

North Delta Water Agency



Special Board Meeting April 27, 2021

Presented by:

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Kevin O'Brien – Downey Brand

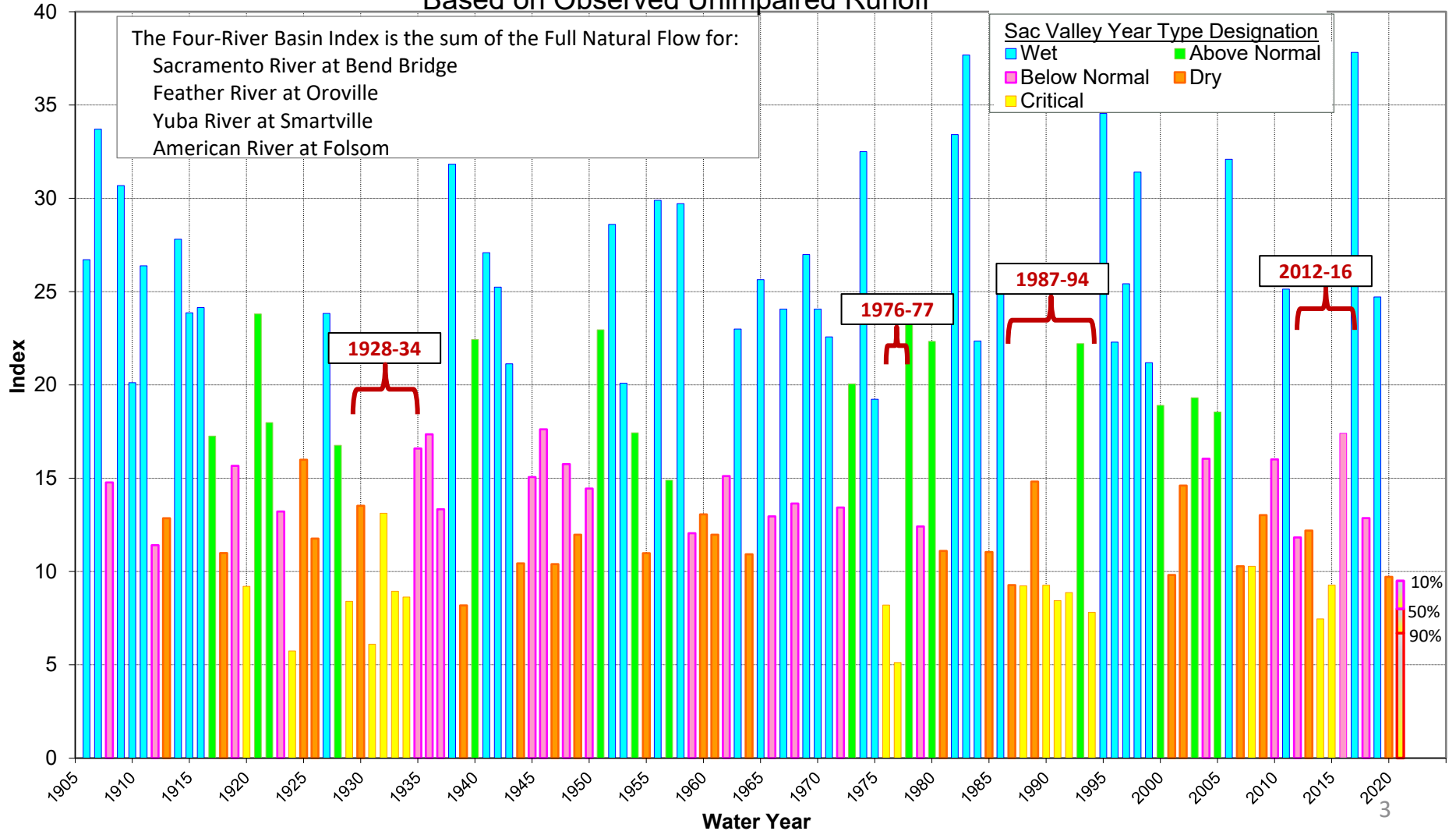
Topics for Discussion

- Current Conditions
 - Water Supply
 - Water Quality
- Drought presentation
 - 2021 drought and related actions
 - NDWA Contract
 - Emergency provisions
- Questions and discussion

Water Supply Conditions

Four-River Basin Index 1906 - 2020

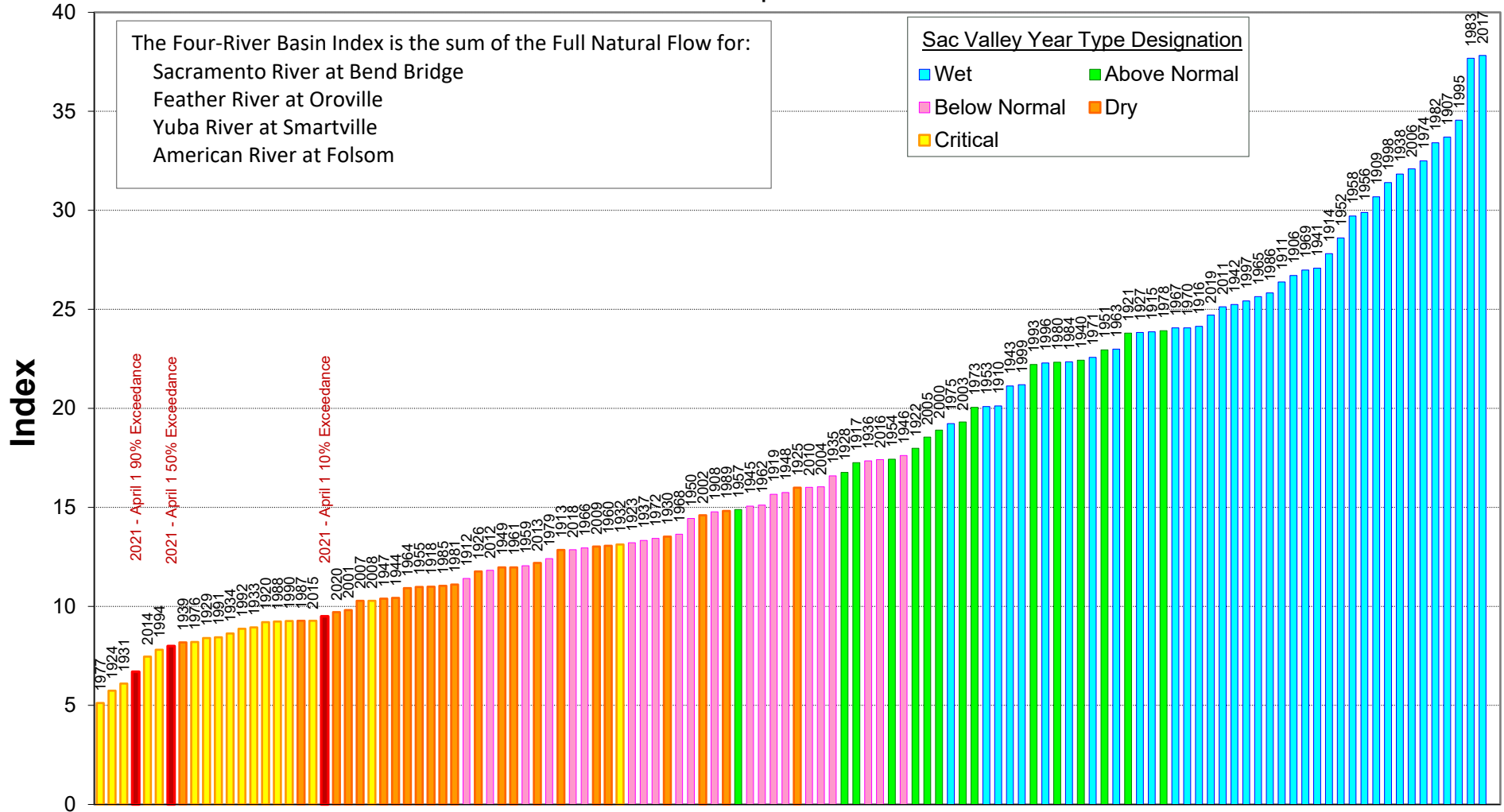
Based on Observed Unimpaired Runoff



Water Supply Conditions

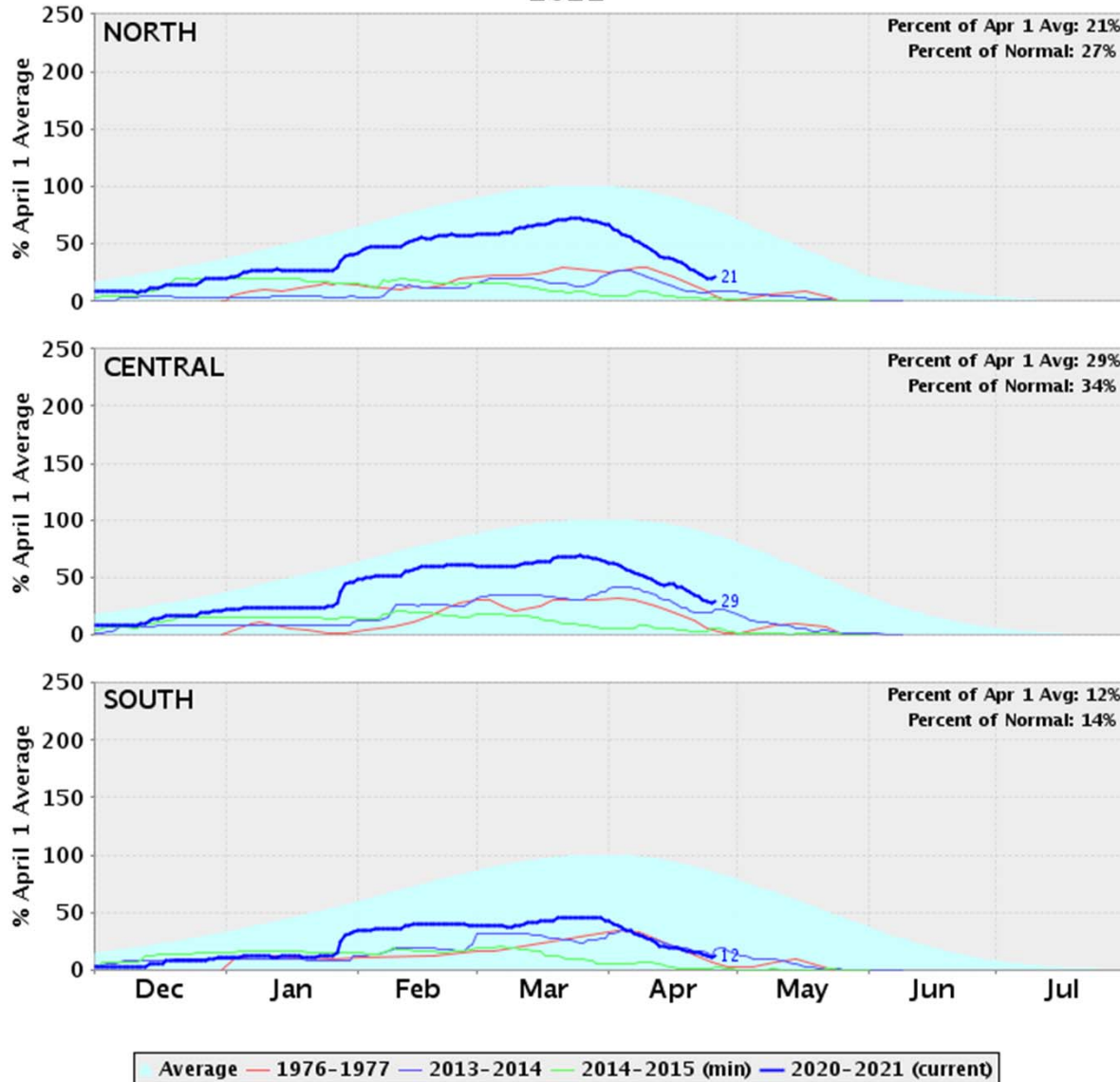
Four-River Basin Index 1906-2021 Sorted

Based on Observed Unimpaired Runoff

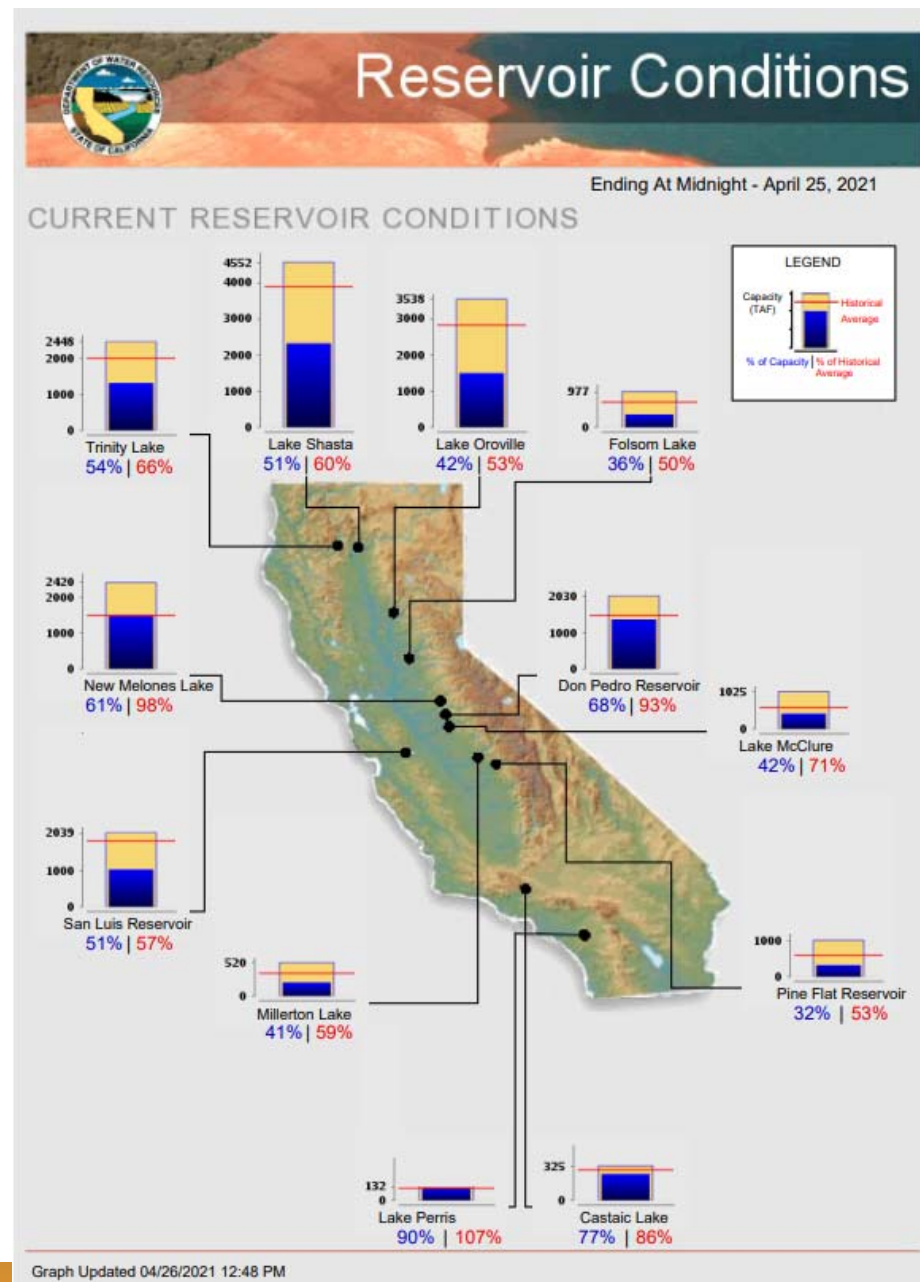


Water Supply Conditions

California Snow Water Content - Percent of April 1 Average For: 26-Apr-2021

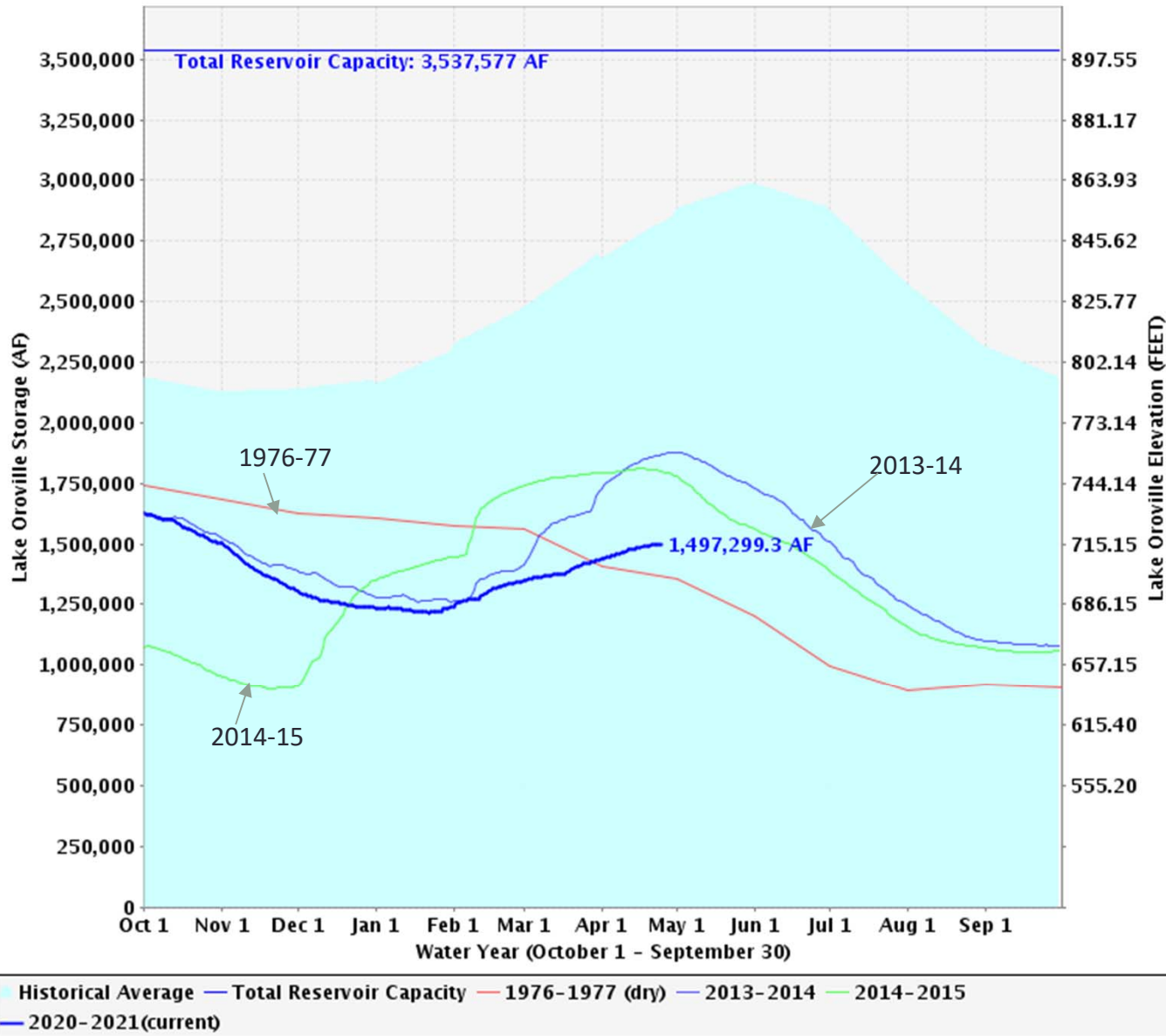


Water Supply Conditions



Water Supply Conditions

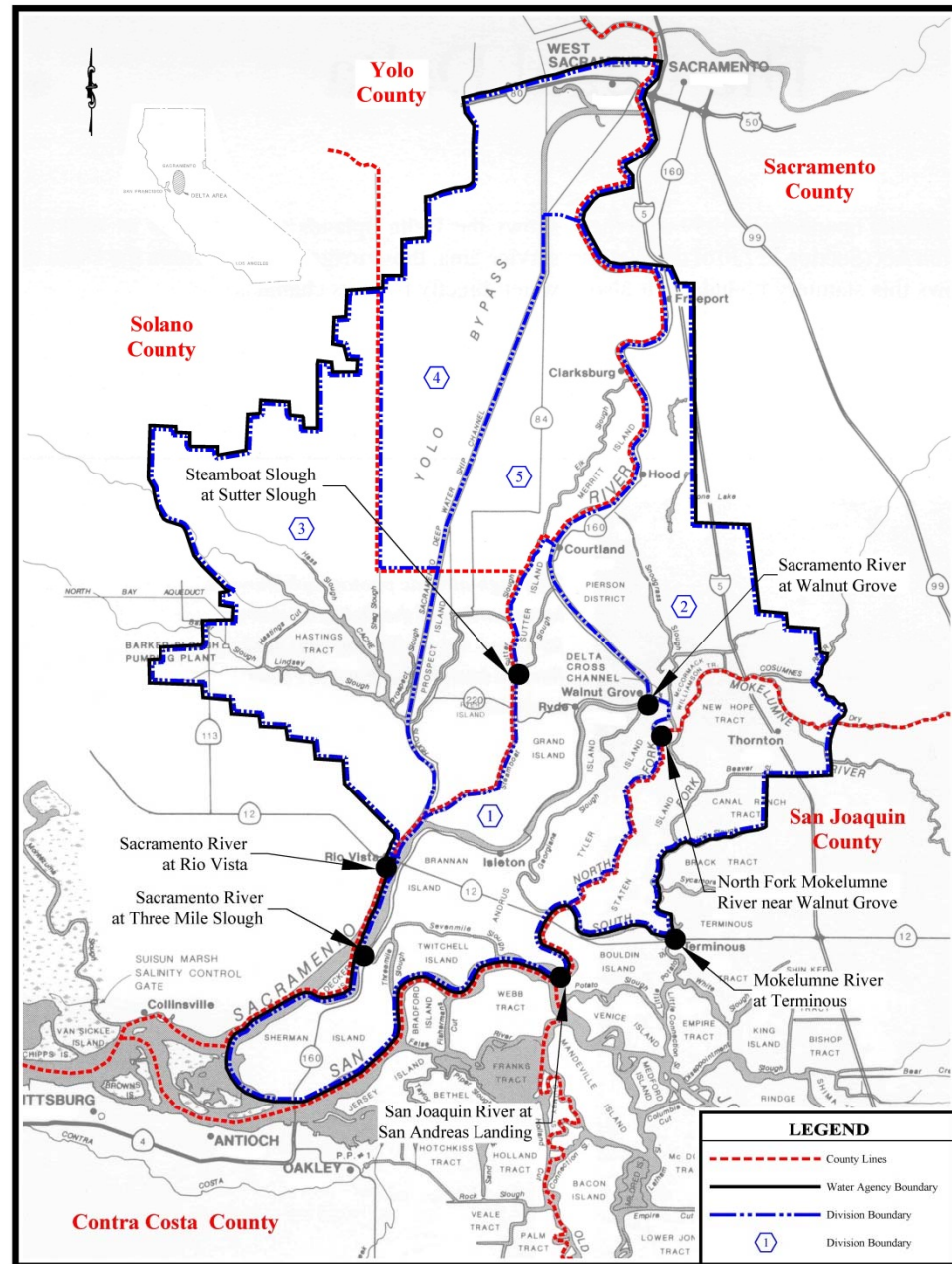
Lake Oroville Storage Levels



Water Supply Conditions

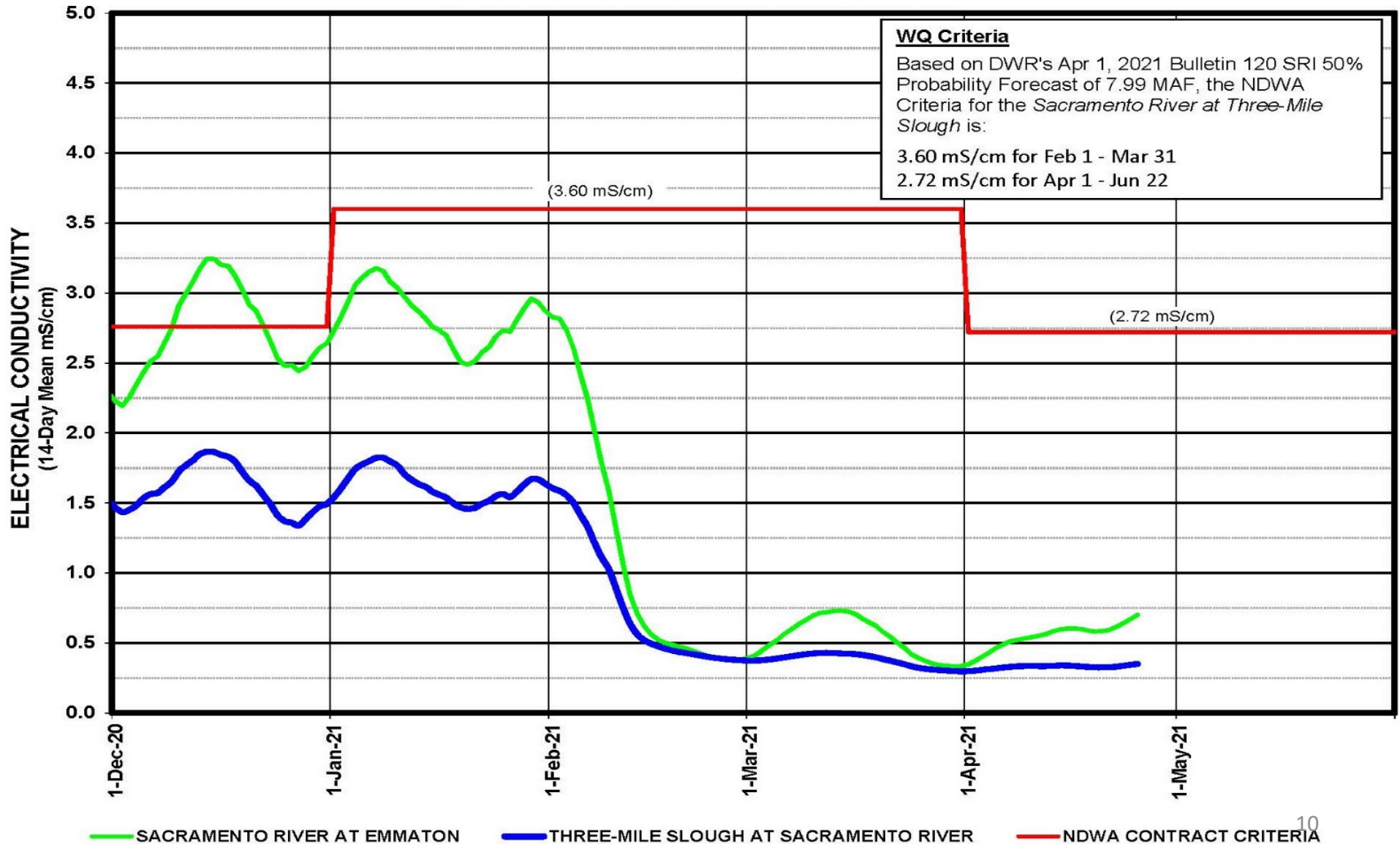
- SWRCB
 - Warning notices to “prepare for drought impacts statewide” sent to water right holders on March 22
 - Term 91 - Curtailments likely in spring, conditions exist as of April 23
- State Water Project (SWP) Allocations
 - FRSA – 50% reduction per Agreements
 - 5% of Table A
- Central Valley Project (CVP) Allocations
 - Settlement Contractors – Shasta Critical Year (75%)
 - Discretionary Contracts
 - NOD AG = 5%
 - SOD Ag = 0%
 - M&I = 55%

NDWA Contract WQ Criteria Compliance Locations



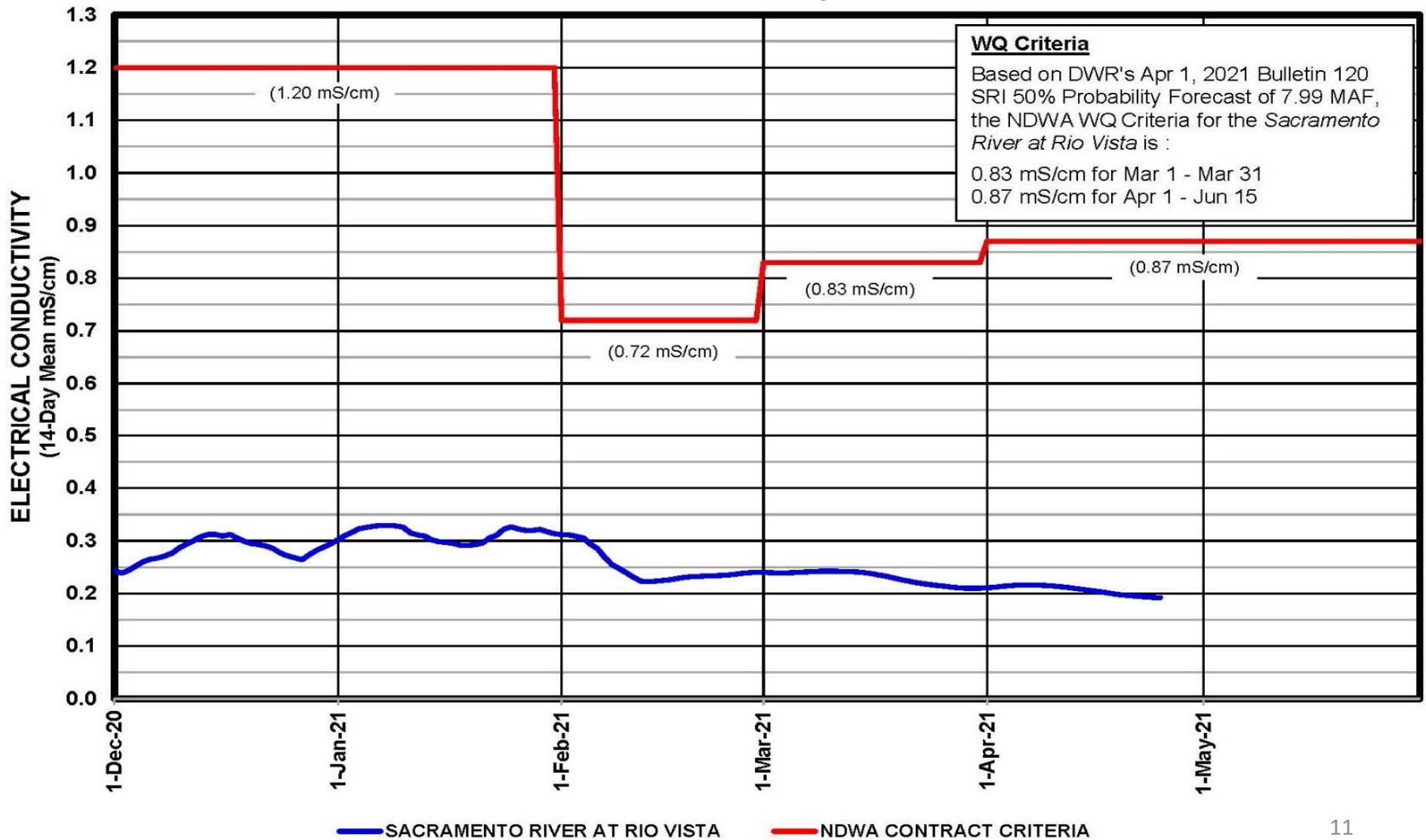
Sacramento River at Three Mile Slough

Dec 2020 – May 2021



Sacramento River at Rio Vista

Dec 2020 – May 2021



Water Quality Monitoring

- NDWA Contract Criteria is based on 14-day mean electrical conductivity (EC)
- EC fluctuates with tides in the Delta
- Suggest conditions be monitored closely as levels rise



EMMATON (USBR) (EMM)

Elevation: 0' - DELTA basin - Operator: US Bureau of Reclamation

Query executed Monday at 11:17:15

Provisional data, subject to change.
Select a sensor type for a plot of data.

HOURLY DATA

Earlier

DATE / TIME PDT	EL COND uS/cm	EL CONDB uS/cm	TEMP W DEG F	BAT VOL VOLTS
04/26/2021 00:00	343	345	62.8	13.9
04/26/2021 01:00	433	435	62.6	13.9
04/26/2021 02:00	469	458	62.4	13.9
04/26/2021 03:00	1,450	1,650	62.2	13.9
04/26/2021 04:00	2,221	2,302	62.0	13.9
04/26/2021 05:00	2,752	2,893	61.8	13.9
04/26/2021 06:00	2,291	2,405	61.7	13.9
04/26/2021 07:00	1,449	1,502	61.8	13.9
04/26/2021 08:00	756	808	61.9	13.9
04/26/2021 09:00	687	733	61.9	13.8
04/26/2021 10:00	580	612	62.2	13.8
04/26/2021 11:00	--	--	--	--

Showing 1 to 12 of 12 entries

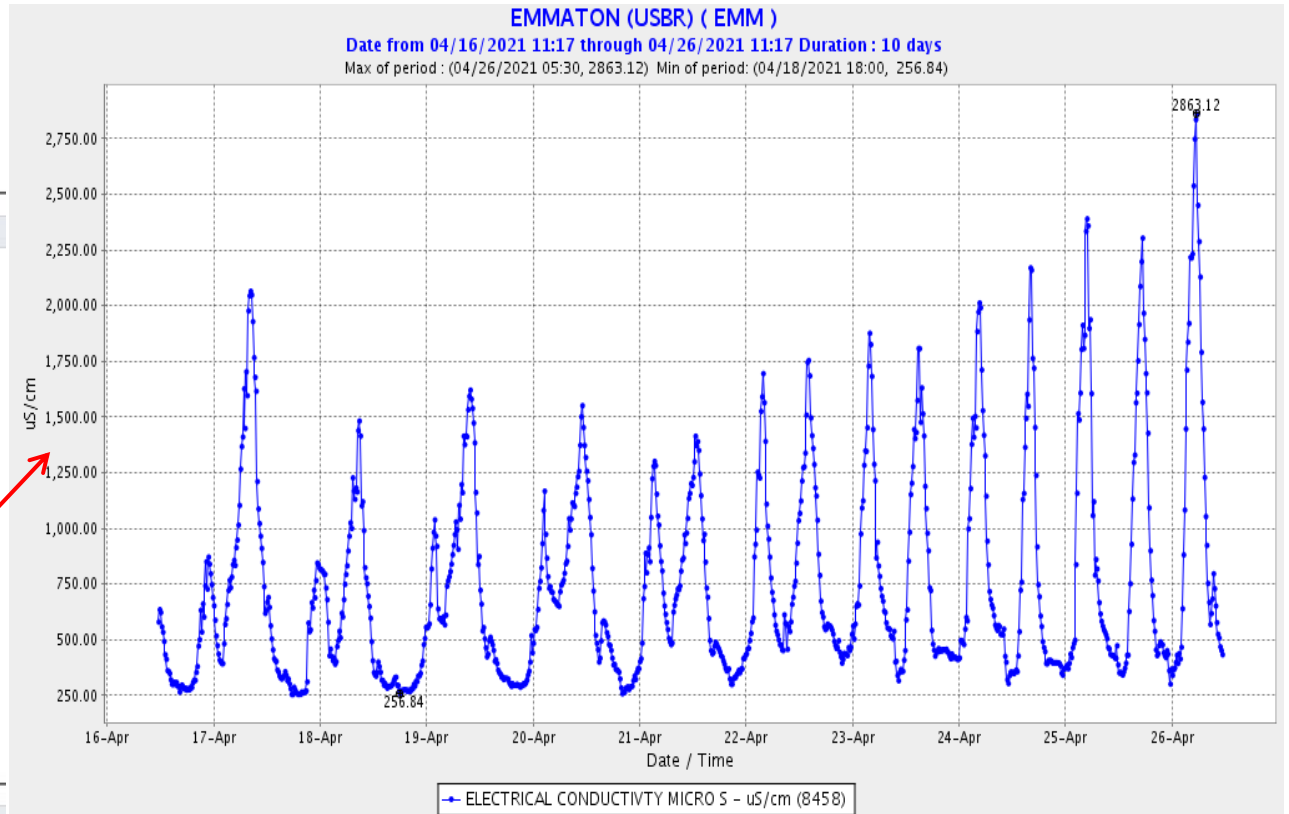
Copy | Excel | CSV | Print | PDF

Later | Latest

15 MINUTE DATA

Earlier

DATE / TIME PDT	EL COND uS/cm	EL CONDB uS/cm
04/25/2021 23:30	304	316
04/25/2021 23:45	372	372
04/26/2021 00:00	343	345
04/26/2021 00:15	368	371
04/26/2021 00:30	376	376
04/26/2021 00:45	401	407
04/26/2021 01:00	433	435
04/26/2021 01:15	397	407
04/26/2021 01:30	441	444



Water Quality Monitoring

- Available water monitoring data
 - Water quality
 - Flow
 - Water elevation or Stage
 - Velocity
 - Other
- Data available through
 - California Data Exchange Center (CDEC)
 - <http://cdec.water.ca.gov/>
 - <http://cdec.water.ca.gov/queryQuick.html>
 - Water Data Library (WDL)
 - <http://www.water.ca.gov/waterdatalibrary/>
 - US Geological Survey (USGS)
 - http://waterdata.usgs.gov/ca/nwis/current/?type=all&group_key=NONE

Drought Related Actions

- Projects prepared a Drought Contingency Plan (DCP) for March 1 through September 30, 2021
 - Required by DWR's ITP with CDFW
 - Based on Feb 1 Forecasts
 - Modeling assumes DWR will meet NDWA Contract Criteria under both 50% and 90% Exceedance Forecast scenarios
 - 50% Forecast
 - CVP and SWP anticipate meeting In-basin requirements and D 1641 standards
 - Concerns for 2022 if dry/critical conditions persist

Drought Related Actions Cont.

➤ 90% Forecast

- D1641 allows for flexibility in meeting X2 Standards therefore CVP/SWP do not anticipate TUCP
- Concerns relative to temperature control and carryover storage
- Addendum to March 1 DCP expected week of April 26
- Updated DCP to be released in late May
- April 21 - Governor's proclamation of drought emergency for Russian River watershed

NDWA Contract

- Assures a dependable water supply of suitable quality
 - Protection from ocean salinity intrusion
 - Continued diversions during curtailment periods
 - Year round salinity standards at 7 locations
- Other protections
 - Changes in natural flows, flow directions, and water surface elevations
 - Erosion and seepage
- Drought Emergency Provision – Article 4

NDWA Contract Emergency Provisions

- Article 4 provides for compensation from the State for damages during a drought emergency when an alternative supply is not available:
 - Compensation for loss of net income for each acre which, due to the drought emergency, was;
 - Planted to a more salt-tolerant crop,
 - Not planted to any crop, or
 - Crops which had reduced yields

NDWA Contract Emergency Provisions cont.

- A drought emergency exists when all of the following occur:
 - The Four River Index is less than an average of 9.0 MAF in two consecutive years
 - Water Supplies for SWP agricultural contractors are less than 50% supply; or water supplies to all SWP Contractors are reduced by more than 15%
 - An SWRCB Emergency Regulation is in effect providing for SWP operations to maintain water quality *different than provided under the NDWA Contract*

NDWA Contract Emergency Provisions Cont.

- Four-River Basin or Sacramento River Index (SRI)
 - Actual and forecasted unimpaired flow
 - Sacramento River at Bend Bridge
 - Feather River at Oroville
 - Yuba River near Smartville
 - American River at Folsom

NDWA Contract Emergency Provisions Cont.

- Four-River Basin Index (SRI)
 - Apr 1 B-120 50% Exceedance Forecast = 8.0 MAF
 - Water year 2020 actual SRI = 9.7 MAF
 - 2020-2021 Average = 8.85 MAF
- SWP Allocations to agricultural contractors
 - 5% based on March 23, 2021 announcement
- Currently no action by SWRCB to modify Water Quality Standards

NDWA Contract Emergency Provisions (cont.)

- 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 significant records and information to be provided to the state

NDWA Contract Emergency Provisions (cont.)

- 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 Emergency Provisions (cont.)

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

Next Steps

- 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

Questions & Discussion

