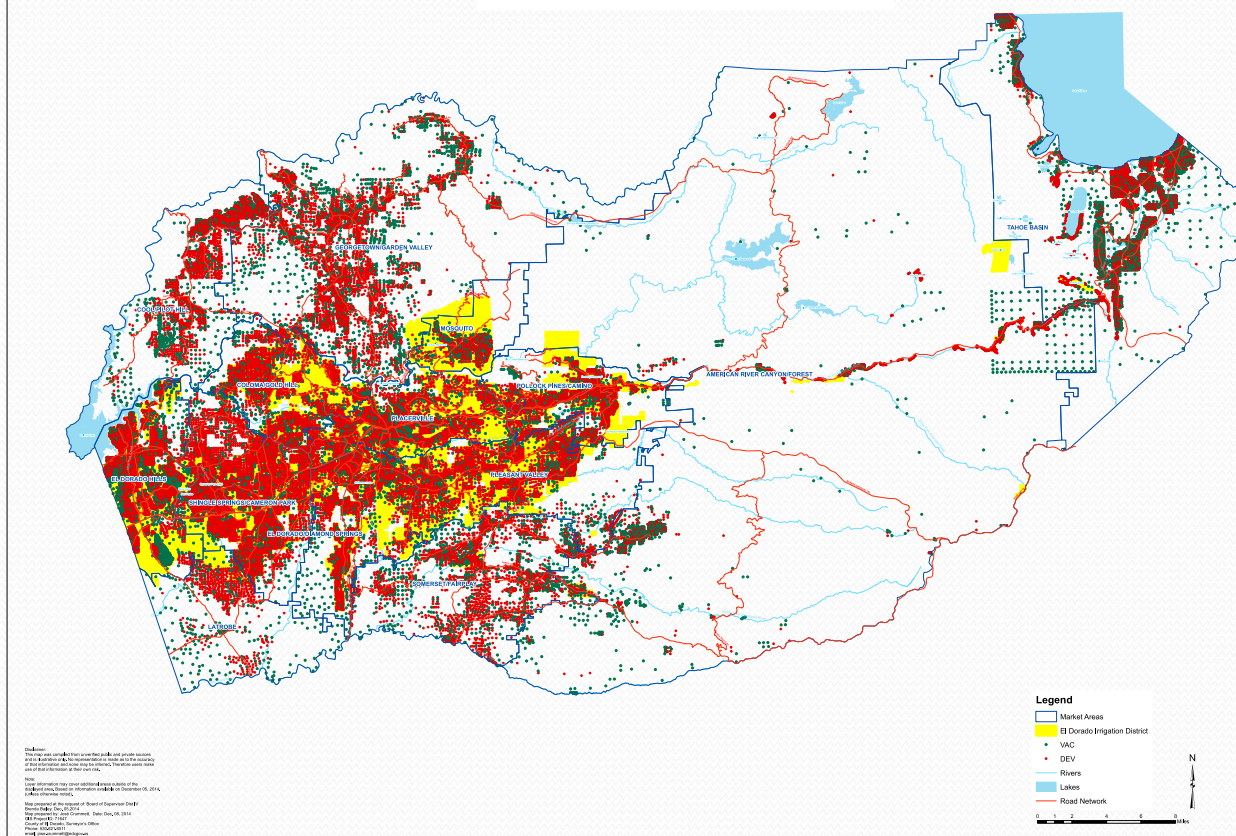


DISCLAIMER
THE INFORMATION WAS OBTAINED FROM UNASSAIDED PUBLIC AND PRIVATE SOURCES AND IS NOT GUARANTEED. THE INFORMATION IS PROVIDED AS IS WITHOUT WARRANTY OF ANY KIND, INCLUDING MERCHANTABILITY. UNDER NO CIRCUMSTANCES SHALL THE INFORMATION BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED.

NOTES
LINES REPRESENTING WATER CONDUITS, ADDITIONAL LINES OUTSIDE OF THE DISPLAYED AREA.

PREPARED BY THE REQUEST OF: Home Agency, DATE: 11/08/2014
MAP PREPARED BY: Fran Boice, DATE: 11/08/2014

EDCWA Considers Interest of other Urban, Rural & Agricultural Regions of the County

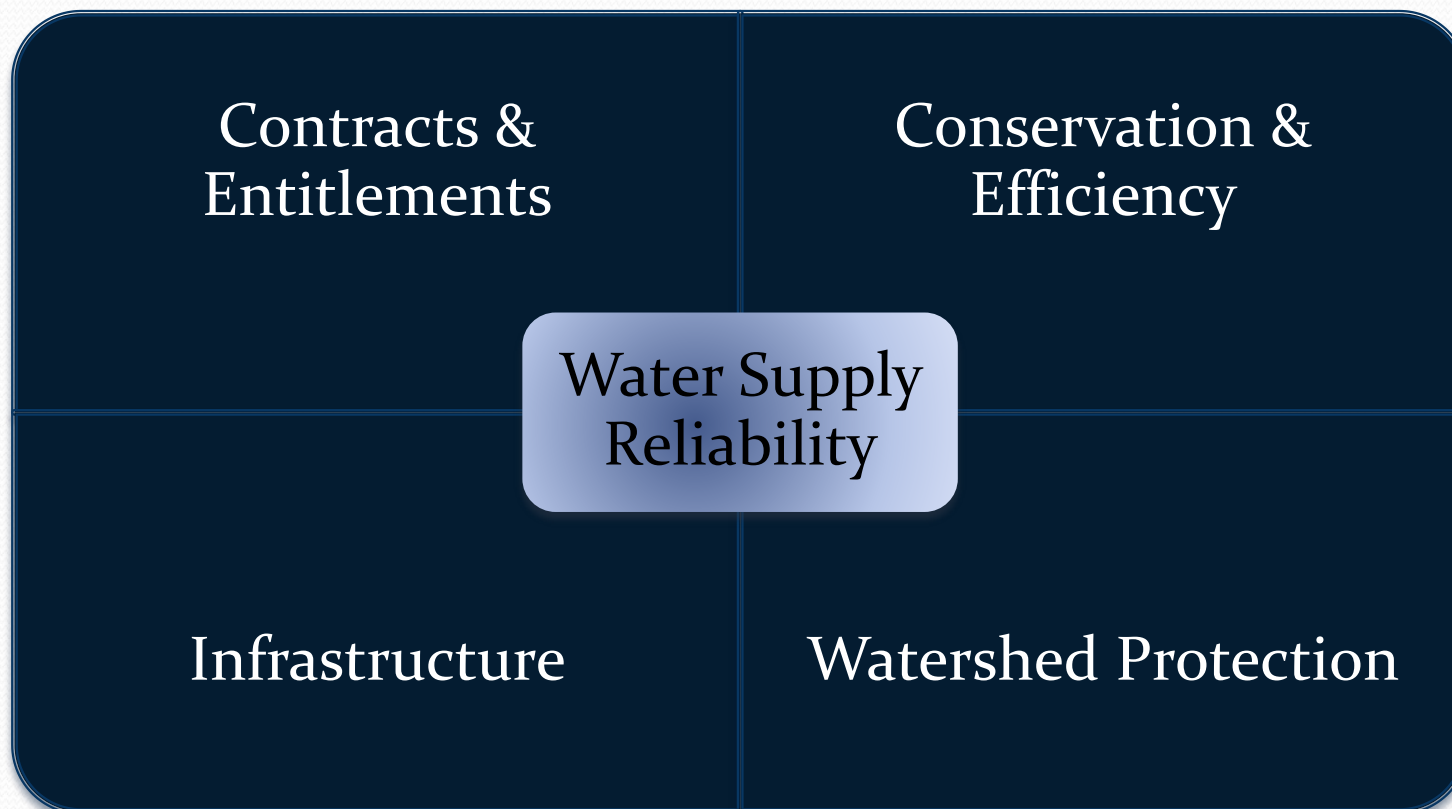


Expenditure Priorities

Expenditures prioritized based on Expenditure Priority
Policy No. B-1003 (approved November 14, 2012)

- First Priority – To preserve, protect, support and defend existing water rights and supplies, as well as to develop and obtain new water rights and supplies.
- Second Priority – Agency administrative operations.
- Third Priority – Support of the activities of Purveyors and the areas they serve, as well as projects in areas of El Dorado County not served by any Purveyor.

Water Supply: Focus Responsibilities



Priority 1 Projects

EDCWA's Priorities are diverse:

- Contracts/Entitlements
 - Fazio Water Entitlements
 - Supplemental Water Supply
- Conservation & Efficiency
 - UWMP Consistency w/Land Uses
 - Drought Response Assistance
 - Drought Action Plan Updates
- Infrastructure
 - Alder Reservoir
 - Hydro
 - GDPUD Sandtrap Siphon
 - Regulatory Support
- Watershed Program
 - IRWMP
 - Forest Management
 - GDPUD Stumpy Meadows
 - Bay-Delta proceedings

Priority 1 Projects

- Water Supply
 - Fazio Water Entitlements
 - Alder Reservoir
 - Drought Action Plan Updates
 - Bay-Delta proceedings
 - Forest Management
 - Water Rights Protection (set-aside)
- Support Services
 - Professional/Technical
- Hydro
 - GDPUD Sandtrap Siphon
 - Regulatory Support
- Watershed Program
 - IRWMP
- Water Use Efficiency
 - Conservation
 - UWMP Consistency w/Land Uses
 - Drought Response Assistance

Project 1: Water Supply

Requires the Agency to continually monitor and participate in federal, state and regional activities

Federal Issues

- Folsom Water Control Manual
- M&I Shortage Policy
- California WaterFix

Energy Independence

- South Tahoe Energy Master Plan
- GDPUD

State & Regional Climate Change and Basin Management

- American River Study
- Cloud Seeding
- Forest Management/Headlands
- ARB IRWMP
- CABY IRWMP

LAR Regional Issues

- Sacramento River Diversion
- Water Forum – Flow Standard
- Regional Water Transfers

Intergovernmental Relations

Requires the Agency to participate in established groups to influence and protect our water supplies and infrastructure

Associations

- Mountain Counties Water Resources Association
- Regional Water Authority
- CABY
- Water Forum
- American River Authority

Statewide Program Development

- Association of California Water Agencies (ACWA)
- CVP Water Association
- CA Urban Water Conservation Council
- CA Special Districts Association

State Legislative Advocacy

- ACWA
- Bay-Delta Joint Defense Agreement
- Northern CA Water Alliance
- MCWRA
- State Advocate

Federal Legislative Advocacy

- ACWA
- Bay-Delta Joint Defense Agreement
- Federal Advocate

Expenditures: Priority 2

Description	FY 2015-16
Salaries & Wages	512,711
<u>Benefits</u>	235,529
	748,240
Priority 2: Services & Supplies	
Office Expenses (leases, insurance, etc.)	126,903
Memberships - General	2,329
Memberships - Legislative Advocacy	28,650
Professional Services (financial, HR)	190,633
Special Departmental Expense / Staff Dev	11,528
Transportation and Travel	20,459
<u>Employee Private Auto Mileage</u>	15,000
	395,502
Priority 2: Miscellaneous	
EDC Charges	39,937
Fixed Assets	4,500
To General Cash Flow Reserve	-
<u>To Designated Reserve (Legal)</u>	-
	44,937
Priority 2: Total	1,188,678

Priority 3 - Cost Share Program

Locally, EDCWA supports Programs that Protect our Water Supplies

Government Agency Cost Shares/Grants

Annual Cost Shares ^b

Tahoe City P.U.D.	43,500
South Tahoe P.U.D.	332,500
El Dorado Irrigation District	535,500
Georgetown Divide P.U.D.	-
Grizzly Flats C.S.D.	11,078
City of Placerville	-
Unidentified Purveyor	250,000
	\$1,172,578

Grizzley Flats C.S.D.

\$11,078

Project	Description	Benefits
Cost of Services Study	Create a water rate study necessary for a rate increase per Prop 218.	Changing rate structure will simplify billing process
Small Water System Annual Permit Fees	Required annually by the State Water Resources Control Board	Help with District expenses

Tahoe City P.U.D.

\$43,500

Project	Description	Benefits
Rubicon Water System Service Line Replacement Planning and Design	Provide the planning, design, specifications and bid documentation for replacement of approximately 150 polybutylene service lines in the Tahoe City's Rubicon Water System	Longer service life and eliminate pipe failures. Will save water, reduce system repairs, avoid environmental impacts from erosion or discharge to Lake Tahoe.
Urban Water Management Plan	Update the UWMP for District	Required plan by State of California must be updated every 5 years
Backflow Test Rebate Program	Rebate program to encourage customers to submit backflow prevention tests results.	Incentive Program would reduce District staff time and resources related to customer follow up.

South Tahoe P.U.D.

\$332,500

Project	Project Description	Benefits
Reliability, Fire and Water Quality Improvements	Multiple, system wide planning, modeling, and analysis projects 1)evaluate vulnerable areas in excessively large shutdown area, locate problems and design improvements, 2) Evaluate efficiency on adding hydrants to waterlines under 6" in diameter; locate viable locations and design improvements, 3) develop uni-directional flushing program to reduce sanding and improve water quality, 4) fire capability suppression assessment.	Assessments of problem areas in the water delivery system in order to prioritize future capital improvement needs to ensure that water delivery, water quality and fire suppression needs are met.
South-Y Groundwater Investigation	Investigation to identify the remaining sources of PCE soil and groundwater throughout the South Y area.	By identifying any PCE contamination in South Y area, future treatment options will be able to be designed with the appropriate information.
Keller-Heavenly Water System Improvements	Improved water supply, design of a new water tank and/or booster station to increase water pressure and water supply in area.	Increased water supply/pressure in area meeting fire suppression needs and providing better water service to customers in area.
Urban Water Management Plan	Urban Water Management Plan Update, required every 5 years. Contract to update prepared	Revised approved UAWMP in order to be eligible for state grant and loan funding
Well Destruction Program	Planning for proper destruction of three inactive water supply wells believed to be susceptible to groundwater contamination.	Destruction of wells will help maintain groundwater supplies and protect groundwater quality

South Tahoe P.U.D.

\$332,500

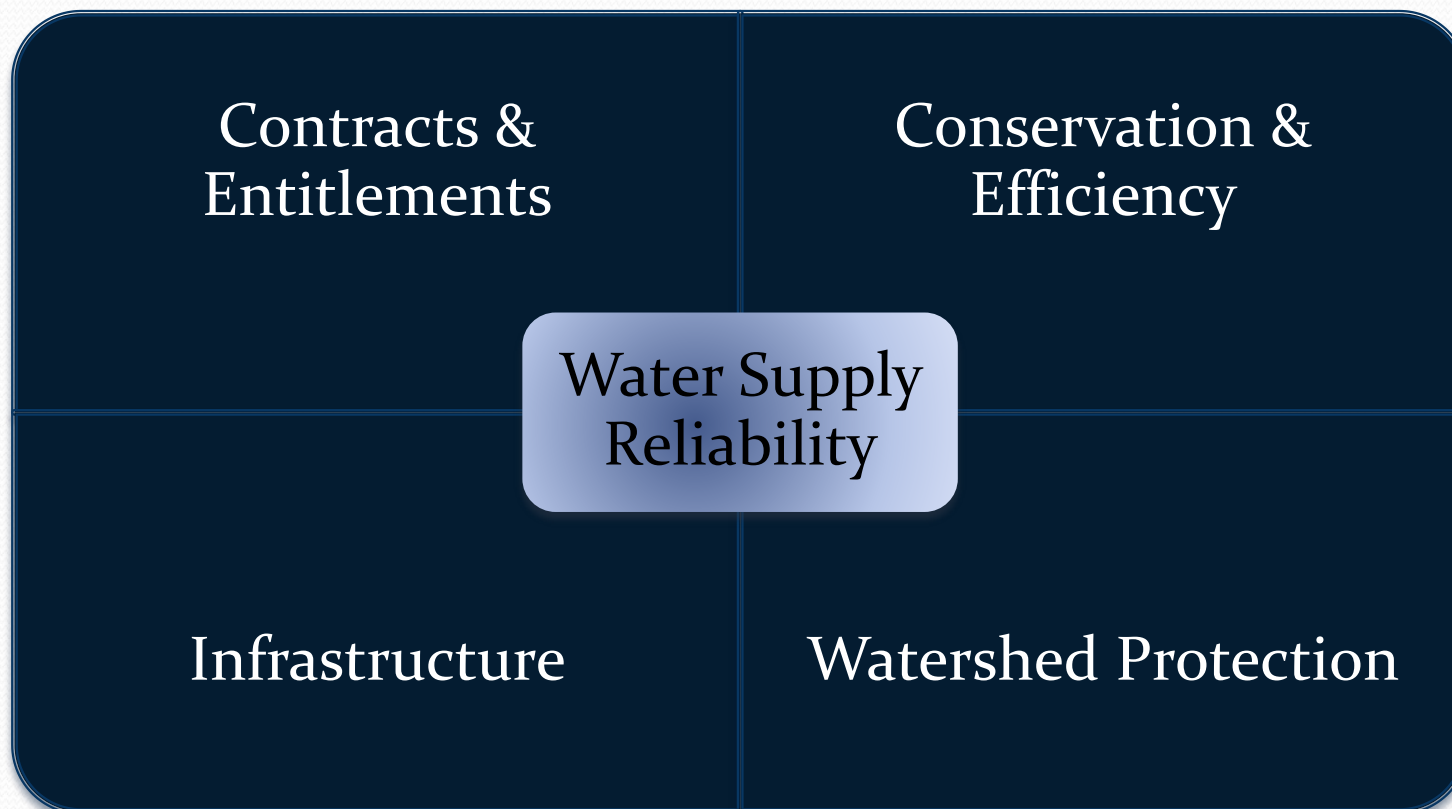
Project	Project Description	Benefits
Upper Montgomery Water System Improvements	Planning and design for Upper Montgomery water zone expansion and booster station improvements and/or replacement to improve pressures, fire flow and reliability.	100% Plans and Specifications for the implementation of a water system improvement project that will improve water pressure to residents, fire flow capacity and water supply reliability.
Drinking Source Water Protection Area Map Improvements	Involves augmenting existing Map of Drinking Source Water Protection Area by compiling and incorporating private and small community water system well construction, water production and contaminant information into the spatial datasets.	Revised DSWPA Map with important information about groundwater and the impact on current supplies
Groundwater Sustainability Agency (GSA)	The Tahoe Valley South Groundwater Basin has been identified by the State of California as a medium priority basin and STPUD is electing to serve as the GSA representing the basin. Funding would offset legal fees and District costs needed to establish the GSA.	Governor Brown signed the SGMA Act of 2014 required GSA Agencies to be established, STPUD will benefit from the ability to monitor and help sustain the Groundwater supply for its service area.
Groundwater Elevation Monitoring Network Equipment Updates	Replacement of pressure transducers used in monitoring of groundwater elevations.	Provide reliable equipment for groundwater monitoring program that continuously collects groundwater measurements.
Groundwater Model Update	Update the existing groundwater model of the Tahoe Valley South Basin with new geological and groundwater data simplified and where possible migrated into a coupled surface water/groundwater model. Funding would be utilized to update the model to estimate basin yield, evaluate change in storage and begin development of a coupled model.	Update will provide better informational data about basin yield, help to evaluate change in storage and will act as the first phase in development of a coupled model with surface water/groundwater.

El Dorado Irrigation District

\$535,500

Project	Project Description	Benefits
Deer Creek Change of Use Petition	File a change of use petition with the Water Rights Division of the Sate Water Board. The goal to reduce or eliminate discharge requirements and utilize more recycled water.	Provides better use of recycled water for irrigation practices and saves potable water supplies for consumption and environmental needs.
Main Ditch Piping Project	Piping 3 miles of earthen ditch between forebay Reservoir in Pllock Pines and Reservoir 1 Water Treatment Plant on Gilmore Road.	Saving 1,300 acre-feet of water per year
Tank 3 in-conduit hydro	Hydroelectric facility installed at Tank 3 site	Provide District with additional revenue stream, directly offsetting operating costs and additional renewable power to the state to assist in meeting the state goal of 33% nonrenewable energy by 2020.

Water Supply: Focus Responsibilities



El Dorado County Water Need

Latest studies:

- At buildout we will need full amount
- Timing depends on actual growth rate
- Consistent with General Plan, jobs, preserve and enhance ag, etc.



Projected Growth: Considerations

- EDWPA is not entity to determine growth projections
 - Use Growth Projections developed by others to develop water demands needs
- EDWPA sources for growth projections
 - El Dorado County
 - California Department of Finance
 - Sacramento Area Council of Governments
- “Medium Growth Rate” scenario projection is used
 - Estimates for both intermediate and long term supply needs

El Dorado County Water

	Safe Yield Supply	Urban			Agricultural			Total Demand			Additional Water Supply Need	
		2012	2030	Build-Out	2012	2030	Build-Out	2012	2030	Build-Out	2030	Build-Out
El Dorado Irrigation District	59,955	40,237	51,403	79,316	7,977	9,515	19,218	48,214	60,919	98,534	964	38,579
Georgetown Divide PUD	10,541	3,001	4,120	9,581	7,121	7,621	10,349	10,122	11,741	19,930	1,200	9,389
Grizzly Flat CSD Total	165	153	187	313	—	—	—	153	187	313	22	148
Other County Areas	—	—	—	12,336	—	—	17,476	—	—	29,812	—	20,560
Western Slope Total	—	—	—	101,546	—	—	47,043	—	—	148,590	2,187	68,677

Reference Chapter 4 and 6 for detailed demand and supply projections by purveyor/area.

Note: 1) 25% of Other County Area urban demands and 100% of agricultural demands are included in the "Additional Water Supply Need." 2) 2012 agricultural demands do not include demand supplied from ground water or riparian sources.

1927 “Area of Origin”

- EDWPA has applied for 40,000 AFA
 - Water right assigned to El Dorado County (Water Code Section 10505, “County of Origin” statutes)
 - Long history, going back to 1950s, for El Dorado County seeking additional 40,000 AFA
- State reserved water with 1927 priority
 - Designated to meet future needs in areas where water “originates”

Projected Water Use Demands

Water Supply Planning

- Provide reliable service to community
 - Municipal & industrial
 - Agriculture
 - System Uses (“Authorized”)
 - System Losses
 - Economic Activity
 - Latent needs
 - Emergency/fire

Actual

- Documented usage
 - Analyze system loss factors



Projected Demand: Recognize changes from conservation requirements & patterns

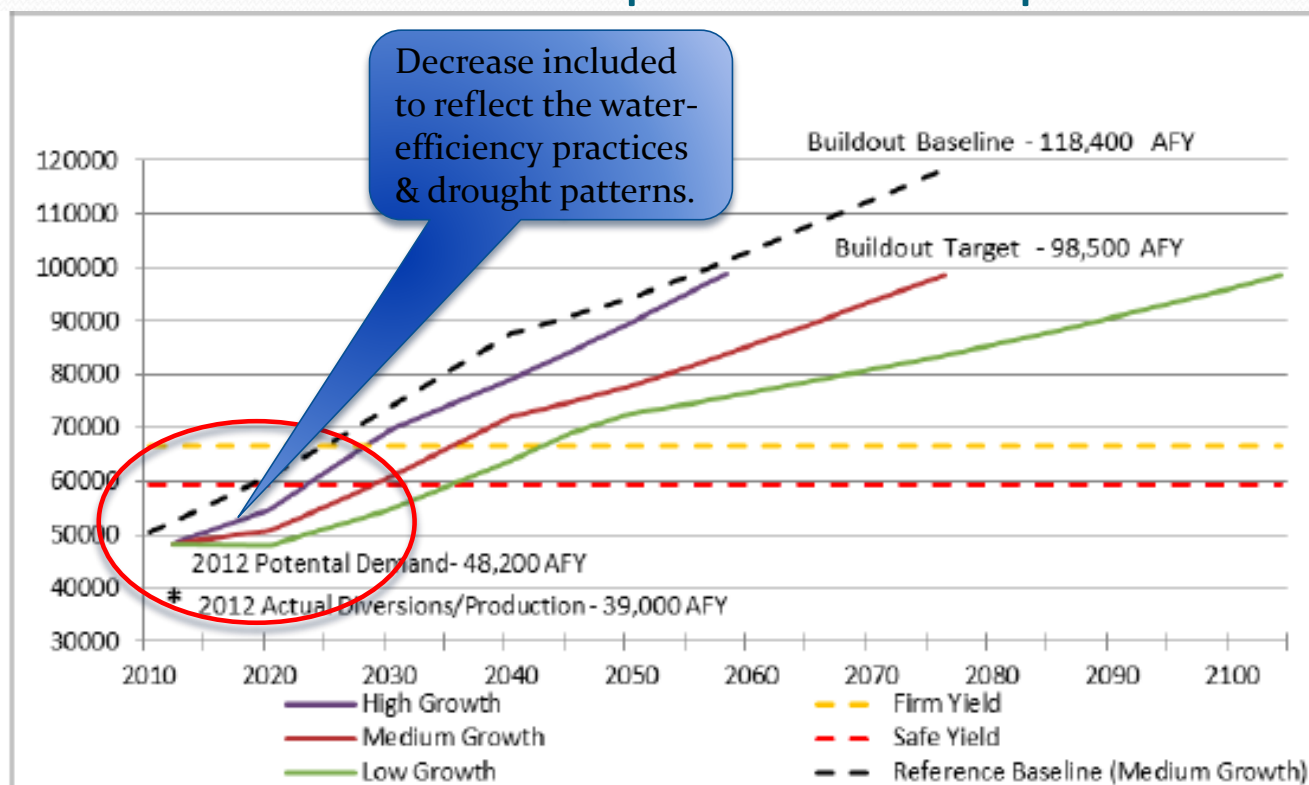


Figure 6-1 El Dorado Irrigation District Existing Supply versus Projected Demand (acre-feet)

Projected Growth: Recognize designated areas

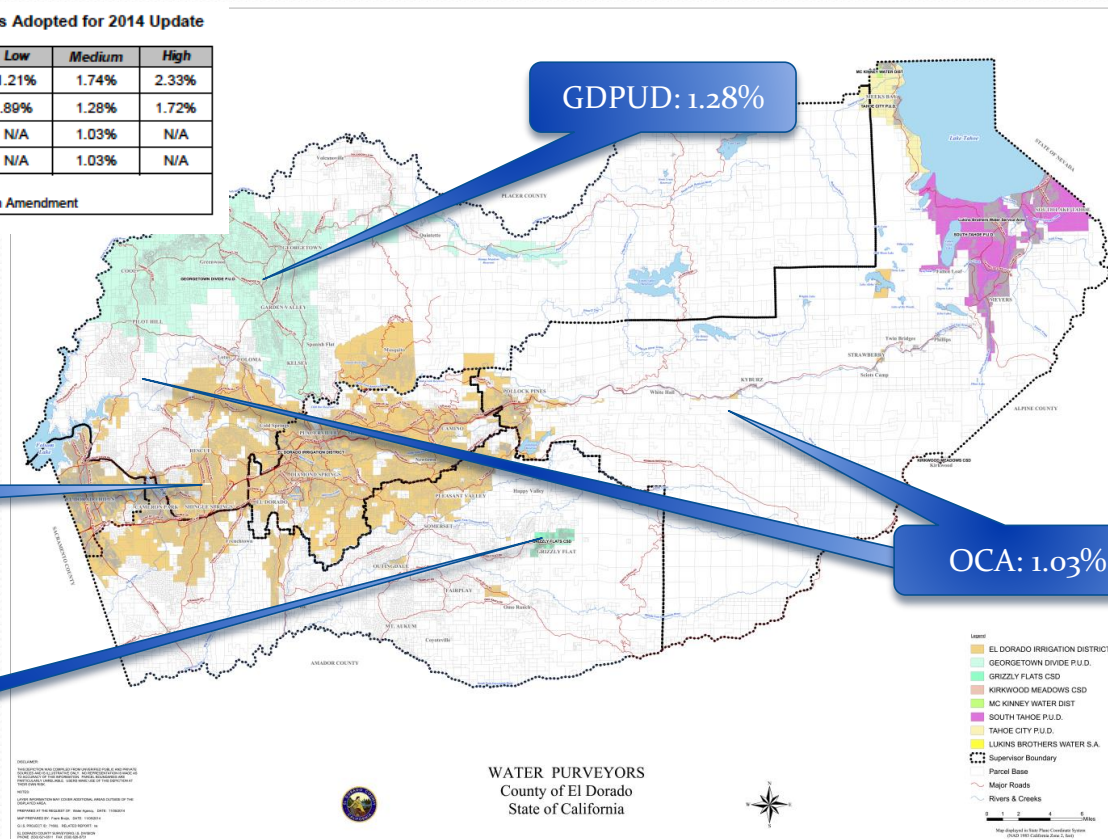
County Growth Projections = 1.03%

Table 3-4 Residential Growth Rate Scenarios Adopted for 2014 Update

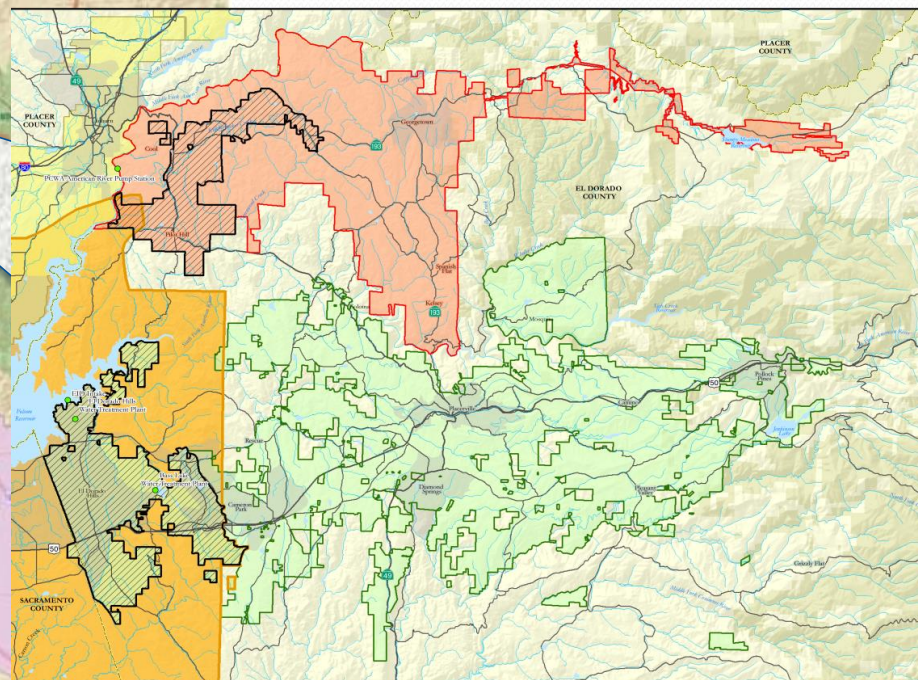
	Low	Medium	High
El Dorado Irrigation District ^a	1.21%	1.74%	2.33%
Georgetown Divide Public Utility District ^a	.89%	1.28%	1.72%
Grizzly Flat Community Services District ^b	N/A	1.03%	N/A
Other county Areas ^b	N/A	1.03%	N/A

a. Reference Table 3-1 and 3-2

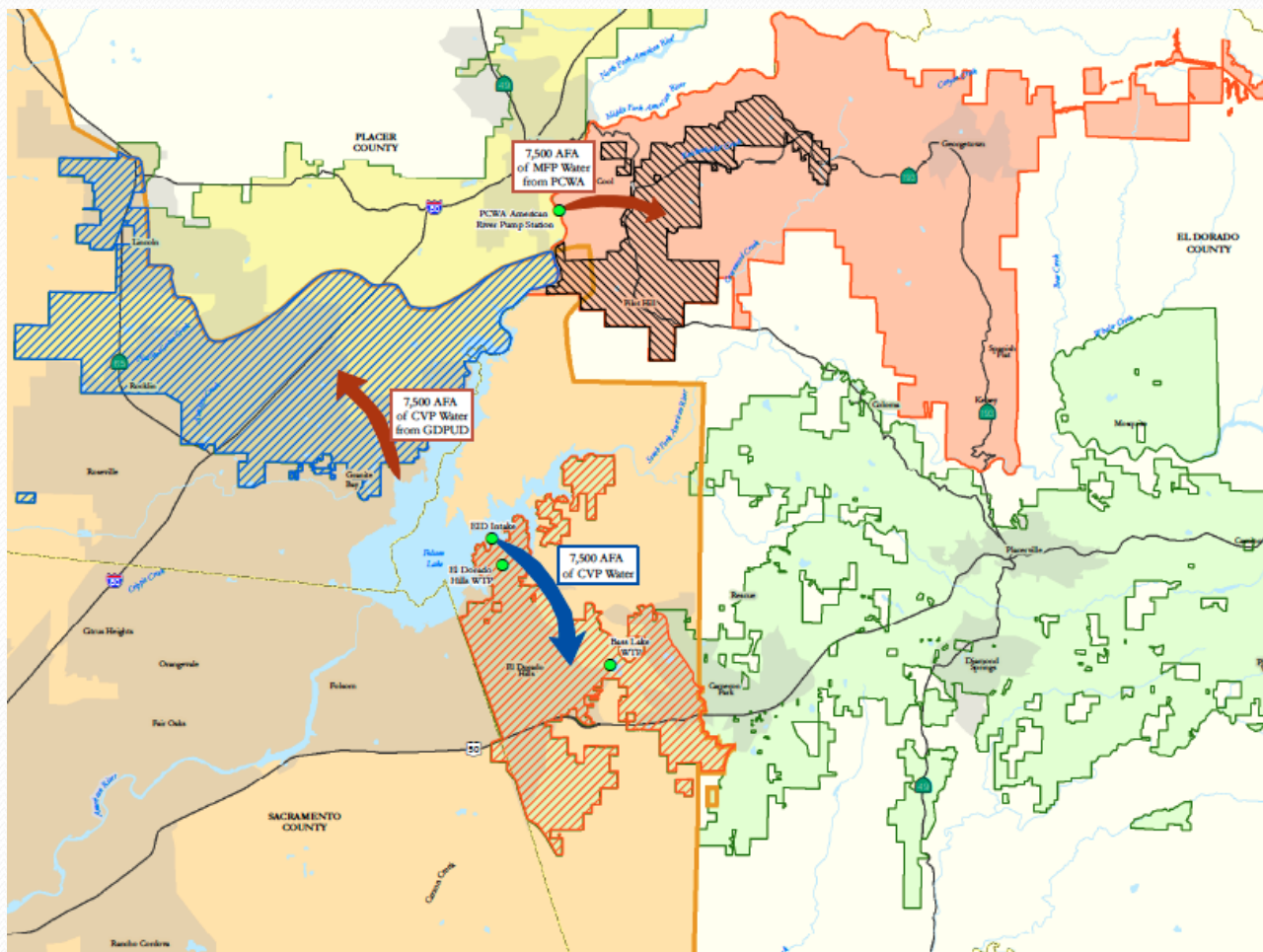
b. Growth rate adopted by EDC for the Targeted General Plan Amendment



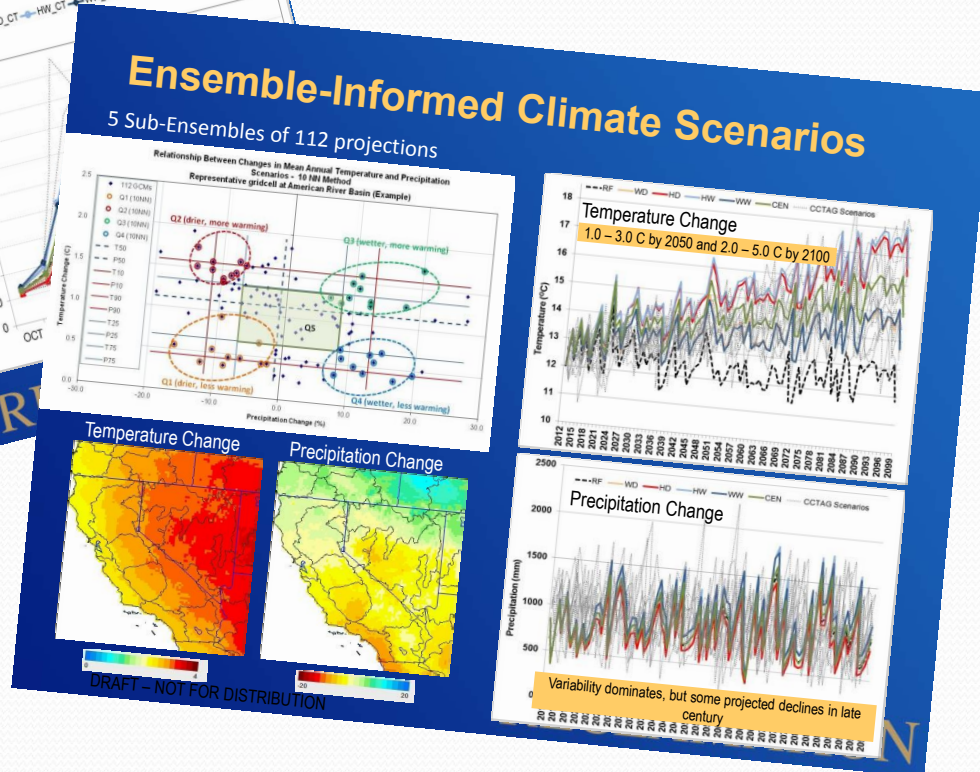
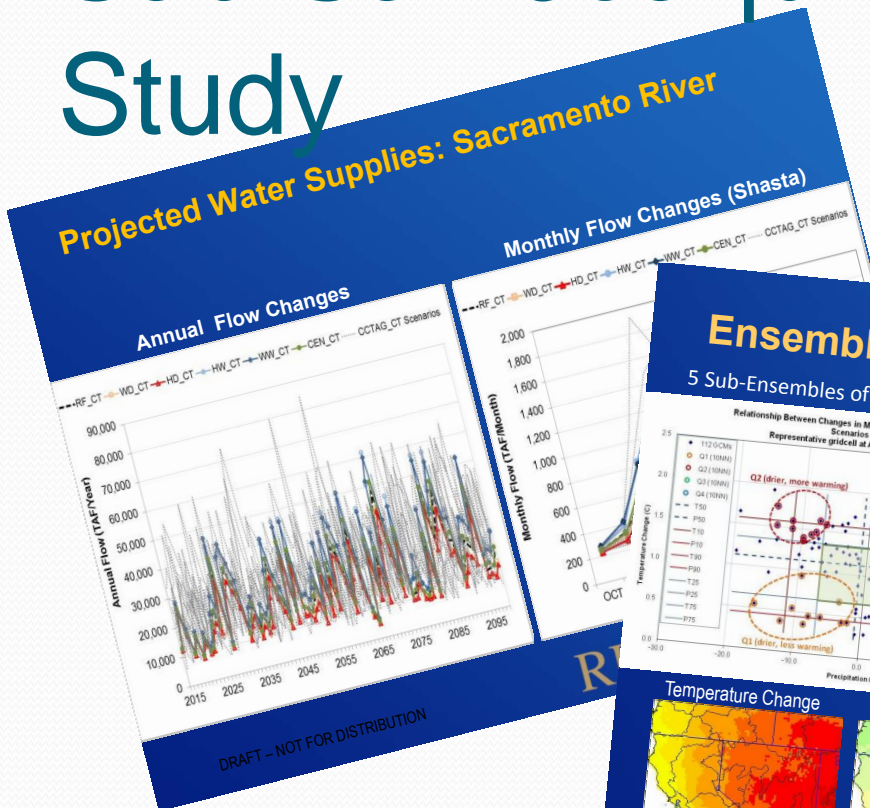
Fazio Water Entitlement



FAZIO – Senario for use



Sac-San Joaquin Basin Study



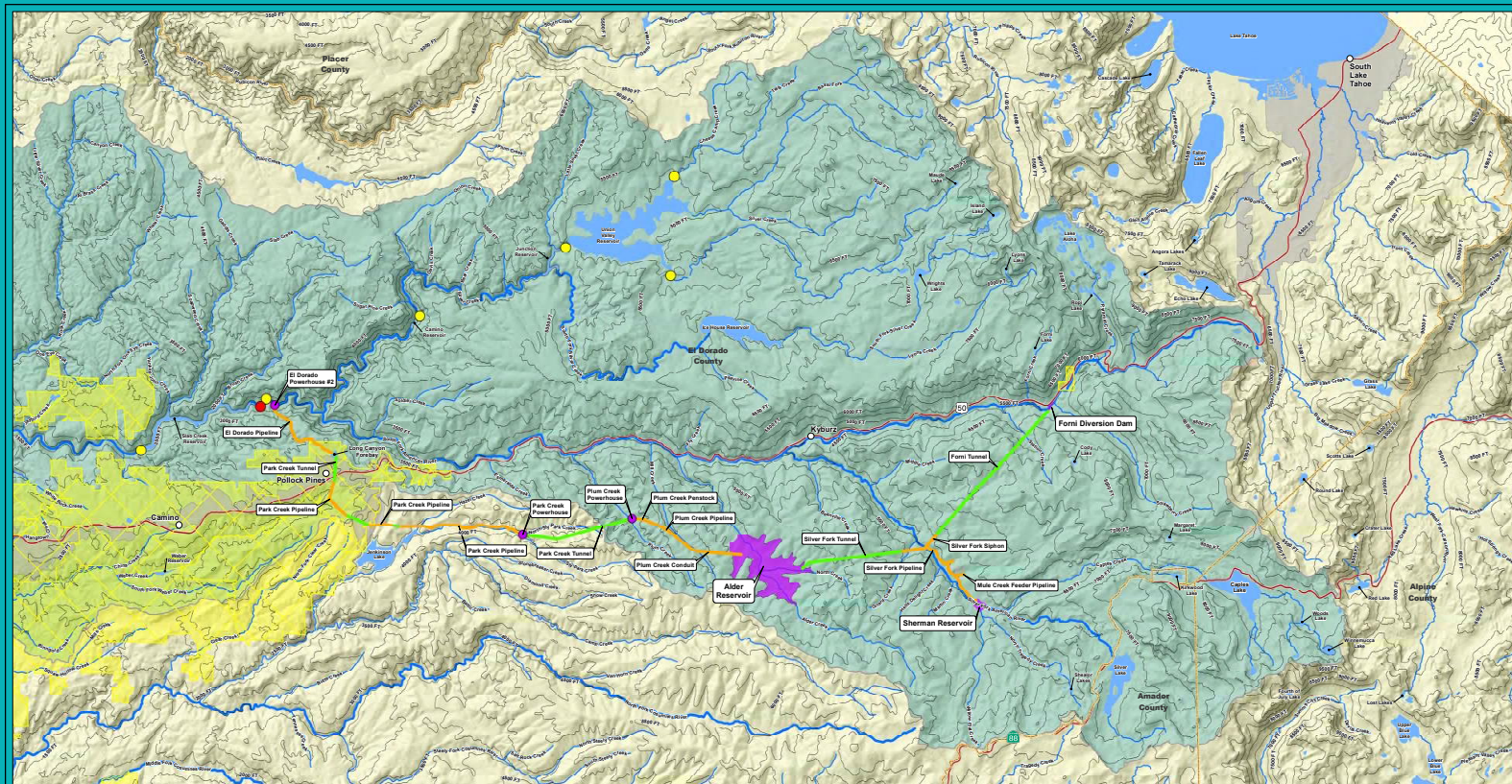
Proposed Representative Actions to be Evaluated in SSJBS

46

20

Action Category	Action Type	Action	Representative Action	Model Action
Reduce Water Demand	Increased Water Use Efficiency	Agricultural Water Use Efficiency	X	A1
Reduce Water Demand	Increased Water Use Efficiency	Changes in Agricultural Water Management, Irrigation Technology, or Crops		
Reduce Water Demand	Increased Water Use Efficiency	Municipal & Industrial Water Use Efficiency	X	A2
Increase Water Supply	Desalination	Brackish Surface or Groundwater Desalination	X	A3
Increase Water Supply	Desalination	Ocean Desalination	X	A4
Increase Water Supply	Recycled water	Recycled Municipal Wastewater	X	A2
Increase Water Supply	Recycled water	Reuse of Oil and Gas Produced Water	X	A3
Increase Water Supply	Recycled water	Grey Water Systems	X	A2
Increase Water Supply	Recycled water	Agricultural Drainwater Reuse	X	A1
Increase Water Supply	Precipitation Enhancement & Use	Cloud Seeding	X	A5
Increase Water Supply	Precipitation Enhancement & Use	Fog Collection		
Increase Water Supply	Precipitation Enhancement & Use	Rainwater Harvesting	X	A2
Improve Operational Efficiency	Groundwater Management	Groundwater Treatment & Use	X	A3
Improve Operational Efficiency	Groundwater Management	Conjunctive Management of Surface and Groundwater	X	
Improve Operational Efficiency	Groundwater Management	Groundwater Banking	X	A6
Improve Operational Efficiency	Groundwater Management	Well Deepening		
Improve Operational Efficiency	Groundwater Management	Enhanced Recharge	X	A7
Improve Operational Efficiency	Water Quality Improvements and Management	Water Quality Improvements and Management		
Improve Operational Efficiency	Water Quality Improvements and Management	Delta Barriers and Operable Gates		
Improve Operational Efficiency	Water Quality Improvements and Management	Increased Wastewater Treatment	X	
Improve Operational Efficiency	Water Quality Improvements and Management	Salt & Salinity Management	X	A8
Improve Operational Efficiency	Water Quality Improvements and Management	Urban Stormwater Runoff Management	X	A7
Improve Operational Efficiency	Water Quality Improvements and Management	River Temperature Management	X	A9
Improve Operational Efficiency	System Operational Efficiency	Hydropower-Water Supply Optimization	?	
Improve Operational Efficiency	System Operational Efficiency	Improved SWP/CVP System Integration	X	
Improve Operational Efficiency	System Operational Efficiency	System Reoperation	X	A10
Improve Operational Efficiency	System Operational Efficiency	Updates to Reservoir Operations Plans	X	
Improve Operational Efficiency	System Operational Efficiency	Seasonal Reoperation in Sacramento Valley for Environmental Restoration	X	A11
Improve Operational Efficiency	System Operational Efficiency	Switch Some Communities from Groundwater to Surface Water	X	A12
Improve Operational Efficiency	System Operational Efficiency	Enhanced Environmental Flows	X	A11
Improve Operational Efficiency	System Operational Efficiency	In-Line/In-Conduit Hydroelectric Generation	X	
Improve Operational Efficiency	Conveyance System Improvements	Existing Canal Capacity Restoration	X	
Improve Operational Efficiency	Conveyance System Improvements	New Delta Conveyance	X	A13
Improve Operational Efficiency	Conveyance System Improvements	New Regional/Local Conveyance	X	A14
Improve Operational Efficiency	Conveyance System Improvements	Canal Lining or Covers	X	
Improve Operational Efficiency	Conveyance System Improvements	Expanding Conveyance Permitted Capacity	X	A13
Improve Operational Efficiency	New or Enlarged/Expanded Surface Storage	Sacramento Valley Surface Storage	X	A15
Improve Operational Efficiency	New or Enlarged/Expanded Surface Storage	San Joaquin Valley Surface Storage	X	A16
Improve Operational Efficiency	New or Enlarged/Expanded Surface Storage	Delta/Export Area Surface Storage	X	A17
Improve Operational Efficiency	New or Enlarged/Expanded Surface Storage	Upper Watershed Surface Storage	X	A18
Improve Operational Efficiency	New or Enlarged/Expanded Surface Storage	Integrated Surface and Groundwater Storage	X	A6
Improve Operational Efficiency	New or Enlarged/Expanded Surface Storage	Temporary Storage Capacity Increases (Flashboards)		
Improve Operational Efficiency	Water Acquisition & Transfers	Agricultural Land Idling/Fallowing	X	A1
Improve Operational Efficiency	Water Acquisition & Transfers	Agricultural Water Use Efficiency	X	A1
Improve Operational Efficiency	Water Acquisition & Transfers	Groundwater Substitution/In-leu Transfers	X	A6
Improve Resource Stewardship	Resource Stewardship	Forest Meadows Restoration	X	A19
Improve Resource Stewardship	Resource Stewardship	Healthy Forests Initiative		
Improve Resource Stewardship	Resource Stewardship	Land Fallowing	X	A1
Improve Resource Stewardship	Resource Stewardship	Protection of Recharge Areas	X	A7
Improve Resource Stewardship	Resource Stewardship	Agricultural Land Stewardship	X	A1
Improve Resource Stewardship	Resource Stewardship	Stormwater Management	X	
Improve Resource Stewardship	Resource Stewardship	Central Valley Flood Protection Plan	X	?
Improve Resource Stewardship	Resource Stewardship	Sediment Management	√	A9

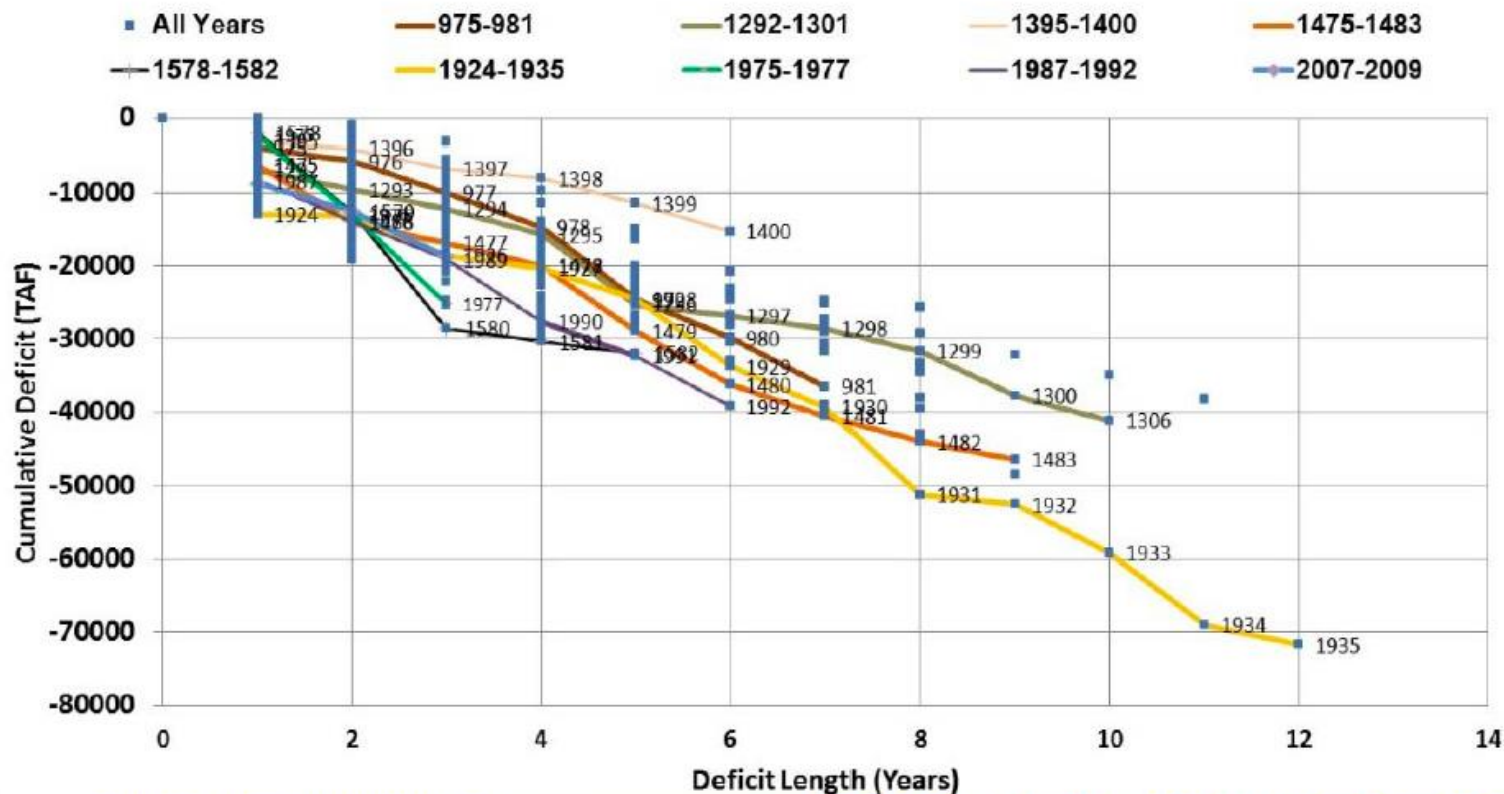
Improve Operational Efficiency	Water Quality Improvements and Management	Delta Barriers and Operable Gates		
Improve Operational Efficiency	Water Quality Improvements and Management	Increased Wastewater Treatment	X	A8
Improve Operational Efficiency	Water Quality Improvements and Management	Salt & Salinity Management	X	
Improve Operational Efficiency	Water Quality Improvements and Management	Urban Stormwater Runoff Management	X	A7
Improve Operational Efficiency	Water Quality Improvements and Management	River Temperature Management	X	A9
Improve Operational Efficiency	System Operational Efficiency	Hydropower-Water Supply Optimization	?	
Improve Operational Efficiency	System Operational Efficiency	Improved SWP/CVP System Integration	X	
Improve Operational Efficiency	System Operational Efficiency	System Reoperation	X	A10
Improve Operational Efficiency	System Operational Efficiency	Updates to Reservoir Operations Plans	X	
Improve Operational Efficiency	System Operational Efficiency	Seasonal Reoperation in Sacramento Valley for Environmental Restoration	X	A11
Improve Operational Efficiency	System Operational Efficiency	Switch Some Communities from Groundwater to Surface Water	X	A12
Improve Operational Efficiency	System Operational Efficiency	Enhanced Environmental Flows	X	A11
Improve Operational Efficiency	System Operational Efficiency	In-Line/In-Conduit Hydroelectric Generation	X	
Improve Operational Efficiency	Conveyance System Improvements	Existing Canal Capacity Restoration	X	
Improve Operational Efficiency	Conveyance System Improvements	New Delta Conveyance	X	A13
Improve Operational Efficiency	Conveyance System Improvements	New Regional/Local Conveyance	X	A14
Improve Operational Efficiency	Conveyance System Improvements	Canal Lining or Covers	X	
Improve Operational Efficiency	Conveyance System Improvements	Expanding Conveyance Permitted Capacity	X	A13
Improve Operational Efficiency	New or Enlarged/Expanded Surface Storage	Sacramento Valley Surface Storage	X	A15
Improve Operational Efficiency	New or Enlarged/Expanded Surface Storage	San Joaquin Valley Surface Storage	X	A16
Improve Operational Efficiency	New or Enlarged/Expanded Surface Storage	Delta/Export Area Surface Storage	X	A17
Improve Operational Efficiency	New or Enlarged/Expanded Surface Storage	Upper Watershed Surface Storage	X	A18
Improve Operational Efficiency	New or Enlarged/Expanded Surface Storage	Integrated Surface and Groundwater Storage	X	A6
Improve Operational Efficiency	New or Enlarged/Expanded Surface Storage	Temporary Storage Capacity Increases (Flashboards)		
Improve Operational Efficiency	Water Acquisition & Transfers	Agricultural Land Idling/Fallowing	X	A1
Improve Operational Efficiency	Water Acquisition & Transfers	Agricultural Water Use Efficiency	X	A1
Improve Operational Efficiency	Water Acquisition & Transfers	Groundwater Substitution/In-leu Transfers	X	A6
Improve Resource Stewardship	Resource Stewardship	Forest Meadows Restoration	X	A19
Improve Resource Stewardship	Resource Stewardship	Healthy Forests Initiative		
Improve Resource Stewardship	Resource Stewardship	Land Fallowing	X	A1
Improve Resource Stewardship	Resource Stewardship	Protection of Recharge Areas	X	A7
Improve Resource Stewardship	Resource Stewardship	Agricultural Land Stewardship	X	A1
Improve Resource Stewardship	Resource Stewardship	Stormwater Management	X	
Improve Resource Stewardship	Resource Stewardship	Central Valley Flood Protection Plan	X	?
Improve Resource Stewardship	Resource Stewardship	Sediment Management	X	A8
Improve Institutional Flexibility	Institutions and Regulations	Improve SWP/CVP Integration	duplicate	
Improve Institutional Flexibility	Institutions and Regulations	Enhance Environmental Flows	duplicate	
Improve Institutional Flexibility	Institutions and Regulations	Improve Regulatory Flexibility/Adaptability	X	A20
Improve Data and Management	Monitoring & Data Management	System Automation Improvements	Qualitative	
Improve Data and Management	Monitoring & Data Management	Hydromet Instrumentation	Qualitative	
Other	Funding, Education, and Other	Economic Incentives (Loans, Grants, & Water Pricing)	Qualitative	
Other	Funding, Education, and Other	Outreach and Education*	Qualitative	
Other	Funding, Education, and Other	Water and Culture*	Qualitative	
Other	Funding, Education, and Other	Water-Dependent Recreation	Qualitative	



<p>NOTES</p> <p>1 2 3 4 5 6 7 8 9 10 11 12</p>	<p>MAP FEATURES</p> <p>Boundaries</p> <ul style="list-style-type: none"> El Dorado Irrigation District Service Area County Boundary Urban Areas South Fork American River Watershed <p>Powerhouse</p> <ul style="list-style-type: none"> Sacramento Municipal Utility District Placer County Water Agency El Dorado Irrigation District <p>Proposed Facilities</p> <ul style="list-style-type: none"> Pipeline/Penstock Tunnel Reservoir/Diversion Powerhouse 	<p>VICINITY MAP</p>	<p>ALDER DAM AND RESERVOIR PROJECT</p> <p style="text-align: center;"><i>Proposed Alder Reservoir Facilities</i></p> <table border="1" style="width: 100%; font-size: small;"> <tr> <td colspan="2">Project Description: Alder Dam and Reservoir Project</td> <td colspan="2">Project Number: 2019-001</td> </tr> <tr> <td>Revision Date: 07/2024</td> <td>Project Name: Alder Reservoir</td> <td>Scale: 1" = 7.500'</td> <td>GIS Specialist: RCH</td> </tr> <tr> <td>Contractor: [Name]</td> <td>Client: [Name]</td> <td colspan="2">Date: [Date]</td> </tr> </table> <p>ECORP Consulting, Inc. ENVIRONMENTAL CONSULTANTS</p> <p><i>Alfred P. [Name]</i> [Address] [City, State, Zip]</p>	Project Description: Alder Dam and Reservoir Project		Project Number: 2019-001		Revision Date: 07/2024	Project Name: Alder Reservoir	Scale: 1" = 7.500'	GIS Specialist: RCH	Contractor: [Name]	Client: [Name]	Date: [Date]	
Project Description: Alder Dam and Reservoir Project		Project Number: 2019-001													
Revision Date: 07/2024	Project Name: Alder Reservoir	Scale: 1" = 7.500'	GIS Specialist: RCH												
Contractor: [Name]	Client: [Name]	Date: [Date]													

Paleo Reconstructed Droughts: Cumulative Streamflow Deficits

Sacramento Valley 4-River Index

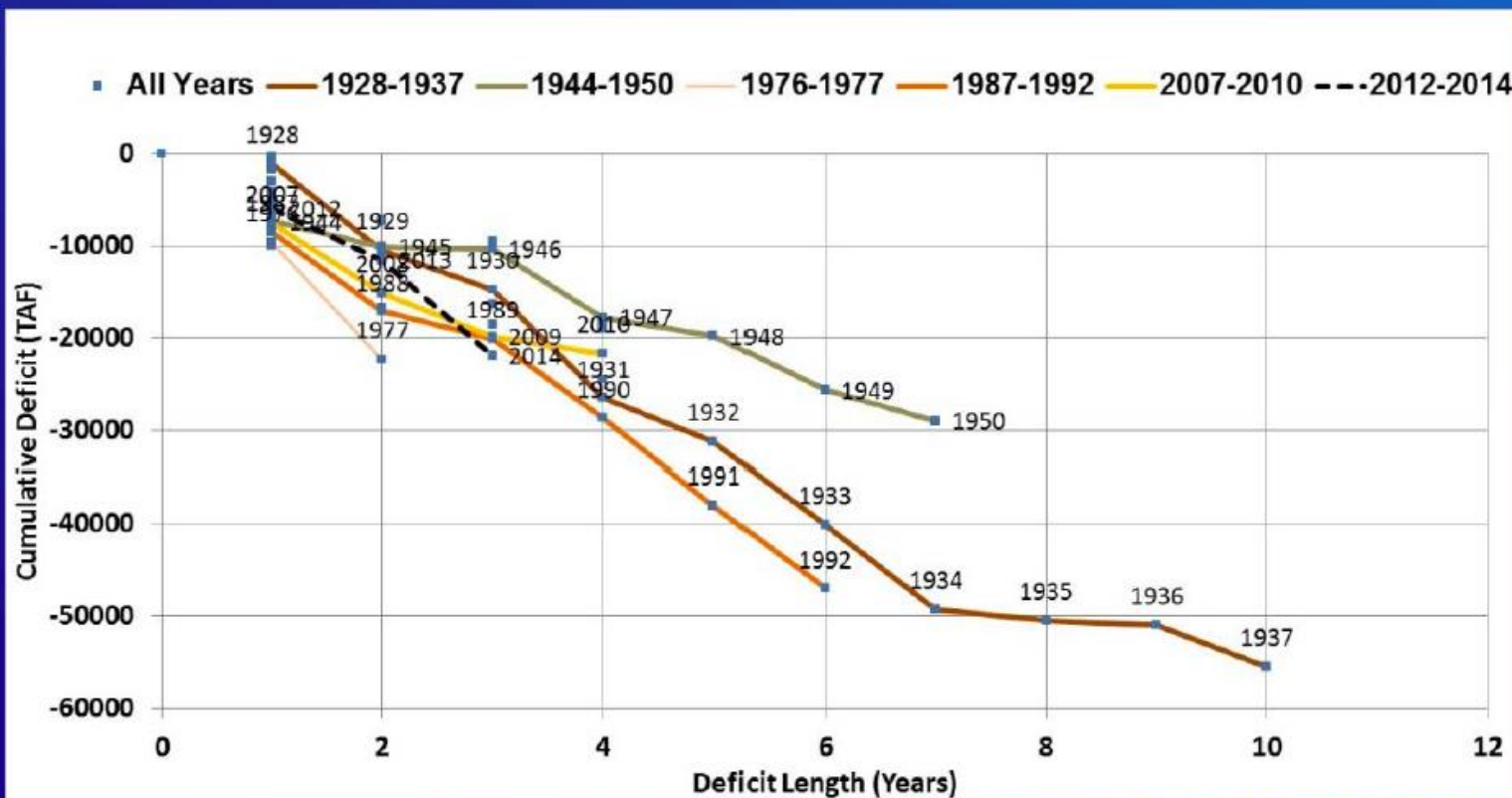


DRAFT - NOT FOR DISTRIBUTION

RECLAMATION

Historical Droughts: Cumulative Streamflow Deficits

Sacramento Valley 4-River Index



DRAFT - NOT FOR DISTRIBUTION

RECLAMATION

State Efforts to Move “BDCP” to “California Water Fix”



The image shows a screenshot of the California Water Fix website. The background is a dark teal color with a faint image of water splashing. In the top left corner, there is a logo for California Water Fix, which consists of a stylized water drop icon in shades of blue and green, followed by the text "CALIFORNIA WATER FIX" in white, and "RELIABLE. CLEAN. WATER." in a smaller font below it. In the top right corner, there is a navigation menu with four items: "PROBLEM", "SOLUTION", "NEWS", and "STAY CONNECTED", all in white uppercase letters. In the center of the page, the word "FIXING" is written in white uppercase letters, flanked by two horizontal white lines. Below this, the main title "CALIFORNIA'S WATER SYSTEM" is written in large, bold, white uppercase letters. Underneath the title, the text "SECURING STATE WATER SUPPLIES" and "ALTERNATIVE 4A" is written in smaller white uppercase letters. At the bottom center, there is a white rectangular button with the text "FIND OUT MORE" in white uppercase letters. Below the button, there is a small white downward-pointing arrow.

Delta Impacts should not be redirected upstream

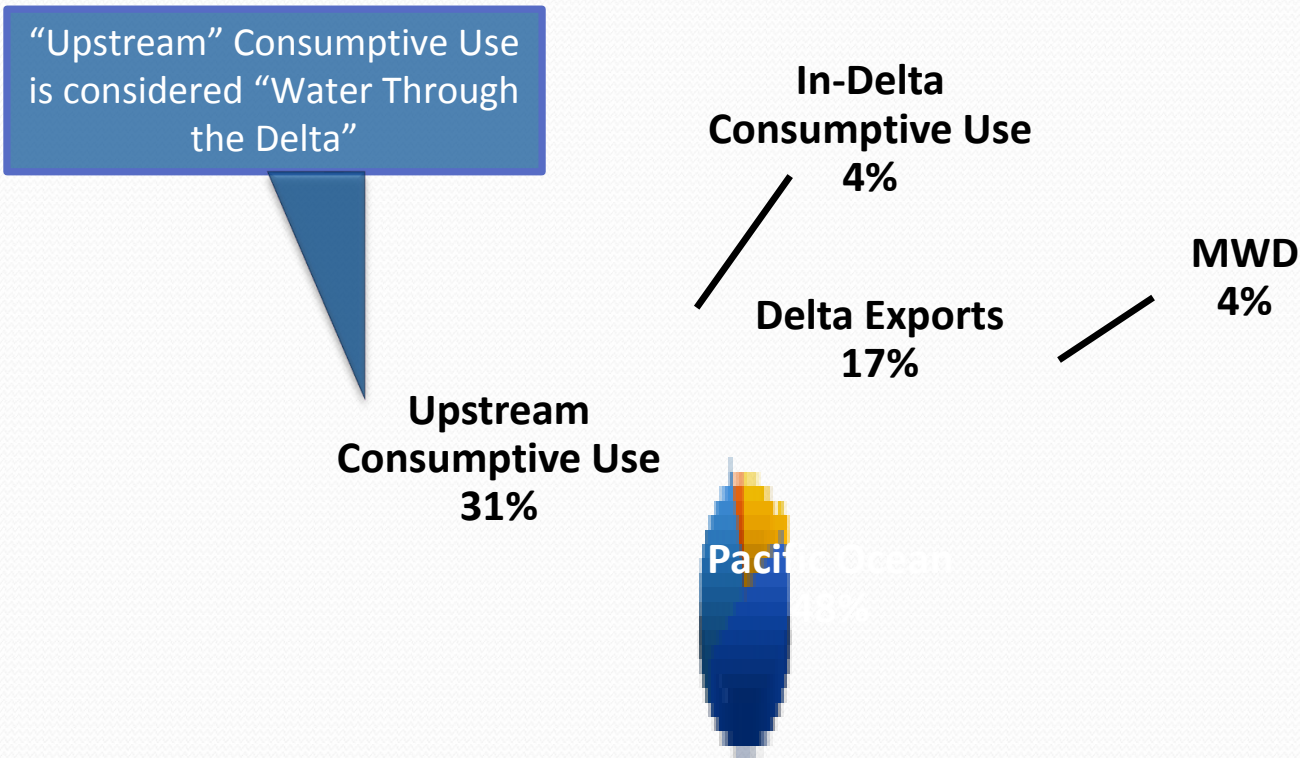
*Proposed Delta solutions pose **SERIOUS RISKS** to our economy, environmental sustainability, and quality of life within the six-county Sacramento Region and Northern California.*



PROBLEM?

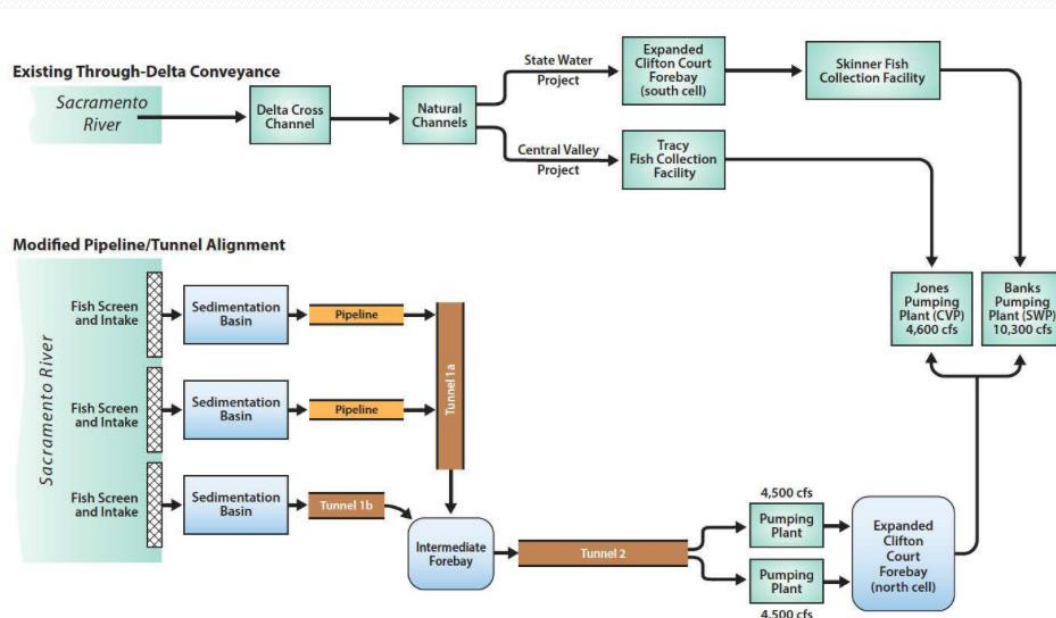
- State Water system is Outdated & Unreliable
 - Ineffective: Environmental constraints with pumping needs
 - Needs Repairs: Seismic Protections & Aging levees
- Doing Nothing is costly
 - Saltwater intrusion to State crop industry
 - Seismic failure to deliver to exports
 - Increases to food costs
 - Species Decline
- Prepare for Climate Change
 - Sea level rising & intensive flood events
- Environmental Impacts
 - Reverse river flows
 - Trapping migrating fish
 - Decline of native/non-native fish populations

Water Flowing Through the Delta



The California Department of Water Resources and Bureau of Reclamation are proposing California WaterFix (Alternative 4A)

- Improve the natural direction of river flows
- Help native fish species navigate to and from the ocean during critical migration periods
- Guard against water supply disruptions, and
- Help local water projects like recycling and groundwater recharge work better.



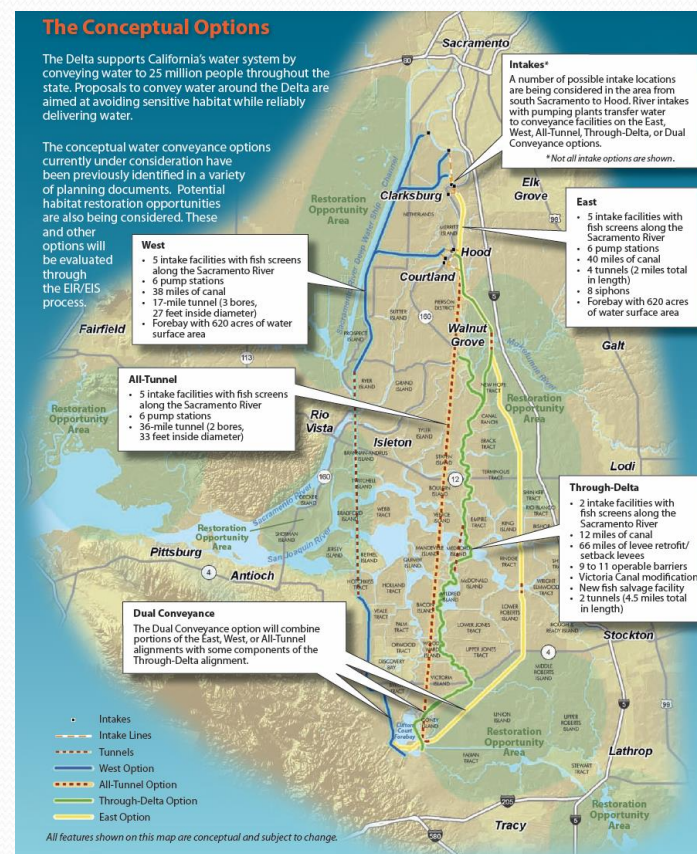
Source: Adapted from California Department of Water Resources Conceptual Engineering Report, 2015.

NOT TO SCALE

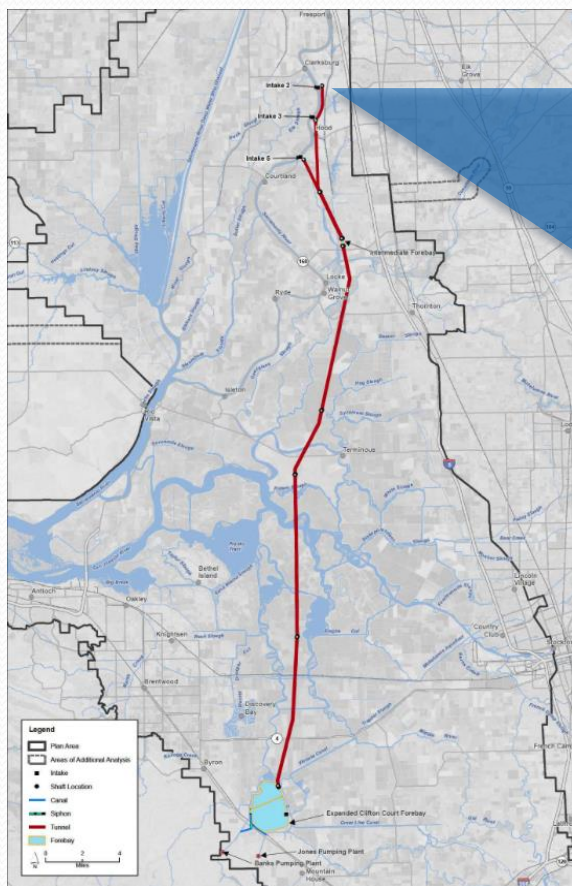
Bay Delta Conservation Plan: 2006 to 2015

50-year permits under Endangered Species Act to cover pumping water out of Delta to serve Southern California and west side of San Joaquin Valley

- 35-mile-long tunnel under Delta
 - Divert upstream of Delta within Sacramento River
 - Convey water to existing export pumps
- Control other stressors
- Habitat restoration
- Financing



California Water Fix has similar facilities as the BDCP – Diversion Facility & Tunnels



Source: DWR 2015.

Primary Changes:

- Reduced power requirements via removal of 3 pumping facilities
- Reduced construction in Staten Island
- Modified Diversion Concept
- Increased use of State-properties

“California Water Fix” – A Downsized Version of the BDCP

- “California Water Fix” is a trimmed-down version of its predecessor, the Bay Delta Conservation Plan (or BDCP),
 - In the planning stages since 2006
- ... Why recirculate the DEIR?
- Change in approach to the permitting of the project
 - Eliminates the “habitat conservation planning approach”
 - Returns to the more conventional approach of consultation and biological opinions
 - Eliminates long-term permits with regulatory assurances

California WaterFix (Alternative 4A)

- Proposed & Recirculated because of project revisions and in consideration of public review and comment.
- Includes:
 - Three new intakes along the Sacramento River
 - Dual-bore tunnels to convey water to the existing state and federal pumping facilities, and
 - Habitat restoration measures and environmental commitments necessary to mitigate impacts in compliance with State and Federal environmental laws.
- Rather than preparing a long-term conservation plan that was a part of the BDCP,
 - California WaterFix (Alternative 4A) embodies an alternative implementation strategy
 - 1) Build Tunnel Project
 - 2) Permits and authorizations for implementation under the California Endangered Species Act and Federal Endangered Species Act to be completed in separate process.

RESTORING THE SACRAMENTO-SAN JOAQUIN DELTA ECOSYSTEM

California EcoRestore (EcoRestore) will accelerate and implement a comprehensive suite of habitat restoration actions to support the long-term health of the Sacramento-San Joaquin Delta's (Delta) native fish and wildlife species.



	<p>Implement multiple fish passage improvement projects in the Yolo Bypass and other key locations</p>		<p>Coordinate with existing local Habitat Conservation Plans and Natural Community Conservation Plans (HCP/NCCP)</p>		<p>Through the Delta Stewardship Council's Delta Science Plan, leverage collaborative Delta science efforts such as the Interagency Ecological Program and Interim Science Action Agenda, and undertake investigations that support adaptive management and long-term understanding of Delta systems.</p>
--	--	--	--	--	---

Over the next 5 years, California will pursue more than 30,000 acres of critical Delta restoration under the EcoRestore program, and pursuant to pre-existing regulatory requirements and various enhancements to improve the overall health of the Delta. **Proposition 1 funds and other state public dollars will be directed exclusively for public benefits unassociated with any regulatory compliance responsibilities.**

Additional priority restoration projects will be identified through regional and locally-led planning processes facilitated by the Delta Conservancy. Plans will be completed for the Cache Slough, West Delta, Cosumnes, and South Delta. Planning for the Suisun Marsh region is already complete and a process for integrated planning in the Yolo Bypass is underway. The Delta Conservancy will lead the implementation of identified restoration projects, in collaboration with local governments and with a priority on using public lands in the Delta.



Over the next 5 years, California will pursue more than 30,000 acres of critical Delta restoration under the EcoRestore program, and pursuant to pre-existing regulatory requirements and various enhancements to improve the overall health of the Delta. Proposition 1 funds and other state public dollars will be directed exclusively for public benefits unassociated with any regulatory compliance responsibilities.

Additional priority restoration projects will be identified through regional and locally-led planning processes facilitated by the Delta Conservancy. Plans will be completed for the Cache Slough, West Delta, Cosumnes, and South Delta. Planning for the Suisun Marsh region is already complete and a process for integrated planning in the Yolo Bypass is underway. The Delta Conservancy will lead the implementation of identified restoration projects, in collaboration with local governments and with a priority on using public lands in the Delta.

ADDITIONAL ACTIONS:

- Engagement of the Delta's local governments to determine community supported restoration practices
- Solicit and receive support from federal agencies and other partners
- Support and engage in inter-agency and stakeholder joint venture efforts aimed to recover Central Valley salmon and steelhead populations
- Coordinate with non-governmental organizations, academia, and other stakeholders throughout California to address various stressors in the Delta, such as invasive species and methylmercury

FUNDING FOR RESTORATION PROJECTS WILL BE PROVIDED THROUGH MULTIPLE SOURCES

- Floodplain and tidal/sub-tidal habit restoration required by existing regulatory frameworks will be funded by state and federal water contractors
- Wetlands restored for subsidence reversal and carbon management will be supported by the AB 32 Greenhouse Gas Reduction Fund and other sources
- Various aquatic, riparian, and upland restoration and multi-benefit flood management projects will be supported by Proposition 1 & 1E
- Additional projects will be supported by various local and federal partners

California Water Fix will cost only \$5/month for urban water users . . .

“The cost to fix California’s primary water delivery system is estimated at \$14.9 billion – or about \$5 a month for urban water users – and will be paid for by public water agencies that rely on the supplies.”

. . . however . . .

Separating the “Water Delivery system”

a) Reduces exporter costs

b) Transfers the environmental mitigation costs to statewide water users.

Key Concerns with the Delta Plan

1. Restrict our region's future use of local water to put more water in Delta
2. Increasing flows to Delta is the primary environmental tool
3. Fees on upstream diverters and dischargers



California Water Fix

- *Update California's primary water delivery system*
 - *Improve the natural direction of river flows*
 - *Help native fish species navigate to and from the ocean during critical migration periods,*
 - *Guard against water supply disruptions, and*
 - *Help local water projects like recycling and groundwater recharge work better.*
- *Updated information from the 2013 Bay Delta Conservation Plan (BDCP) Draft*
 - *Included in the BDCP/California WaterFix Partially Recirculated Draft EIR/Supplemental Draft EIS.*



Delta Mitigation

Delays long-term conservation plan that was a part of the BDCP. Separates necessary permits and authorizations for implementation under the California Endangered Species Act and Federal Endangered Species Act

Dual Tunnels

California WaterFix (Alternative 4A) includes 3 new intakes along the Sacramento River and dual-bore tunnels, and habitat restoration measures and environmental commitments

