

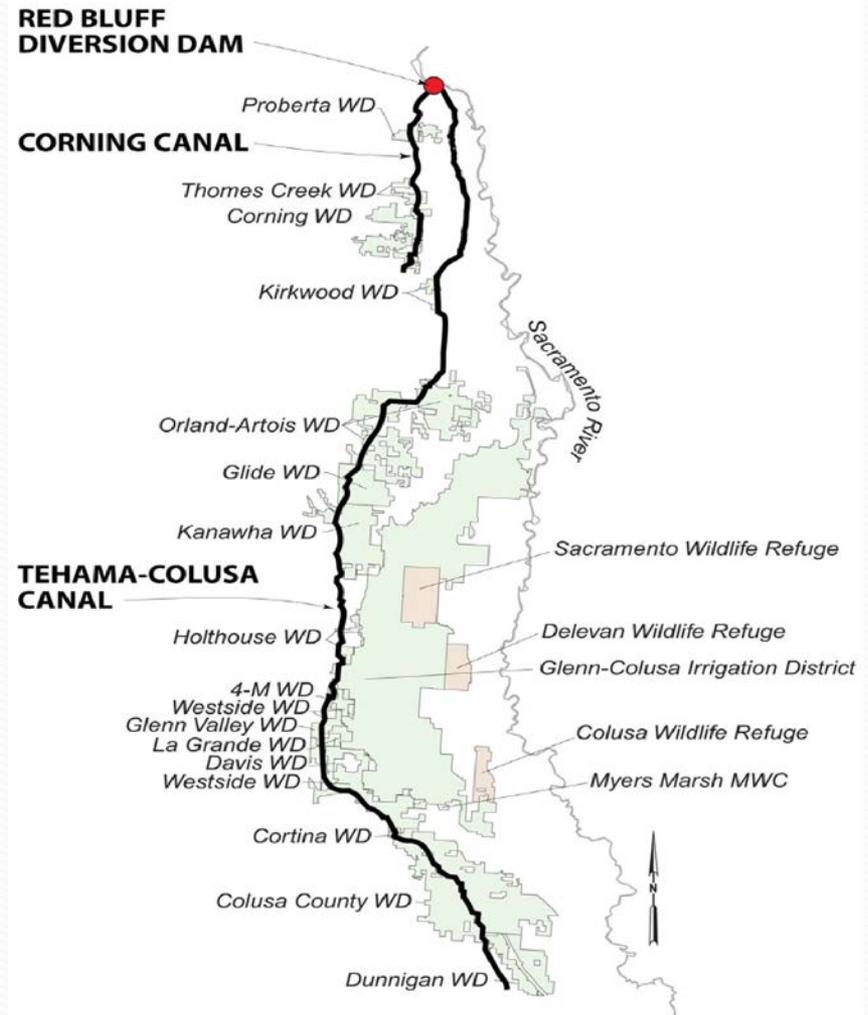
Tehama-Colusa Canal Authority Sites Reservoir Presentation to California Department of Food & Ag



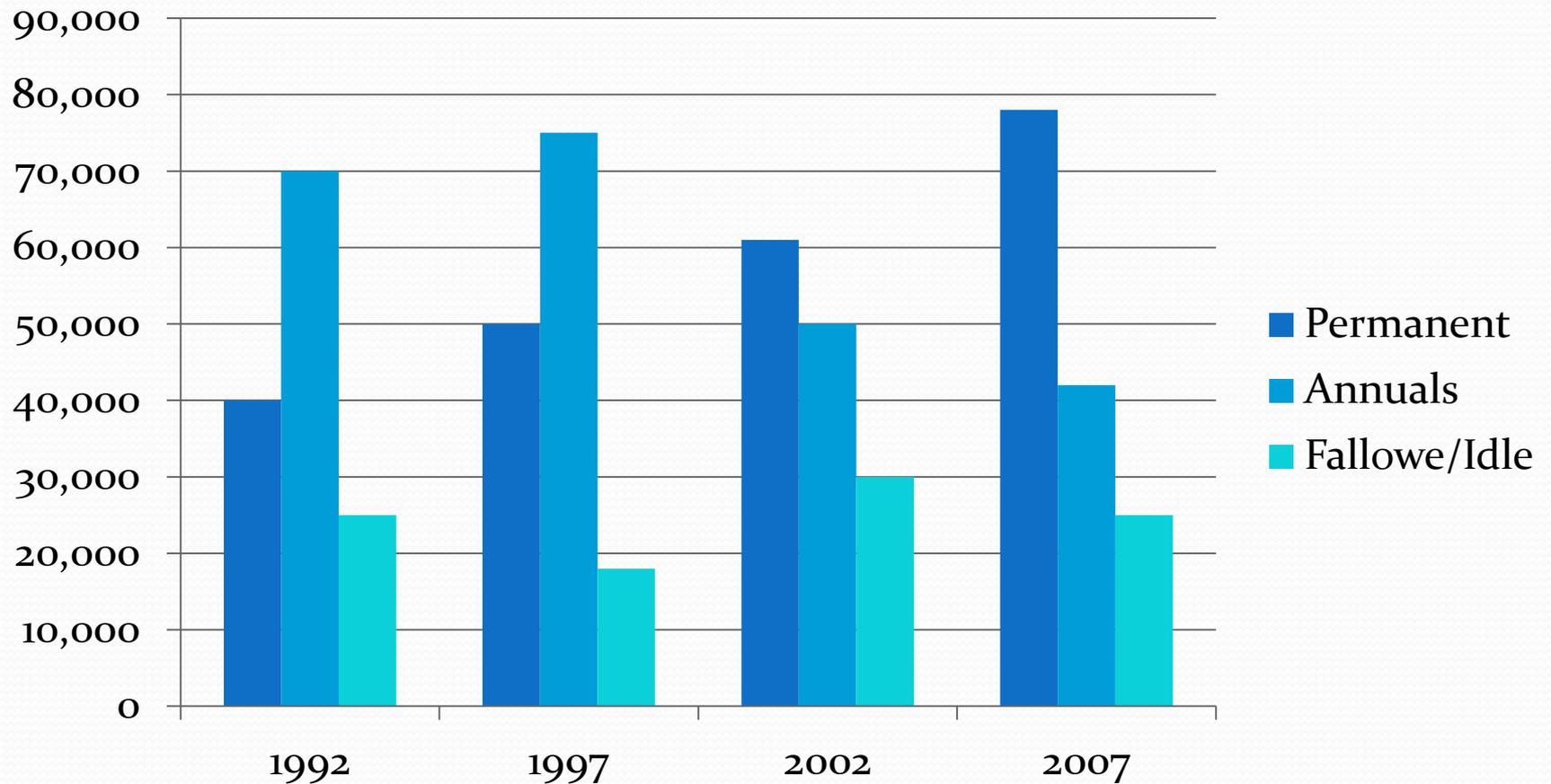
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Tehama-Colusa Canal Authority

- Operate & Maintain Sacramento Canals Unit of the Central Valley Project
 - Tehama Colusa Canal (110 miles)
 - Corning Canal (22 miles)
 - Funks Reservoir
 - Red Bluff Diversion Facilities
- Serves 17 Water Districts with CVP water service contracts throughout a four county service area (Tehama, Glenn, Colusa, and Yolo County)
- Total TCCA District Contract amounts = 318,700 acre feet
- Irrigation to 150,000 acres
 - almonds
 - pistachios
 - walnuts
 - prunes
 - olives
 - rice
 - tomatoes



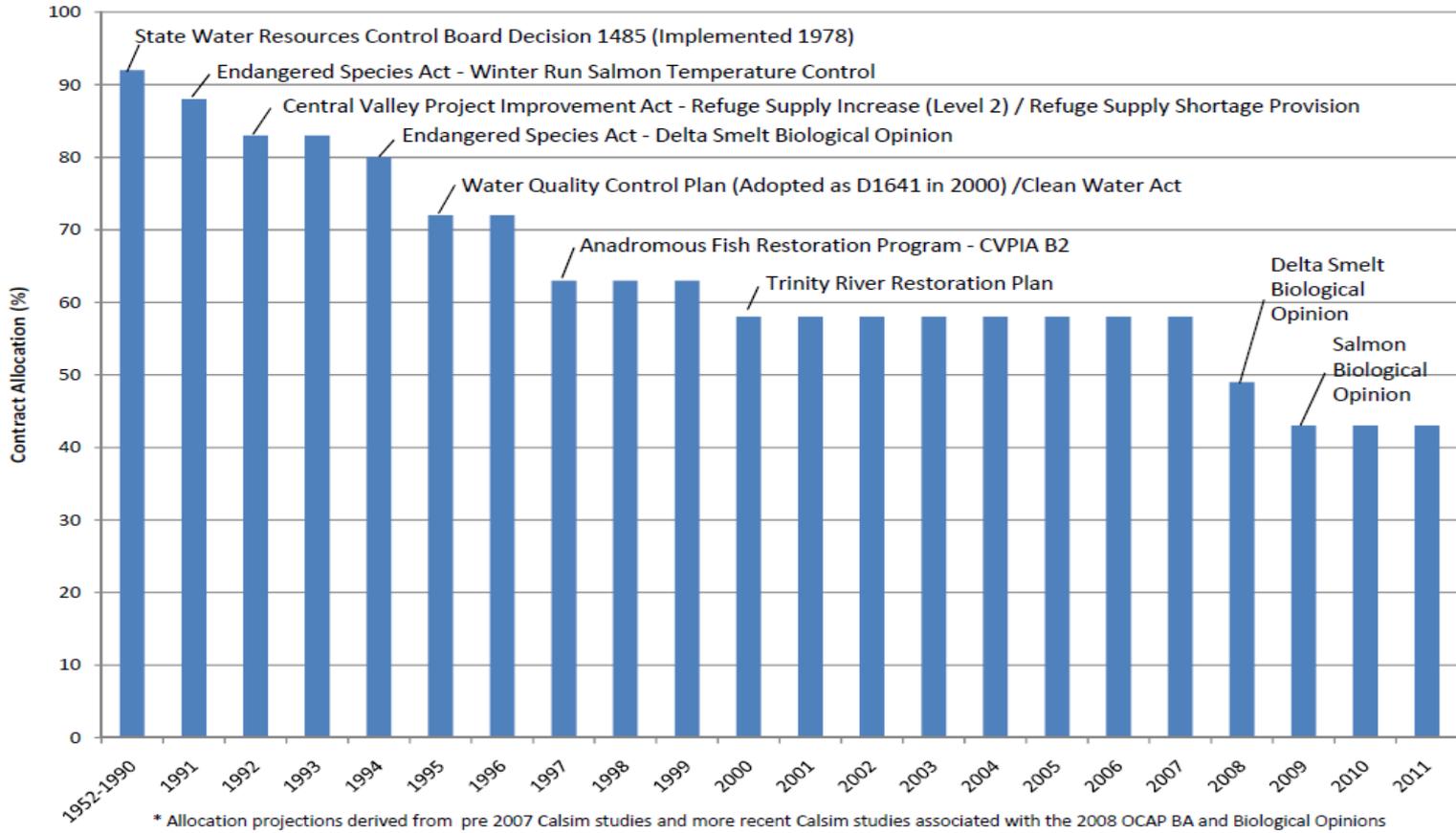
Crop Type in the TCCA Service Area



Impacts to CVP Water Supply Reliability

- Central Valley Project Improvement Act
- Trinity Record of Decision
- SWRCB Bay Delta Water Quality Plans
- Endangered Species Act; Central Valley Project OCAP Biological Opinions by NMFS and USFWS (2006 and 2009)

Long Term Average, CVP S. of Delta Ag Service Contract Allocation



Historical CVP Agricultural Water Allocations

<u>YEAR</u>	<u>NOD</u>	<u>SOD</u>	
1977	25	25	C
77-89	100	100	4D & 1C
1990	50	50	C
91	50	50	C
92	25	25	C
93	100	50	AN
94	35	35	C
95	100	100	W
96	100	95	W
97	90	90	W
98	100	100	W
99	100	70	W
2000	100	65	AN
1	60	49	D
2	100	70	D
3	100	75	AN
4	100	70	BN
5	100	85	AN
6	100	100	W
7	100	50	D
8	40*	40	C
9	40**	10	D
10	100***	45	BN
11	100	80	W
12	100****	40	D
13	75	20	D
14	0	0	C

C= CRITICAL
D=DRY
W=WET
AN=ABOVE NORMAL
BN= BELOW NORMAL

* = Decrease of 5% on 6-3-2008

** = Started at 5%; Increase to 40% on 5-22-2009

*** = Started at 0%; Increase to 50% on 3-16-2010; Increase to 100% on 4-15-2010

**** = Started at 30% on 2-22-2012; Increase to 100% on 4-13-2012

2014 Drought Response

2014: First Ever 0% Water Allocation

- Fallowing of Approx. 60,000 acres
- Water Transfers/Purchases via Crop Idling and Ground Water Substitution (Forbearance Agreements)
- Greatly Increased Ground Water Pumping
- Warren Act Contracts (Relaxed Water Quality Requirements and Water Monitoring Program)
- Installation of Lift Pumps at Several Check Structures
- Deficit Irrigation

2014 Drought Impacts

- Greatly Increased Cost of Water (\$450 ac/ft)
- Increased Conveyance, Power and Delivery Costs
- Increased Reliance on and Reduction of Reserve Funds
- Deferred Maintenance and Staffing
- Stress to Permanent Crops due to Deficit Irrigation
- (Long-term Impacts)
- Depleted Aquifer and Localized Ground Water Impacts
- Local Economic Impacts Associated with Crop Idling
 - Reduced Production
 - Labor Impacts
 - 3rd Party Impacts

NORTH-OF-THE-DELTA OFFSTREAM STORAGE



Sites Joint Powers Authority

JPA Members

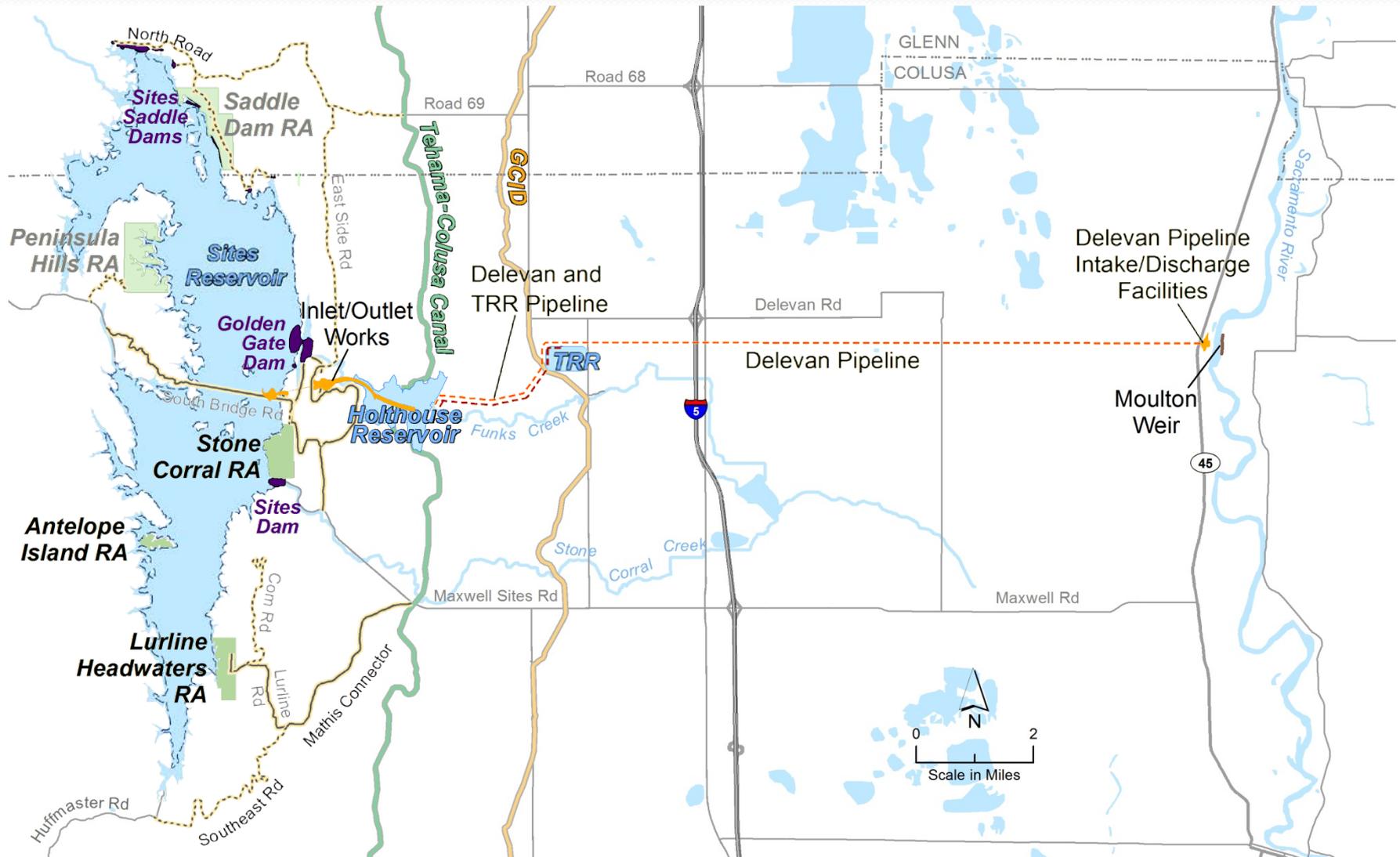
- Glenn County
- Colusa County
- Glenn-Colusa Irrigation District
- Tehama Colusa Canal Authority
- Reclamation District 108
- Maxwell Irrigation District
- Yolo County Flood Control and Water Conservation District
- DWR – no voting member

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.



Proposed Sites Reservoir Elements



Objectives

North-of-the-Delta Offstream Storage

“Public Benefit” Objectives:

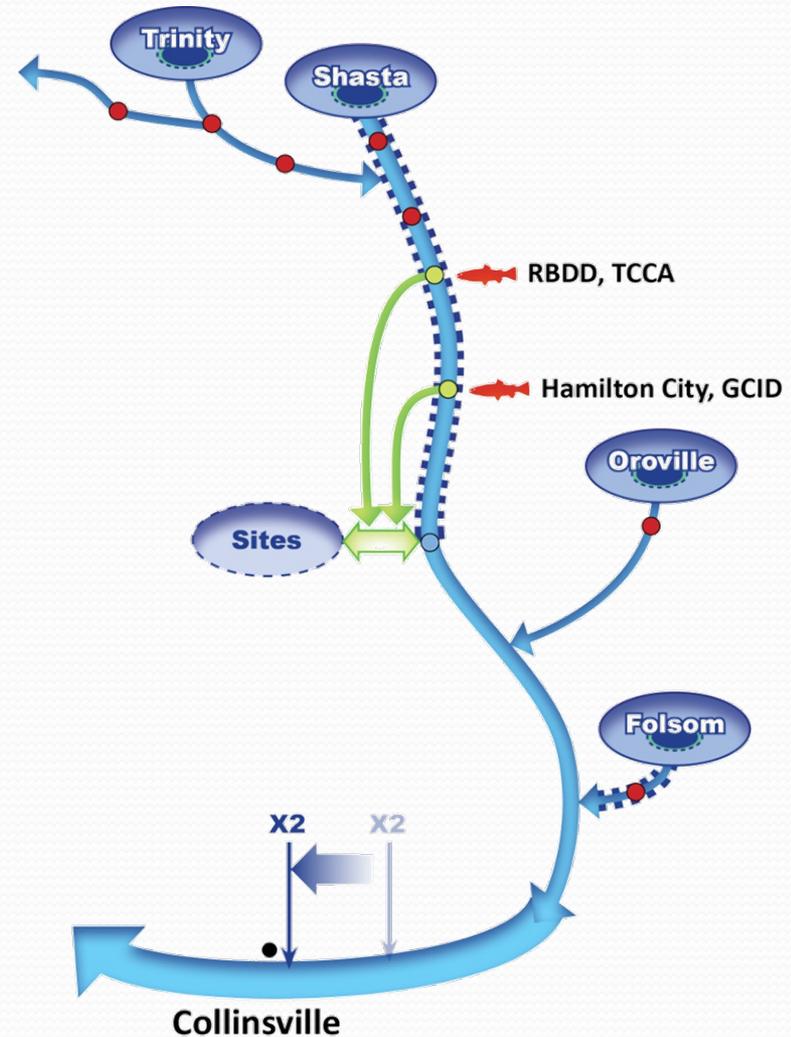
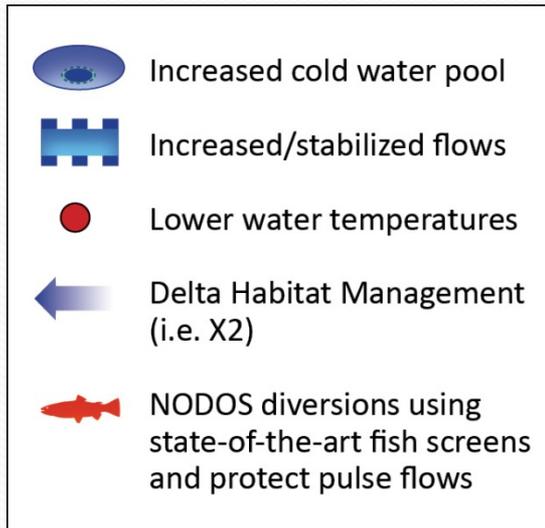
- Ecosystem Improvements - Must be 50% of PB's
- Water Quality
- Emergency Response
- Recreation
- Flood Control

Non-Public Benefit Objectives:

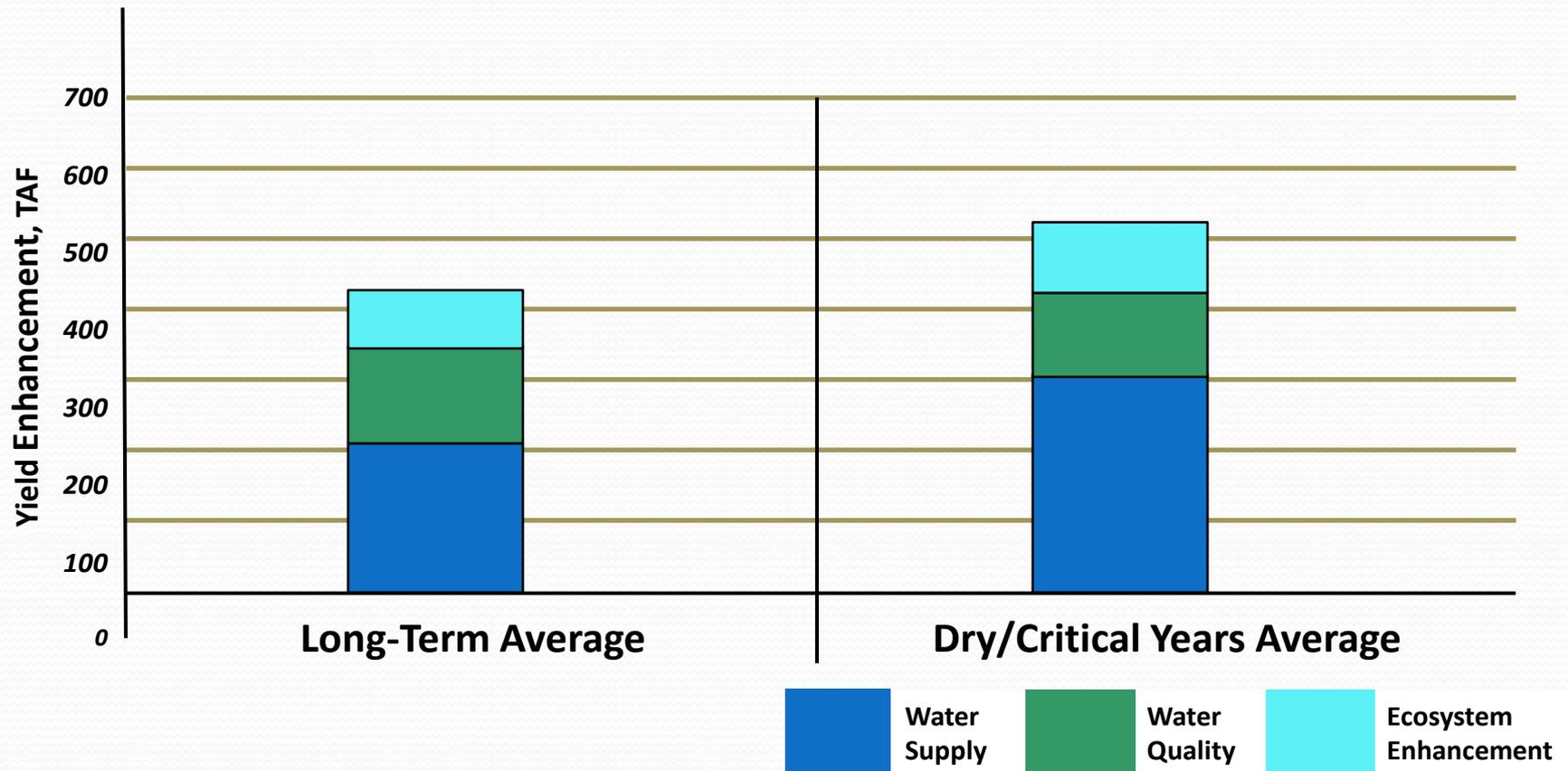
- Water Supply/Quality: M&I and Ag
- Flexible Generation Hydropower (USBR)



NODOS Contributions to Fish Survival

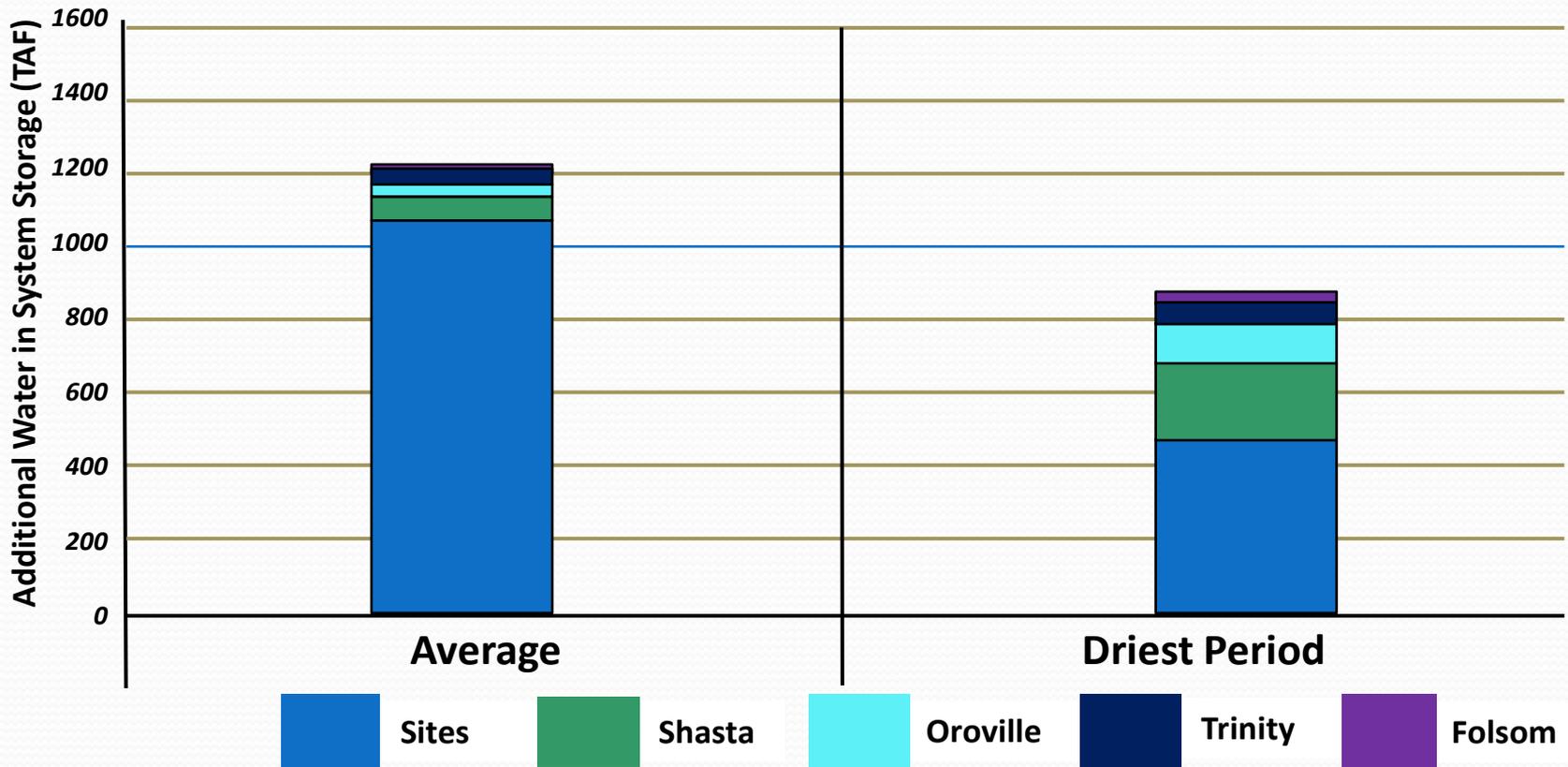


Water Benefits Summary



System Flexibility and Emergency Response

Additional Water in System Storage



Questions?

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