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**From:** [sunshine@snugharbor.net](mailto:sunshine@snugharbor.net) [mailto:[sunshine@snugharbor.net](mailto:sunshine@snugharbor.net)]

**Sent:** Monday, August 22, 2016 11:31 AM

**To:** CWFhearing

**Cc:** [abl@bkslawfirm.com](mailto:abl@bkslawfirm.com); [aferguson@somachlaw.com](mailto:aferguson@somachlaw.com); [ahitchings@somachlaw.com](mailto:ahitchings@somachlaw.com); [amy.aufdemberge@sol.doi.gov](mailto:amy.aufdemberge@sol.doi.gov); [apeltzer@prlawcorp.com](mailto:apeltzer@prlawcorp.com); [awearn@nrdc.org](mailto:awearn@nrdc.org); [barbara@restorethedelta.org](mailto:barbara@restorethedelta.org); [barbarav@aqualliance.net](mailto:barbarav@aqualliance.net); [barry@solagra.com](mailto:barry@solagra.com); [bdalymn@citlink.net](mailto:bdalymn@citlink.net); [bjohnson@tu.org](mailto:bjohnson@tu.org); [blancapaloma@msn.com](mailto:blancapaloma@msn.com); [bobker@bay.org](mailto:bobker@bay.org); [bradpappa@gmail.com](mailto:bradpappa@gmail.com); [brettgbaker@gmail.com](mailto:brettgbaker@gmail.com); [bwright@friendsoftheriver.org](mailto:bwright@friendsoftheriver.org); Wilcox, Carl@Wildlife; [caroleekrieger7@gmail.com](mailto:caroleekrieger7@gmail.com); [colin@ejcw.org](mailto:colin@ejcw.org); [connere@gmail.com](mailto:connere@gmail.com); CWFhearing; [daladjem@downeybrand.com](mailto:daladjem@downeybrand.com); [daniel@kaydix.com](mailto:daniel@kaydix.com); [dcooper@minasianlaw.com](mailto:dcooper@minasianlaw.com); [dcoty@bpmnj.com](mailto:dcoty@bpmnj.com); [ddj@cah2oresearch.com](mailto:ddj@cah2oresearch.com); [dean@hprlaw.net](mailto:dean@hprlaw.net); [deltaactioncommittee@gmail.com](mailto:deltaactioncommittee@gmail.com); [deltakeep@me.com](mailto:deltakeep@me.com); [dkelly@pcwa.net](mailto:dkelly@pcwa.net); [dobegi@nrdc.org](mailto:dobegi@nrdc.org); [dohanlon@kmtg.com](mailto:dohanlon@kmtg.com); [dorth@davidorthconsulting.com](mailto:dorth@davidorthconsulting.com); [empappa@gmail.com](mailto:empappa@gmail.com); [evielma@cafecoop.org](mailto:evielma@cafecoop.org); [fetherid@ebmud.com](mailto:fetherid@ebmud.com); [fmorrissey@orangecoveid.org](mailto:fmorrissey@orangecoveid.org); [friendsofsfestuary@gmail.com](mailto:friendsofsfestuary@gmail.com); [gadams@fclaw.com](mailto:gadams@fclaw.com); [info@californiadelta.org](mailto:info@californiadelta.org); Mizell, James@DWR; [jailin@awattorneys.com](mailto:jailin@awattorneys.com); [jtb@bkslawfirm.com](mailto:jtb@bkslawfirm.com); [jconway@rd800.org](mailto:jconway@rd800.org); [jfox@awattorneys.com](mailto:jfox@awattorneys.com); [jennifer@spalettalaw.com](mailto:jennifer@spalettalaw.com); Herrick, John@aol.com; Minton, Jonas; [john.luebberke@stocktonca.gov](mailto:john.luebberke@stocktonca.gov); Rubin, Jon@sldmwa.org; [jph@tulareid.org](mailto:jph@tulareid.org); [jrobinson@cityofsacramento.org](mailto:jrobinson@cityofsacramento.org); [jsagwomack@gmail.com](mailto:jsagwomack@gmail.com); [jsalmon@ebmud.com](mailto:jsalmon@ebmud.com); [jvolker@volkerlaw.com](mailto:jvolker@volkerlaw.com); [kelweg1@aol.com](mailto:kelweg1@aol.com); [kharrigfeld@herumcrabtree.com](mailto:kharrigfeld@herumcrabtree.com); [kobrien@downeybrand.com](mailto:kobrien@downeybrand.com); [kpoole@nrdc.org](mailto:kpoole@nrdc.org); [ktaber@somachlaw.com](mailto:ktaber@somachlaw.com); [kyle.jones@sierraclub.org](mailto:kyle.jones@sierraclub.org); [lcaster@fclaw.com](mailto:lcaster@fclaw.com)

**Subject:** California Waterfix Hearing-Snug Harbor Resorts, LLC (SHR) document SHR-101

Attached please find the document introduced by SHR for cross-examination of the General Overview panel, labeled SHR-101. Due to the size of documents, there will be four emails today from me, each one containing different attachments. Half of the list serve is sent at a time. This email serves emails A through K.

NICOLE S. SUARD, Esq.  
Managing Member, Snug Harbor Resorts, LLC  
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Mail address for Nicole S. Suard, Esq  
1155 Trancas St.  
Napa, CA 94558

email: [sunshine@snugharbor.net](mailto:sunshine@snugharbor.net)  
Phone for messages and fax: 707-253-8232

**STATEMENT OF SERVICE**

**CALIFORNIA WATERFIX PETITION HEARING  
Department of Water Resources and U.S. Bureau of Reclamation (Petitioners)**

I hereby certify that I have this day submitted to the State Water Resources Control Board and caused a true and correct copy of the following document(s):

[SHR-101 Slide set of questions for Part 1, General Overview]

to be served **by Electronic Mail** (email) upon the parties listed in Table 1 of the **Current Service List** for the California WaterFix Petition Hearing, dated 8-8-2016, posted by the State Water Resources Control Board on 8-16-2016 at

[http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/bay\\_delta/california\\_waterfix/service\\_list.shtml](http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/service_list.shtml):

*Note: In the event that any emails to any parties on the Current Service List are undeliverable, you must attempt to effectuate service using another method of service, if necessary, and submit another statement of service that describes any changes to the date and method of service for those parties.*

	<b>Petitioners Only:</b>
	I caused a true and correct <b>hard copy</b> of the document(s) to be served by the following method of service to Suzanne Womack & Sheldon Moore, Clifton Court, L.P., 3619 Land Park Drive, Sacramento, CA 95818:
	<b>Method of Service:</b> _____

Date

I certify that the foregoing is true and correct and that this document was executed on 8-22-2016

Signature: 

Name: Nicole S. Suard, Esq.

Title: Managing Member

Party/Affiliation: Address: Snug Harbor Resorts, LLC  
3356 Snug Harbor Drive (Ryer Island, Solano County)  
Walnut Grove, CA 95690

916-775-1455 FAX 707-253-8232

Snug Harbor Resorts, LLC

Questions for presenters: 8-4-16 re: general overview of project

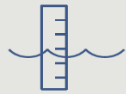
Slides to be used as reference during questioning come from  
DWR-1 and other official DWR/BDCP/WaterFix documents found online

Nicole S Suard, Esq, Managing Member, Snug Harbor Resorts, LLC



# TESTIMONY OVERVIEW

Modeling testimony will provide detail regarding the assumptions and modeling results completed for the boundary analysis:



Water Levels



Water Supply



Water Quality



Reservoir Storage

## Focus areas for Delta Impact analysis: “What’s changing”- boundary analysis

- Water quality in the Delta\*
- Water flow for supply outside the Delta
- Water levels
- Timing

## Focus areas for the Delta impact analysis:

- water quantity *left* flowing through the North Delta natural channels
- water (flow) rate
- water (flow) timing
- upstream operations of SWP/CVP and its contractors
- purpose of (water) use under the existing permits



# WHAT ISN'T CHANGING



Upstream operations of SWP/CVP

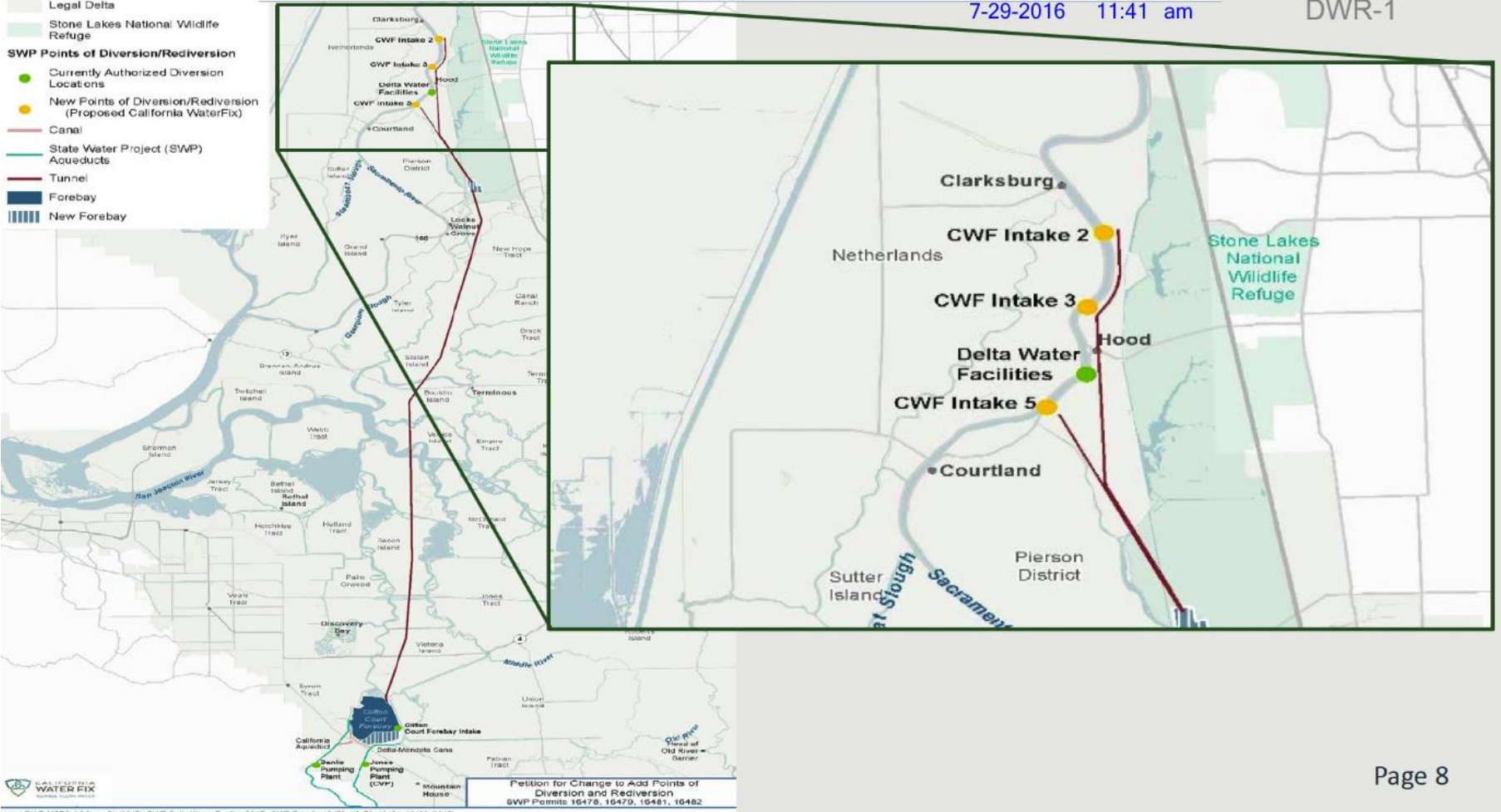


Water contractor service areas



No change to quantity, rate, timing, place or purpose of use under the existing permits

- Head of Old River Barrier
- Legal Delta
- Stone Lakes National Wildlife Refuge
- SWP Points of Diversion/Rediversion**
- Currently Authorized Diversion Locations
- New Points of Diversion/Rediversion (Proposed California WaterFix)
- Canal
- State Water Project (SWP) Aqueducts
- Tunnel
- Forebay
- New Forebay



Petition for Change to Add Points of Diversion and Rediversion SWP Points 16478, 16479, 16481, 16482

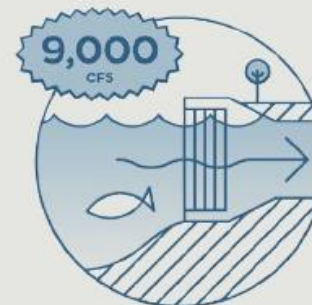
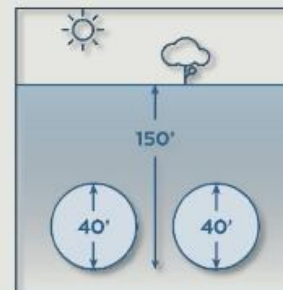
“No injury to legal water rights users”

[http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/bay\\_delta/california\\_waterfix/exhibits/docs/petitioners\\_exhibit/dwr/dwr\\_1.pdf](http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/dwr/dwr_1.pdf)



## PHYSICAL COMPONENTS OF THE PROJECT

- 2 tunnels up to 150' below ground designed to protect California's water supplies
- 3 new intakes, each with 3,000 cubic-feet per second (cfs) capacity. **Average annual yield of 4.9 million acre-feet**



1. 1 cfs = 1.98 acre feet per day estimated.  $9000 \text{ cfs} \times 1.98 = 17,820 \text{ af per day}$ , which equals 6,504,300 acre feet per year, so why the average yield of 4.9 million acre-feet? Does it take diversion of 6.5 maf to deliver 4.9 maf?
2. Will there be overflow or pressure relief valves and if so where does that water go? Is MAXIMUM capacity for each intake 3000 cfs or is each designed to be adaptable to accept extra capacity? What is the diameter of each smaller tunnel or pipes, and the total number of tunnels or pipes, from each intake structure to the 40 foot tunnels?
3. Will those smaller tunnels or pipes be located at the bottom of the river, mid-river or near the surface?
4. What is the capacity of each 40 foot tunnel? In cfs and in acre feet?

22 My testimony presents information relevant to water rights issues covered in Part 1  
23 of this hearing. In the California WaterFix (CWF) Petition for Change, DWR proposes to  
24 add three new points of diversion to four SWP water right permits that would allow for the  
25 CWF. (Exhibits SWRCB-1; SWRCB-2.) The purpose of my testimony is to explain DWR's  
26 water right permits for the SWP and how the CWF will be operated consistent with these  
27 permits, that the proposed project does not change the diversion rate or season of use  
28 \_\_\_\_\_  
<sup>1</sup> Exhibit DWR-19 is a true and correct copy of the document.

2  
TESTIMONY OF MAUREEN SERGENT

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DWR-53

1 permitted under the permits, and how the information provided by DWR supports a  
2 conclusion by the State Water Board that the new points of diversion will not injure other  
3 legal users of water or in effect initiate a new water right<sup>2</sup> and to provide a general overview  
4 of DWR water supply and settlement agreements.

1. It appears from DWR-1 and DWR-53 that petitioners claim to be diverting 6,504,300 acre feet per year of Sacramento River water *already*, so what year did you start taking Sacramento River water at that volume? For the water flow modeling, was the baseline diversion rate 6,504,3000 acre feet from the Sacramento River, and if not, how many acre feet? For example, as a comparison, how much Sacramento River water was diverted in 2000, 2005, 2010 and 2014?
2. How much water was exported from the whole Delta, in acre feet in 2015?

Below is a screen print\* from the “Delta Water Balance Estimate” in thousands of acre feet, from the final version of the California Water Plan Update 2013 showing how much Sacramento River Inflow, outflow and the EXPORTS to State Water Project and Central Valley Project. In none of those years do we see 6.5 million acre feet of export or diversion from the Sacramento River, so how can DWR/USBR claim there is no change to QUANTITY of diversion from the Sacramento River? From 2011 to 2015 how much Sacramento River water has been diverted, by year?

[http://www.waterplan.water.ca.gov/docs/cwpu2013/ae/water\\_portfolio-inflow\\_outflow\\_delta.pdf](http://www.waterplan.water.ca.gov/docs/cwpu2013/ae/water_portfolio-inflow_outflow_delta.pdf)

Delta Water Balance Estimates <sup>1</sup> (TAF)													
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sacramento River Inflow	29015	21770	18360	10517	13104	18304	17129	16747	20039	11010	9557	9867	12777
Yolo Bypass Inflow	8996	1635	2961	366	708	1122	3121	707	13034	248	417	317	659
Eastside Tributaries Inflow	2096	1399	1078	372	462	534	445	1173	9679	1979	n	1231	2461
San Joaquin River Inflow	8456	3568	2846	1732	1396	1365	1373	3777	7341	1596	1234	865	1829
North Bay Aqueduct Exports	39	37	47	45	47	42	52	48	43	61	55	46	43
Contra Costa Water District Diversions at Rock Slough and Old River	160	133	125	104	121	138	120	119	116	112	135	107	94
State Water Project Exports at Banks Pumping Plant or Clifton Court Intake	2134	2439	3692	2635	2900	3458	3251	3625	3527	2954	1527	1636	2496
Central Valley Project Exports at Tracy	2474	2262	2487	2332	2505	2685	2722	2679	2628	2679	2018	1884	2141
Delta Consumptive Use <sup>2</sup>	1691	1691	1693	1691	1691	1691	1693	1691	1691	1691	1693	1691	1666
Delta Precipitation <sup>2</sup>	1423	734	956	764	758	739	753	1089	1059	477	600	662	789
Delta Outflow	43487	22542	18155	6844	9163	14050	14922	15403	43805	6216	1529	6713	2461

<sup>1</sup> Data from DAYFLOW Program; NOTE: includes DAYFLOW corrections through 01-01-2004 (<http://ep.water.ca.gov/dayflow>)

<sup>2</sup> Content Required by Water Code Section 10004.6

If 6.5 million acre feet of Sacramento River water is already being diverted from the Delta, please point out on the map the locations of the diversion points. Does DWR or USBR have smaller intakes on the Sacramento River north of Ida Island? Does DWR or USBR operate intakes on Sutter Slough, Steamboat Slough, Miner’s Slough, Georgiana Slough, Elk Slough, Elkhorn Slough or in the Liberty Island or Yolo bypass area?

\*Screen print from January 2014 and has been subsequently revised several times online by the drafters of CWPU 2013



Q: Does 1 cubic foot/second equal 646,320 OR 646,272 gallons a day?

### Why does DWR use different conversion numbers from USGS? Compare converting CFS to gallons per day

<http://www.water.ca.gov/swp/operationscontrol/docs/annual/annual01.pdf>

#### Conversion Factors

Quantity	Multiply	By	To obtain
<b>Area</b>	acre	43,560	square feet
<b>Volume</b>	cubic foot	7.481	gallons
	cubic foot	62.4	pounds of water
	gallon	0.13368	cubic feet
	acre-foot	325,900	gallons
	acre-foot	43,560	cubic feet
	million gallons	3.07	acre-feet
<b>Flow</b>	cubic foot/second (cfs)	450	gallons/minute (gpm)
	gallons/minute	0.002228	cubic feet/second (cfs)
	million gallons/day	1.5472	cubic feet/second (cfs)
	cubic foot/second (cfs)	646.320	gallons a day
	acre-feet a day		
	acre-feet a year		
	pounds/square inch (psi)		
	horsepower (hp)		

<http://md.water.usgs.gov/cfscalculator/>

#### USGS CFS Conversion Calculator

Convert to

CFS Value (ft<sup>3</sup>/s)

Result:

#### Conversion factors for cfs calculations: 1 cfs =

7	.48	gallons per second
448	.8	gallons per minute
26,928	.0	gallons per hour
646,272	.0	gallons per day
28	.32	liters of water per second
1,699	.2	liters of water per minute
101,952	.0	liters of water per hour
2,446,848	.0	liters of water per day
2.446848	.0	million liters of water per day
0	.646272	million gallons per day
62	.5	pounds of water per second
3,750	.0	pounds of water per minute
225,000	.0	pounds of water per hour
5,400,000	.0	pounds of water per day

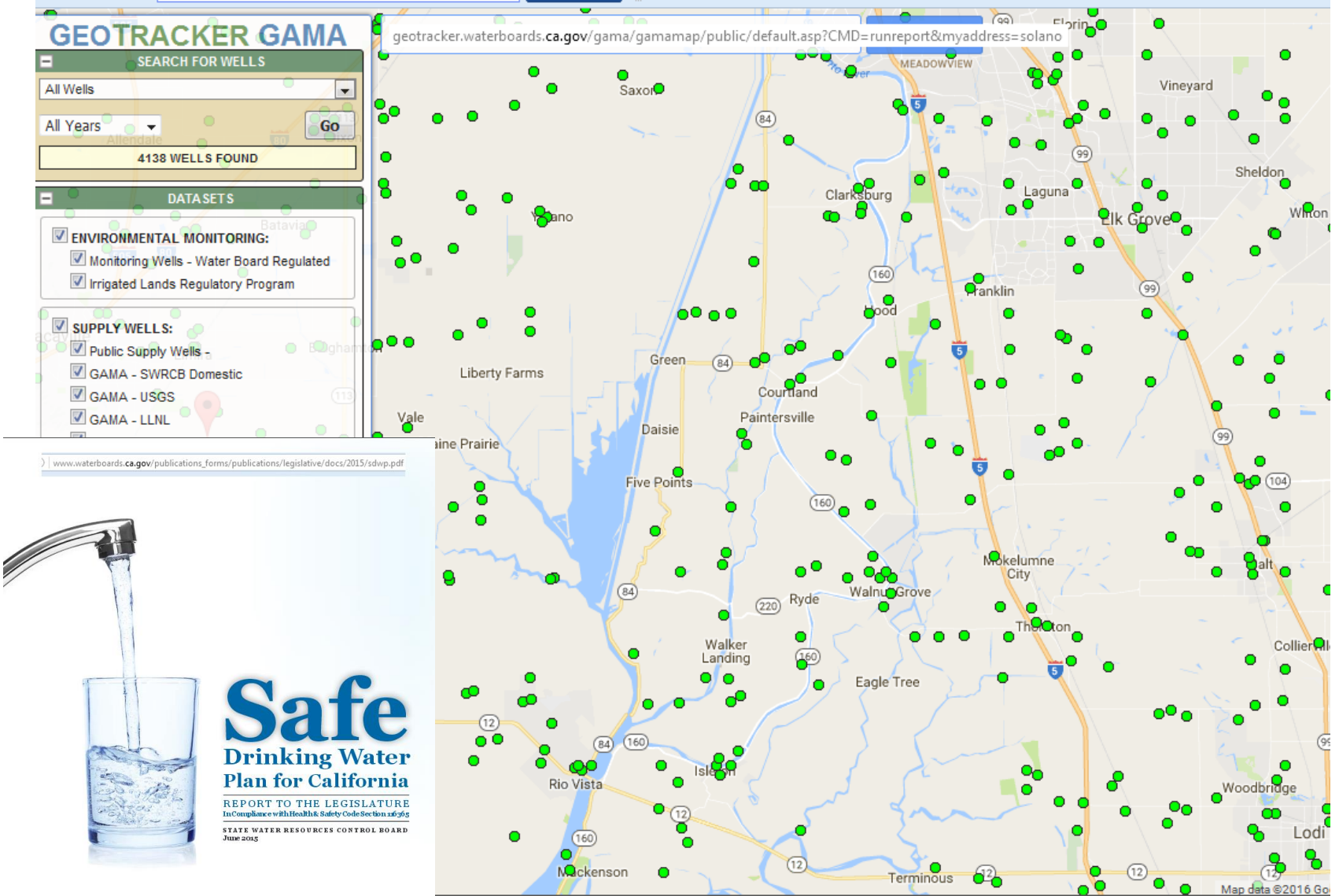
[close this window](#)

26 / 33 [http://www.swrcb.ca.gov/water\\_issues/hot\\_topics/strategic\\_plan/docs/2008\\_2012/020608\\_presentation.pdf](http://www.swrcb.ca.gov/water_issues/hot_topics/strategic_plan/docs/2008_2012/020608_presentation.pdf)



Inappropriate inconsistency can result in inequitable treatment, no common understanding of key water quality and water rights goals, and difficulty in achieving a meaningful evaluation of outcomes.

8/4/2016



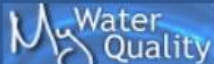
**Board Chair**  
**Felicia Marcus**



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- State and Regional Water Boards' Map
- Board Priorities
- Laws/Regulations
- Plans/Policies
- Programs
- Decisions Pending and Opportunities for Public Participation

Agendas  
English/Español



Performance Report

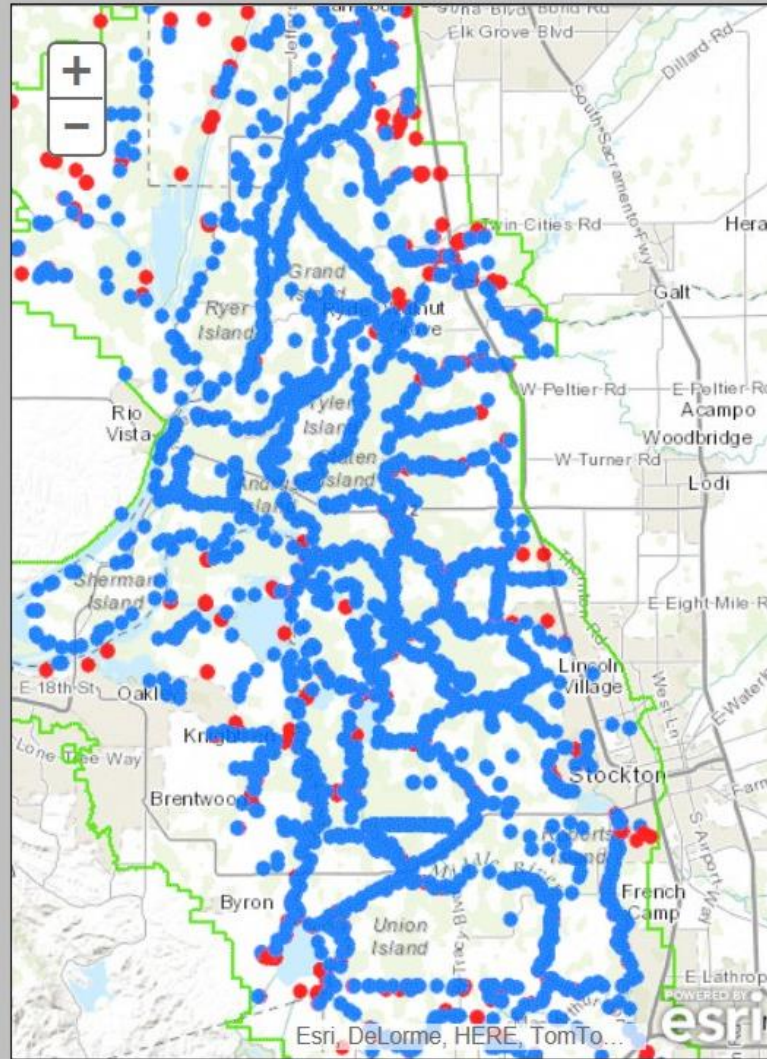
**DELTA WATERMASTER**

- Bay Delta Program
- eWRIMS Database
- Statement of Diversion and Use Program
- Contact Us



## WATER RIGHTS ASSOCIATED WITHIN THE LEGAL DELTA

This interactive map displays **Appropriative** water rights (Permits and/or Licenses) and **Statements of Water Diversion and Use** water rights for islands/areas in the Legal Delta. Find water right information by clicking on a location dot on the map. Completed Island Summaries of Water Rights can be found on the Select a Delta Island or Area box on the right.



**Legend**

Map Info

- green:** Legal Delta Boundary
- red:** Appropriative Permit or License
- blue:** Statement of Diversion and Use
- RD:** Reclamation District

Change Basemap...

Select a Delta Island or Area...

Return to Legal Delta full extent

# Seasonal Changes in Flow

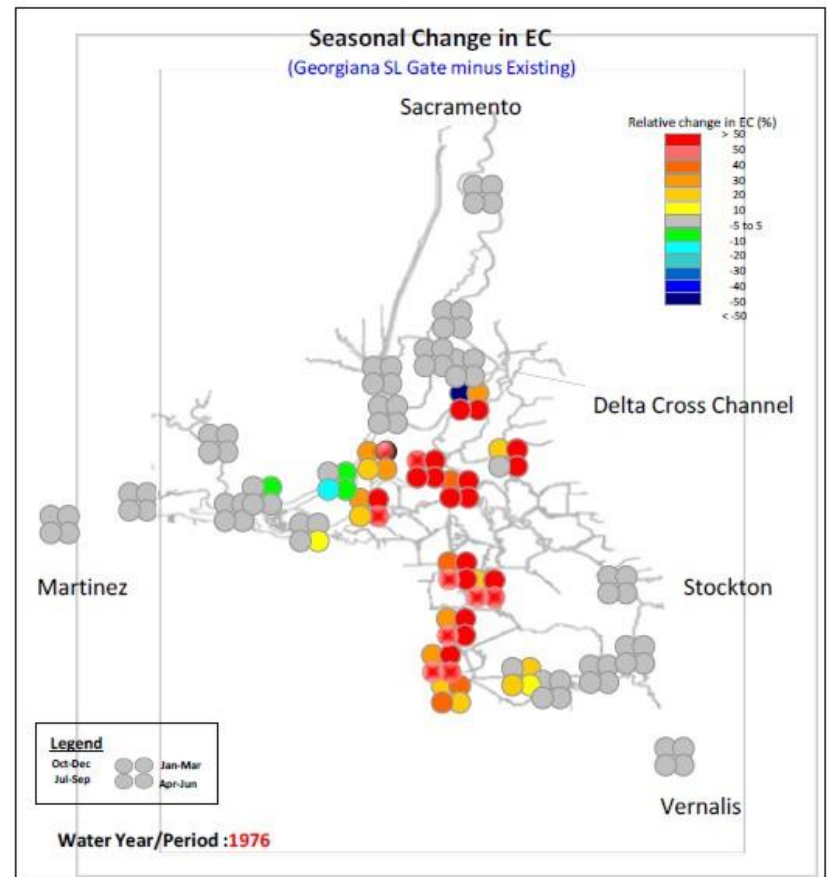
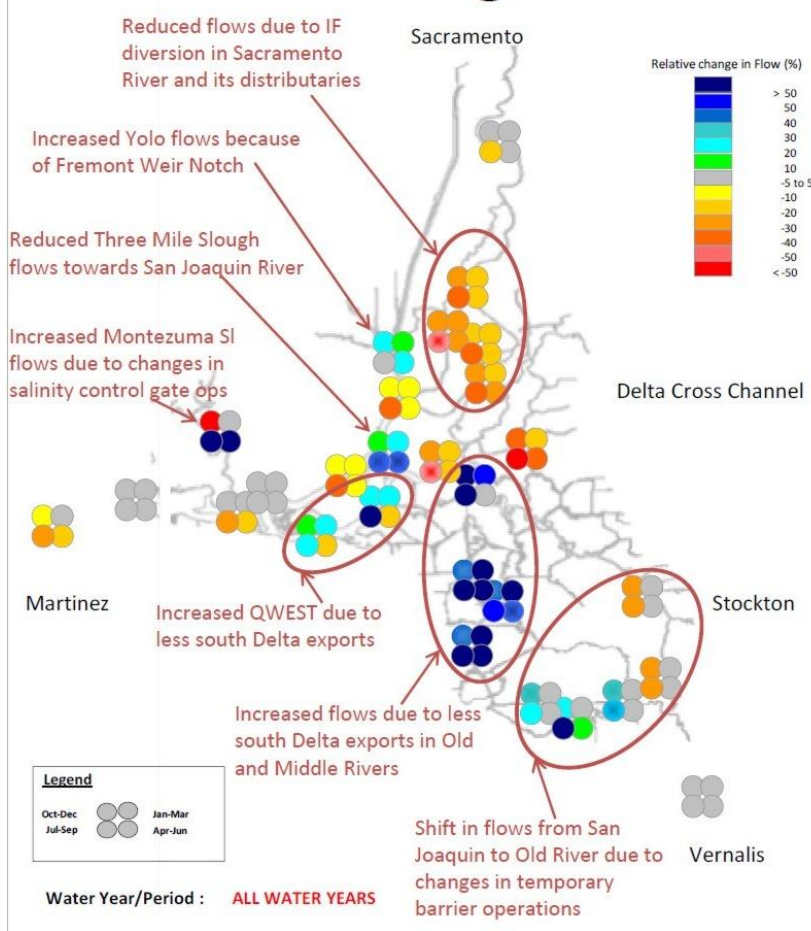


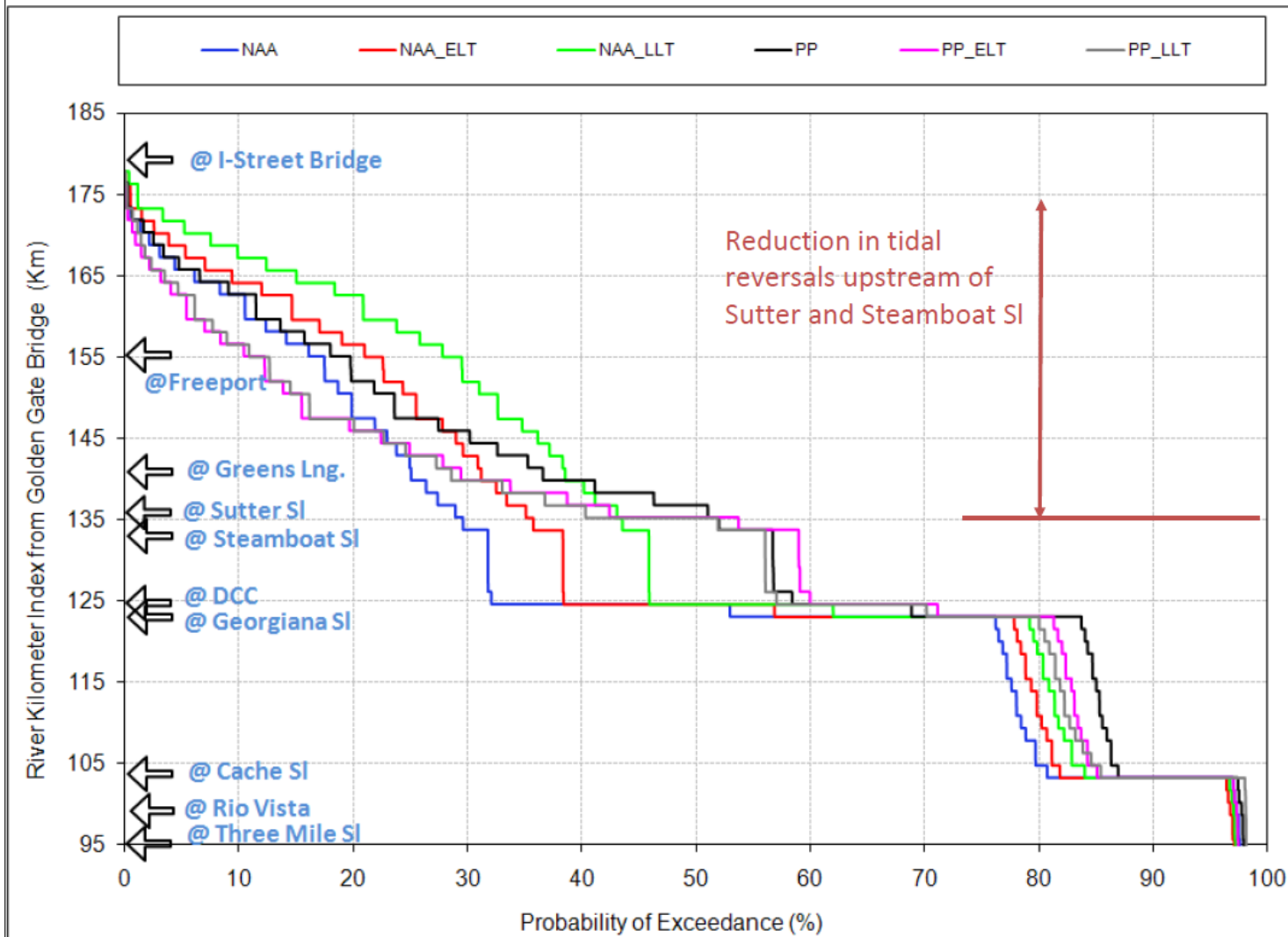
Figure 4-38 Impacts of Georgiana Slough Gate on Water Quality throughout Delta

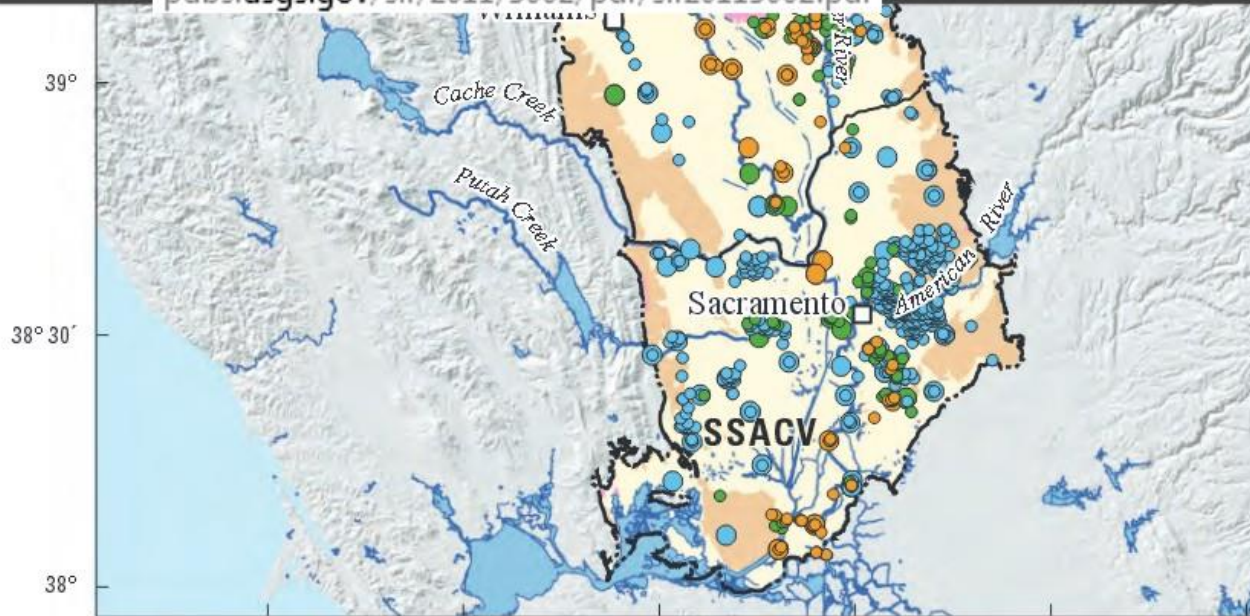


	9,000 cfs North Delta Diversion	Fall X2	Delta Outflow requirements	NMFS BiOp SJR i/e ratio	OMR Requirements	Head of Old River Barrier/Gate
<b>No Action Alternative</b>	No	Yes	Per D-1641	Yes	Yes; per BiOps	Temporary barrier installed in fall months
<b>Boundary 1</b>	Yes	No	Per D-1641	No	Yes; per BiOps	Permanent gate operating in fall months consistent with NAA
<b>H3</b>	Yes	Yes	Per D-1641	No	Yes; more restrictive of either BiOps or new OMR requirements identified in the RDEIR/SDEIS for Alternative 4A	Permanent gate operating in fall, winter and spring months (partial closure)
<b>H4</b>	Yes	Yes	Per D-1641 and increased Delta Outflow requirements during March-May	No		
<b>Boundary 2</b>	Yes	Yes	Per D-1641 and increased Delta Outflow goals in all months	No	Yes; more restrictive of either BiOps or new OMR requirements identified in the RDEIR/SDEIS Appendix C	Permanent gate operating in fall, winter and spring months (full closure)

Water quantity and levels in the North Delta natural waterways: Sacramento River, Sutter Slough, Steamboat Slough, Georgiana Slough, Elk Slough, Elkhorn Slough, Miner’s Slough?

# Flow Reversals in Sacramento River





Shaded relief derived from U.S. Geological Survey  
National Elevation Dataset, 2006,  
Albers Equal Area Conic Projection  
Horizontal datum: North American Datum of  
1983 (NAD 83)

0 10 20 40 Miles  
0 10 20 40 Kilometers

#### Geology

- Quaternary alluvium (Q)
- Quaternary/Plio-Pleistocene  
semiconsolidated (QPc)
- Quaternary/Tertiary  
volcanic pyroclastic (QTvp)

#### EXPLANATION

#### Relative-concentration of arsenic in:

##### USGS-Grid wells

- High
- Moderate
- Low

##### CDPH wells

- 
- 
- 

--- Boundary of Sacramento Valley

#### Study units

- Northern Sacramento Valley study unit (NSACV)
- Middle Sacramento Valley study unit (MSACV)
- Southern Sacramento Valley study unit (SSACV)

**Figure 9.** Relative-concentrations of arsenic in USGS-grid wells and CDPH wells, Southern, Middle, and Northern Sacramento Valley Groundwater Ambient Monitoring and Assessment (GAMA) study units, California.

“no impacts to water rights holders” see page 10, 25, 26, 29 of ...

[http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/bay\\_delta/california\\_waterfix/exhibits/docs/petitioners\\_exhibit/dwr/dwr\\_510.pdf](http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/dwr/dwr_510.pdf)

waterboards.ca.gov/waterrights/water\_issues/programs/bay\_delta/california\_waterfix/exhibits/docs/petitioners\_exhibit/dwr/dwr\_510.pdf

11 of 61

One of the exhibits by DWR refers to barriers and gates.

Do you think blocking off freshwater flow into the North Delta waterways would have any impacts on water rights on Steamboat and/or Sutter Slough landowners? Do you think it would have impacts to navigation? Impacts to humans from reduction in drinking water quality? Impacts to businesses that are water – recreation based?

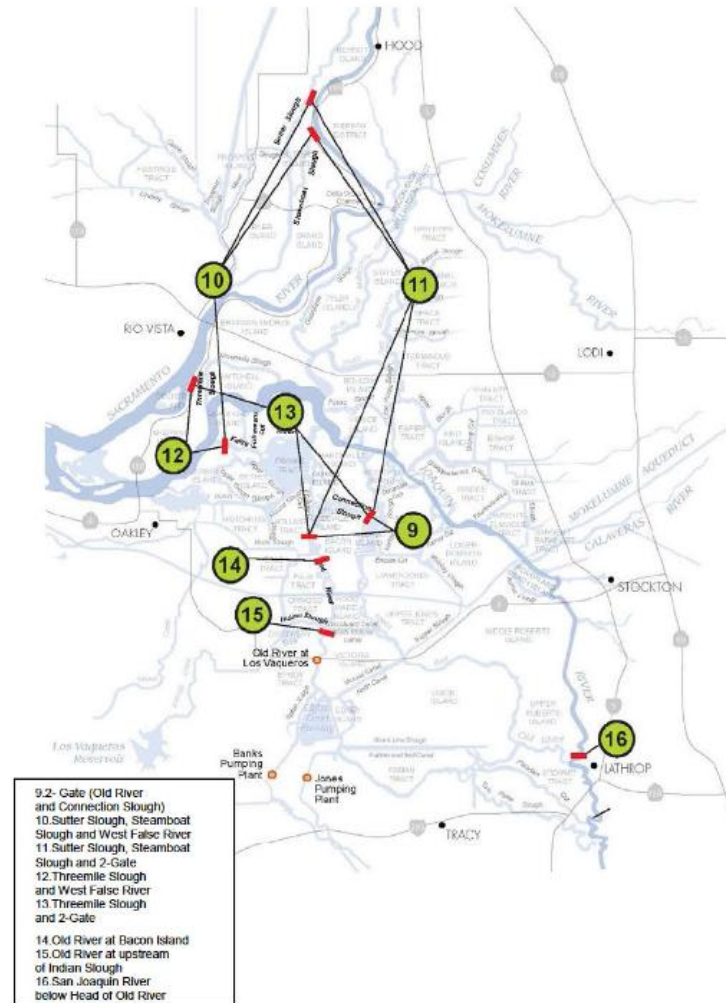


Figure 4-1b Location of Phase 1 Alternatives 9 through 16

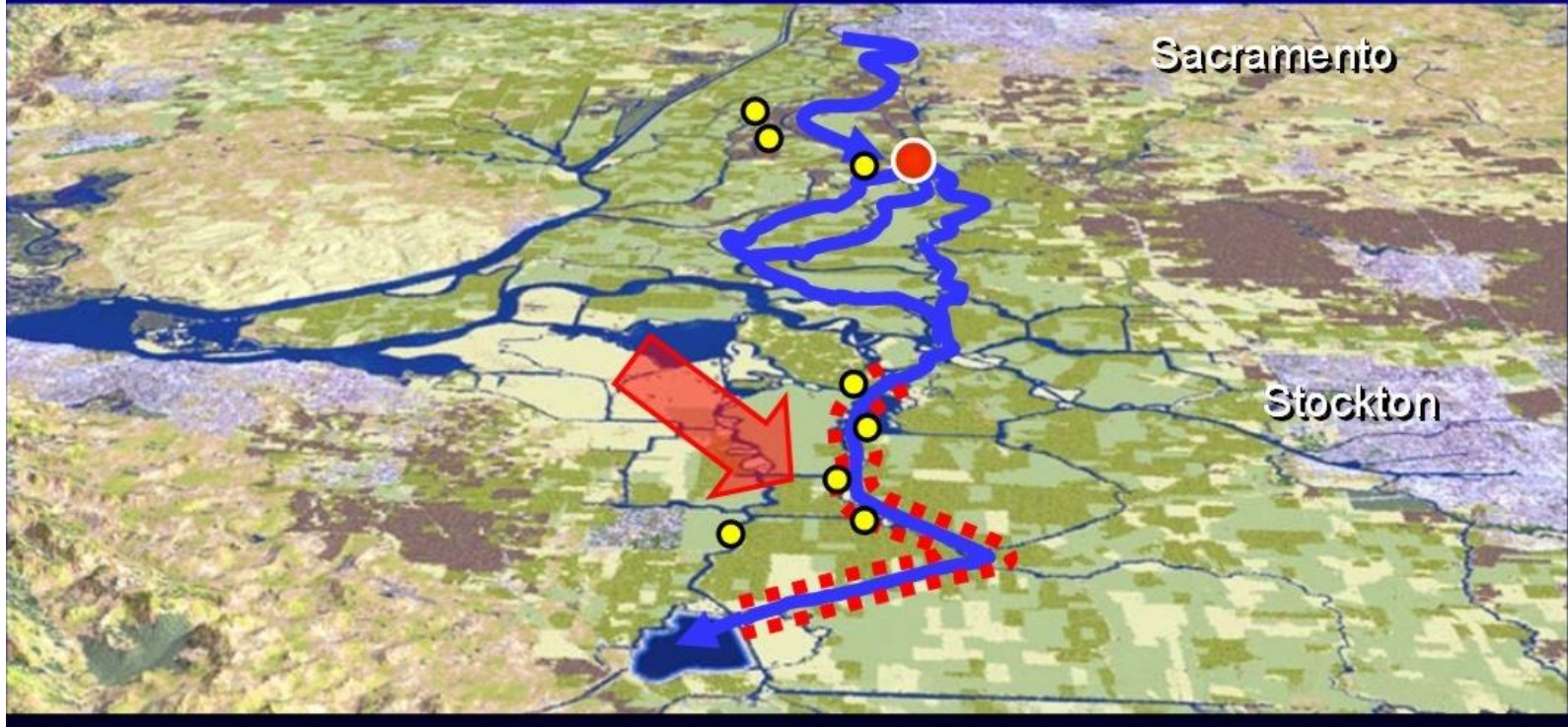


Questions on project related to DWR-510:

# Emergency Freshwater Pathway Concept

Dennis Majors  
Metropolitan Water District of Southern California  
August 22, 2007

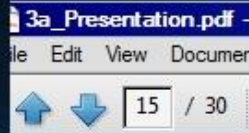
[www.science.calwater.ca.gov/pdf/workshops/workshop\\_dci\\_presentation\\_03\\_majors.pdf](http://www.science.calwater.ca.gov/pdf/workshops/workshop_dci_presentation_03_majors.pdf)





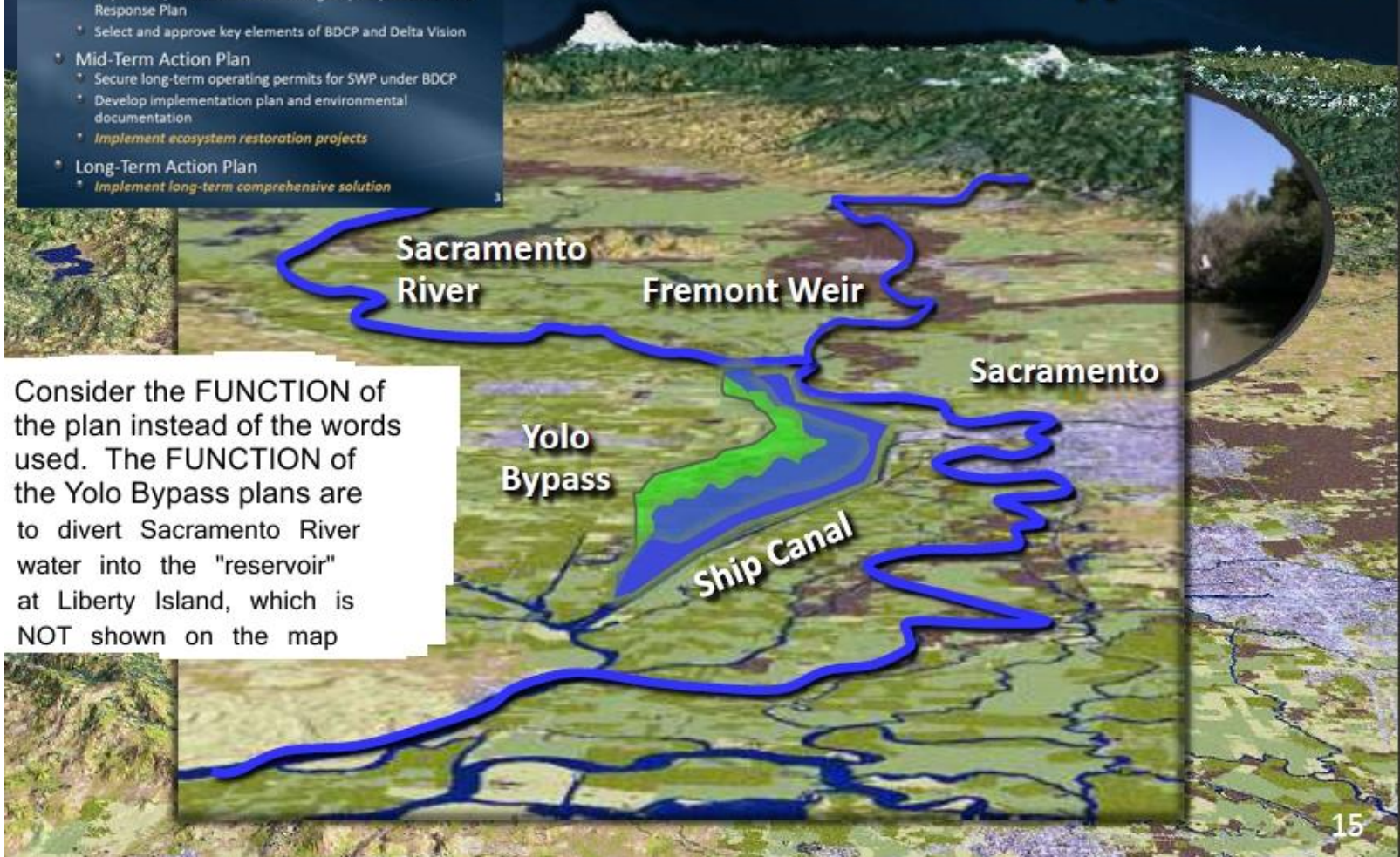
## Metropolitan Board Policy Delta Action Plan Framework

- Board approved in June 2007 (Board Letter 8-6)
  - Short-Term Action Plan
    - Secure permits to operate Bank's Pumping Plant
    - Implement/Fund Delta Levee Emergency Preparedness and Response Plan
    - Select and approve key elements of BDCP and Delta Vision
  - Mid-Term Action Plan
    - Secure long-term operating permits for SWP under BDCP
    - Develop implementation plan and environmental documentation
    - Implement ecosystem restoration projects
  - Long-Term Action Plan
    - Implement long-term comprehensive solution

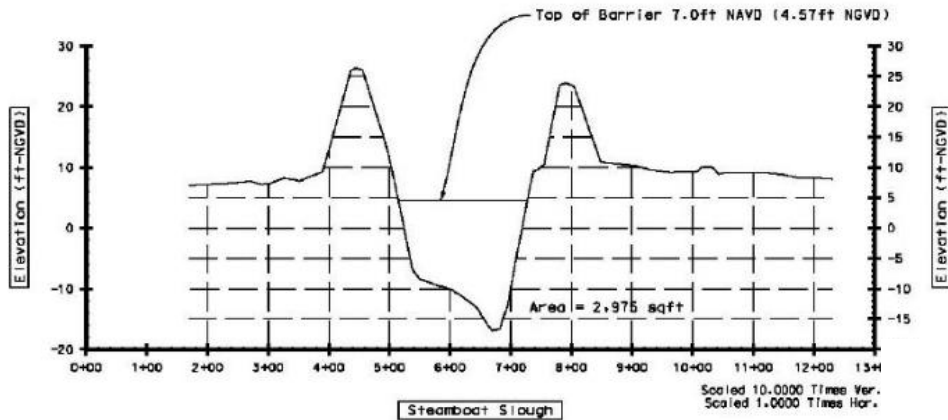


# Yolo Bypass

## Habitat & Food-Web Opportunities



Consider the **FUNCTION** of the plan instead of the words used. The **FUNCTION** of the Yolo Bypass plans are to divert Sacramento River water into the "reservoir" at Liberty Island, which is **NOT** shown on the map



\*Survey data from USACE Camp Study 1998  
 \*State Plane Coordinates NAD 83(±±), NGVD 1929(±±)  
 \*NGVD + 2.43±± = NAVD

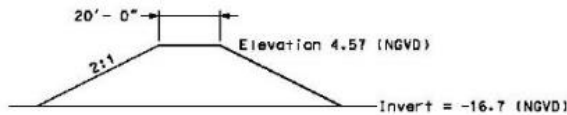
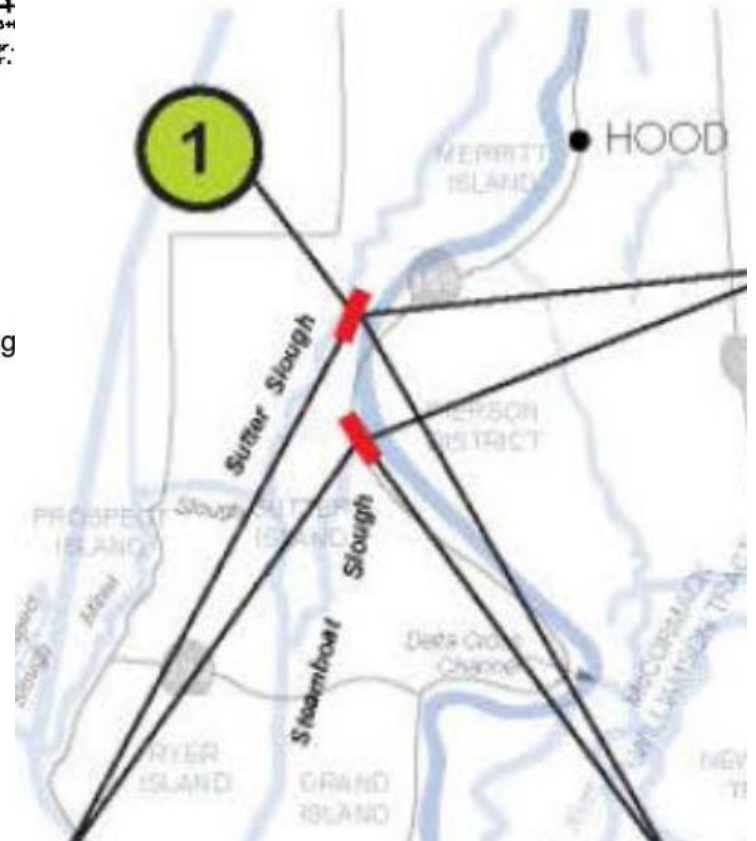


Figure 5-3 Sectional Views of Rock Barrier at Steamboat Slough

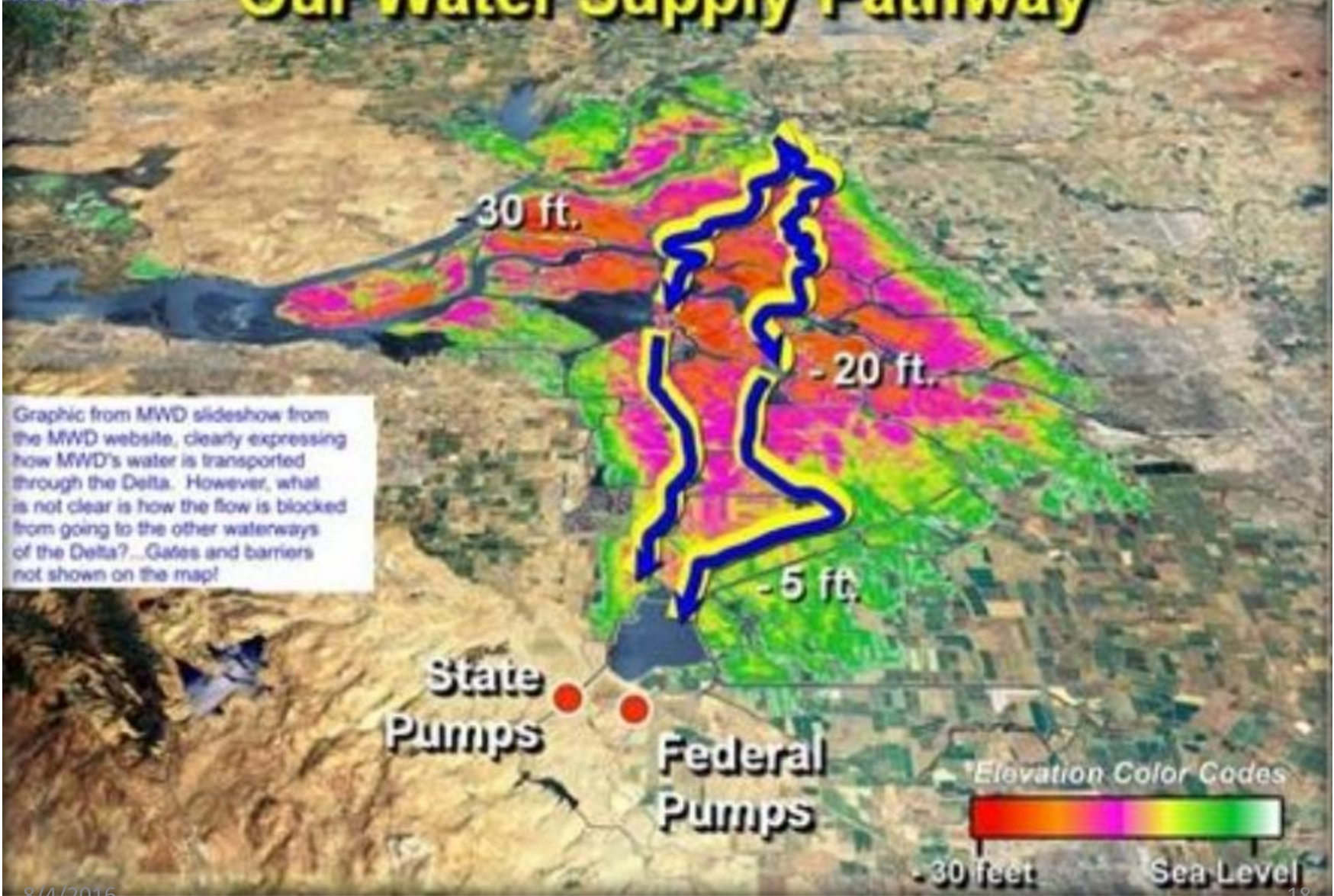
Wouldn't leaving only 5000 cfs of flow on the Sacramento River suspend the North Delta waterways in a permanent "drought" situation, which would trigger more pressure to install barriers and gates to increase flows on the Sacramento River, into the DDC and Georgiana Slough to help keep the Central Delta fresher? Wouldn't this create a conflict between North Delta water quality and quantity rights and that of the Central Delta?



No longer available at MWD site

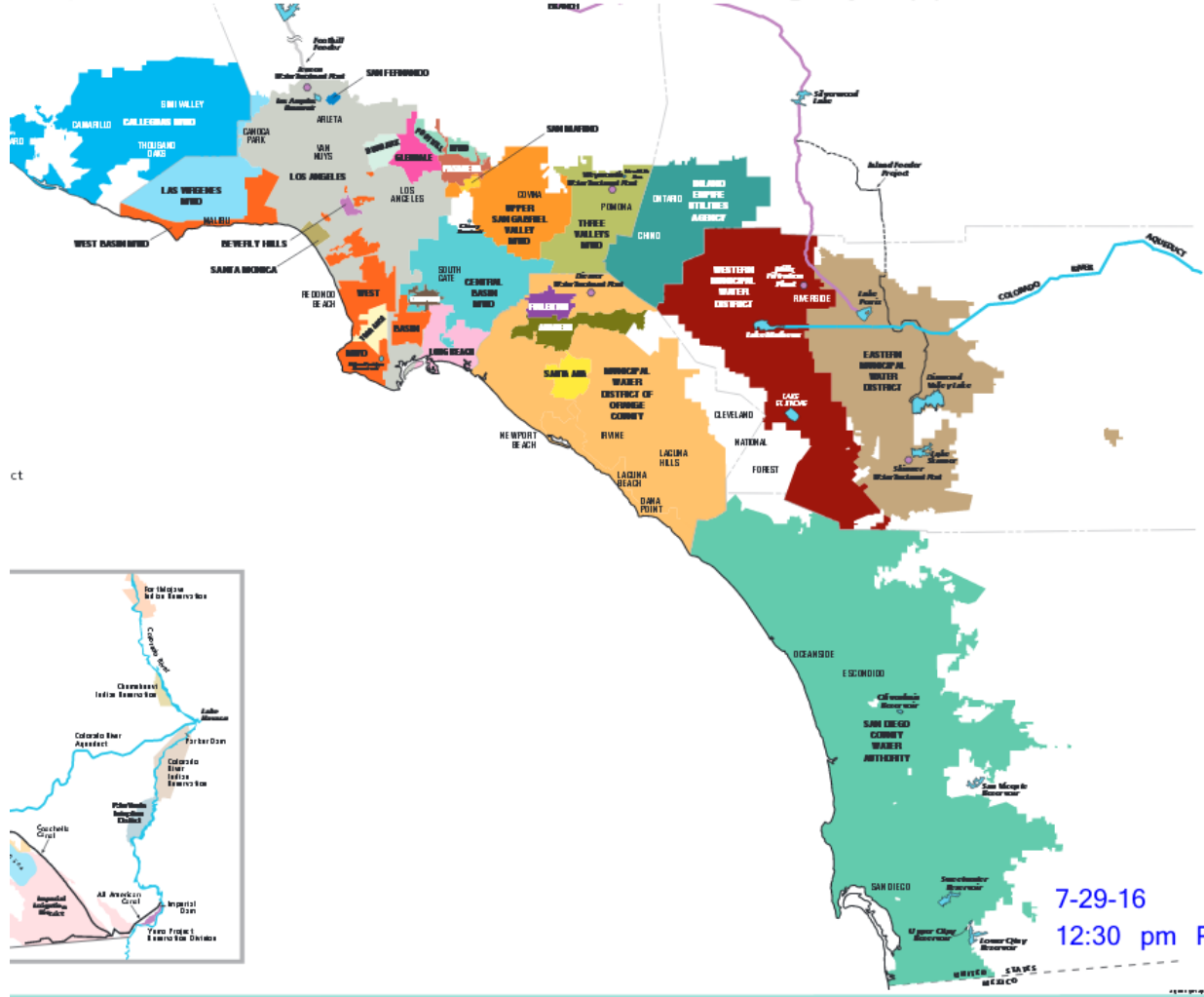
<http://www.mwdh2o.com/mwdh2o/pages/yourwater/supply/Delta/images/big/Slide9.JPG>

# Our Water Supply Pathway



# THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

[www.mwdh2o.com/WhoWeAre/FactSheets/MemberAgencyMap.pdf](http://www.mwdh2o.com/WhoWeAre/FactSheets/MemberAgencyMap.pdf)



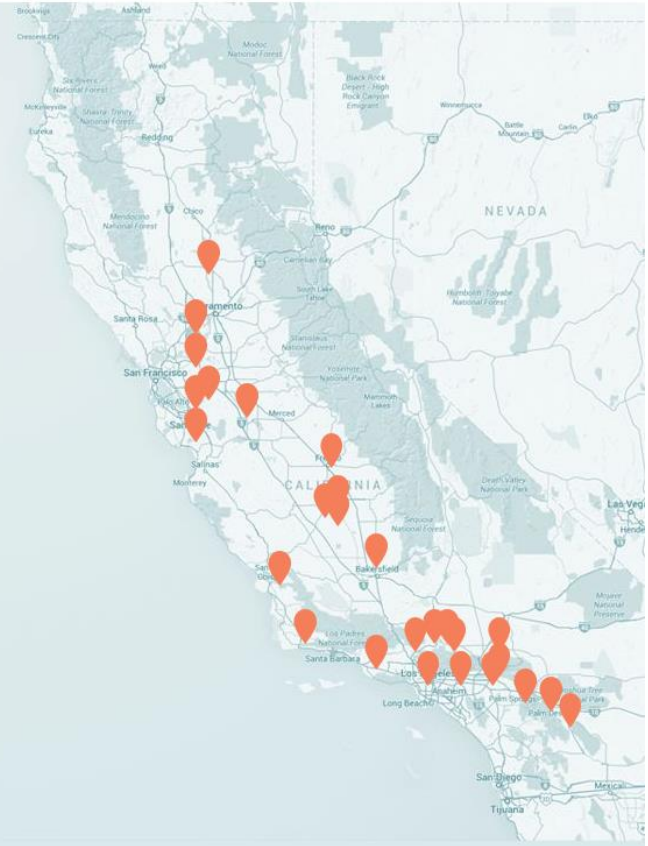
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12:30 pm PT



- Alameda County Flood Control & Water Conservation District Zone 7
- Alameda County Water District
- Antelope Valley-East Kern Water Agency
- Casitas Municipal Water District
- Castaic Lake Water Agency
- Central Coast Water Authority
- City of Yuba City
- Coachella Valley Water District
- County of Kings
- Crestline-Lake Arrowhead Water Agency
- Desert Water Agency
- Dudley Ridge Water District
- Empire Westside Irrigation District
- Kern County Water Agency

- Littlerock Creek Irrigation District
- Metropolitan Water District of Southern California
- Mojave Water Agency
- Napa County Flood Control & Water Conservation District
- Oak Flat Water District
- Palmdale Water District
- San Bernardino Valley Municipal Water District
- San Gabriel Valley Municipal Water District
- San Geronio Pass Water Agency
- San Luis Obispo County Flood Control & Water Conservation District
- Santa Clara Valley Water District
- Solano County Water Agency
- Tulare Lake Basin Water Storage District



## Water transfers and "new water rights"

8

**Table 2 - Table A Amounts in Each Scenario (acre-feet)**

SWP CONTRACTOR	1994 Baseline	2003 Baseline	2020 Baseline	2003 No Project A	2020 No Project A	2003 No Project B	2020 No Project B	2003 Proposed Project	2020 Proposed Project
County of Butte	1,200	3,500	27,500	3,500	27,500	1,594	12,388	3,500	27,500
Plumas County FC&WCD	1,200	1,690	2,700	1,690	2,700	770	1,216	1,690	2,700
City of Yuba City	9,600	9,600	9,600	9,600	9,600	4,372	4,325	9,600	9,600
Napa County FC&WCD	9,135	17,450	24,900	21,475	28,925	7,947	11,217	21,475	28,925
Solano County WA	28,080	41,000	42,000	46,756	47,756	18,672	18,920	46,756	47,756
Alameda Co. FC&WCD, Zone 7	40,000	46,000	46,000	80,619	80,619	20,950	20,722	80,619	80,619
Alameda County WD	42,000	42,000	42,000	42,000	42,000	19,128	18,920	42,000	42,000
Santa Clara Valley WD	100,000	100,000	100,000	100,000	100,000	45,543	45,048	100,000	100,000
Oak Flat WD	5,700	5,700	5,700	5,700	5,700	2,596	2,568	5,700	5,700
County of Kings	4,000	4,000	4,000	9,000	9,000	1,822	1,802	9,000	9,000
Dudley Ridge WD	57,700	57,700	57,700	61,673	61,673	26,273	25,933	57,343	57,343
Empire West Side ID	3,000	3,000	3,000	3,000	3,000	1,366	1,351	3,000	3,000
Kern County Water Agency (M&I)	134,600	134,600	134,600	134,600	134,600	61,300	60,635	134,600	134,600
Kern County Water Agency (Agric.)	1,018,800	1,018,800	1,018,800	945,800	929,800	463,987	458,953	864,130	848,130
Tulare Lake Basin WSD	118,500	118,500	118,500	96,227	96,227	53,568	53,382	96,227	96,227
San Luis Obispo Co. FC&WCD	25,000	25,000	25,000	25,000	25,000	11,386	11,262	25,000	25,000
Santa Barbara Co. FC&WCD	45,486	45,486	45,486	45,486	45,486	20,715	20,491	45,486	45,486
Antelope Valley-East Kern WA	138,400	138,400	138,400	141,400	141,400	63,031	62,347	141,400	141,400
Castaic Lake WA (31A)	12,700	12,700	12,700	12,700	12,700	5,784	5,721	12,700	12,700
Castaic Lake WA	41,500	41,500	41,500	41,500	41,500	18,900	18,695	82,500	82,500
Coachella Valley WD	23,100	23,100	111,200	33,000	133,100	10,520	50,094	33,000	133,100
Crestline-Lake Arrowhead WA	5,800	5,800	5,800	5,800	5,800	2,641	2,613	5,800	5,800
Desert WA	38,100	38,100	50,000	38,100	54,000	17,352	22,524	38,100	54,000
Little Rock Creek ID	2,300	2,300	2,300	2,300	2,300	1,047	1,036	2,300	2,300
Mojave WA	50,800	50,800	50,800	75,800	75,800	23,136	22,885	75,800	75,800
Metropolitan WDSC	2,011,500	2,011,500	1,911,500	2,011,500	1,911,500	916,088	861,080	2,011,500	1,911,500
Palmdale WD	17,300	17,300	17,300	21,300	21,300	7,879	7,793	21,300	21,300
San Bernardino Valley MWD	102,600	102,600	102,600	102,600	102,600	46,727	46,220	102,600	102,600
San Gabriel Valley MWD	28,800	28,800	28,800	28,800	28,800	13,116	12,974	28,800	28,800
San Geronio Pass WA	17,300	5,000	17,300	5,000	17,300	2,277	7,793	5,000	17,300
Ventura County FCD	20,000	20,000	20,000	20,000	20,000	9,109	9,010	20,000	20,000
Total Agriculture	1,220,400	1,220,400	1,220,400	1,134,100	1,118,100	555,801	549,771	1,048,100	1,032,100
Total M&I	2,933,801	2,951,526	2,997,286	3,037,826	3,099,586	1,344,199	1,350,229	3,078,826	3,140,586
Total	4,154,201	4,171,926	4,217,686	4,171,926	4,217,686	1,900,000	1,900,000	4,126,926	4,172,686

changed over time. The name RIVER has a lot in common with...

- Correct names are shown in **BOLD**
- Islands with changed names
  - Waterways with changed names
  - Cities, towns or Delta communities with changed names

snugarbor.net/images-2013/deltastuff/wrongdeltanames.jpg

**The purpose of this map is to show how various government agencies involved in the BDCP confused the location of Delta waterways and islands in their planning studies. If they can not even get the basic locations correct, why would anyone believe any other base data of the computer model upon which the report is based is right?**

**SNUG HARBOR**  
 Portion of Hogback Shoals?  
 Blake Land Grant-1876  
 Peninsula-Soil survey-1935  
 Martin's Island-1945  
 (a peninsula owned by the Martin Family)  
 Snug Harbor-1950's  
**Hidden Harbor-US census 2000**

**RYER ISLAND**  
 Priest Island & Sutter Island-1850  
 Combined into Ryer Island by 1865  
 Pierson District-2005-DWR  
 Tyler Island-2008 Google  
 Delta Lake-2010-CalTrans  
 Sherman Lake-2012 DWR-IRWM  
 Confused with Sutter Island-SFEI-2012  
 Unnamed Island in 2013 by DWR,

**WEST SACRAMENTO**  
 Washington-1850's

**SACRAMENTO**  
 Boston-1840's  
 Sacramento City-1850's

**SACRAMENTO**  
 Sutterville-1840's to early 1850's

**STEAMBOAT SLOUGH**  
 Middle Fork (of the Sacramento River)-1848-1850's (Ringgold)  
 Steamboat Slough-captan's maps, charts, books 1855-2013  
 West Branch of Sacramento River-1869  
 Sacramento River-Bancrofts History of CA 1886  
 Sacramento River-Sacramento County surveys  
 Sacramento River-DWR 2005, NOAA 2011,  
 Seven Mile Slough-NOAA, Google- 2010  
 Sacramento River-Sacramento County 2003

**GRAND ISLAND**  
 Taylor Island-1850's  
 Sutter Island-2005

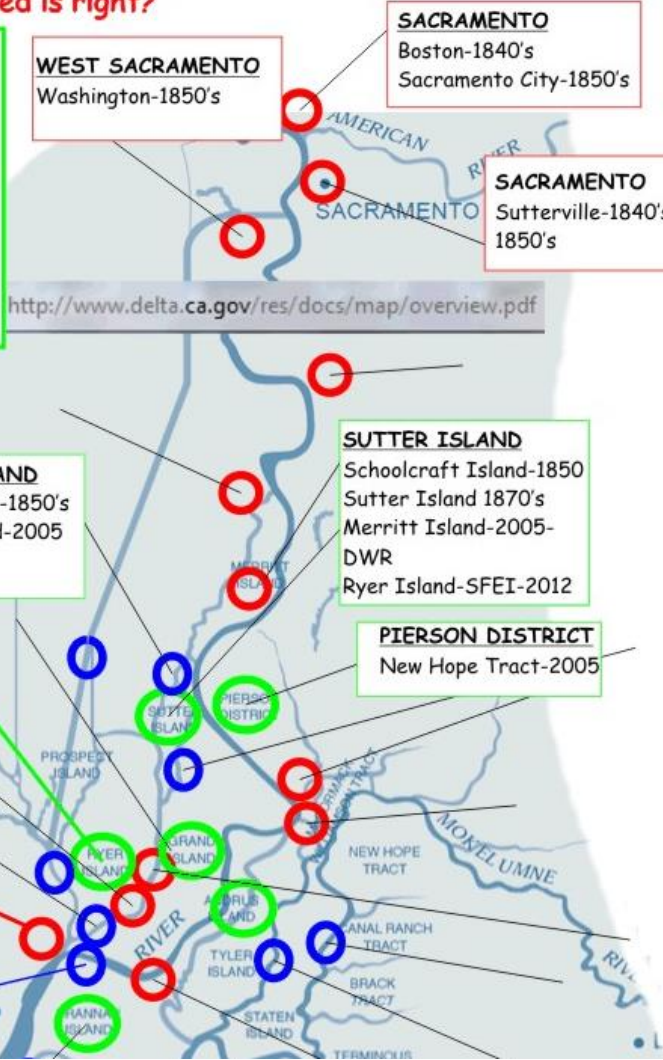
**SUTTER ISLAND**  
 Schoolcraft Island-1850  
 Sutter Island 1870's  
 Merritt Island-2005-DWR  
 Ryer Island-SFEI-2012

**PIERSON DISTRICT**  
 New Hope Tract-2005

**RYER ISLAND** (the other Ryer south of Rio Vista in Suisun Marsh)  
 Kings Island-1850s  
 Long Point Island-1890's  
 Ryer Island-1980-USGS  
 River Island -2003 DWR  
 River Island-2008 Delta Vision  
 Ryer Island-2012-BDCP  
 Long Point Island-2012-DSC  
 Ryer Island-Google/National Atlas 2013

**RIO VISTA**  
 Suisun City-1850  
 Newtown & Rio Vista 1860's

**SACRAMENTO RIVER**  
 Old River-1840s-1900s  
 Main Branch or Main Stem (of the Sacramento River)  
**1862 Hutchings et al**



<http://www.delta.ca.gov/res/docs/map/overview.pdf>