

# SWP Water Quality Summary

October 7 to November 8, 2010

**Electrical Conductivity:** EC decreased at all locations. Concentrations ranged from 221  $\mu\text{S}/\text{cm}$  to 577  $\mu\text{S}/\text{cm}$  (133 mg/L to 346 mg/L) and were below the Article 19 Monthly Average Objective of 440 mg/L (733  $\mu\text{S}/\text{cm}$ ). At the end of the month, the highest concentration of 469  $\mu\text{S}/\text{cm}$  (281 mg/L) occurred at Check 29, while the lowest concentration of 221  $\mu\text{S}/\text{cm}$  (133 mg/L) occurred at Barker Slough. The 32-day average concentration at Harvey O. Banks Pumping Plant (HBP) was 459  $\mu\text{S}/\text{cm}$  (275 mg/L).

**Bromide\*:** Concentrations exceeded the California Bay-Delta Authority (CBDA) Objective of 0.05 mg/L at all locations. Concentrations ranged from 0.06 mg/L to 0.30 mg/L. At the end of the month, Check 29 and Check 41 had the highest concentration of 0.21 mg/L, while the lowest concentration of 0.06 mg/L occurred at Barker Slough.

\* Bromide concentrations are calculated values using linear regression equations using EC concentrations and are not as accurate as bromide concentrations from laboratory analysis.

**Turbidity:** Turbidity levels increased at HBP, Check 29 and Barker Slough, but decreased at Check 41 and Vallecitos. Turbidity ranged from 4.3 NTU to 40.8 NTU this month. At the end of the month, the lowest level of 4.4 NTU occurred at Check 29, while the highest level of 40.8 NTU occurred at Barker Slough. The 32-day average turbidity level at HBP was 8.1 NTU with an 11% change.

**Dissolved Organic Carbon (DOC):** Concentrations decreased at HBP, but increased at Check 13. DOC 32-day average concentrations were 1.9 mg/L at HBP and 1.6 mg/L at Check 13. The DOC 27-day average for Edmonston was 2.4 mg/L. HBP had the lowest change in concentration at -6%.

**Taste and Odor Compounds:** MIB and geosmin concentrations in the SWP ranged from non-detect to 17 ng/L at Clifton Court Inlet, HBP, South Bay Aqueduct at Del Valle Check 7, O'Neil Forebay Outlet (Check 13), San Luis Reservoir, Pacheco Pumping Plant Outlet and Silverwood Lake.

Groundwater pump-ins to the California Aqueduct totaled 8,595 AF. The break down of the total volume was:

- Arvin Edison Water Storage District = 3 AF
- Kern Water Bank Authority (operates the Kern Water Bank Canal) = 165 AF
- Semitropic (2&3) Water Storage District = 8,427 AF

*No data were available for Devil Canyon this month due to a maintenance-driven station shutdown.*

**Note:**

The intent of the monthly water quality (WQ) summary is to acquaint state water contractors, scientists and interested parties with the status of water quality in the State Water Project (SWP).

Your comments, questions and suggestions are welcome and should be directed to Cindy Garcia at 916-653-7213, or Austine Eke at 916-653-7227. To view WQ data from the automated stations along the SWP, visit: [http://www.water.ca.gov/swp/waterquality/AutostationData/Autostation\\_map.cfm](http://www.water.ca.gov/swp/waterquality/AutostationData/Autostation_map.cfm), and click on a station name on the map to link to the station's data on the California Data Exchange Center (CDEC) website.

To view the Edmonston daily AF pumping data, visit: [www.water.ca.gov](http://www.water.ca.gov). Click on the "State Water Project" tab, and click on the "Operations Control" link. Look under the "Project-Wide Operations" header for the "Dispatcher's Daily Water Report."

## SWP Water Quality Report

### DWR Operations & Maintenance Water Quality Automated Station Data from October 7 to November 8, 2010

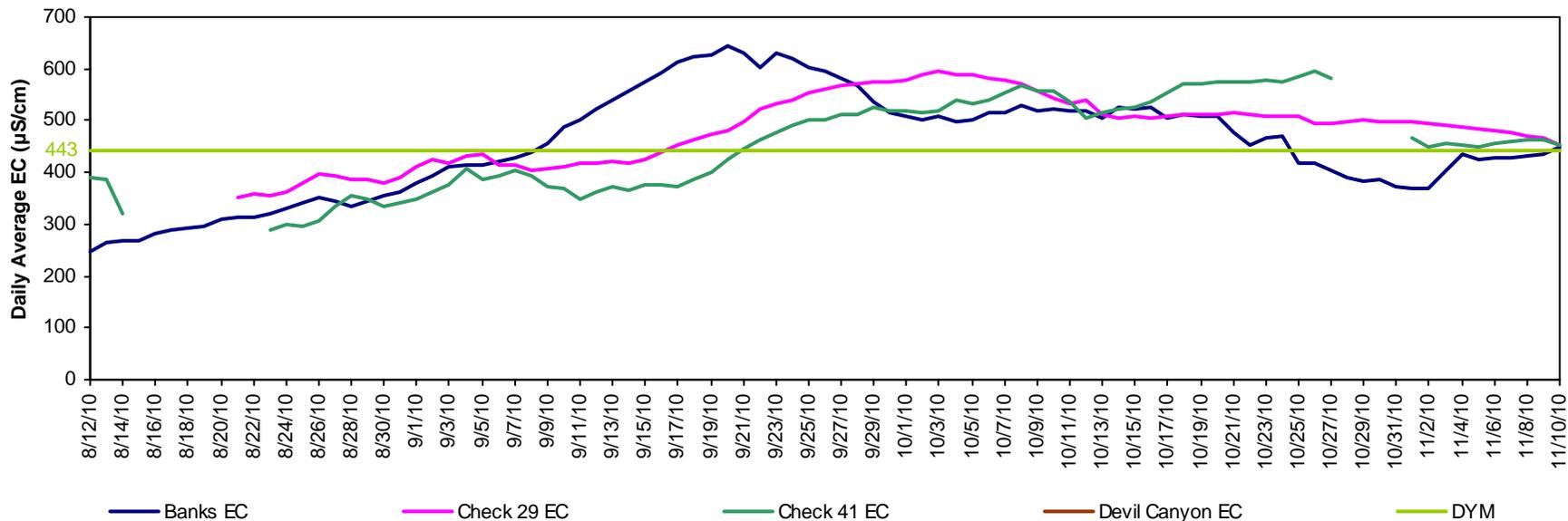
Automated sampling stations provide real time data by continuously measuring water quality conditions in the California Aqueduct.

Water Quality Parameters	Objective	Range	Harvey O. Banks PP KA000331	Check 29 KA024454	Check 41 KA030341	Devil Canyon KA041288	NBA at Barker Slough KG000000	Vallecitos KB002250	Check 13 O'Neill Forebay Outlet KA007089	Edmonston PP Milepost 293.45
EC (µS/cm)	733**	10/7/2010	515	577	554	NA	299	498		
		11/8/2010	431	469	463	NA	221	430		
		% change	-16	-19	-16		-26	-14		
		32-day Avg	459	510	530		253	467		
Bromide (mg/L)	0.05*	10/7/2010	0.25	0.30	0.28	NA	0.10	0.23		
		11/8/2010	0.18	0.21	0.21	NA	0.06	0.18		
		% change	-26	-29	-26		-40	-22		
		32-day Avg	0.21	0.24	0.26		0.08	0.21		
Turbidity (NTU)		10/7/2010	7.8	4.3	16.7	NA	39.4	7.7		
		11/8/2010	8.7	4.4	5.8	NA	40.8	5.1		
		% change	11	3	-65		4	-34		
		32-day Avg	8.1	5.1	7.1		45.4	6.8		
DOC (mg/L)	3.0*	10/7/2010	2.1						1.6	NA
		11/8/2010	2.0						1.7	2.8
		% change	-6						8	
		32-day Avg***	1.9						1.6	2.4
Taste & Odor Parameters	Range	Clifton Court KA000000	Harvey O. Banks PP KA000331	Lake Del Valle, Check 7 KB001632	Check 13 O'Neill Forebay Outlet KA007089	Check 41 KA030341	Check 66 KA040341	Castaic Lake	Lake Perris	Silverwood Lake
MIB (ng/L)	10/11/10	2 to 4	3 to 17	2 to 10	4	NA	NA	NA	NA	2
Geosmin (ng/L)	11/2/10	4 to 6	5 to 6	4	4	NA	NA	NA	NA	3

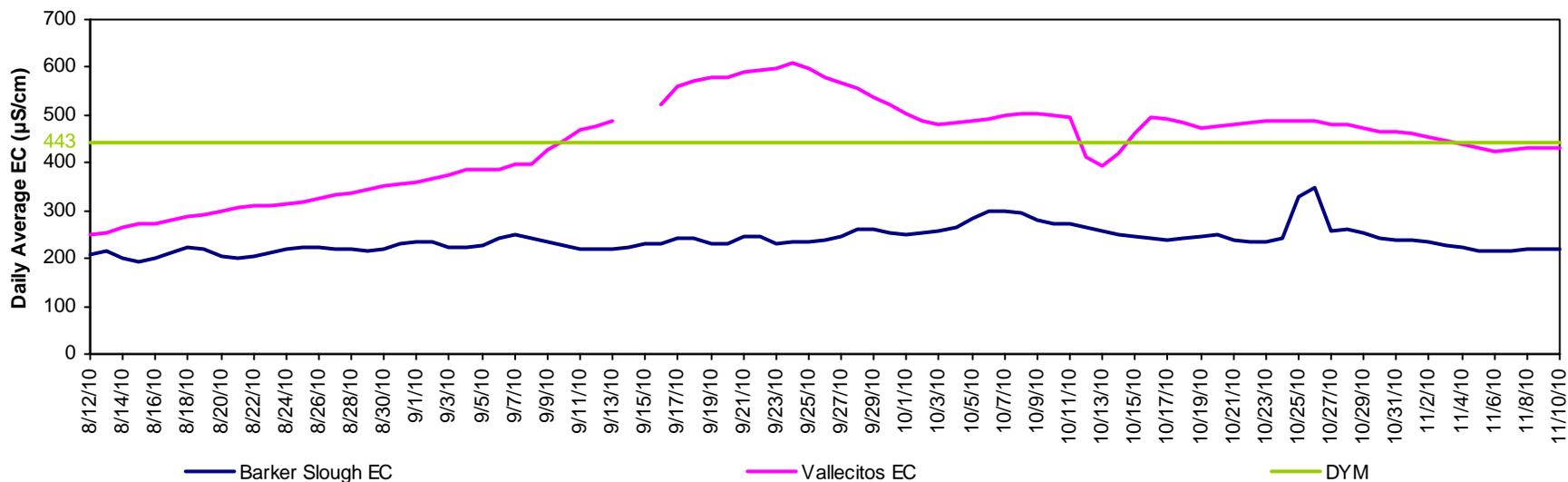
\*CBDA Objective; \*\*Article 19 Monthly Average (converted from 440 mg/L to 733µS/cm); \*\*\*Edmonston DOC average based on 27 days of data.

ND = non-detect; NA = data not available

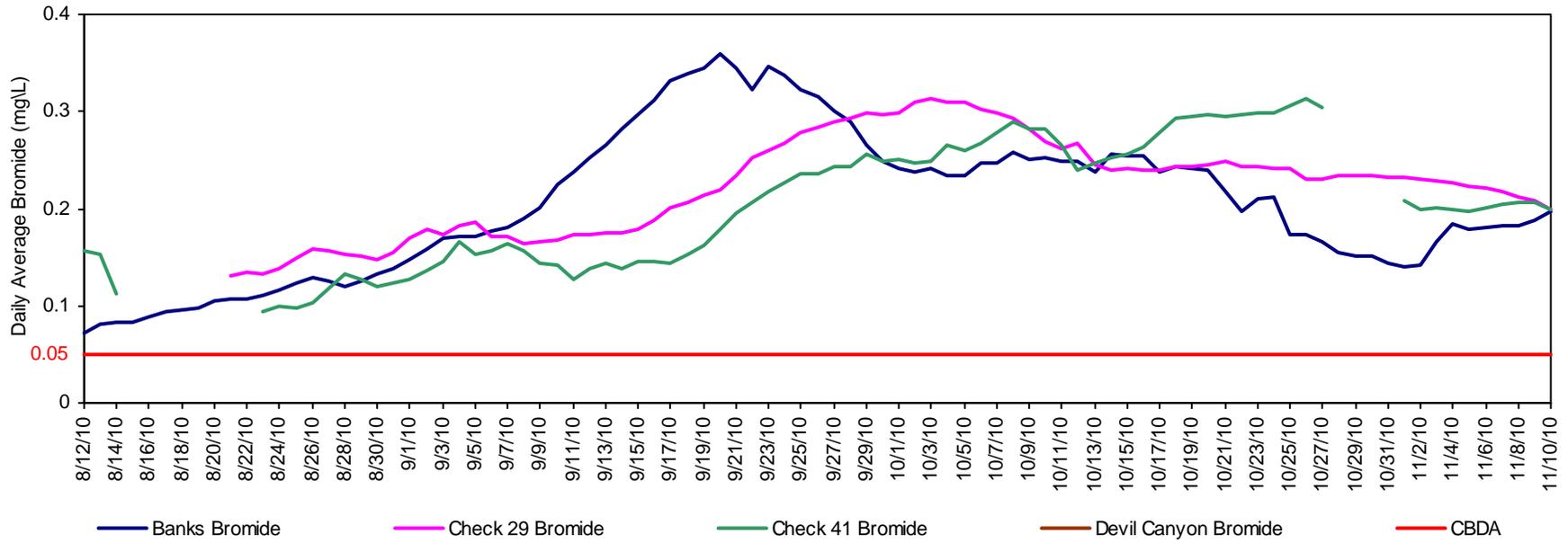
### California Aqueduct - Electrical Conductivity



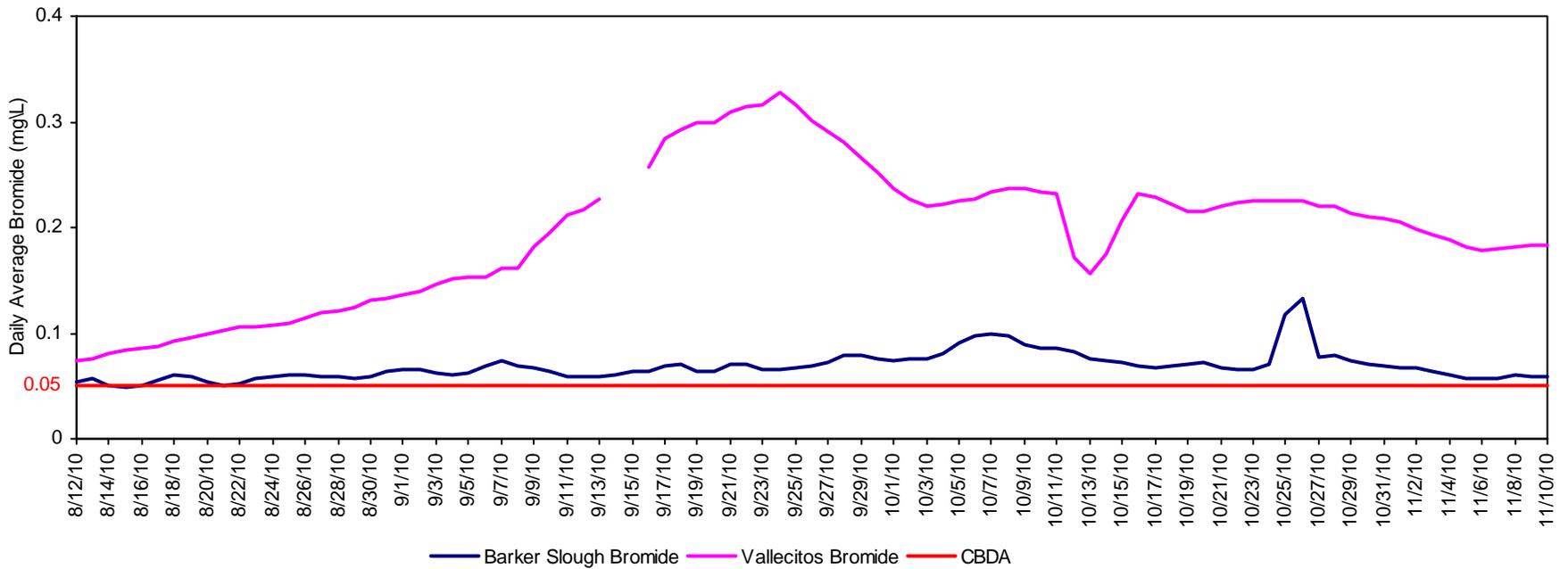
### North and South Bay Aqueduct - Electrical Conductivity



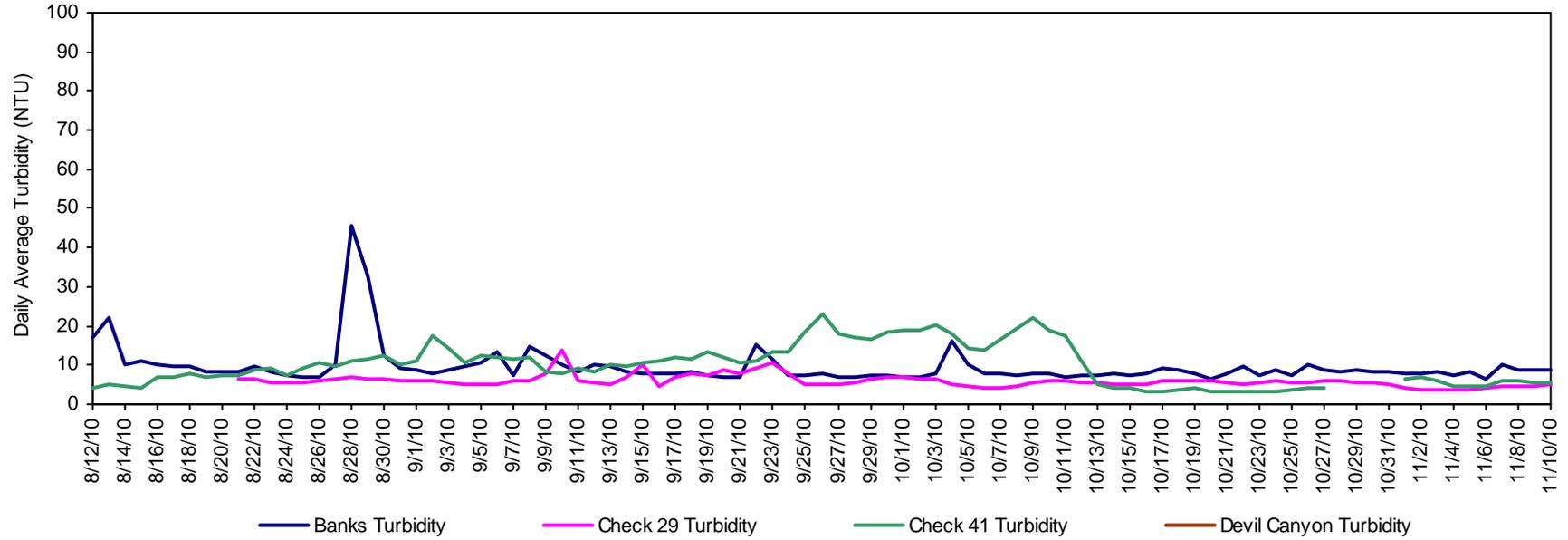
### California Aqueduct - Calculated Bromide



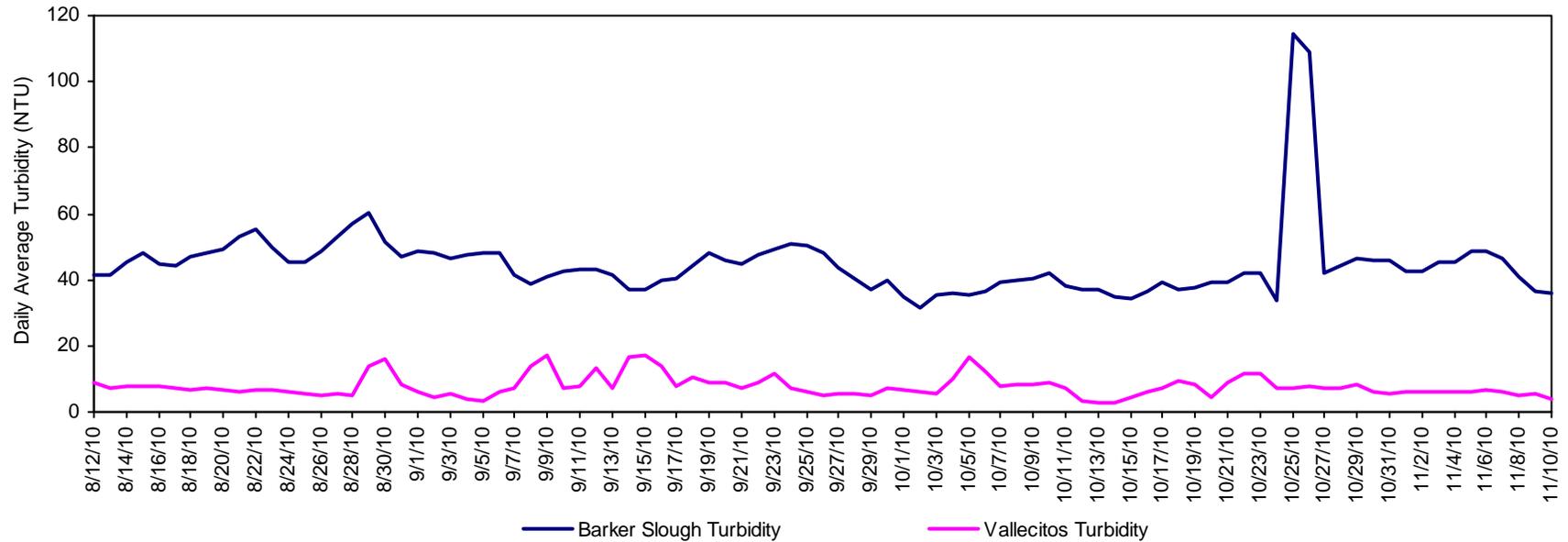
### North and South Bay Aqueduct - Calculated Bromide



### California Aqueduct - Turbidity



### North and South Bay Aqueduct - Turbidity



# California Aqueduct Calculated Dissolved Organic Carbon

