



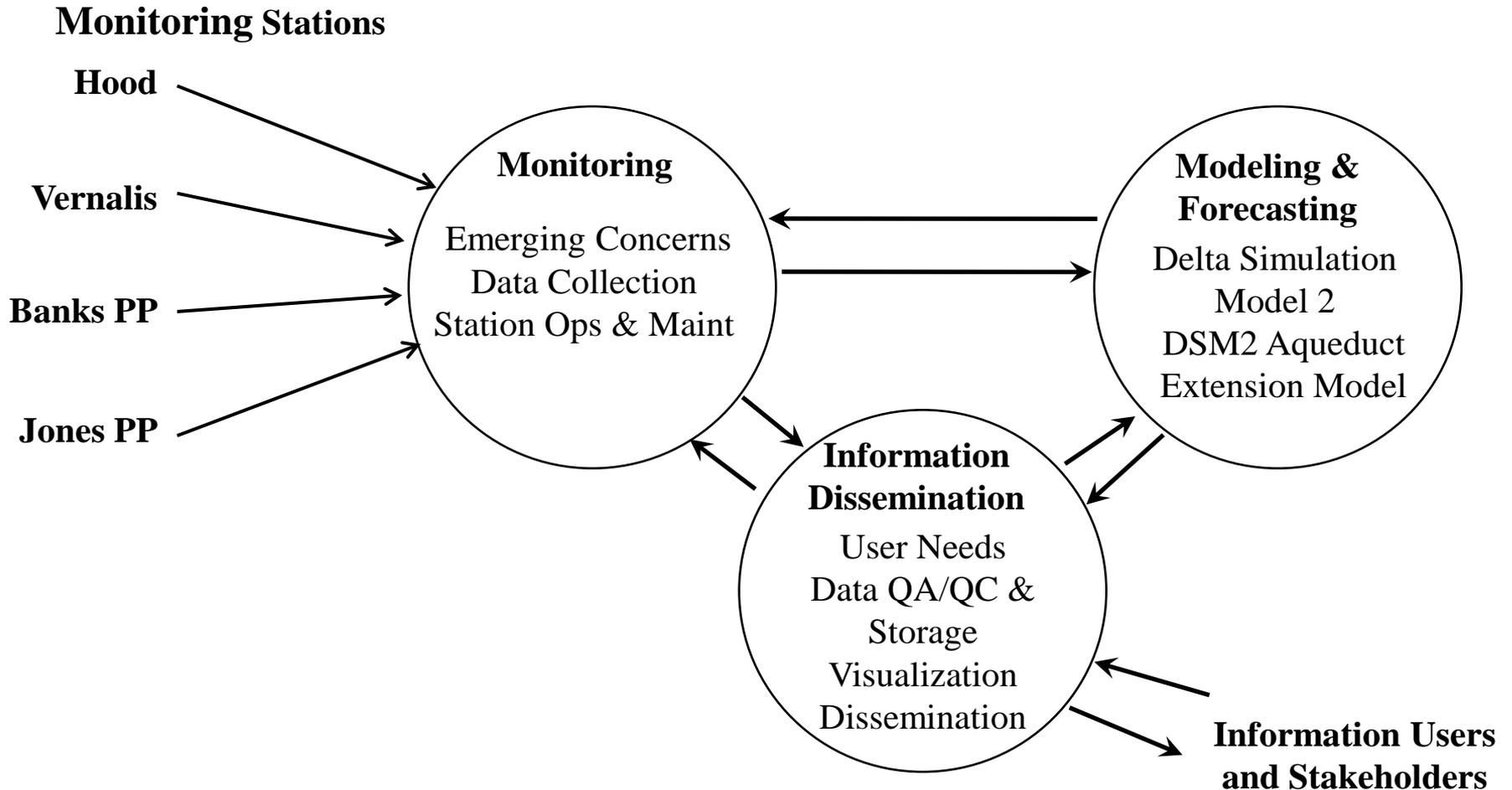
***Real-Time Data and Forecasting Project:
Overview and Progress***

Ted Swift

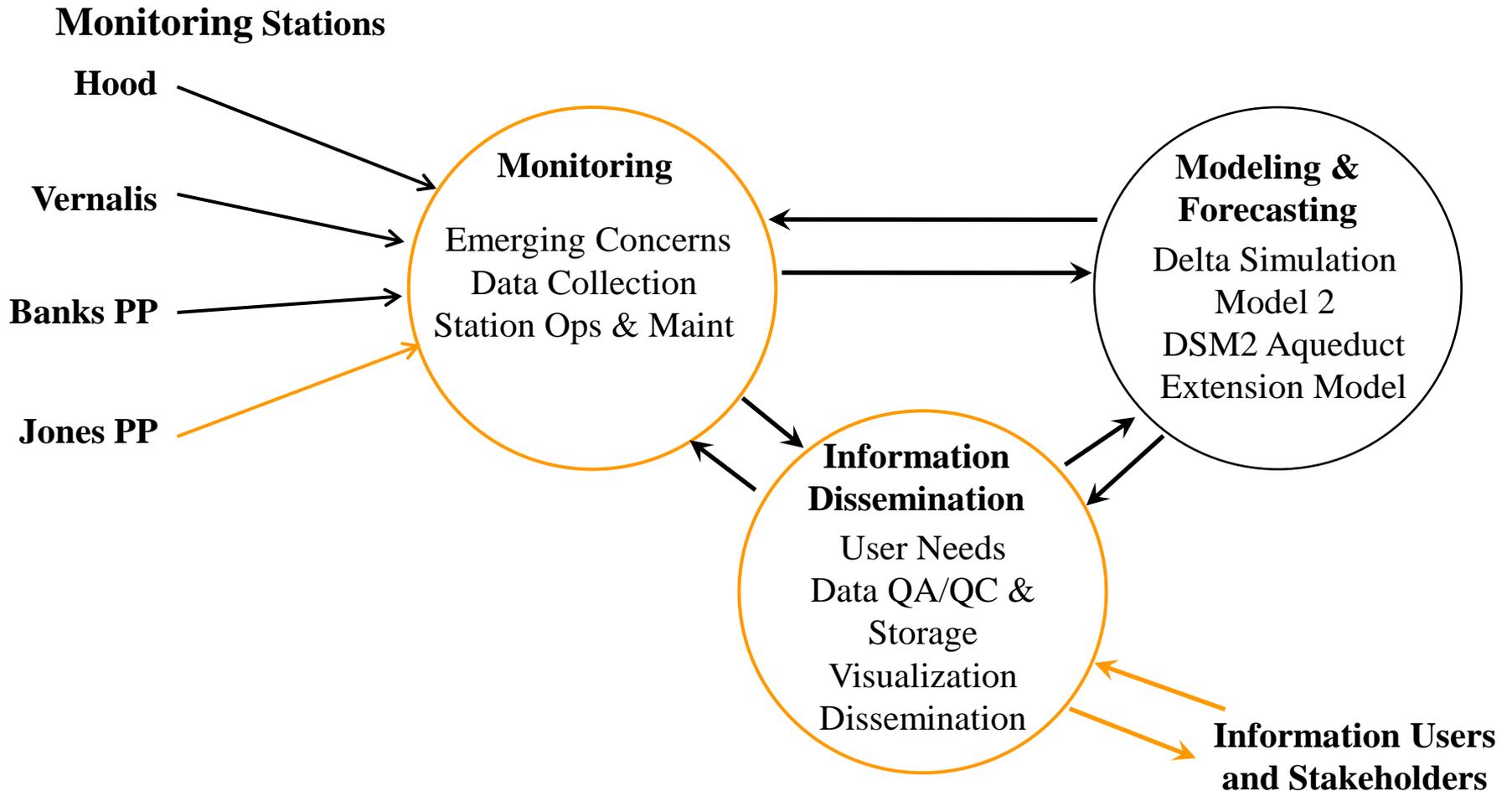
***Municipal Water Quality Investigations Program,
California Dept. of Water Resources
tswift@water.ca.gov***

21 Apr 2009

RTDF: Three Components



RTDF: Three Components



RTDF Monitoring Stations

*Sacramento - San Joaquin
River Delta as Source Water*

Sacramento River

Hood

**To the
Pacific**

San Joaquin River

Jones PP

H.O.Banks PP

SWP

CVP

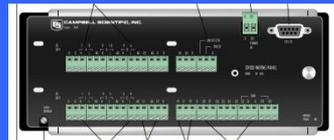
Vernalis



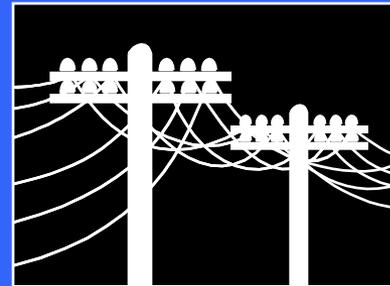
Real-time Data System



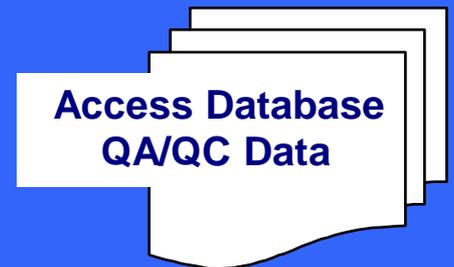
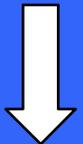
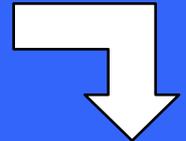
**TOC Analyzer
& Other Instruments**



**Campbell Datalogger
or personal computer**



**Phone Modem
and frame relay**



FTP

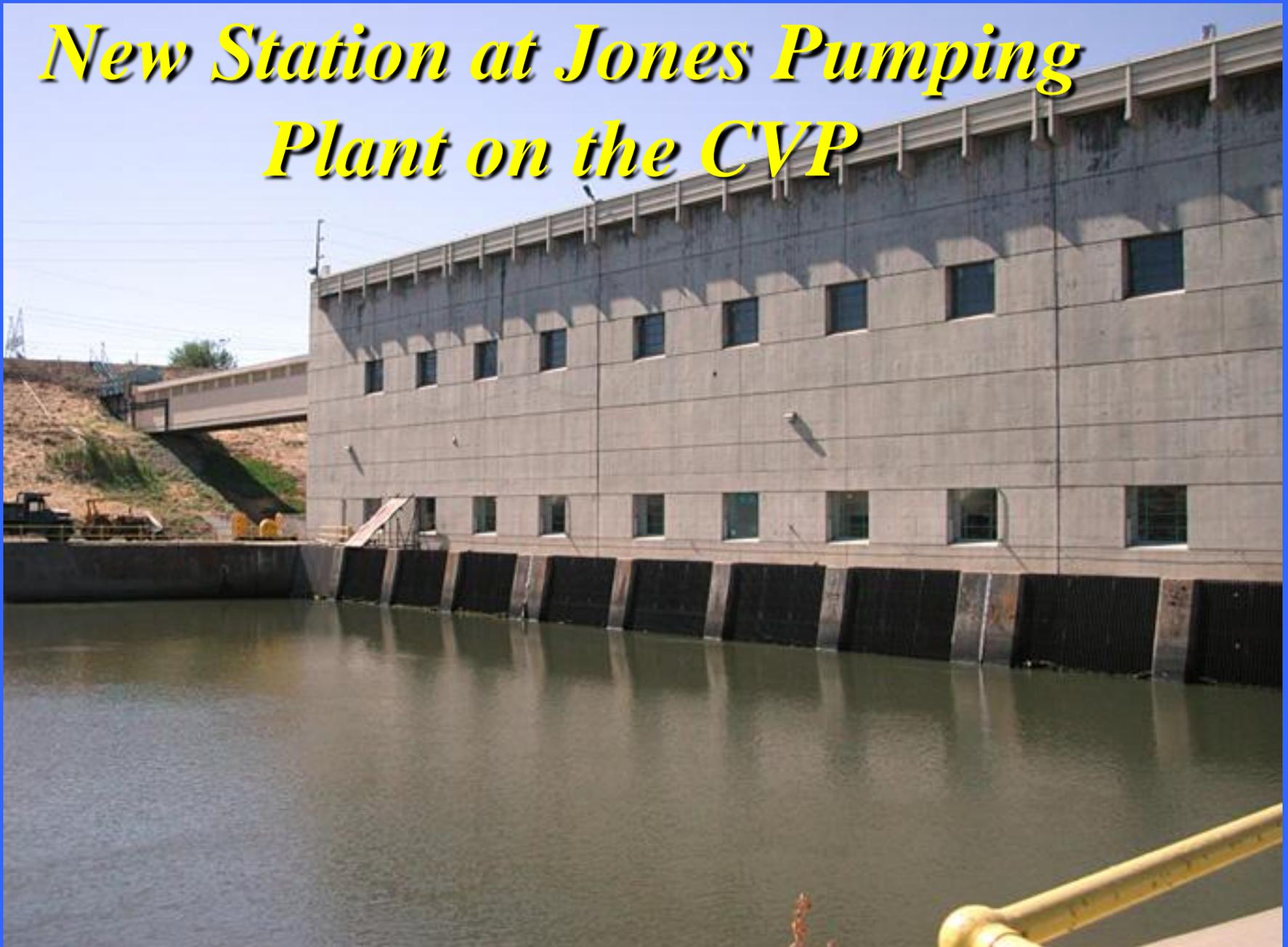


**DWR
California Data
Exchange**

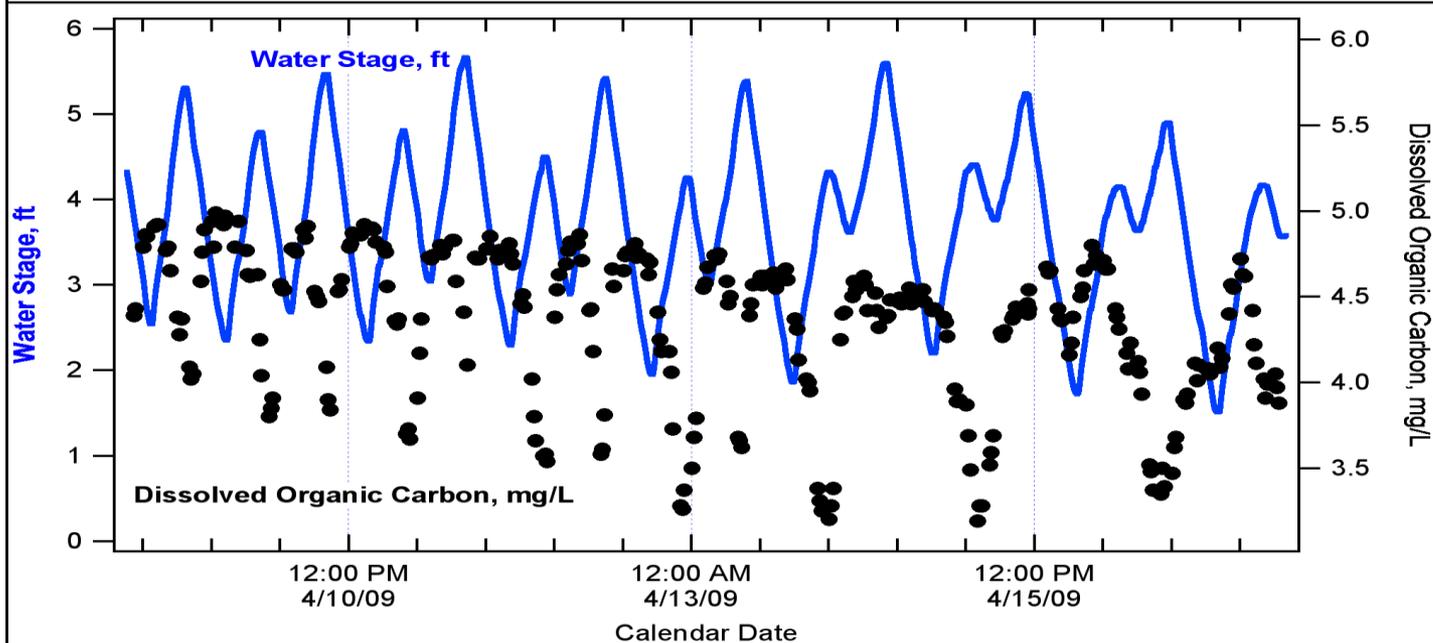
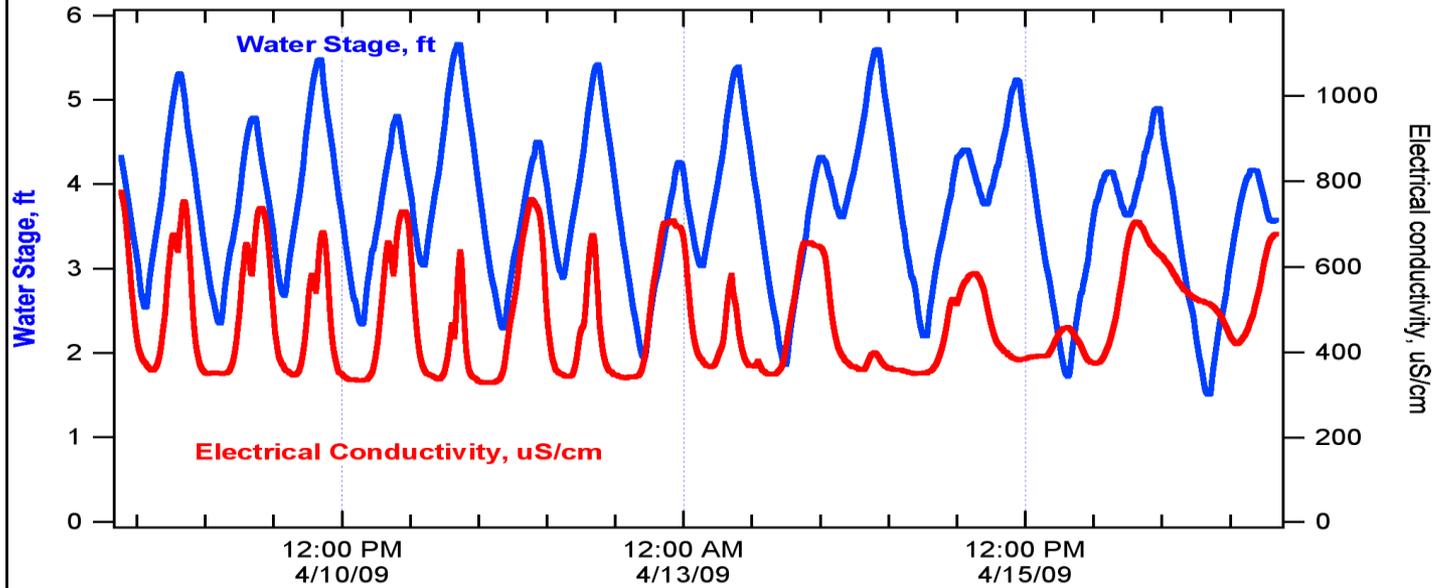


**World Wide Web,
PDF Emailed reports**

New Station at Jones Pumping Plant on the CVP



Jones Pumping Plant: Effects of Tides



RTDF Project Design: Serve up information



- *Identify Customer Needs & Purposes*
- *Develop Tools and Processes to meet them*
- *Information Products are Valuable Resources*
- *Have a Feedback Process*

Real Time Data and Forecasting Project
 Water Quality Report mockup; Tuesday, <Date>
 Office of Water Quality, Department of Water Resources
 For questions contact: <Name> <email> <phone>

Summary Comments, Observations and Interpretation

	Week ago	Last	%Change	Prediction
Sacramento River mean daily flow, cfs	9229	9340	+1.2%	↗
Salinity (EC), µS/cm	203.6	205.7	+1.0%	↘
DOC, mg/L	1.3	1.4	+7.7%	↔
TOC, mg/L	1.6	1.8	+12.5%	↘
San Joaquin River mean daily flow	2440	2155	-11.7%	↘
Salinity (EC), µS/cm	570.6	609.4	+6.8%	↗
DOC, mg/L	2.7	2.5	-7.4%	↔
TOC, mg/L	4.0	3.7	-7.5%	↘
H. O. Banks Pumping Plant pumping, cfs	1,457	1,904	+30.7%	↗
DOC, mg/L	6.0	5.8	-3.3%	↘
TOC, mg/L	6.9	6.4	-7.2%	↘
H. O. Banks Pumping Plant pumping, cfs	1,457	1,904	+30.7%	↗
C.W. Jones Pumping Plant pumping, cfs	1,874	1,008	-46.2%	↘
Barker Slough Pumping Plant pumping, cfs	5	11	+120%	↗
Delta total outflow index, cfs	7,831	6,715	-14.3%	↘
Other Salinity and Anions:				
Barkers Slough mean daily EC, µS/cm	524	556	+6.1%	↔
Banks Pumping Plant mean EC, µS/cm	435	440	+1.1%	↔
Banks Anions: mean daily bromide, mg/L	0.19	0.17	-10.5%	↘
Vernalis Station mean daily bromide, mg/L	0.27	0.24	-11.1%	↔

Anion concentrations at **Banks and Vernalis Stations** have generally decreased. Along the South Bay Aqueduct high geosmin concentrations were detected in the Del Valle reservoir on 36 Mar. Geosmin concentrations ranged from 35 to 43 ng/L in the samples. Delta Field Division staff were scheduled to resample Del Valle today, 1 April, to confirm the high geosmin concentrations.

Precipitation: There was very little precipitation in the Central Valley last week. For this week the [NOAA River Forecast Center](#) forecasts little to no precipitation in the Central Valley. There is a 20-40% chance of rain in the valley for Wednesday.

Information Dissemination: Goals & Guides



- *Must meet user needs ... which will change*
- *Data visualization & presentation are important to reach a variety of users*
- *Create & foster feedback for improvement & collaboration*



Information Dissemination: Products

- *A weekly report & data set for the Delta, SWP and CVP e-mailed to about 240 subscribers, also made available on web site archive.*
- *In the near future, a continuously updated website where users can access historical, real-time and forecasted data and information.*
- *A long-term data management system for storing QC'ed real-time data*
- *Other products...?*

Acknowledgements

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Questions & Discussion?