

## ***Notice of Meeting***

### **STATE WATER SUBCONTRACTORS ADVISORY COMMITTEE**

SAN LUIS OBISPO COUNTY FLOOD CONTROL AND  
WATER CONSERVATION DISTRICT

County Government Center, Rm. D361  
1055 Monterey Street, San Luis Obispo, CA 93408

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Wednesday, Oct 23, 2019 – 9:00 to 10:30 AM

**Chair:** Rob Livick, City of Morro Bay  
**Vice Chair:** Brad Hagemann, Avila Beach CSD  
**Clerk:** Wes Thomson, County of San Luis Obispo

### **AGENDA**

- I. **Call to Order & Roll Call – 9:00 AM** (*Quorum Count*)
- II. **Public Comment** (*Opportunity for members of the public to address the committee on matters within the committee's jurisdiction. Time for each comment may be limited to three minutes.*)
- III. **District Staff Report**
  - A. Update regarding proceeding on one or more studies to evaluate benefits of the anticipated water management tools contract amendment and south of Delta storage options.
  - B. Consider recommending that the District participate in preliminary efforts associated with the Delta Conveyance Project.
- IV. **Future Agenda Items**
- V. **Date of Next Regular Meeting:** Nov. 20, 2019
- VI. **Adjournment**

**CONTACT: Wes Thomson, County Public Works Dept., (805) 781-5252**  
976 Osos St., Rm 206, County Government Center, San Luis Obispo, CA 93408

***The purpose of the Committee is, "to monitor all aspects of this agreement and related agreements and to advise the governing bodies of District and Contractor on the functioning of this agreement and related agreements, and to recommend to the governing bodies of District and Contractor any modifications to said agreements that may, from time to time, be appropriate."***  
*(Art. 31, Water Supply Agreement, 1992)*



SAN LUIS OBISPO COUNTY  
FLOOD CONTROL AND WATER CONSERVATION DISTRICT

**TO:** District State Water Subcontractors

**FROM:** Wes Thomson, P.E.  
Water Utilities Engineer

**DATE:** October 23, 2019

**SUBJECT:** Agenda Item III.A. – Update regarding proceeding on one or more studies to evaluate benefits of the anticipated water management tools contract amendment and south of Delta storage options.

**RECOMMENDATION**

Staff recommend that the District participate in a joint study with CCWA to evaluate the proposed water management tools provided under a forthcoming contract amendment between the District and DWR. Staff would also like the Subcontractors to support moving forward with a related but separate study to evaluate water storage options south of the Delta.

**DISCUSSION**

The District anticipates receiving a request from DWR within the next year for a decision on signing the Water Management Contract Amendment<sup>1</sup>. Staff anticipates that new water management tools provided by the amendment will allow for exchanges and transfers of State Water among contractors that will help the District to optimize management of the water supply for the central coast.

At this time, staff recommend that the District participate in (1) a joint study with CCWA to share the cost involved in better understanding the benefits of the amendment provisions, and (2) initiate a separate study to identify potential alternative storage options for reducing the District’s reliance on San Luis Reservoir. Staff recommend these studies for the following reasons:

- A. Any future SWP supply augmentation projects, like a Delta Conveyance Project, will have significant impact on how contractors utilize storage at San Luis Reservoir. The water management tools were negotiated with the understanding that they would help contractors reduce their reliance on the temporary storage at San Luis Reservoir.

<sup>1</sup> The “Draft Agreement in Principle for the SWP Water Supply Contract Amendment for Water Management” (i.e., the “Water Management Tools” AIP), was completed in May 2019, and is now being drafted into formal contract language. The final EIR is expected to be ready in January 2020.

- B. The proposed water management contract amendment would provide exchange and transfer options that could help the District optimize its State water supply and improve coordinated management of Coastal Branch operations with CCWA. Participating in a joint study with CCWA is a logical next step. It would include analysis of the exchange and transfer options to inform policy decisions and strategy for optimizing State water delivery and storage management for the central coast.
  
- C. Given the forthcoming changes due to the proposed water management contract amendment and Delta Conveyance Project (regardless of District participation in the DCP), the District will also need to identify alternative storage options for managing its “wet year” water supply so that the supply is available to meet local demand in dry years. A separate “south of Delta” storage options study will support the District’s need to develop new strategies for utilizing the new water management tools and prioritizing future investments in programs or infrastructure for improving the long-term reliability of the District’s State water supply.

### **FINANCIAL CONSIDERATIONS**

The anticipated costs for:

(1) The joint-CCWA water management tools study for the District’s share is approximately \$50-60,000 dollars and is projected to take 6-8 months once a consultant is under contract to perform the work.

(2) The separate “south of Delta” storage options study is estimated to be approximately \$20-30,000 for the District and projected to take 4-6 months to complete.

Costs for the District and Subcontractors would be allocated in proportion to their total subscribed water (base Water Service Amount plus Drought Buffer).



SAN LUIS OBISPO COUNTY  
FLOOD CONTROL AND WATER CONSERVATION DISTRICT

**TO:** District State Water Subcontractors Advisory Committee (SWSAC)

**FROM:** Wes Thomson, P.E.  
Water Utilities Engineer

**Via:** Courtney Howard  
Water Resources Division Manager

**DATE:** October 23, 2019

**SUBJECT:** Agenda Item III.B. – Consider recommending that the District participate in preliminary efforts associated with the Delta Conveyance Project.

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## RECOMMENDATION

Consider recommending that the District Board of Supervisors sign the Agreement in Principle (AIP) for the Delta Conveyance Project (DCP) and the funding agreement for a proportionate share of the cost for planning and environmental review for the DCP.

## DISCUSSION

The District anticipates receiving a letter from DWR within the next few months requesting a decision on signing the AIP<sup>1</sup>. Staff anticipates that the letter will also require the execution of a funding agreement for a proportionate share of the cost of planning and environmental review for the DCP in order to be included in those preliminary efforts.

- If the District **signs** both, the District can finish working with the Subcontractors and CCWA to analyze whether or not to participate in the Delta Conveyance Project.
- If the District **does not sign** both, the District would be deciding that it will **not** participate in the Delta Conveyance Project.

The SWSAC may wish to recommend that the District sign the agreements for the following reasons:

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<sup>1</sup> The AIP, to be signed by DWR and participating State Water Project Contractors, describes a methodology for the DCP cost allocation and other related matters that would be the basis of a contract amendment if a DCP is approved and after all necessary environmental review.

1. By providing a second conveyance system under the delta, the DCP would provide increased reliability of the State Water Project given the known seismic risk and vulnerabilities of the Delta levees.
2. Participating in the next phase would provide time to evaluate different scenarios, particularly with respect to the impact of the DCP on reliability of storage at San Luis Reservoir and the timing of water availability, and decide whether to opt in or out when the contract amendment is ready to sign or sooner.
3. The DCP would provide increased overall reliability for state water deliveries long term, addressing the decreased capability of the existing facilities due to the biological opinions.
4. Signing the agreements now is consistent with the District's decisions in 2009 and 2010 to fund its share of the multi-year "alternatives" study, under the "Delta Habitat Conservation and Conveyance Program" (DHCCP), which has led to the current preferred alternative proposal – the single tunnel Delta Conveyance Project.
5. The long-term availability of the District's "excess allocation" to Subcontractors is uncertain.

#### Preliminary Evaluation of Reliability Options

Staff has provided the attached preliminary analysis of scenarios using the period 2008 – 2019, which had an average annual delivery percentage of 49% and is reflective of the projected future long-term reliability of the State Water Project for Contractors that do not participate in the DCP. The analysis also takes into account DCP operations and staff's preliminary understanding of the impact to storage and deliveries. Also included is copies of information that the Central Coast Water Authority provided to its members earlier this year.

#### **FINANCIAL CONSIDERATIONS**

Costs for the first phase of the environmental review (per CEQA) and the preliminary planning and engineering efforts are projected to be about \$350 million in total for the participating State Water Contractors. The District's anticipated prorated cost share would be approximately \$2.5 million dollars. The preliminary efforts are anticipated to take 2 – 3 years.

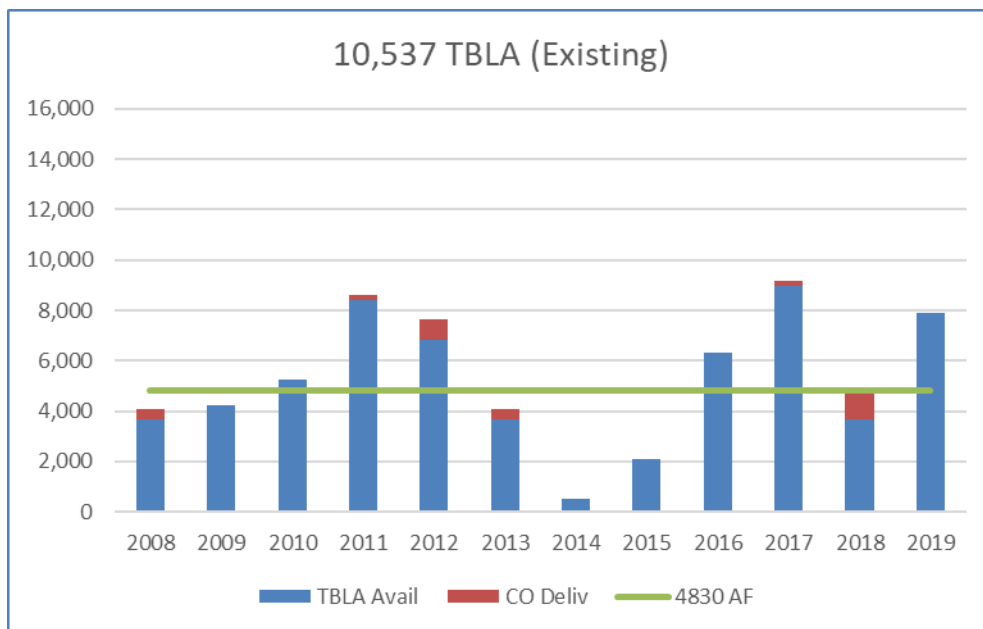
Table 1 below provides a cost breakdown for the District and Subcontractors in proportion to their total subscribed water (base Water Service Amount plus Drought Buffer). The recommendation to the Board from the Subcontractors could include a request to bill the Subcontractor's proportionate share over a longer period of time.

Table 1: Estimated Cost of Preliminary DCP Efforts

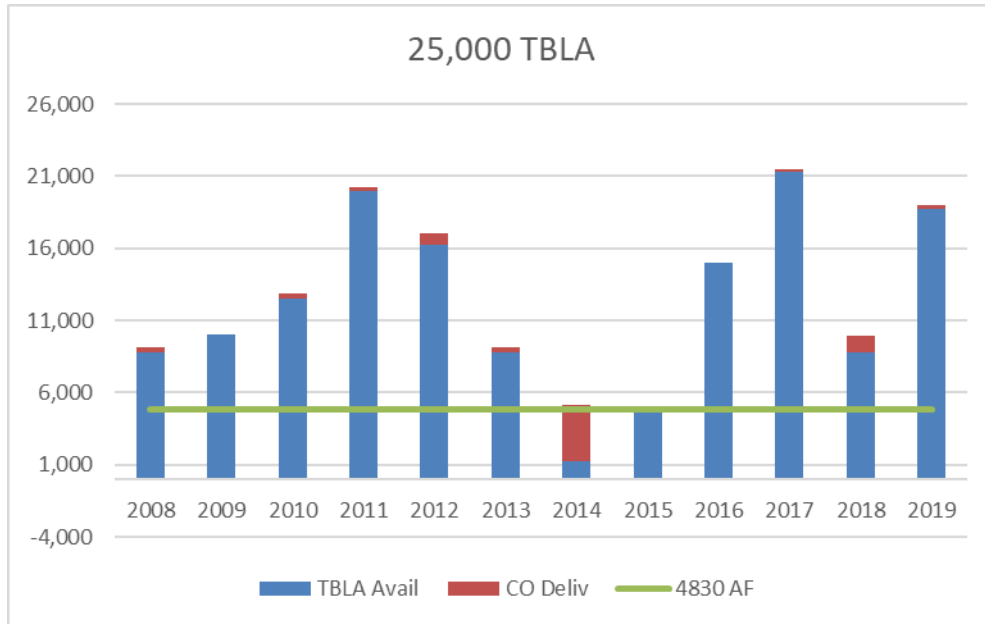
	SUBCONTRACTOR	WSA (AFY)	DB (AFY)	WSA + DB (AFY)	Subscription Percentage	Est'd Cost Share of DCP Phase 1
<i>SHANDON</i>	<b>CSA 16 (Shandon)</b>	100	0	100	0.004	\$ 10,000
<i>TURNOUT</i>	<i>Subtotal</i>	100	0	100		
<i>CHORRO VALLEY</i>	<b>City of Morro Bay</b>	1,313	2,290	3,603	0.14412	\$ 360,300
<i>TURNOUT</i>	<b>CMC</b>	400	400	800	0.032	\$ 80,000
	<b>County Ops Center</b>	425	425	850	0.034	\$ 85,000
	<b>Cuesta College</b>	200	200	400	0.016	\$ 40,000
	<i>Subtotal</i>	2,338	3,315	5,653		
<i>LOPEZ</i>	<b>City of Pismo Beach</b>	1,240	1,240	2,480	0.0992	\$ 248,000
<i>TURNOUT</i>	<b>Oceano CSD</b>	750	750	1,500	0.06	\$ 150,000
	<b>San Miguelito MWC</b>	275	275	550	0.022	\$ 55,000
	<b>Avila Beach CSD</b>	100	100	200	0.008	\$ 20,000
	<b>Avila Valley MWC</b>	20	20	40	0.0016	\$ 4,000
	<b>San Luis Coastal USD</b>	7	7	14	0.00056	\$ 1,400
	<i>Subtotal</i>	2,392	2,392	4,784		
	<b>TOTAL</b>	<b>4,830</b>	<b>5,707</b>	<b>10,537</b>	<b>0.42148</b>	<b>\$ 1,053,700</b>
	<i>*Contracted Delivery Capacity in Coastal Branch (AFY)</i>			4,830		
				District's "Table A" Allocation (AFY)	25,000	
				<b>Total "Table A" Subcontracted (AFY)</b>	<b>10,537</b>	
				District's "Unsubscribed" Allocation (AFY)	14,463	0.57852
						<b>\$ 1,446,300</b>
	<b>ABBREVIATIONS</b>					
	AFY = Acre-Feet per Year					
	WSA = Water Service Amount					
	DB = Drought Buffer					

	Scenario	Table A AFY	Additional "Insurance" Allocation	Cost per AFY	Notes
<b>A</b>	Subcontractor Allocation Current Drought Buffer	10,537	NA	NA	Other supplies/conservation may be needed at unknown cost
<b>B</b>	Subcontractor Allocation Increased Drought Buffer	25,000	14,423	\$200	Drought Buffer currently \$173/AFY; assume increased costs in future
<b>C</b>	Subcontractor Allocation Current Drought Buffer DCP @ <b>10,537 Table A</b>	10,537	1,981	\$230	\$2.4M estimated annual DCP cost
<b>D</b>	Subcontractor Allocation Increased Drought Buffer DCP @ <b>25,000 Table A</b>	25,000	19,123	\$440	\$6M estimated annual DCP cost plus increased drought buffer cost

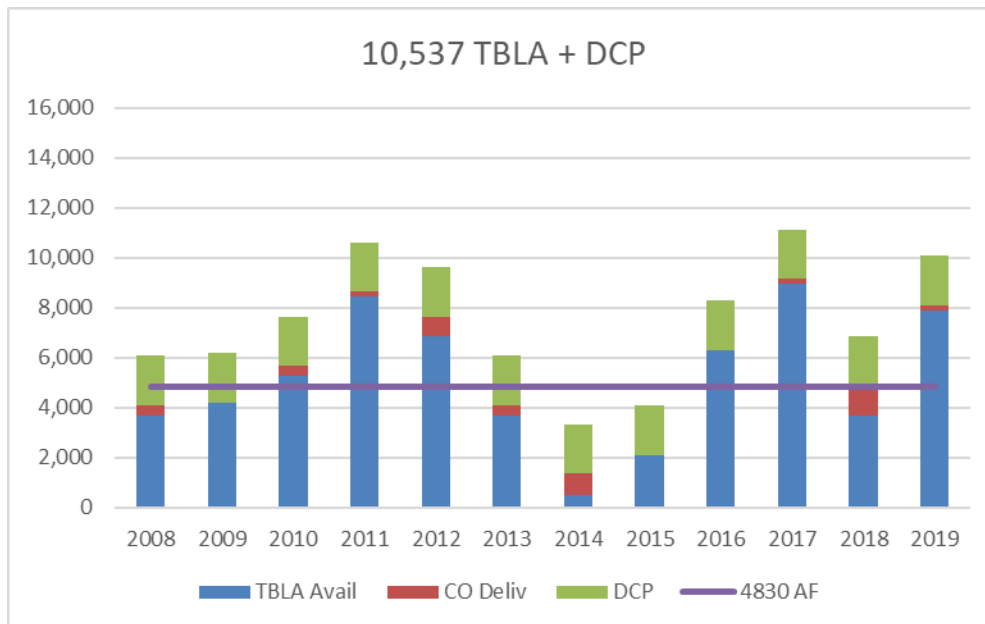
**Scenario A**



**Scenario B**

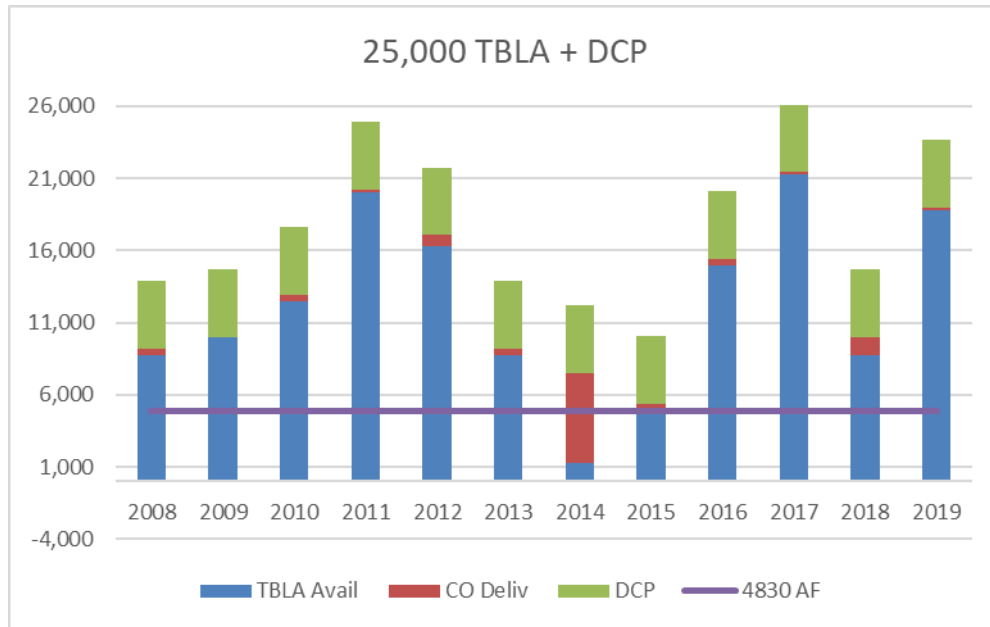


**Scenario C**





**Scenario D**






## CENTRAL COAST WATER AUTHORITY

### MEMORANDUM

August 1, 2019

**TO:** CCWA Board of Directors  
CCWA Member Agencies  
CCWA Project Participants

**FROM:** Ray A. Stokes   
Executive Director

**SUBJECT:** Participation Decision in the State of California Department of Water Resources  
Delta Conveyance Project

#### SUMMARY

At the Direction of Governor Newsom, the Department of Water Resources (DWR) rescinded all approvals and withdrew all requested applications for permits and approvals for the project previously referred to as “Cal Waterfix” or, more commonly, the “twin-tunnels” project. Governor Newsom directed DWR to engage in planning efforts for a strategically designed single tunnel to deliver water through the Delta. As a result, on May 2, 2019, DWR informed the State Water Project Contractors (SWC) that it had rescinded its approvals and began withdrawing proposed permits for the Cal Waterfix project and planning for a smaller, single-tunnel project.

DWR is currently working on defining a proposed single tunnel project, which is being referred to as the “Delta Conveyance” project” (DC). As part of this, on July 24, 2019, DWR and the State Water Project (SWP) Contractors began negotiations to amend the long-term water supply contracts to define the cost allocation and water supply benefits from a DC facility. It is anticipated that at the conclusion of the contract amendment negotiations, anticipated to be completed by the end of August 2019, a set of “Agreements in Principle” (AIP) will be made available summarizing the various proposed amendments to the State Water Contract for consideration by each of the SWP Contractors. DWR is requesting that each SWP Contractor take an action to approve a proposed AIP and indicate whether each will be participating in the planning costs for DC. It is expected that DWR will set a date-certain for these votes to occur.

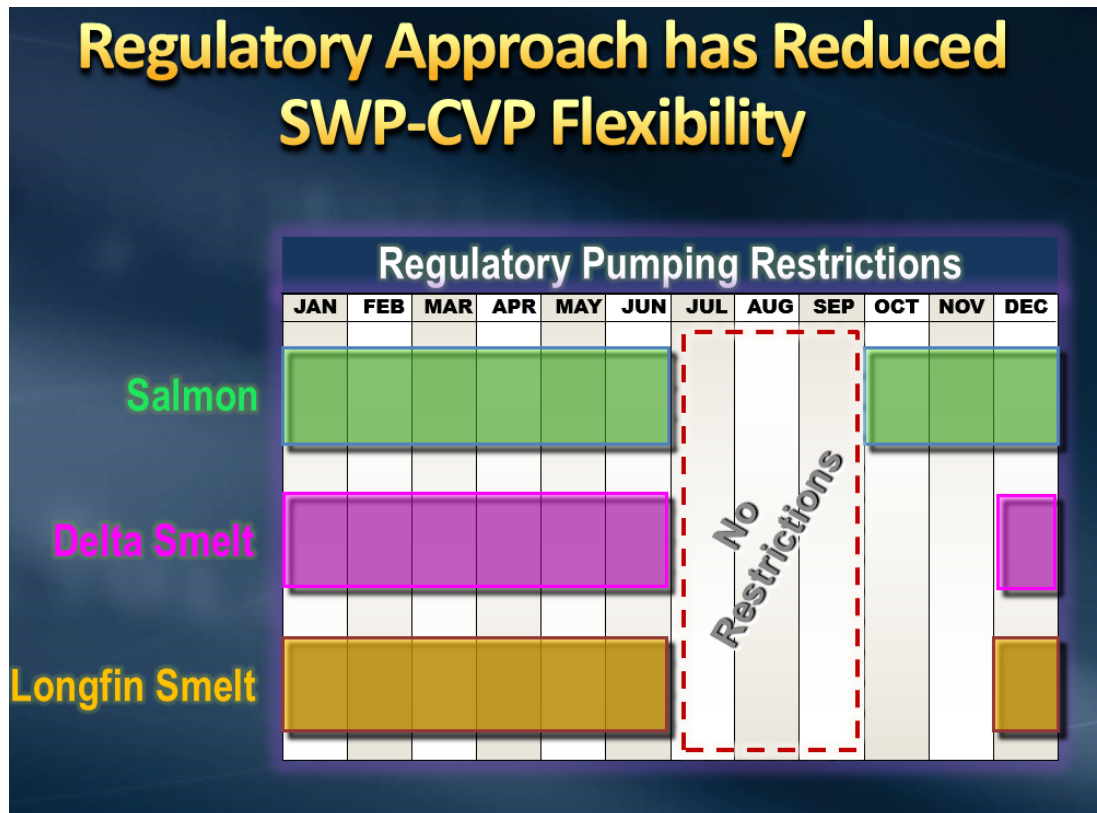
This report will summarize the following:

1. What problems is Delta Conveyance trying to address?
2. How did Cal Waterfix (formally withdrawn) propose to address those issues?
3. Benefits of Delta Conveyance
4. DWR/SWP Contract Amendment Negotiations
5. Single Tunnel Delta Conveyance Cost Estimates
6. Key Considerations
7. Likely DWR Requests of Individual SWP Contractors
8. CCWA Project Participant and Board Decisions

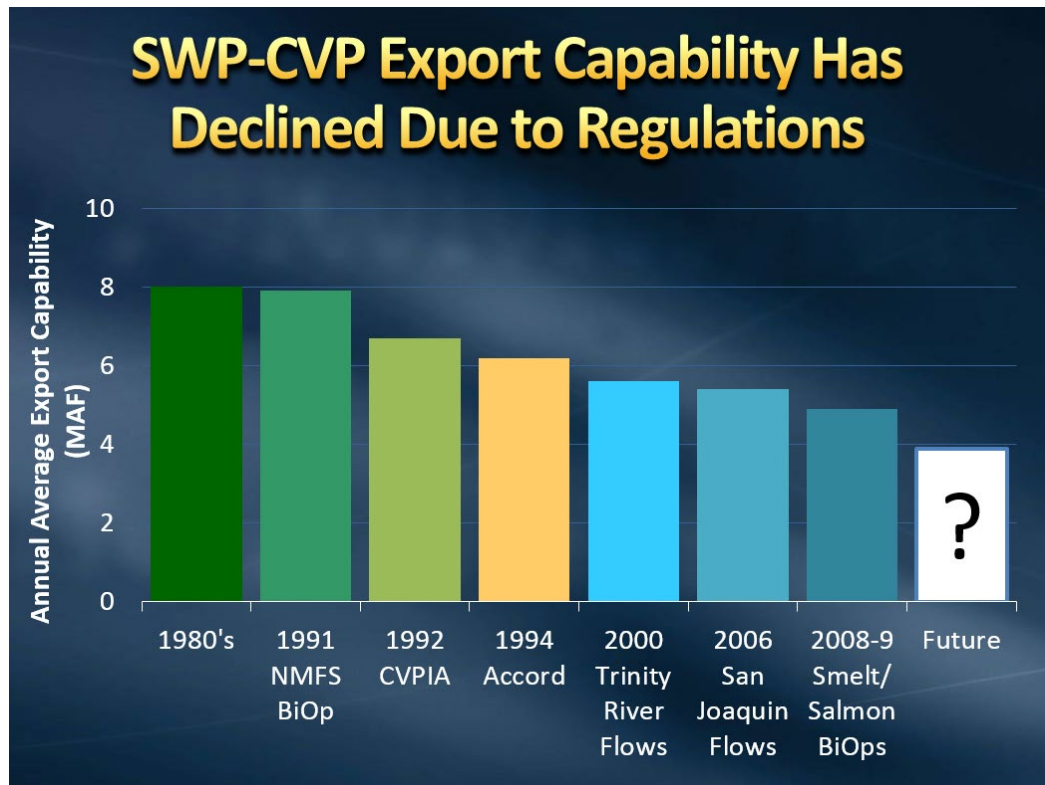
**What Problems is Delta Conveyance Trying to Address?**

There has been a continual decline in the amount of water than can be exported from the Sacramento-San Joaquin Delta over the years.

The various fish regulatory agencies have continued to impose pumping restrictions on both the state and federal water projects. In fact, the following graph shows that the only months in which there is not some sort of pumping restrictions for endangered fish species are in the months of July to September.



Due to the increased pumping restrictions, there has been a continual decline in the amount of exports through the Sacramento-San Joaquin Delta (the Delta) as shown below.

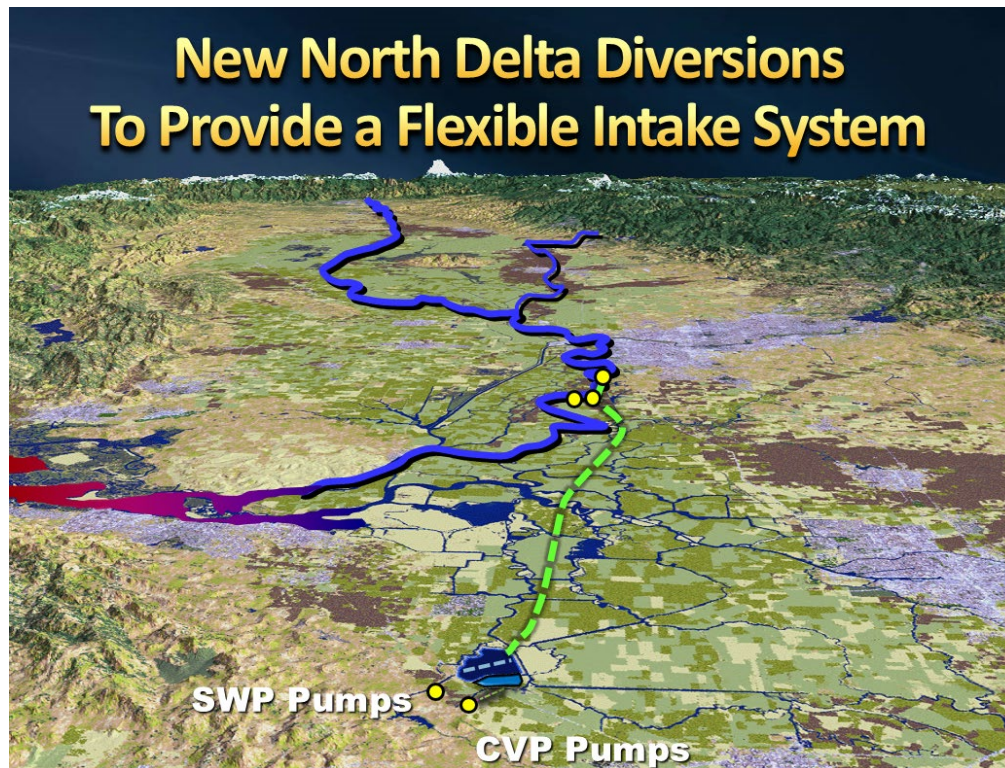


In addition to the increasingly restrictive regulatory environment, the current conveyance relies on a levee system that is vulnerable to earthquakes and other failures, does not easily respond to inner seasonal swings in hydrology projected under climate change, and is not situated to be resilient to sea level rise. DWR estimates that without some form of alternative conveyance to move water around or under the Delta (i.e., tunnel), that the long-term export capabilities of the SWP will be around 48%, down from the current 62%.

### **How Did Cal WaterFix Propose to address those problems?**

Cal Waterfix proposed to construct two 40 foot diameter tunnels underneath the Delta, about 30 miles long, 150 feet underground with a total capacity of 9,000 cubic feet per second (cfs) of capacity. The project would have installed three new intakes on the Sacramento River, which would then flow into the underground tunnels to the existing State and Federal pumps located in the south Delta as shown below.

The use of a dual conveyance system would address some regulatory issues by installing state of the art fish screening techniques; would address levee failure risks by providing an ability to convey water to the export facilities even under conditions where movement through leveed channels could not occur; and would address climate change by providing a second point of diversion for more flexibility, located at a higher elevation than the existing pumps to ensure access to fresh water.



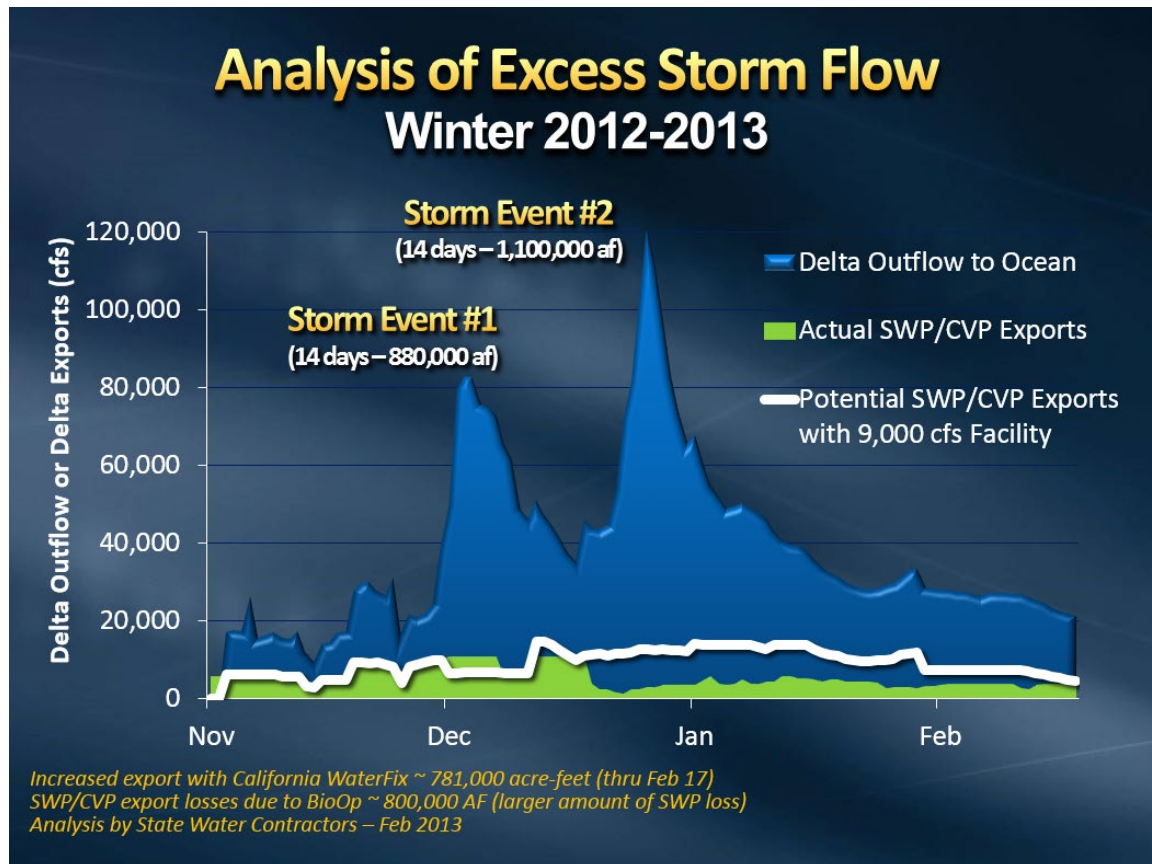
With the Governor's revised direction for Delta Conveyance, it is anticipated that there would be a single tunnel with less capacity, but still moving water under the Delta to the existing SWP pumps in the south Delta.

### **Benefits of Alternative Conveyance**

Again, we do not yet know the scope of the project that DWR will propose, but the prior analysis done under Cal Waterfix provides some idea of the "type" of benefits moving SWP under the Delta could achieve.

### ***Additional Exports During High Flow Events***

One of the benefits of dual conveyance and moving a portion of the SWP water under the Delta as opposed to "through the Delta", is the ability to take "big gulps" of water when there is high flow due to storm activity. The following graph shows an analysis of two storm events in the winter of 2012-13, the amount of flow to the ocean, the actual amount of state and federal project exports and the amount that could have been exported, if Cal Waterfix had been in place, while still meeting the various regulatory protections currently in place. Again, we don't know the benefits a revised DC will provide, but this gives a general idea of the concept.

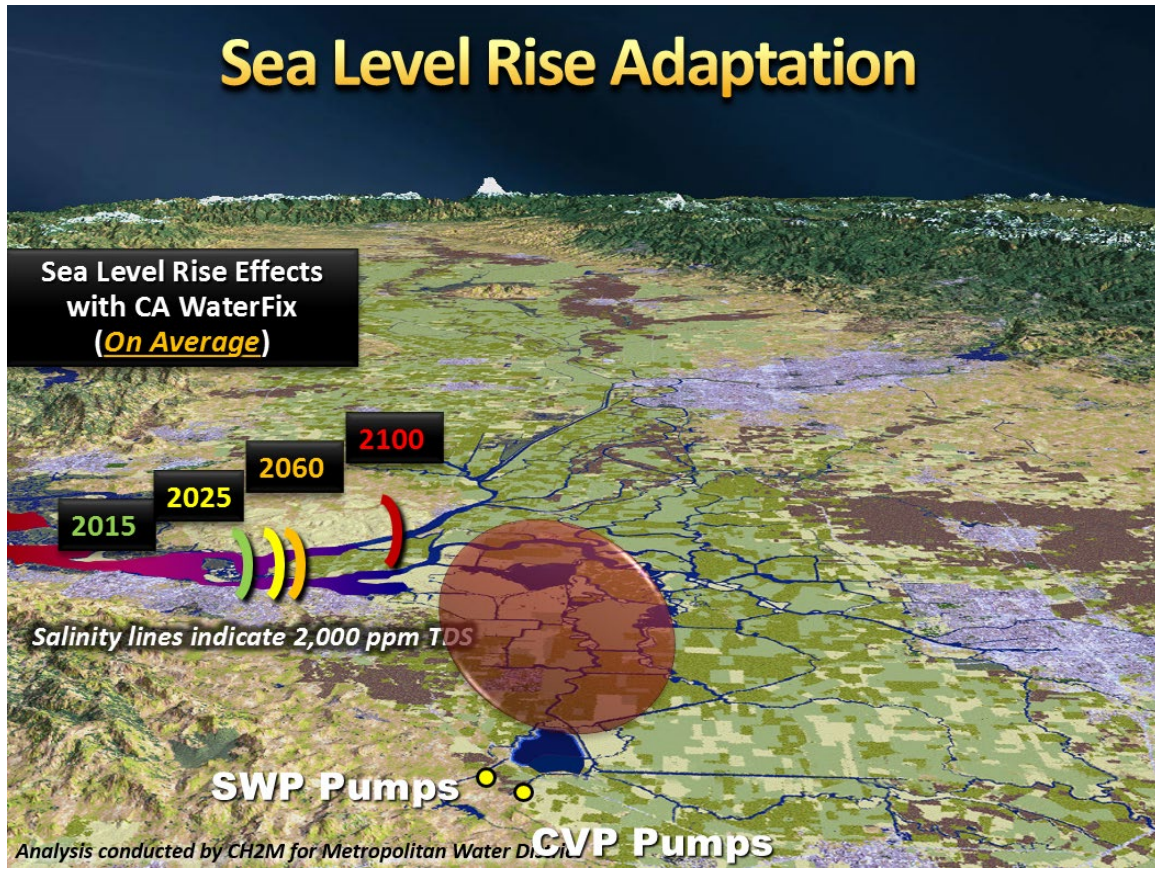


### **Climate Change Risk**

Climate change will have a significant impact on the export capability of the SWP. That's due to:

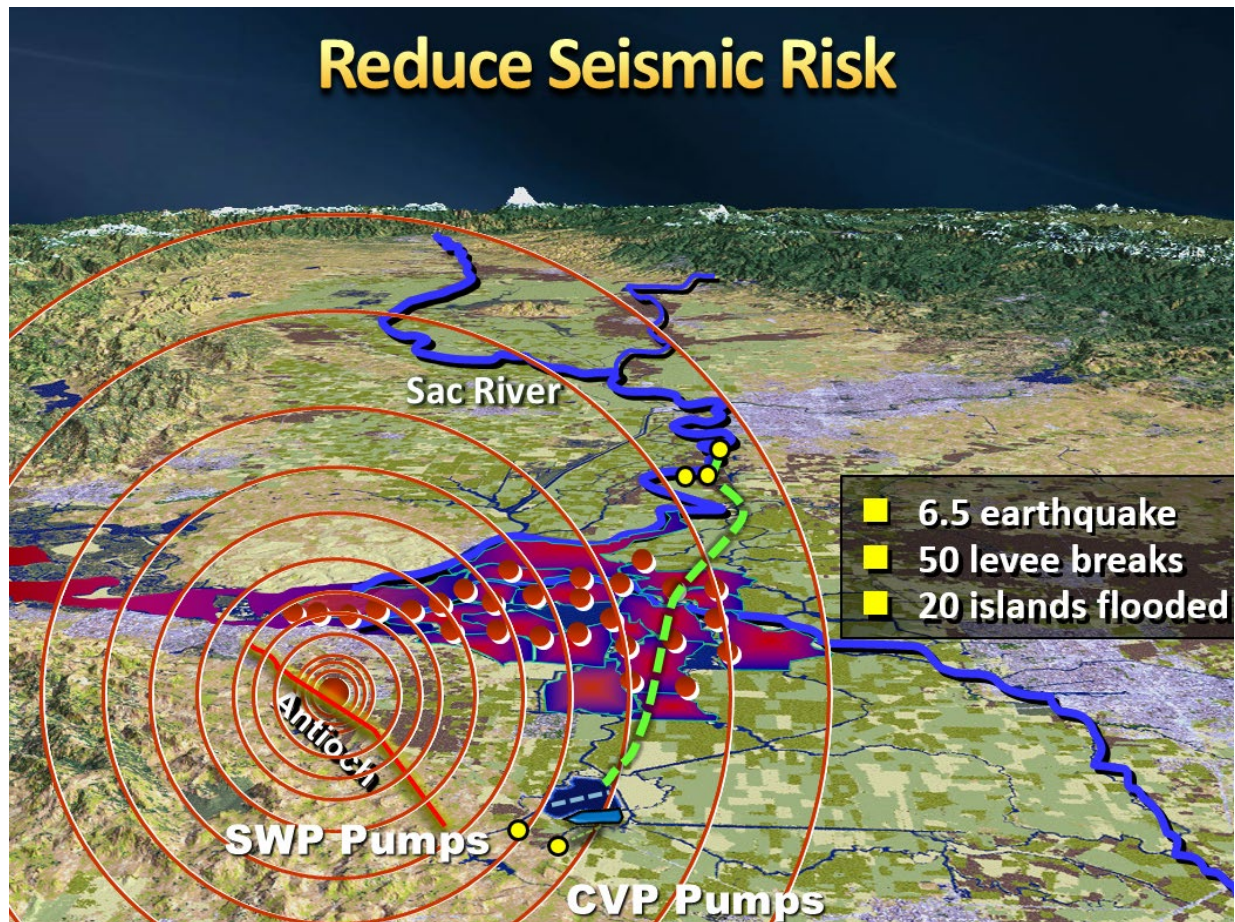
- Sea level rise
- Reduced snowpack
- Changing precipitation patterns
- Changing runoff timing and intensity

The following graphic shows estimates of additional salinity within the Delta due to sea level rise and highlighting the close proximity to the interior of the Delta and the pathway to the pumps.



## **Seismic Risk**

Studies on the impact of seismic risk in the Delta show that there is a 63% probability of a 6.5 magnitude earthquake or greater by the year 2032. The impact of such an earthquake on the ability to deliver SWP through the Delta, is that there is a great potential for significant levee failures within the delta, resulting in the flooding of delta islands and large quantities of seawater rushing in to flood the breached levees and islands. By installing a tunnel underneath the Delta, the seismic risk to water supply is substantially reduced.



### **DWR/SWP Contract Amendment Negotiations**

On July 24, 2019, DWR and the SWP Contractors entered into negotiations to amend the SWP Contract for a single-tunnel DC. While DWR has not yet provided information on the revised DC, it is anticipated that the basic framework for the cost allocation and accounting for benefits can be addressed in an AIP. The negotiations will inform a Notice of Preparation for DC project environmental review.

The following represents the SWP Contractor's initial offer to DWR on July 24, 2019 for the cost-allocation portion of the proposed amendments. Obviously, since this is a negotiation process, this is just a starting point and it may change. However, the following general principles represent the current basis for consideration to be used in deciding to participate in the planning of DC or not (a more detailed version of the SWP Contractor initial offer is attached to this report).

1. "Opt-In" approach: SWP Contractors can either opt-in to the project for their full contracted Table A amount, or opt-out completely.
2. DC is a SWP facility integrated with the existing SWP
3. DC water established as a new type of SWP water
4. DC water and rights to use available capacity allocated to participating SWP Contractors.
5. "Non-Participants" may use available capacity (if any) and pay all associated costs of DC
6. Five north of Delta public water agencies excluded from the DC



7. AIP from contract negotiations to include:
  - a. Description of Opt-In framework
  - b. Schedule of SWP Contractor proposed participation
  - c. Cost accounting principles
  - d. Water accounting/forecasting/administration
  - e. General Operations Principles:
    - i. Delivery priority
    - ii. Use of available capacity in DC
    - iii. Use of San Luis Reservoir
    - iv. Carriage water savings
  - f. Dispute resolution – a description of a dispute resolution process

### **Single Tunnel Delta Conveyance Cost Estimate**

Since we do not yet know the project DWR will propose, we can only use cost estimates that were performed under Cal Waterfix. In the environmental analysis done for Cal Waterfix, a single tunnel, 6,000 cfs facility was analyzed. The following cost estimates are based on estimates provided in that analysis.

#### ***Key Principles***

- Opt In/Out (full Table A or opt out completely)
- May be able to enter into an agreement for a portion of the project from those SWP Contractors opting in (i.e., another SWP Contractor may be willing to transfer a portion of their participating rights in the project if CCWA opts out of the DC)
- Costs follow the water

#### ***Key Financing Assumptions***

- 40-year bond term at 6%
- Construction Costs (\$11 billion cost estimate, with 3% inflation per year over a ten-year construction period resulting in a total construction cost of \$14 billion)
- Estimated average cost per year when operational of about \$1 billion
- CCWA share of the project: 1.09% (Table A contract percentage of 45,486 AF)

#### ***Preliminary Cost Estimate***

The following table shows that CCWA's share of a \$14 billion project would be about \$153 million. Based on an estimated \$1 billion cost per year (includes operations and maintenance costs and repayment of capital costs), CCWA's share would be about \$10.9 million per year, or \$240 per acre-foot (\$10.9 million divided by 45,486 AF).

**PRELIMINARY COST ESTIMATES ONLY**

Construction Cost Estimate	\$14 Billion
(CCWA share of construction Cost \$14 B times 1.09%)	\$ 152,600,000
Bonding Term	40 years
Interest Rate:	6%
Estimated Average Costs per year with O&M	\$1 Billion

<b>CCWA Estimated Annual Costs</b>	<b>\$ 10,900,000</b>
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<b>CCWA Estimated Annual Costs per AF: (1)</b>	<b>\$ 240</b>
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(1) \$10.9M divided by 45,486 AF Table A amount.

**Incremental Water**

Again, not knowing what additional water supply benefits will be provided (and based on the previous Cal Waterfix analysis), if one assumes the long-term reliability of the SWP will continue to decline to around 48% of current contract amounts, and that DC will provide on average, 67%, CCWA could realize an increase in water (incremental water) of 8,459 acre-feet per year above what is projected to occur in the future given the regulatory, climate change, and seismic risks described above. If you divided the \$10.9 million by the additional water supply of 8,459 AF, the additional cost for the incremental water is \$1,289/AF.

**Cost of Additional Reliability from Participating in the Project**

Annual additional Reliability from participating in the conveyance project (acre-feet)	8,459
Est. Annual Cost to CCWA:	\$ 10,900,000

<b>Annual Cost Per Acre-Foot of Additional Reliability</b>	<b>\$ 1,289</b>
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**Additional Planning Costs**

The Delta Conveyance Design and Construction Authority (DCA) is the agency that would design and construct the DC facilities. The DCA will not begin construction until a DC project is defined and has secured necessary permits, but can begin planning and design work that can advance design to better inform the environmental analysis, including defining appropriate mitigation. The DCA has stated it needs an additional \$350 million in planning costs to continue the design of the project. The additional funds will be paid by those SWP Contractors that opt-in to the project and a separate funding agreement will be executed with DWR so that the funds can be collected on the annual Statement of Charges.

If CCWA were to opt-in to the DC, based on the Cal Waterfix analysis, CCWA's share of the \$350 million would be approximately \$3.8 million.

**Summary of Estimated Costs**

The following table shows an estimate of the cost to CCWA by project participant using the criteria listed above.

- Column 1: Shows CCWA’s estimated share of \$14 billion in construction costs
- Column 2: Shows each CCWA project participant’s share of the additional \$350 million in planning costs, should CCWA opt-in to the project.
- Column 3: Shows the estimate by project participant of the annual cost of participating in DC. Based on \$1 billion per year on average to repay the capital costs and annual operations and maintenance costs.
- Column 4: Estimated annual costs (column 3) divided by Table A amount, including drought buffer

**Estimated Cost of Delta Conveyance Project**

Project Participant	Table A Including Drought Buffer		(1)	(2)	(3)	(4)
	Drought Buffer	Percentage	Estimated Total Capital Cost	Additional Planning Costs (\$350M)	Est. Annual Costs of DCP w/O&M	Est. Annual Costs of DCP (\$/AF)
Guadalupe	605	1.33%	\$ 2,029,701	50,743	\$ 144,979	\$ 240
Santa Maria	17,820	39.18%	59,783,934	1,494,598	4,270,281	240
Golden State Water Co.	550	1.21%	1,845,183	46,130	131,799	240
VAFB	6,050	13.30%	20,297,014	507,425	1,449,787	240
Buellton	636	1.40%	2,133,703	53,343	152,407	240
Santa Ynez (Solvang)	1,500	3.30%	5,032,318	125,808	359,451	240
Santa Ynez	700	1.54%	2,348,415	58,710	167,744	240
Goleta	7,450	16.38%	24,993,844	624,846	1,785,275	240
Morehart	220	0.48%	738,073	18,452	52,720	240
La Cumbre	1,100	2.42%	3,690,366	92,259	263,598	240
Raytheon	55	0.12%	184,518	4,613	13,180	240
Santa Barbara	3,300	7.25%	11,071,099	276,777	790,793	240
Montecito	3,300	7.25%	11,071,099	276,777	790,793	240
Carpinteria	2,200	4.84%	7,380,733	184,518	527,195	240
Subtotal	45,486	100.00%	\$ 152,600,000	\$ 3,815,000	\$ 10,900,000	\$ 240

**KEY CONSIDERATIONS**

**Participation Risk**

As stated earlier, CCWA could opt out of DC right now and then determine if any individual CCWA project participants wish to participate in DC and try to enter into a separate transfer agreement with another participating SWP Contractor. However, there are risks to this approach:

- It is anticipated that if an individual SWP Contractor does not approve the AIP shortly after the AIP is developed and agree to provide planning funds, the project that DWR defines and is analyzed will not include participation by such Contractor and they will be assumed to be out of the project

- DWR may size the project for only those SWP Contractors opting in
- Other SWP contractors may not have excess to transfer to CCWA
- Might be a premium to get in later
- If we don't participate now, the primary mechanism to participate later would be through transfer agreements with a participating contractor.
- Participating now (approving an AIP and approving planning funds) only "reserves" our participation until we can review and analyze the actual project DWR will analyze and propose (i.e., the FINAL decision will occur when DWR presents the proposed contract amendments to the SWP Contractors AFTER the full environmental analysis).

### ***Seismic Risk***

If CCWA does not participate in DC and the Delta is not available to convey SWP water, we may not be able to receive SWP water for an extended period of time.

### ***Reliability Risk***

Is 48% long-term reliability for those not participating in the DC realistic? If it is, can individual CCWA project participants live with a continued decline in the long-term reliability of the SWP?

### **DWR Requests of Individual SWP Contractors**

We anticipate DWR requesting each SWP Contractor to do the following:

1. At the conclusion of the contract amendment negotiations, take an action on the Agreements in Principle (AIP) indicating whether they approve the AIP and if they are electing to participate in DC.
2. If the SWP Contractor is electing to participate in DC, sign a funding agreement for their allocated share of the additional \$350 million in planning costs.

### **CCWA Project Participant and Board Decisions**

1. CCWA will share with all CCWA project participants the AIP and any other pertinent information developed over the course of the negotiation as it is developed.
2. CCWA is asking each CCWA project participant to consider their position on participating in DC. This includes those project participants that are not represented on the CCWA Board of Directors, as shown below:
  - La Cumbre Mutual Water Company
  - Vandenberg Air Force Base
  - Golden State Water Company
  - Morehart Land Company
  - Raytheon Systems, Inc.

For the project participants listed above, please communicate your participation interest to Ray Stokes before September 26, 2019 at [ras@ccwa.com](mailto:ras@ccwa.com)

For CCWA member agencies represented on the Board of Directors, your participation decisions will be made at the Board meeting.

3. The CCWA Board of Directors will vote to consider CCWA participation in DC at its meeting on September 26, 2019 (note: This date might get pushed to the October 24, 2019 meeting if the SWP contract amendment negotiations extend beyond August 2019).
4. Following the vote by the CCWA Board of Directors, CCWA will communicate its decision to the Santa Barbara County Flood Control and Water Conservation District (SB County), as the contracting agency with DWR.

If you have any questions regarding this information, please contact Ray Stokes at (805) 697-5214 or [ras@ccwa.com](mailto:ras@ccwa.com)

RAS

Attachment



## Delta Conveyance Project Update

CCWA Board of Directors Meeting  
July 25, 2019

1

## Presentation Outline

- What problems is Delta Conveyance trying to address?
- How did Cal WaterFix propose to address these problems?
- Governor's revised delta conveyance proposal
- DWR/SWP Contractor Contract Amendment Negotiations
- Cost estimates and reliability benefits
- Participation decision by CCWA
- Timeline and next steps

2

## What Problems is Delta Conveyance Trying to Address?

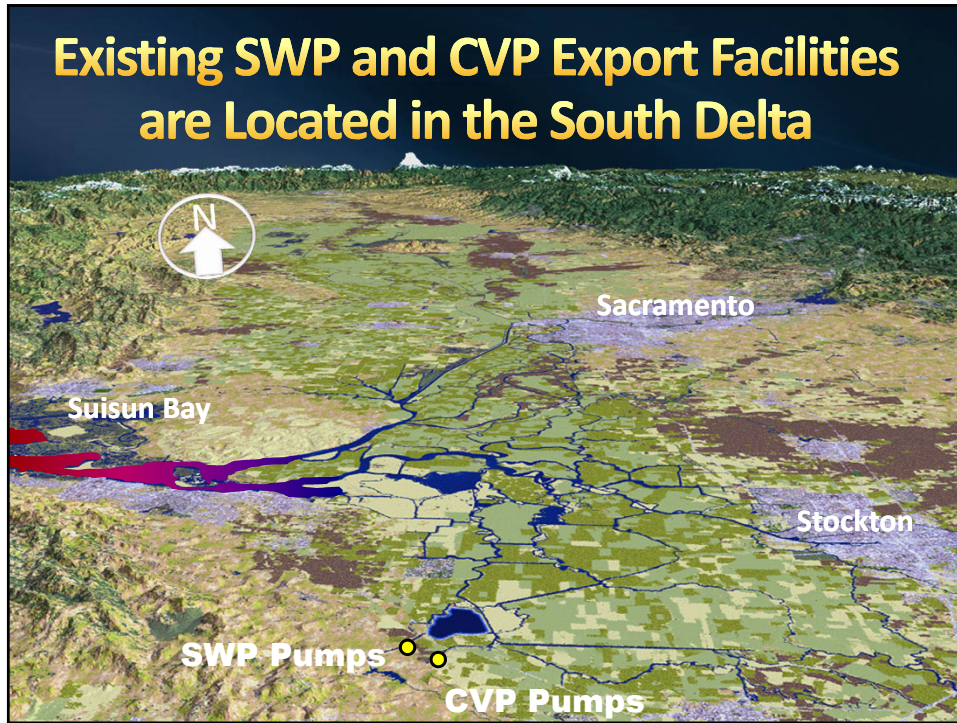
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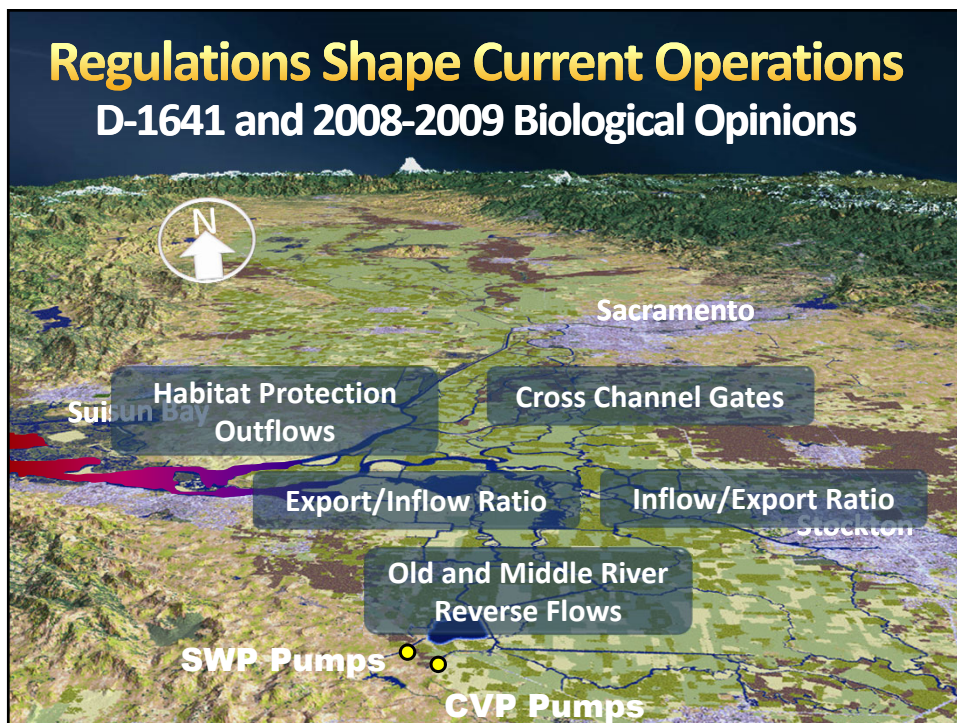


## Regulations Which Affect Current Project Operations

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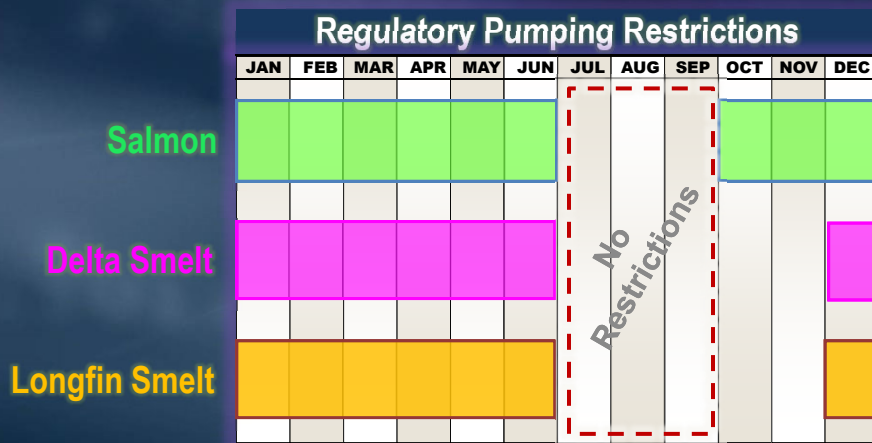
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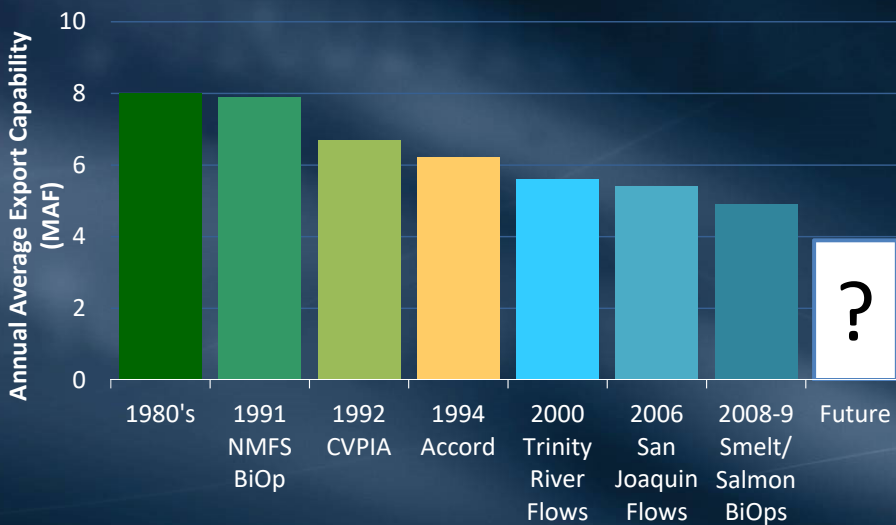


## Regulatory Approach has Reduced SWP-CVP Flexibility

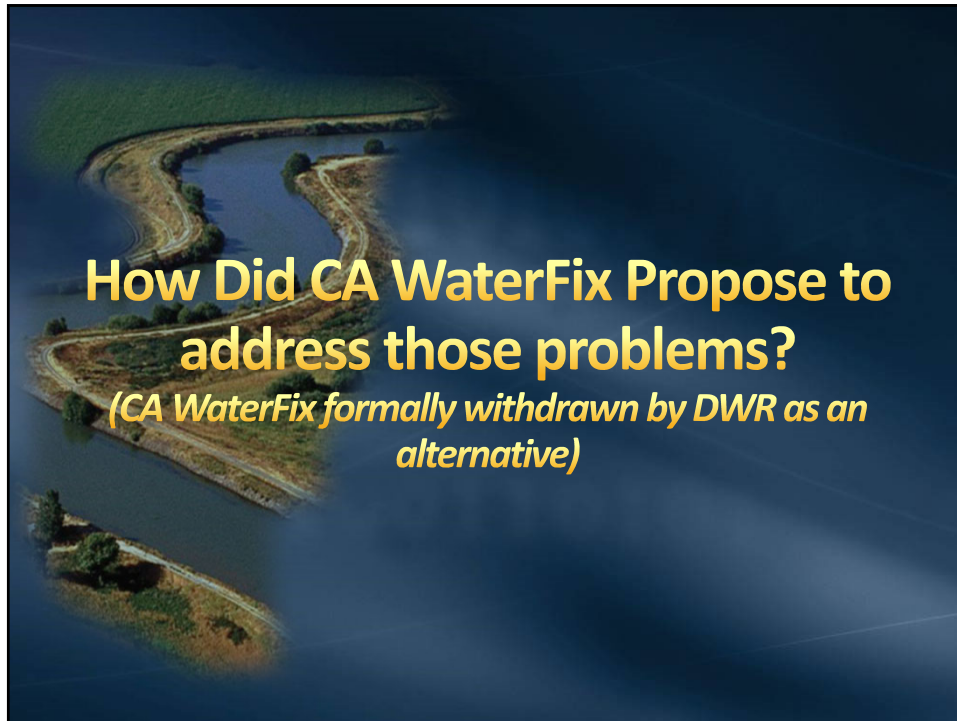


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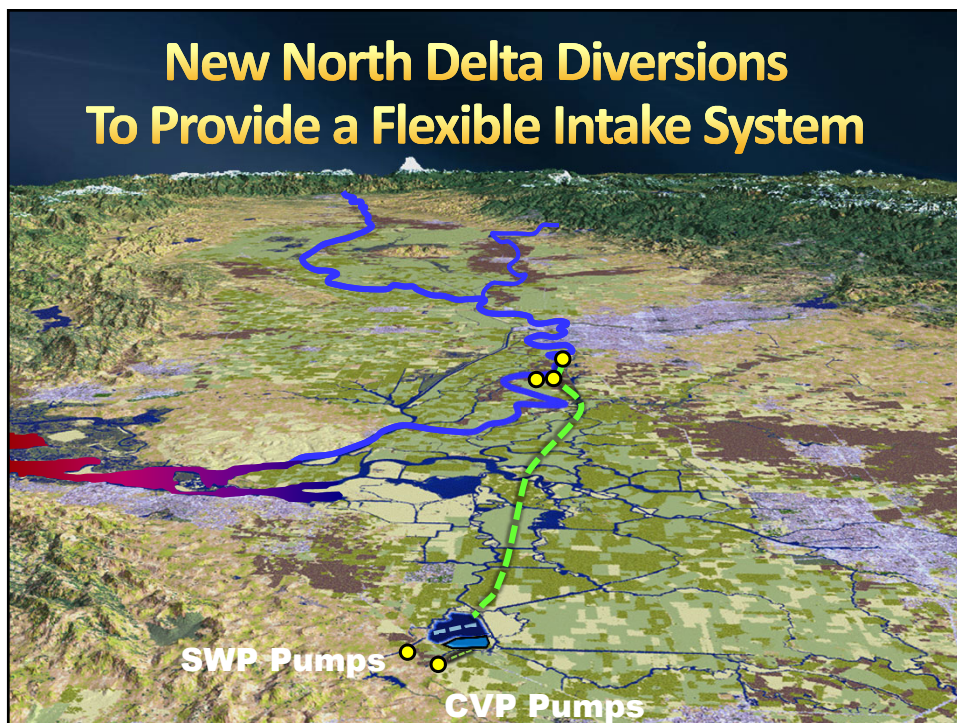
## SWP-CVP Export Capability Has Declined Due to Regulations



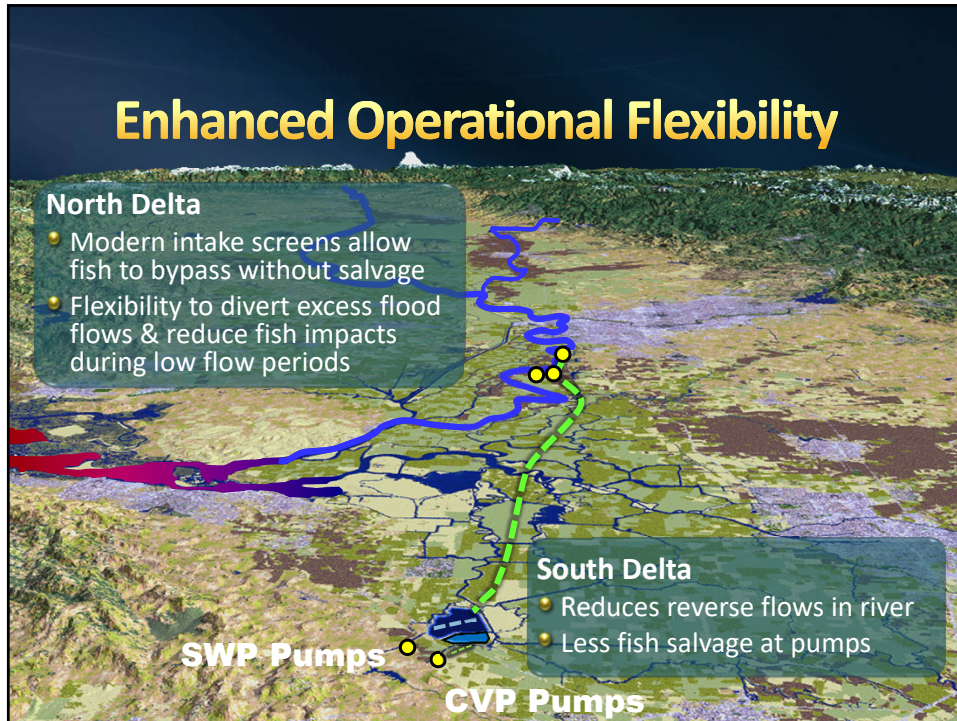
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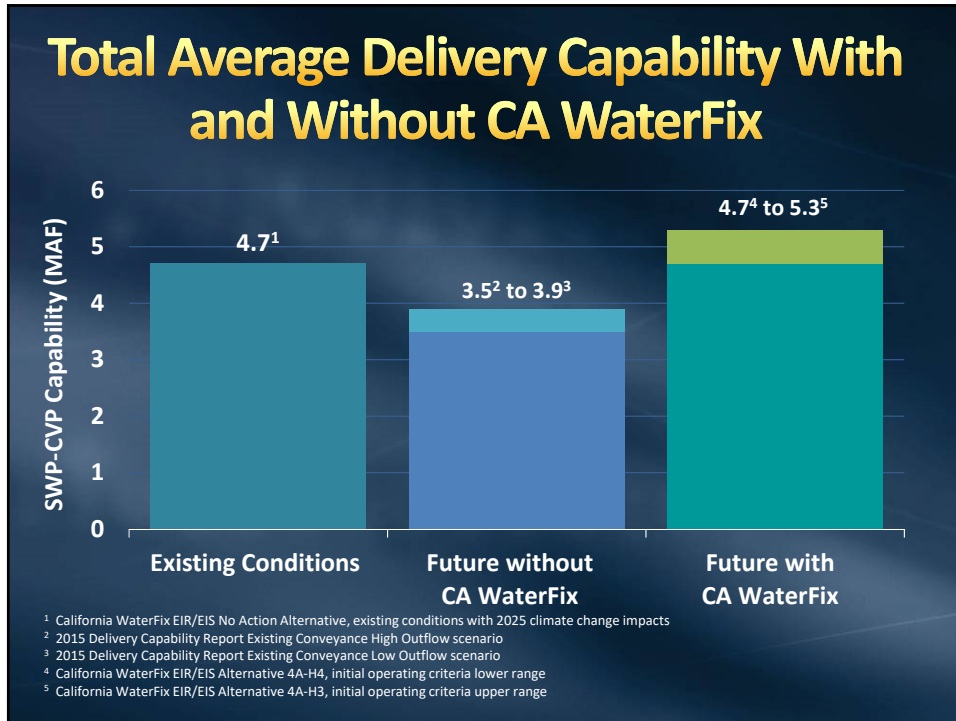
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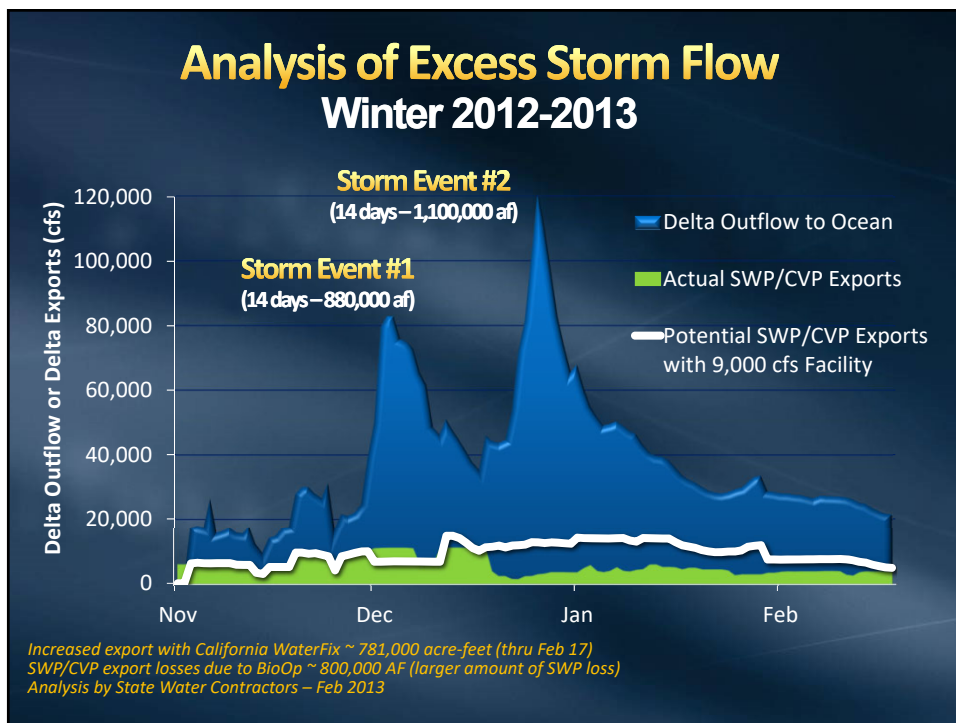
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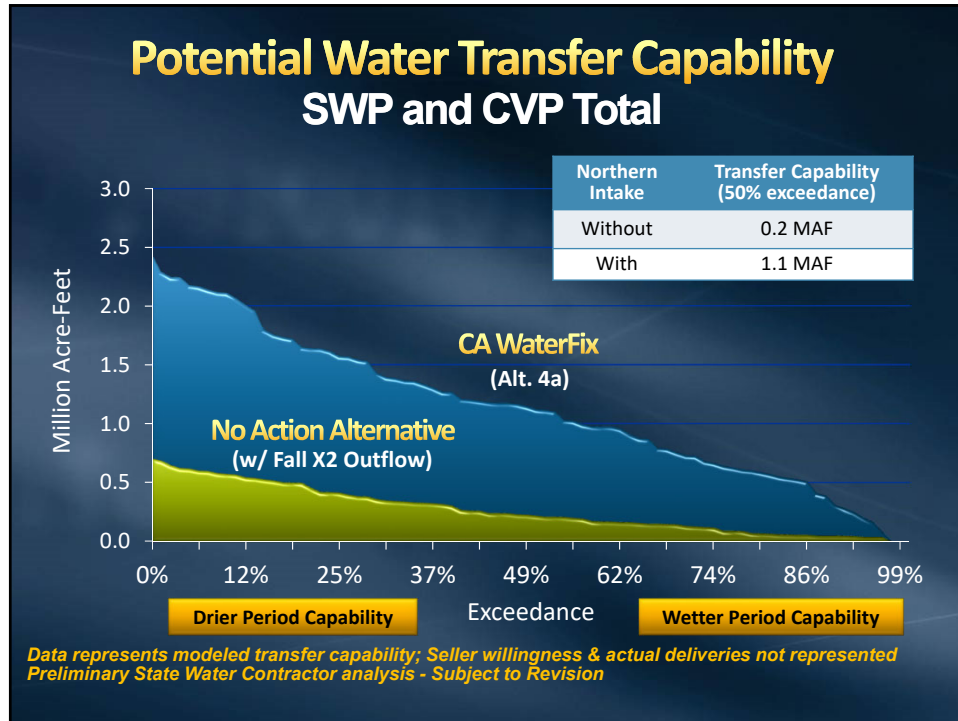
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## Reduce Climate Change Risks

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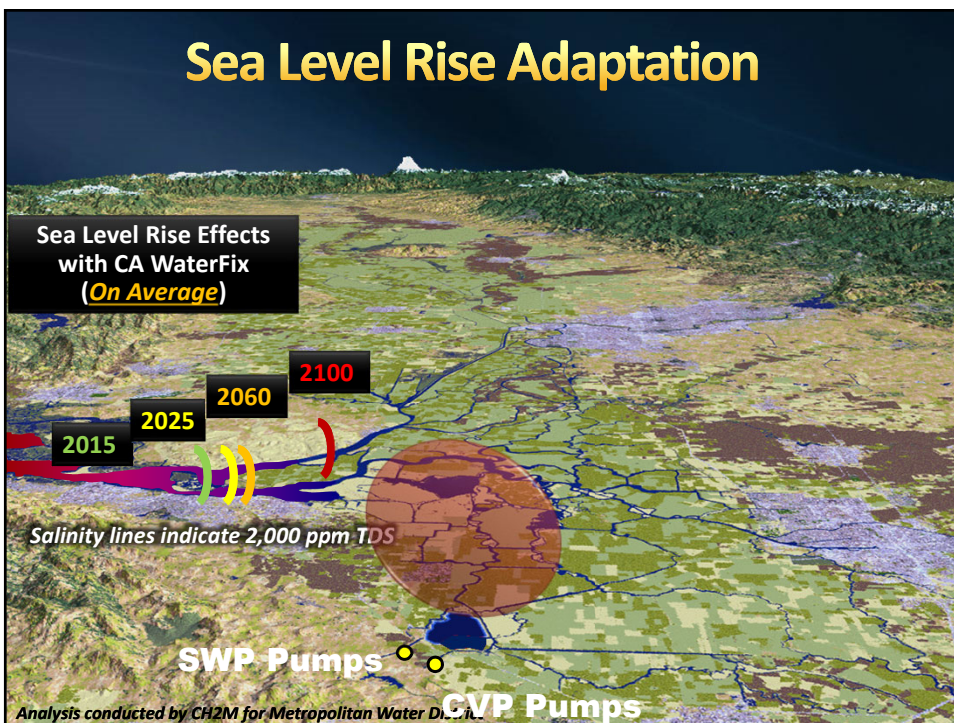
## Climate Change Risk

- Sea Level Rise
- Reduced Snowpack
- Changing Precipitation Patterns
- Changing Runoff Timing and Intensity

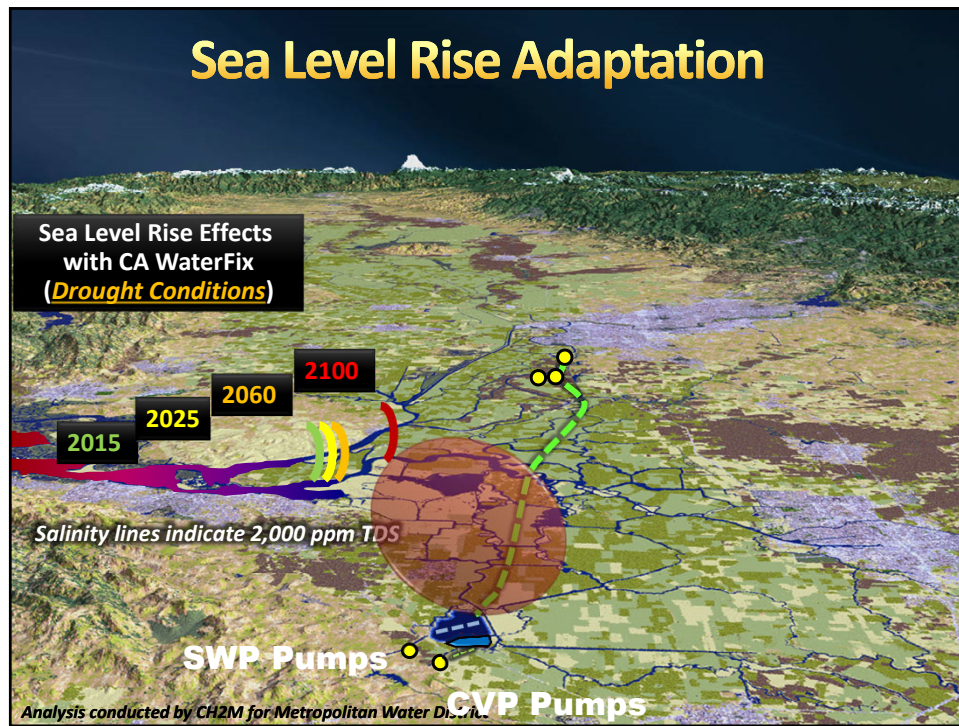


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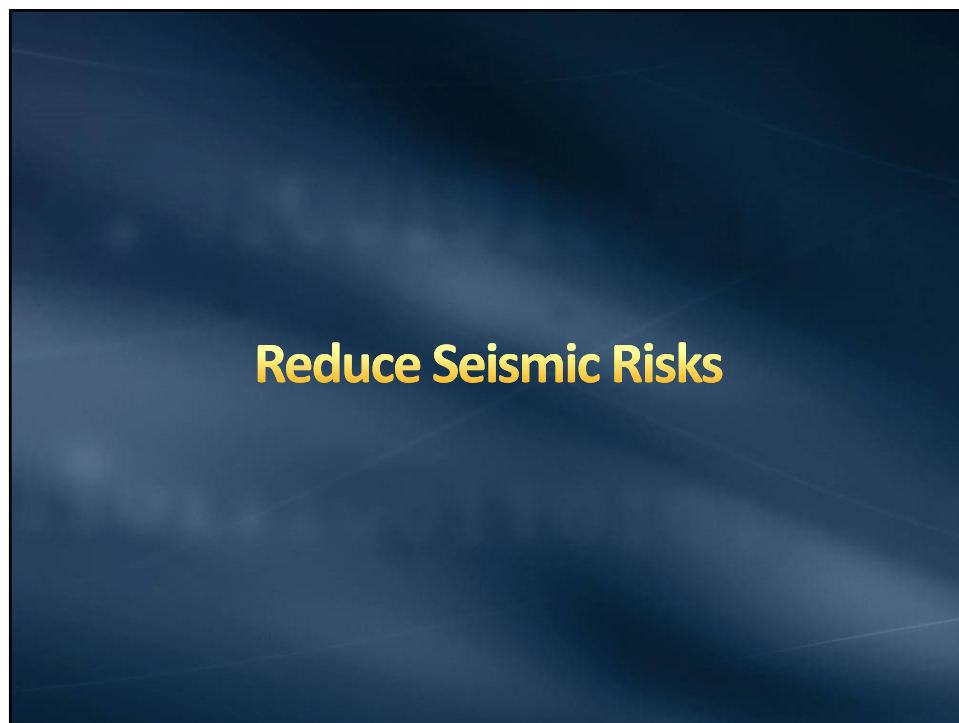
## Sea Level Rise Adaptation



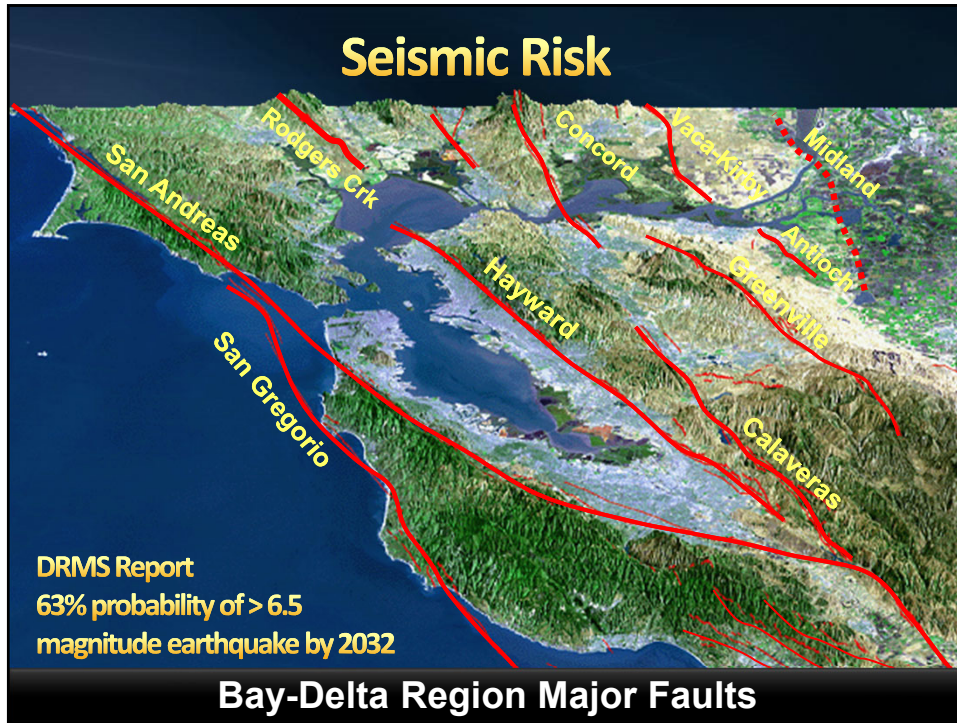
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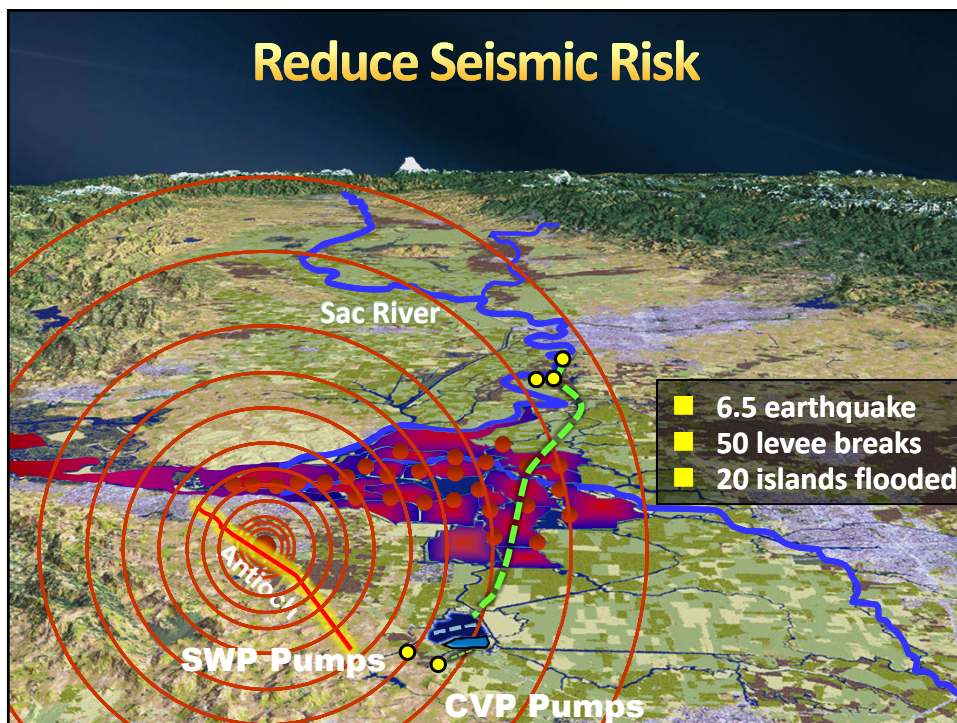
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## Governor's Revised Delta Conveyance Proposal

- May 2, 2019: DWR begins to withdraw proposed permits for WaterFix and begin planning for a smaller, single tunnel
  - Rescind permitting applications from the State Water Resources Control Board, CA Dept. of Fish and Wildlife and federal agencies responsible for ESA
- DWR currently working on a Notice of Preparation for a proposed single tunnel project (6,000 cfs?)

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## DWR and State Water Project Contractors Delta Conveyance Contract Amendment

24

## SWC Initial Offer to DWR-July 24, 2019

- “Opt-In’ approach
  - Full Table A amount OR
  - Opt out completely
- DCP a SWP facility integrated with existing SWP
- DCP water established as a new type of SWP water
- DCP water and rights to use available capacity allocated to participating SWP Contractors
- “Non-Participants” may use available capacity (if any) and pay all associated costs of DCP

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## SWC Initial Offer to DWR-July 24, 2019

- Five north of Delta Public Water Agencies (PWA’s) excluded from the DCP
- Agreements in Principle from contract negotiations to include:
  - Definition of proposed project to include:
    - Project objectives
    - Capacity
    - General configuration (alignment, intakes, etc.)
  - Description of Opt-In framework
  - Schedule of PWA participation
  - Cost accounting principles
  - Water accounting/forecasting/administration

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## SWC Initial Offer to DWR-July 24, 2019

- Agreements in Principle from contract negotiations to include (continued):
  - **General Operations Principles:**
    - Delivery priority
    - Use of available capacity in the DCP
    - Use of San Luis Reservoir
    - Carriage water savings
  - **Dispute resolution-description of a dispute resolution process**

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## Single Tunnel Delta Conveyance Project Estimated Costs

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## Single-Tunnel 6,000 cfs Cost Estimates

*(For illustration purposes only)*

- Key Principles
  - Opt In/Out (full Table A or Opt out completely)
  - May be able to enter into an agreement for a portion of the project from those opting in
  - Costs Follow Water
- Key Financing Assumptions
  - 40-year bond term at 6%
  - Construction Costs (\$11B, with inflation \$14B, 3% over ten years)
  - Estimated Average Cost per year with O&M: \$1B

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## Single-Tunnel 6,000 cfs Cost Allocation Estimates

*(For illustration purposes only)*

- Key Cost Allocation Assumptions
  - SWP Only (excludes 5 north of Delta contractors)
  - No SWP Agricultural Contractors
  - CCWA share of project: 1.09% (Table A percentage)

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# Illustration of CCWA Estimated Delta Conveyance Costs

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## Illustration of CCWA's Estimated Delta Conveyance Project Costs

<b>PRELIMINARY COST ESTIMATES ONLY</b>	
Construction Cost Estimate	\$14 Billion
<i>(CCWA share of construction Cost</i>	
<i>\$14 B times 1.09%)</i>	
Bonding Term	40 years
Interest Rate:	6%
Estimated Average Costs per year with O&M	\$1 Billion
<b>CCWA Estimated Annual Costs</b>	<b>\$ 10,900,000</b>
<b>CCWA Estimated Annual Costs per AF: (1)</b>	<b>\$ 240</b>

*(1) \$10.9M divided by 45,486 AF Table A amount.*

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## Illustration of CCWA's Estimated Additional Water Supply and Cost/AF

<i>Cost of Additional Reliability from Participating in the Project</i>	
Annual additional Reliability from participating in the conveyance project (acre-feet)	8,459
Est. Annual Cost to CCWA:	\$ 10,900,000
<b>Annual Cost Per Acre-Foot of Additional Reliability</b>	<b>\$ 1,289</b>

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## Other Financing and Cost Issues and Possible Decisions

34

## Additional Planning Costs

- Delta Conveyance Design and Construction Authority (DCA) requesting an additional \$350M to continue design of the project.
  - Based on CCWA's estimated current share of the project at 1.09%, CCWA's share of the additional planning costs would be approximately \$3.8M
  - Note: Participation percentages are estimates only

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## Potential CCWA Participation/Actions

- Participate in Delta Conveyance Project?
  - Opt in to the project completely (full Table A) and then attempt to enter into a side agreement with another SWP Contractor for that portion not needed/wanted?
  - Opt out of the project completely and then enter into a participation agreement with another SWP Contractor for a smaller share of the project?

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## Key Considerations Regarding Participation Decision

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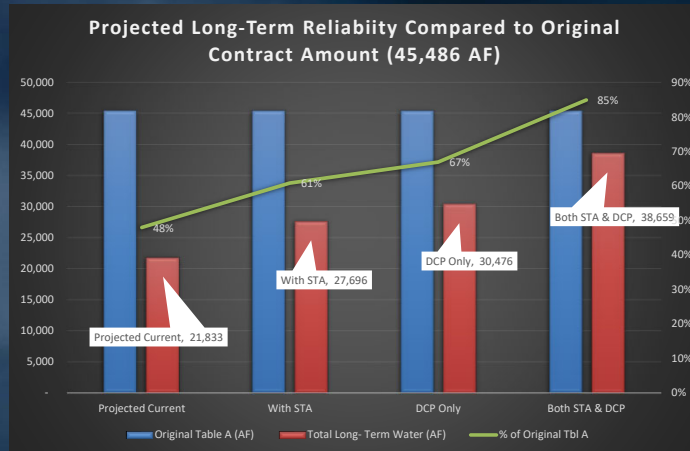
### Long-Term Reliability

- The current DWR long-term reliability projections are around 62% of contract Table A amounts
- DWR projects that without an alternative conveyance facilities such as DCP, the long-term reliability of the SWP will continue to decline to around 48%
- DCP participants would see an increase in the long-term reliability, perhaps around 67% (estimate only)

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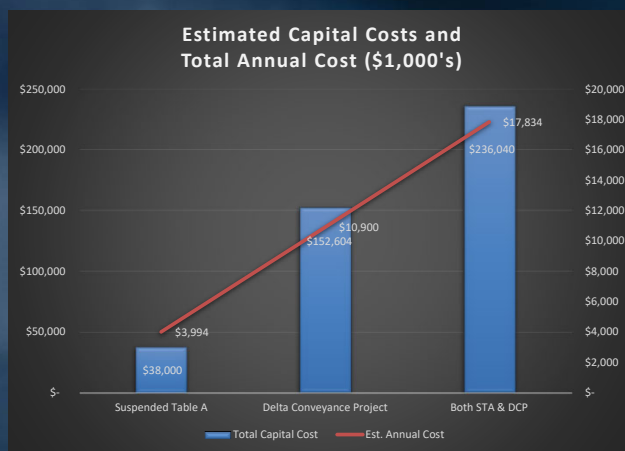
## Improving Long-Term Reliability Suspended Table A (STA) Reacquisition and DCP Project



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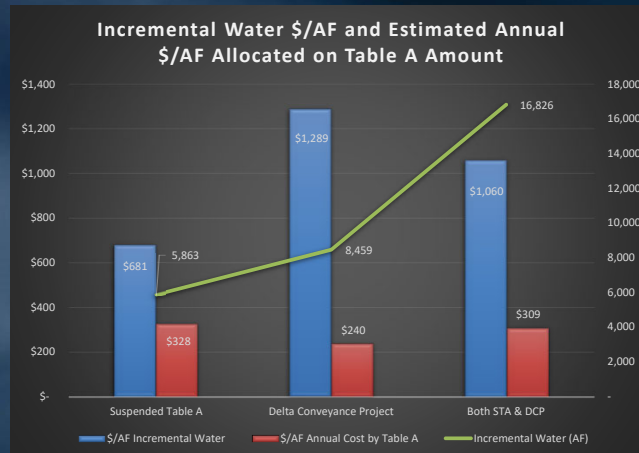
## Capital Costs Comparison Suspended Table A (STA) Reacquisition and DCP Project



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## Incremental Water Cost Suspended Table A (STA) Reacquisition and DCP Project



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## Other Considerations

- **Seismic risk**
  - If we don't participate and the Delta is not available to convey SWP water, we may not be able to receive water for an extended period of time
- **Continued decline in the long-term reliability of the SWP**
  - Is 48% long-term reliability for non-participants realistic?
- **Opt-Out with Side Agreement Risk**
  - DWR may size the project for only those opting in
  - Other SWP contractors may not have excess to "sell" to CCWA
  - Might be a premium to get in later

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## Timeline and Next Steps

- DWR requesting participation decisions from the SWP Contractors by the end of September 2019
- CCWA Project Participants and Members
  - Individual consideration over the next two months?
- CCWA Board decision at the September 26, 2019 Board meeting
  - Letter to Santa Barbara County FCWCD and DWR regarding CCWA's decision immediately after the September 26, 2019 Board meeting.
- Post September 2019 (over the next year or two)
  - Individual project participants request side agreement to participate in the project?

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Questions?

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