### North Delta Water Agency



#### Public Meeting November 5, 2014

Presented by: Gary Kienlen – MBK Engineers Kevin O'Brien – Downey Brand

Introductions

- NDWA staff
  - ➤ Melinda Terry
  - ➤ Colleen Flannery
  - ➤ Gary Kienlen, Engineer
  - ➤ Kevin O'Brien, Legal Counsel
- NDWA Board members

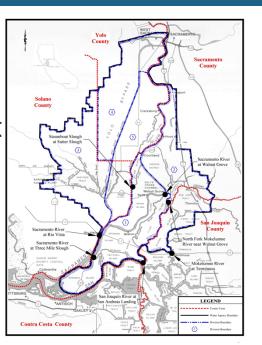
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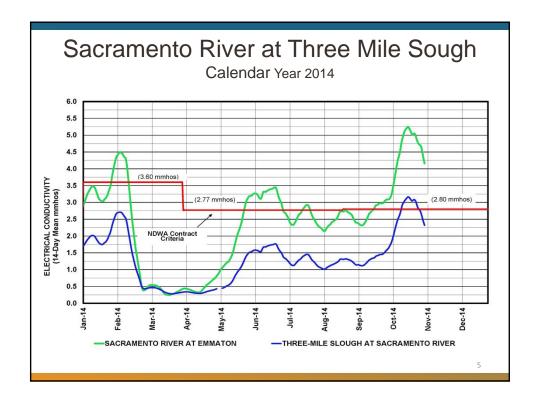
#### **Topics for Discussion**

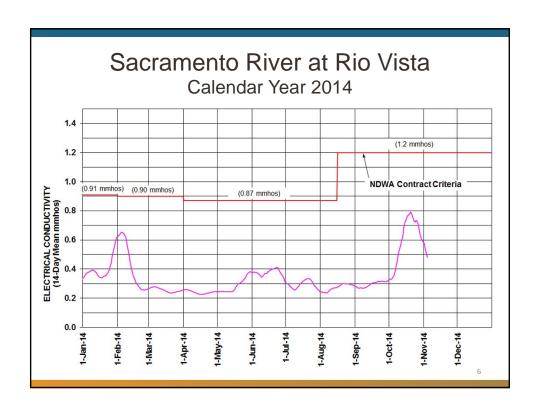
- Current water quality conditions
- Drought presentation
  - ≥2014 drought and related actions
  - ➤ NDWA Contract
    - Emergency provisions
  - ➤ Status of barriers
- Questions and discussion

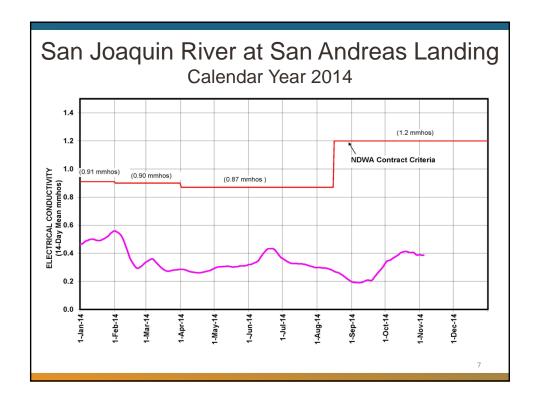
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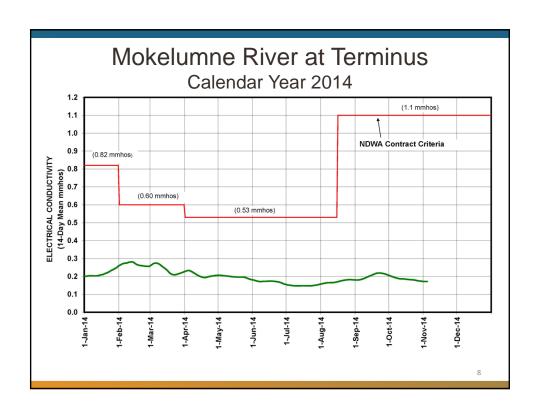
NDWA Contract
WQ Criteria
Compliance
Locations











### 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/
    - <a href="http://cdec.water.ca.gov/queryQuick.html">http://cdec.water.ca.gov/queryQuick.html</a>
  - ➤ Water Data Library (WDL)
    - <a href="http://www.water.ca.gov/waterdatalibrary/">http://www.water.ca.gov/waterdatalibrary/</a>
  - ➤ US Geological Survey (USGS)
    - <a href="http://waterdata.usgs.gov/ca/nwis/current/?type=all&group\_key=NONE">http://waterdata.usgs.gov/ca/nwis/current/?type=all&group\_key=NONE</a>

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<u> </u>	No	CDEC Station ID	Station Name	Entity	EC	Velocity	Flow	Stage
Data Available on	1	EMM	Emmaton	USBR	Х			
	2	SDI	Sacramento River at Decker Island	USGS	Х	х	х	
	3	TMS	Three Mile Slough	DWR	х			
	4	RVB	Sacramento River at Rio Vista	USBR	Х			
	5	RIV	Rio Vista	USBR	х			Х
	7	GSS	Georgiana Slough at Sacramento River	USGS	х	X	х	Х
	8	GES	Sacramento Blw Georgiana Slough	USGS	Х	Х	Х	Х
	9	SDC	Sacramento R above Delta Cross Channel	USGS		х	х	Х
	10	SUT	Sutter Slough at Courtland	USGS		Х	х	Х
	11	SRD	Sacramento River at Hood (USGS)	USGS		х	х	х
	12	SRH	Sacramento River at Hood	DWR	Х			
	13	FPT	Sacramento River at Freeport	USGS	Х	х	х	х
	14	RYI	Cache Slough at Ryer Island	USGS	х	х	х	Х
	15	LIB	Liberty Island @ Approx Center S End	USGS	Х	Х	х	х
Available on	16	DWS	Deep Water Ship Channel	USGS	х	х	х	х
	18	SSS	Steamboat Slough stw Sac R and Sutter Sl	USGS		х	х	х
	19	HWB	Miner Slough at Hwy 84 Bridge	USGS	Х	Х	Х	Х
CDEC	20	MFV	Miner Slough at Five Points	DWR				х
0220	21	CCS	Cache Slough	USBR	х			
	22	LIR	Liberty Island - RD 2068	DWR				х
	23	LIS	Yolo Byspass at Lisbon	DWR		х	х	х
	24	BLP	Blind Point	DWR	х			
	25	SJJ	San Joaquin River at Jersey Point	USGS	х	х	х	х
	26	JER	Jersey Point	USBR	х			
	27	FAL	False River	USGS	х	х	х	х
	28	TSL	Threemile Slough at San Joaquin River	USGS	х	х	х	х
	29	SAL	San Joaquin River at San Andreas Landing	USBR	Х			
	30	MOK	Mokelumne R @ San Joaquin River	USGS	х	х	х	
	31	STI	Staten Island on SF Mokelumne River (Terminous)	USBR	х			
	33	SMR	South Mokelumne River at W Walnut Grove Rd	USGS	х	х	х	х
	34	NMR	North Mokelumne River at W Walnut Grove Rd	USGS	х	х	х	х
	35	DLC	Delta Cross Channel btw Sac R & Snodgrass	USGS	х	х	х	х
	36	BEN	Mokelumne R NR Thornton (Benson's Ferry)	DWR				х

#### Data Available on WDL

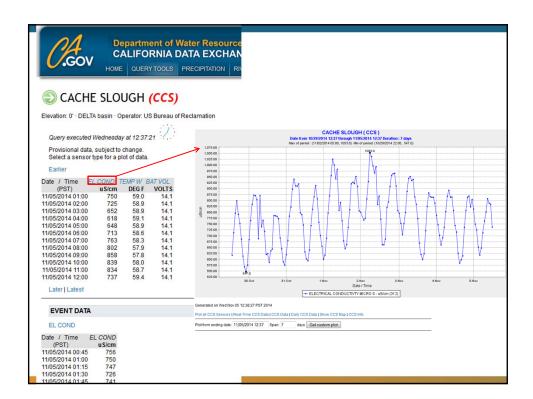
	Data Available on Water Data Library											
No	WDL Station ID	Station Name	Entity	EC	Velocity	Flow	Stage					
_	Station ID											
6	B91650	Sacramento River at Walnut Grove	DWR	Х		Х	Х					
17	B91479	Steamboat Slough below Sutter Slough	DWR	Х								
32	B94133	NF Mokelumne River blw Snograss Sl	DWR	Х								

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# Monitoring Station Locations

- NDWA Contract Compliance points
- Other Monitoring Points





#### Lake Oroville

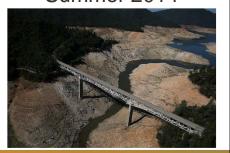


Summer 2011



Summer 2014





#### **Drought Related Actions**

- Jan 17
  - ➤ Governor issues Drought Proclamation
  - > SWRCB issues notice of probable curtailments
- Jan 31
  - ➤ SWRCB Order approving Temporary Urgency Change Petition by DWR and USBR (TUCP)
- Apr 8
  - ➤ Drought Operations Plan (DOP) submitted to SWRCB by DWR and USBR
- May 27
  - ➤ SWRCB curtails Post-1914 water rights

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#### Drought Related Actions Cont.

- Sep 24
  - ➤ SWRCB workshop Central and south delta water availability and use
  - ➤ SWRCB considered and denied petitions for reconsideration of the Jan 31 TUCP Order
- Oct 3
  - > SWRCB plan for temporary lifting of post-1914 curtailments
- Oct 7
  - > SWRCB most recent modification to Jan 31st TUCP
- Oct 31-Nov 2
  - > SWRCB temporarily lifted curtailments of post-1914 water rights

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## Drought Related Actions TUCP and SWRCB Order

- Projects to submit Drought Contingency Plan (DCP) for Oct through Jan by Oct 15, 2014
  - ➤ CVP and SWP anticipate operating under D 1641 standards as modified by TUCP Order under 50% and 90% hydrology
  - ➤ Potential modifications to DCC operations under 99% hydrology
- Projects to submit DCP for remainder of WY 2015
   January 15, 2015

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#### **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

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#### NDWA Contract Emergency Provisions (Article 4)

- 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
    - Which had a reduced yield

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#### NDWA Contract Emergency Provisions (Article 4)

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

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#### NDWA Contract Emergency Provisions (Article 4) Cont.

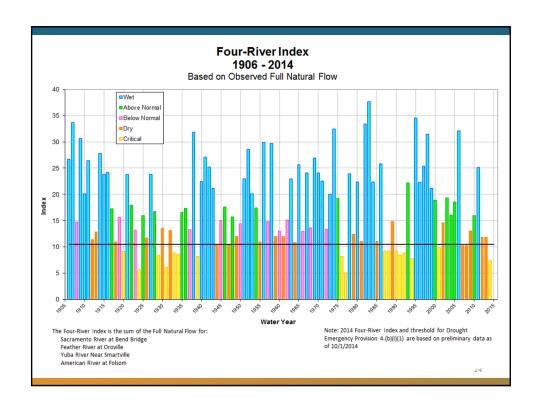
- Four River Index (SRI)
  - >Actual and forecasted unimpaired flow
    - Sacramento River at Bend Bridge
    - Feather River at Oroville
    - Yuba River at Smartville
    - American River at Folsom

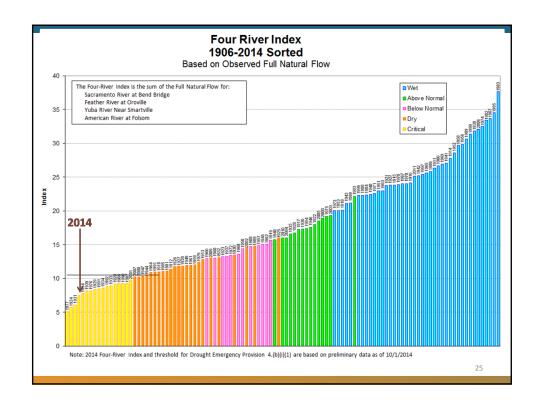
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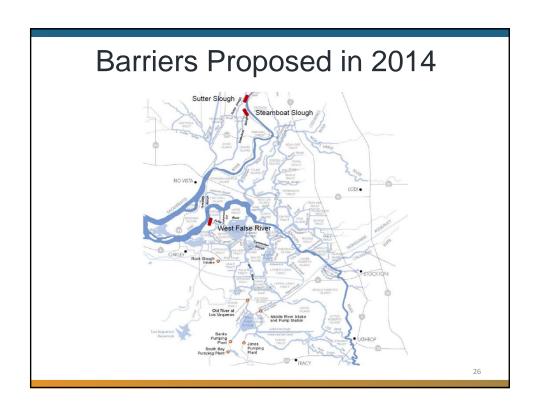
#### NDWA Contract Emergency Provisions (Article 4) Cont.

- May 1, 2014 Bulletin 120 forecast
  - ≥50% exceedance = 7.18 MAF
- Water year 2014 actual
  - **>**7.47 MAF
- Water year 2015 forecast
  - ➤ Condition (a) triggered *if* May 1, 2015 forecast is less than 10.53 MAF

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#### Status of Barriers

- Barriers not included in Oct 15<sup>th</sup> Drought Contingency Plan
- Barriers will likely be included in the Jan 15<sup>th</sup>
   Drought Contingency Plan
  - ➤ Timing: depends on fishery and salinity management and hydrology
- Permitting process is still an issue
- NDWA is continuing discussions with DWR

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#### **Next Steps**

- Agency is continuing to monitor conditions closely and will take appropriate action based on conditions/circumstances
- Agency will disseminate information to landowners
  - > Letter to landowners
  - ➤ Possible public meetings
  - ➤ Other correspondence as appropriate
- Oct 29<sup>th</sup> meeting with DWR

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