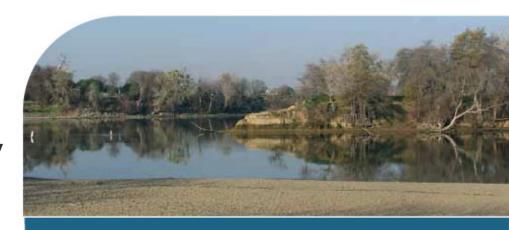
North Delta Water Agency

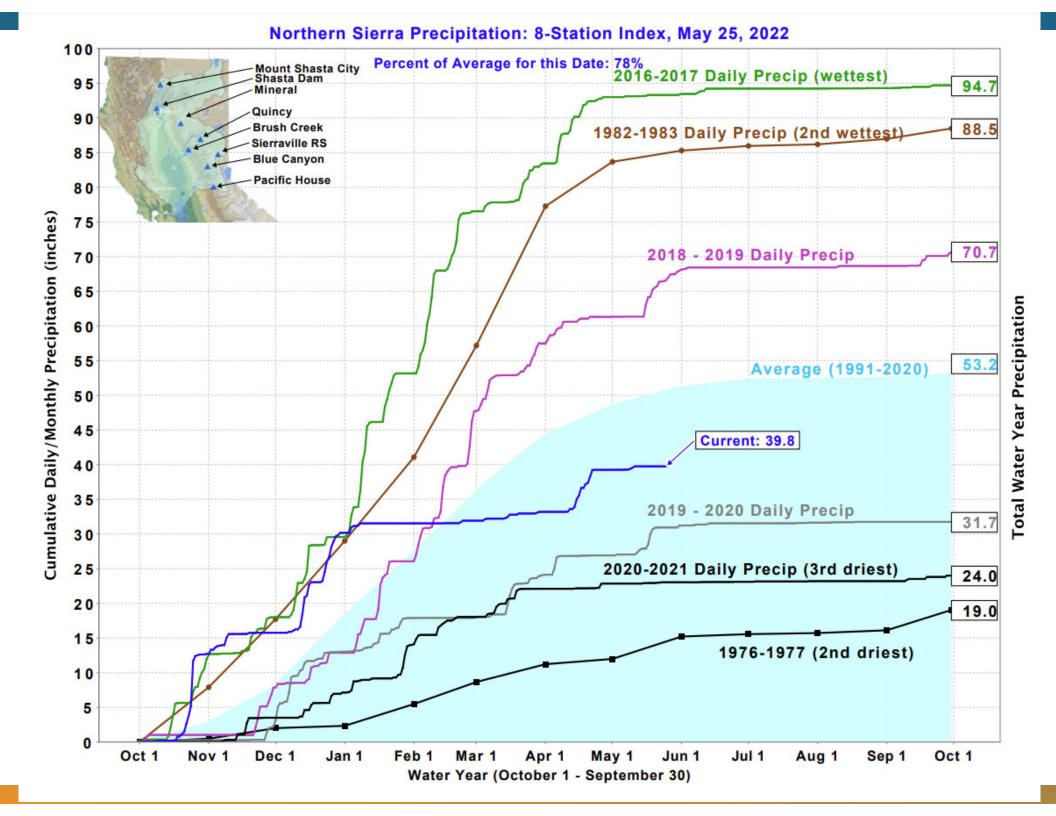


Special Board Meeting May 26, 2022

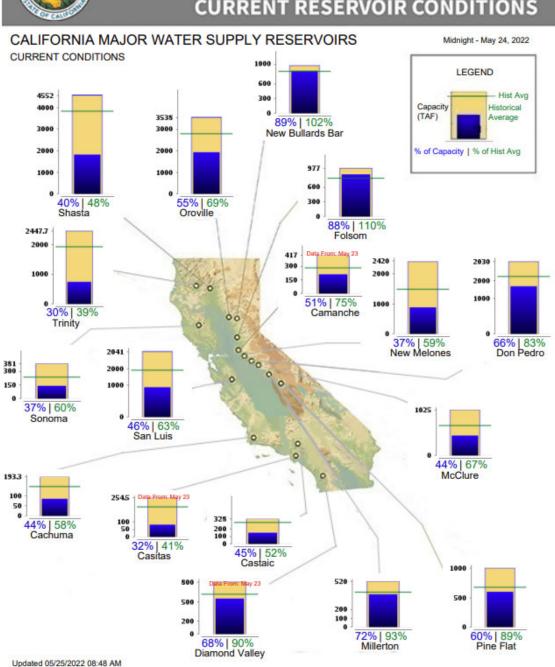
> Presented by: Anne Williams – MBK Engineers

Topics

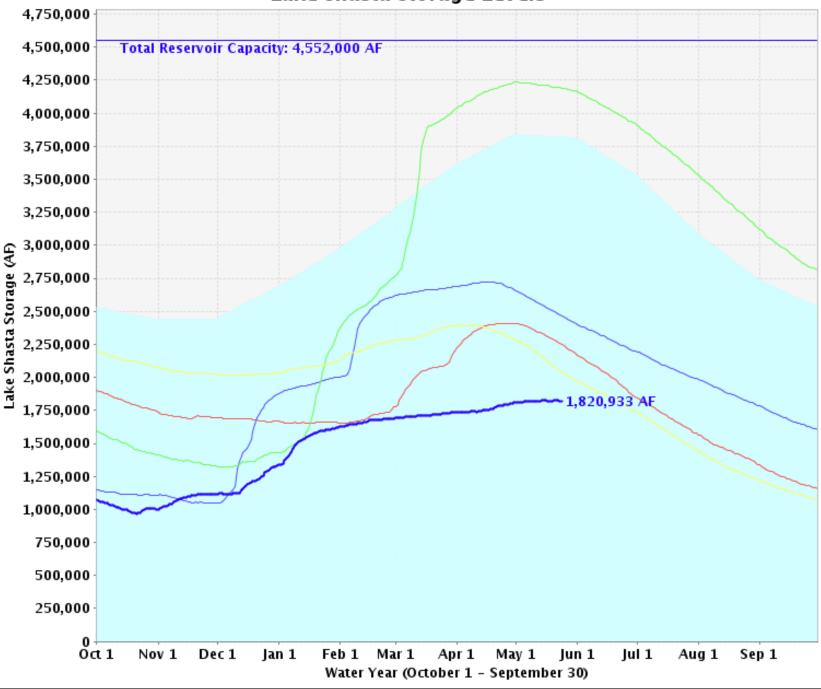
- Hydrologic Conditions
- Water Quality Conditions
- Current Delta Operations
- CVP/SWP TUCP re D-1641
- Curtailments
- NDWA Contract Protections
- Drought Planning for 2023





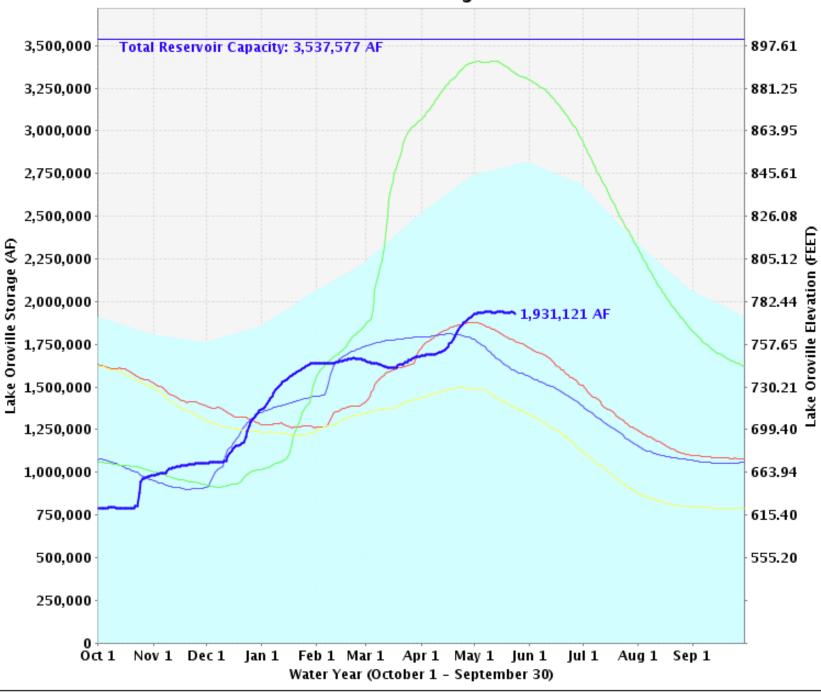


Lake Shasta Storage Levels



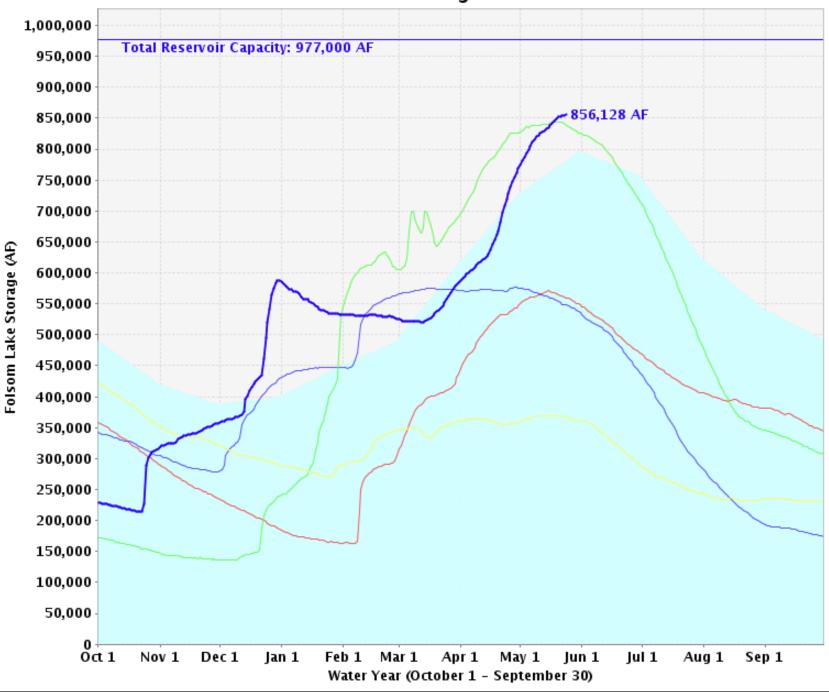
Historical Average — Total Reservoir Capacity — 2013-2014 — 2014-2015 — 2015-2016 — 2020-2021 — 2021-2022(current)

Lake Oroville Storage Levels



Historical Average — Total Reservoir Capacity — 2013-2014 — 2014-2015 — 2015-2016 — 2020-2021 — 2021-2022(current)

Folsom Lake Storage Levels



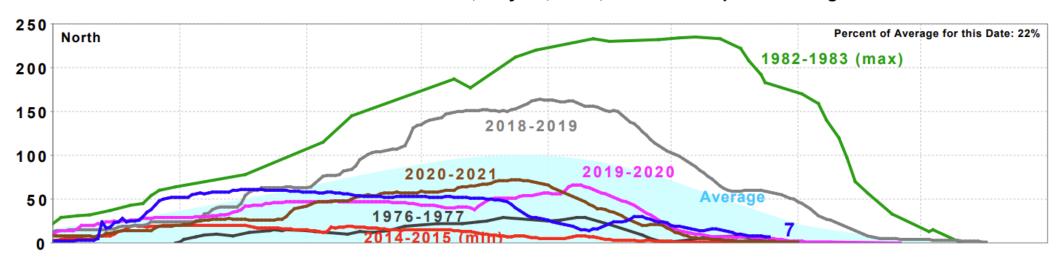
Historical Average — Total Reservoir Capacity — 2013-2014 — 2014-2015 — 2015-2016 — 2020-2021 — 2021-2022(current)

Reservoir Storage Comparison

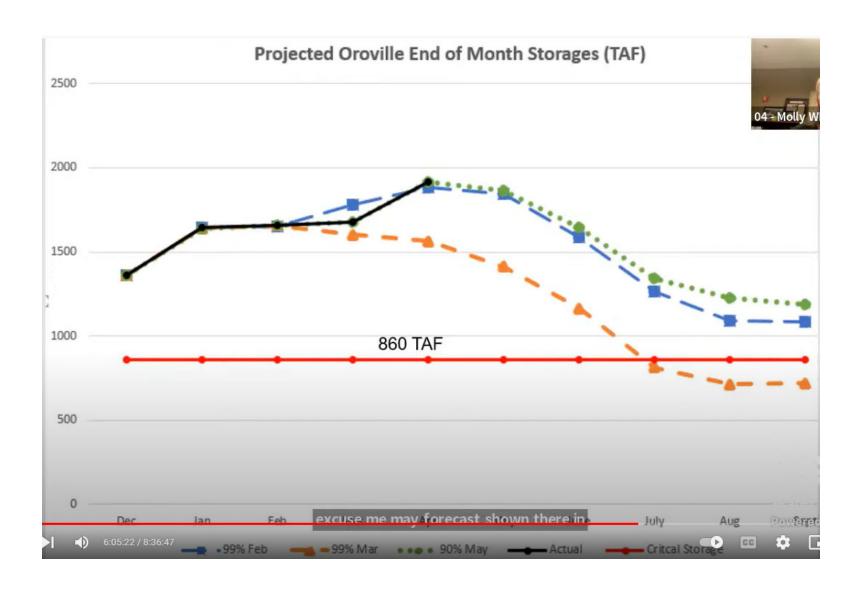
Reservoir Storage (MAF)					
	<u>5-24-2014</u>	<u>5-24-2015</u>	<u>5-24-2021</u>	5-24-2022	
Shasta	2.247	2.464	2.038	1.821	
Oroville	1.769	1.593	1.379	1.931	
Folsom	0.560	0.548	0.367	0.856	
Total	4.576	4.605	3.784	4.608	

Snow Water Content

California Snow Water Content, May 25, 2022, Percent of April 1 Average



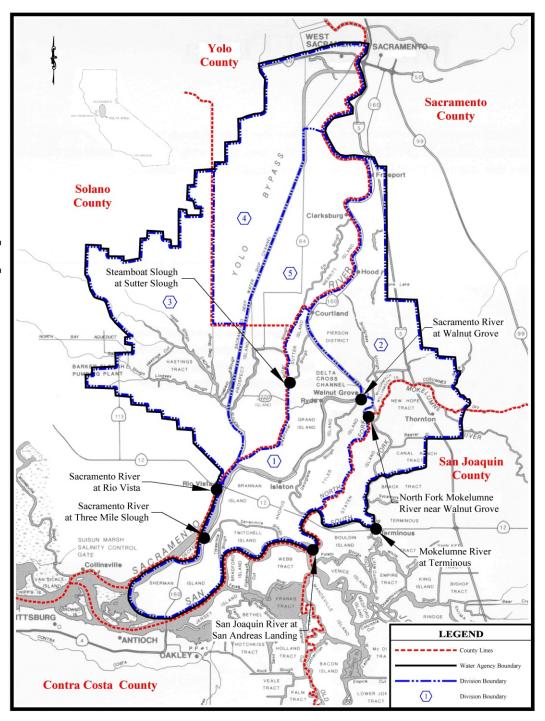
Forecasted Oroville Storage



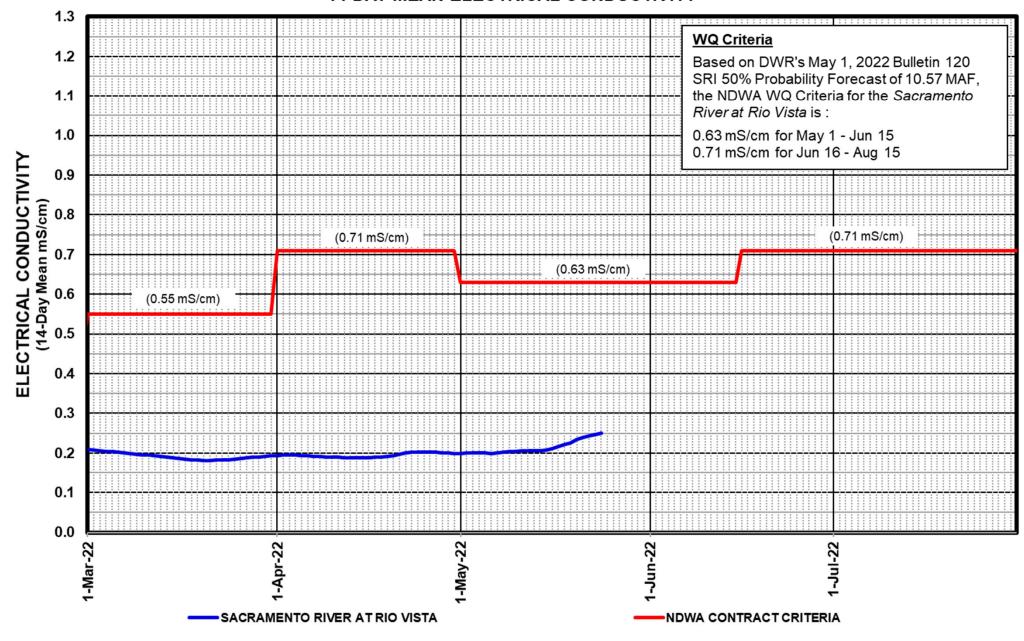
Current Delta Operations

- Delta inflow = 8,600 cfs
- NDOI = 4,700 cfs (7-day average)
- Balanced conditions
- Delta exports = 1,700 cfs
- DCC gate closed
- TUCP approved for April-June

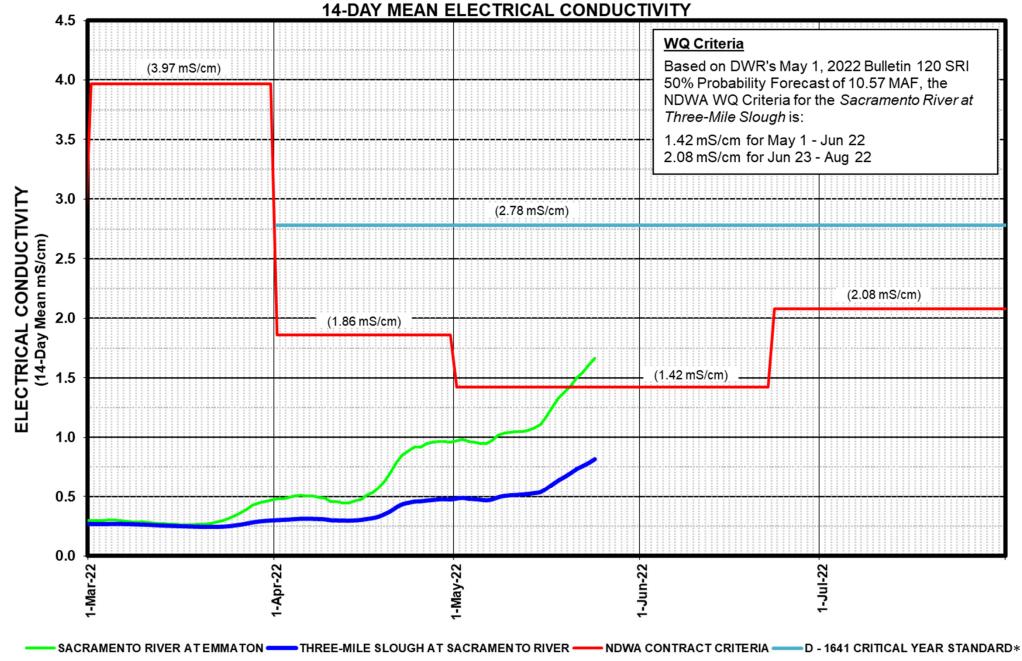
NDWA Contract WQ Criteria Compliance Locations



SACRAMENTO RIVER AT RIO VISTA 14-DAY MEAN ELECTRICAL CONDUCTIVITY



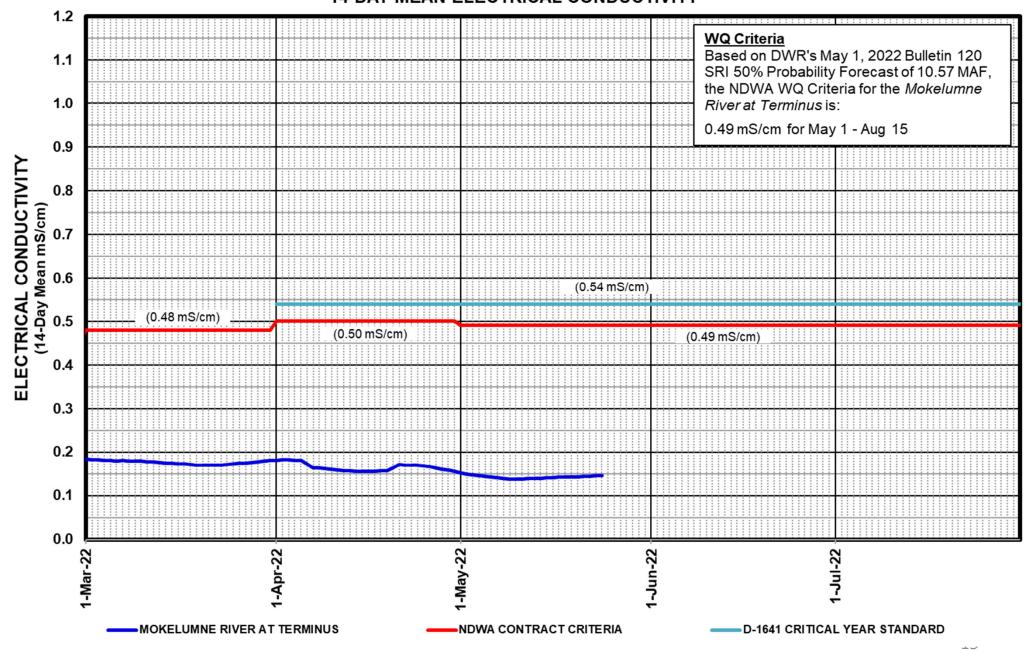
SACRAMENTO RIVER AT THREE-MILE SLOUGH



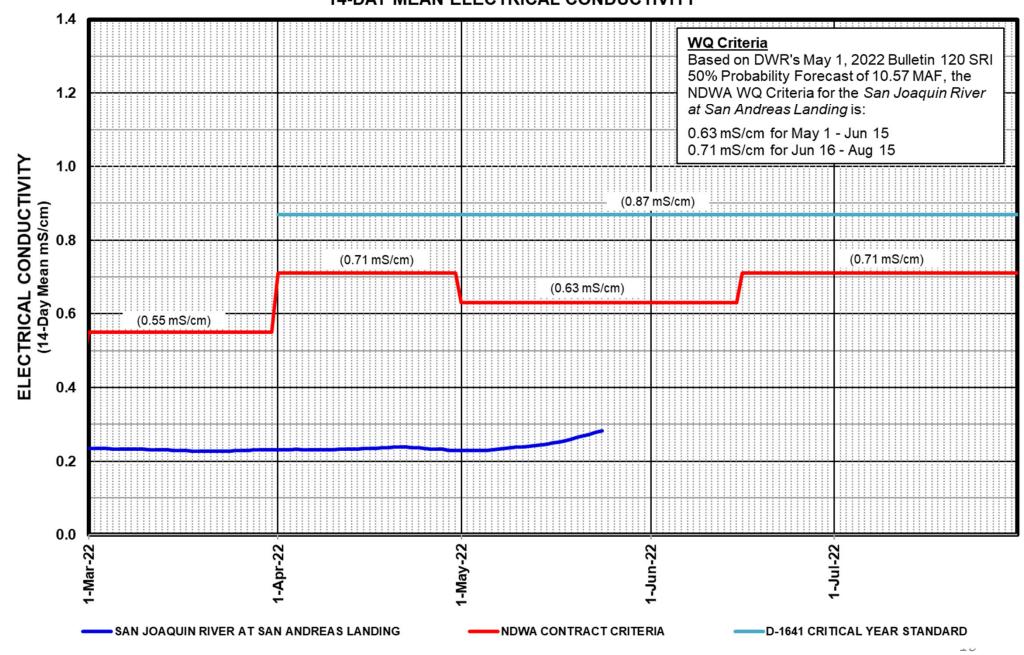
^{*}Pursuant to TUCO, standard will move from Emmaton to TMS once Projects are no longer storing/diverting water during April-June. 14

MOKELUMNE RIVER AT TERMINUS (STATEN ISLAND)

14-DAY MEAN ELECTRICAL CONDUCTIVITY

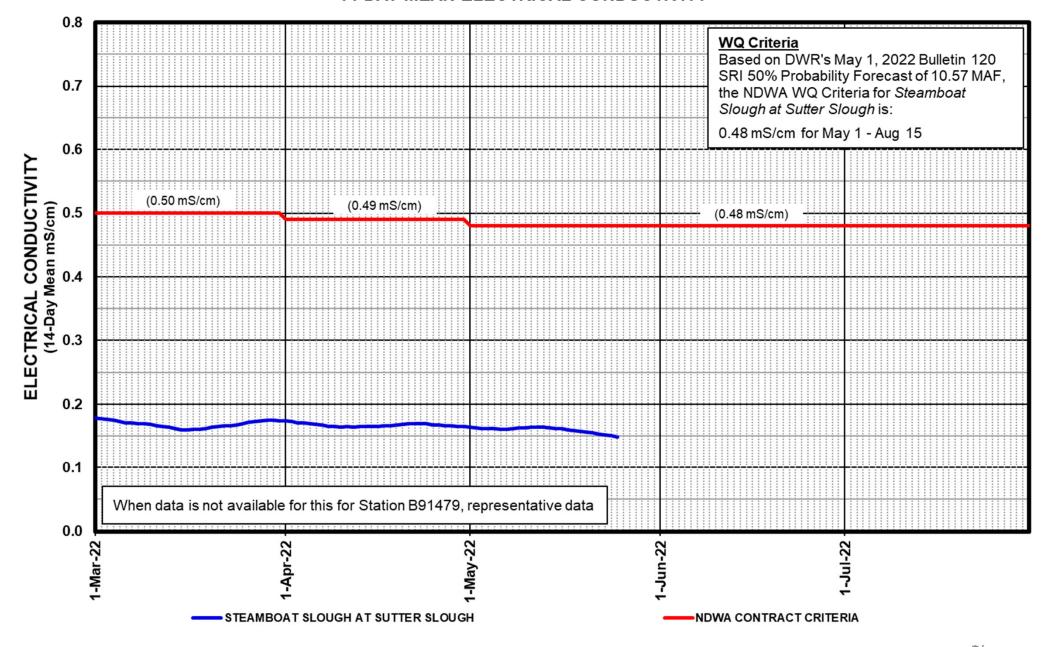


SAN JOAQUIN RIVER AT SAN ANDREAS LANDING 14-DAY MEAN ELECTRICAL CONDUCTIVITY

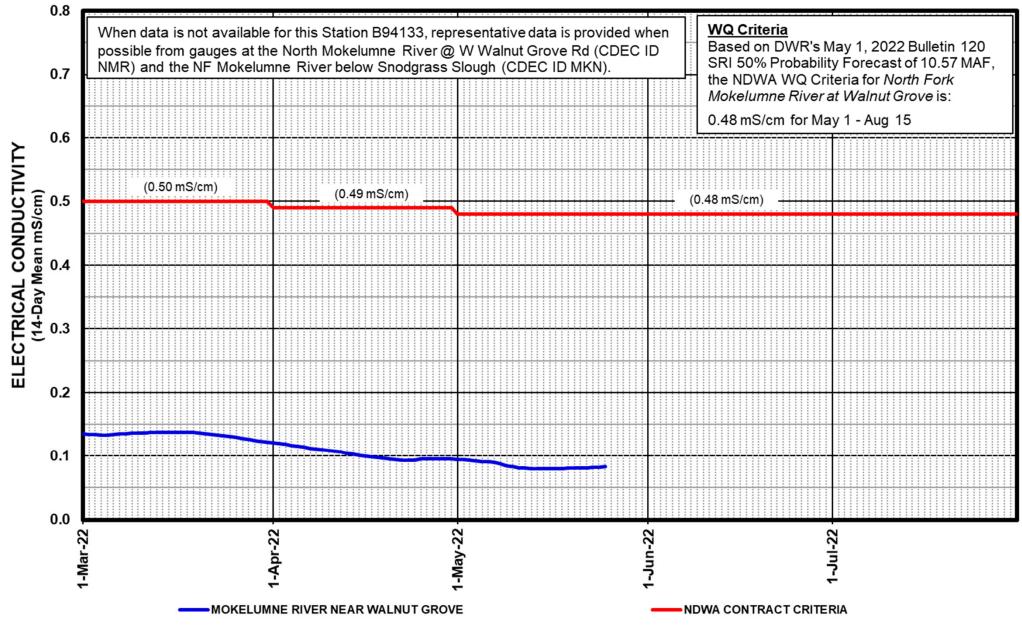


STEAMBOAT SLOUGH AT SUTTER SLOUGH

14-DAY MEAN ELECTRICAL CONDUCTIVITY

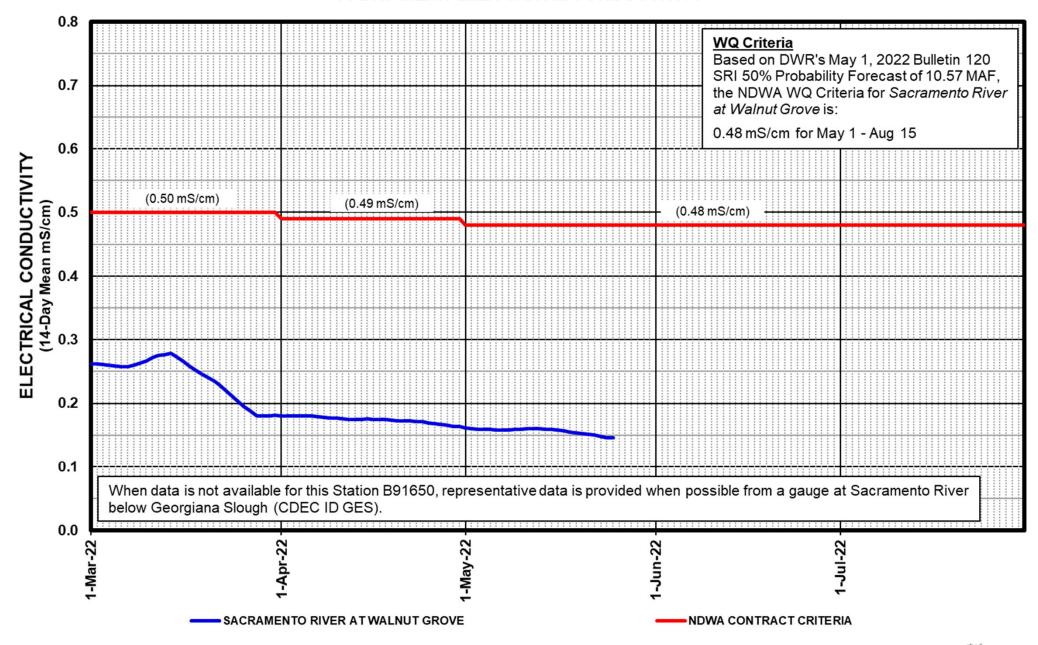


MOKELUMNE RIVER NEAR WALNUT GROVE 14-DAY MEAN ELECTRICAL CONDUCTIVITY



SACRAMENTO RIVER AT WALNUT GROVE

14-DAY MEAN ELECTRICAL CONDUCTIVITY



CVP/SWP TUCP

- Modifications to D-1641 (Apr 1 June 30):
 - 1. Reduce Delta outflow req from 7,100 cfs to 4,000 cfs (14-day average)
 - 2. Limit exports to 1,500 cfs when not meeting D-1641
 - 3. Reduce min monthly average flow req on San Joaquin River at Vernalis to 710 cfs
 - 4. Relocate Western Delta Agriculture compliance point from Emmaton to Threemile Slough
 - TUCP approved on 4/4 with conditions
 - Relocation of Western Delta Agriculture compliance point from Emmaton to Threemile Slough will only occur once projects stop diverting/storing water

Curtailments

- Term 91: Not in Effect
 - Precipitation in April deferred Term 91
 - ➤ Will likely be in effect in soon
- SWRCB refinements to water unavailability methodology ongoing
 - ➤ Planning for curtailments of licenses and some pre-1914 water rights
 - > Don't anticipate riparian curtailments
- Requirements for water right holders to certify and report more often

NDWA Contract

- Assures a dependable water supply of suitable quality
 - > Protections from ocean salinity intrusion
 - > Year round salinity standards at 7 locations
 - > Supplements water rights during curtailment periods
- Includes drought emergency provision

NDWA Contract Drought Emergency Provision

Criteria (all must occur)	Current Status
1. Four-River Basin Index is less than an average of 9 MAF in two consecutive years	2021 = 6.4 MAF 2022 = 10.6 MAF Average = 8.5 MAF
2. SWP Ag < 50%, or all SWP annual entitlements are reduced by at least 15%	SWP allocations at 5% as of March 18 th
3. SWRCB emergency regulation is in effect and maintains water quality different from contract criteria	TUCO conditionally moves Emmaton WQ req (2.78 mS/cm) to Threemile Slough; NDWA Contract criteria <2.78 mS/cm at Threemile Slough

NDWA Contract Drought Emergency Provision

- SWRCB emergency regulation is in effect and maintains water quality different from contract criteria
 - ➤ NDWA Criteria at TMS for June 1-22 1.42 mS/cm and June 23-30 is 2.08 mS/cm
 - TUCO for April 4-June 30 moves D-1641 Western Delta Salinity Standard at EMM (2.78 mS/cm) to TMS
 - When CVP/SWP are "directly diverting or storing water on a net basis from sources within the Bay-Delta watershed and not supplementing flows in the Delta to meet water quality or flow requirements" the compliance location remains at EMM
 - Currently, net storage is +2,210 cfs and diversion is +1,371 cfs (SPW is -3,581) to date, standard has remained at EMM
 - Anticipate this shift occurs within next 1-2 weeks
 - Likely no TUCP for July-Sept period

NDWA Contract Drought Emergency Provision

- Article 4(b)(iv) identifies that when a drought emergency exists "a special contract claims procedure shall be established by the State to expedite and facilitate the payment of such compensation."
- Claims procedure require <u>significant records</u> and information to be provided to the state

NDWA Contract Drought Emergency Provision

- DWR is developing a claims procedure in anticipation of a possible triggering of the emergency provision
- Claims procedure will likely be similar to 2015

NDWA Contract Drought Emergency Provision

- Information for claims includes but is not limited to:
 - Current year crop type, acreage, date planted, date harvested
 - Receipts/invoices
 - > Yields
 - > Timing and quantity of irrigations
 - ➤ Soil salinity data
 - Water quality data
 - > 5-year crop history for fields involved
 - > Crop insurance information

NDWA Contract Drought Emergency Provision

- Claims procedure takes time
 - ➤ Claims submitted in 2015 took > 1-year to process and pay
 - ➤ Any disputes regarding claims settled through binding arbitration

NDWA Contract Drought Emergency Provision

- Agency is continuing to monitor conditions closely and will take appropriate action based on conditions/circumstances
- Agency staff is coordinating regularly with DWR staff
- Agency will disseminate information to landowners
 - ➤ Correspondence to RD's and postings on NDWA website as appropriate
 - ➤ Possible public meetings

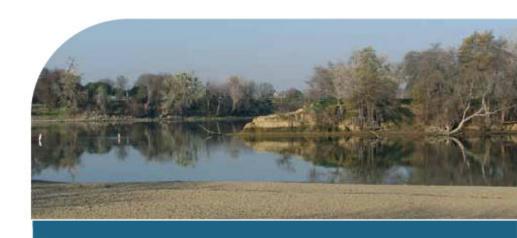
Drought Planning for 2023 – Delta Drought Barriers

- Timing: Installation on Minor & Steamboat Sloughs from June 15 through November 15, 2023
- Location:
 - ➤ Near bottom of Steamboat Slough
 - ➤ Near Arrowhead Marina on Minor Slough
- Design:
 - > 48" diameter circular culverts
 - ➤ Operable gates either all open or all closed
- Impacts:
 - ➤ Increased daily salinity levels (Cache Slough region and Three Mile Slough)
 - ➤ Increased daily water surface elevations (1.3 feet immediately upstream of Minor Slough Barrier)

Drought Planning for 2023 – Delta Drought Response Plan

- 2022 Pilot Program
 - ➤ Purpose is to evaluate water conservation from altering farming practices.
 - ≥ 35 grants (8,500 acres)
- 2023 Drought Response Program
 - ➤ DWR has expressed interest in renewing program for 2023 implementation. Will accept applications in Sept/Oct to allow earlier decision-making by farmers
 - ➤ •Final decision on 2023 implementation will be funding approved by Legislature in the 2022-23 State Budget approved by June 30, 2022

Questions & Discussion



North Delta Salinity Barriers

