

SWP Water Quality Summary

December 7, 2010 to January 10, 2011

Electrical Conductivity: EC decreased at Harvey O. Banks Pumping Plant (HBP), Check 29, Check 41 and Vallecitos, but increased at Barker Slough. Concentrations ranged from 237 $\mu\text{S}/\text{cm}$ to 511 $\mu\text{S}/\text{cm}$ (142 mg/L to 307 mg/L), 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 385 $\mu\text{S}/\text{cm}$ (231 mg/L) occurred at Vallecitos, while the lowest concentration of 237 $\mu\text{S}/\text{cm}$ (142 mg/L) occurred at HBP. The 35-day average concentration at HBP was 333 $\mu\text{S}/\text{cm}$ (200 mg/L).

Bromide*: Concentrations exceeded the California Bay-Delta Authority (CBDA) Objective of 0.05 mg/L at all locations. Concentrations ranged from 0.07 mg/L to 0.24 mg/L. At the end of the month, Vallecitos had the highest concentration of 0.15 mg/L, while the lowest concentration of 0.07 mg/L occurred at HBP.

* 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 all the locations and ranged from 2.3 NTU to 53.3 NTU. At the end of the month, the lowest level of 8.5 NTU occurred at Vallecitos, while the highest level of 53.3 NTU occurred at Barker Slough. The 35-day average turbidity level at HBP was 22.5 NTU with a 117% change.

Dissolved Organic Carbon (DOC): Concentrations increased from 2.1 to 5.5 mg/L at HBP, from 2.4 to 4.5 mg/L at Check 13, and from 2.3 to 4.4 mg/L at Edmonston. The DOC 35-day average concentration at HBP was 3.8 mg/L.

Taste and Odor Compounds: MIB and geosmin concentrations in the SWP ranged from non-detect to 5 ng/L at Clifton Court Inlet, HBP, and O'Neill Forebay Outlet (Check 13).

Ground water pump-ins to the California Aqueduct totaled 1,793 AF. The break down of the total volume was:

- Arvin-Edison Water Storage District = 4 AF
- Kern Water Bank Authority (who operate the Kern Water Bank Canal) = 141 AF
- Semitropic (2&3) Water Storage District = 1,648 AF

Floodwater volumes and inflows to the California Aqueduct for December 2010 to January 2011:

Total inflow to Date: 491.67 AF

Max.cfs from Cantua Creek = 100 cfs

Max. cfs from Salt Creek = 7cfs

Mile 133.67 Old Cantua: 398.44 AF Max CFS

Mile 136.00 Salt Creek: 16.92 AF

Drain Inlets: 76.31 AF

Estimated Max. Peak Flow:

Old Cantua Creek: 100 cfs 1/2/11

Salt Creek: 20 cfs 1/2/11

Los Gatos Creek: 1750 cfs 1/2/11

Warthan Creek: 1000 cfs 1/2/11

Jacolitos Creek: 800-1000 cfs 1/2/11

Zapata Chino Creek: 50 cfs 1/2/11

EL Dorado Creek: 2500 cfs 1/2/11

Estimated Maximum Storage @ Gale Ave Ponding Basin, Mile 158.30 = 180 - 200AF

The Devil Canyon Headworks station has been discontinued. Future water quality summary reports will include data from the Devil Canyon Second Afterbay station (KA041275). Data for this station may be found on CDEC under "Real-time Data" using the station name of "DC2".

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, 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. 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

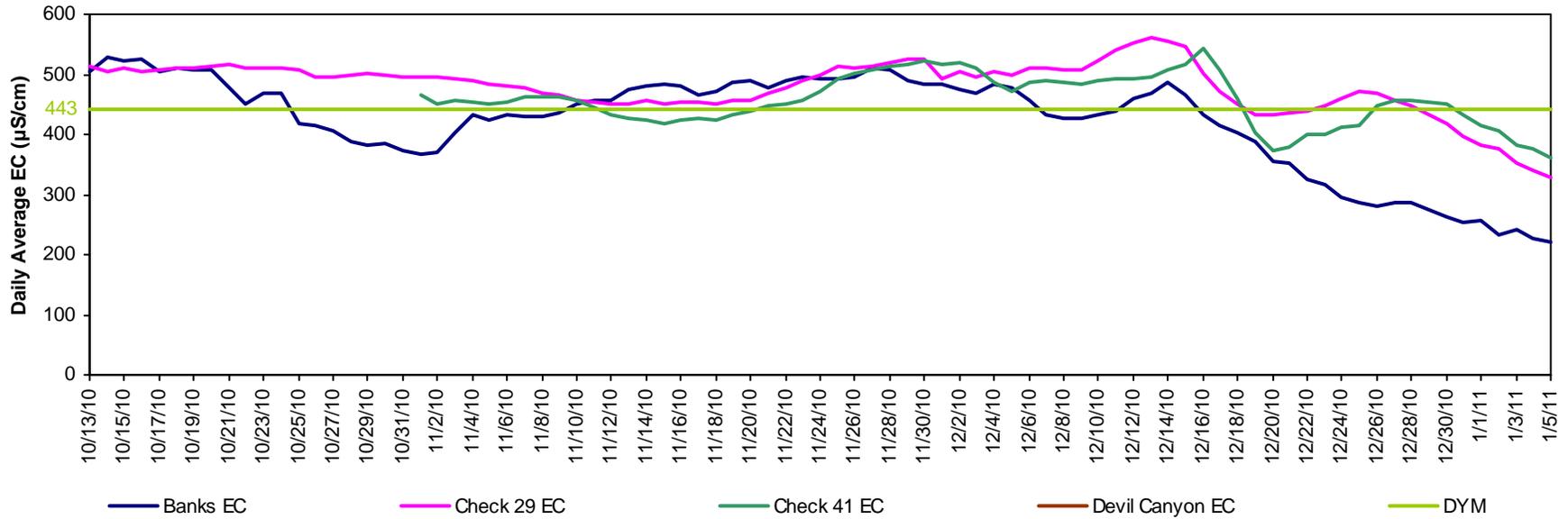
DWR Operations & Maintenance Water Quality Automated Station Data from December 7, 2010 to January 10, 2011.

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

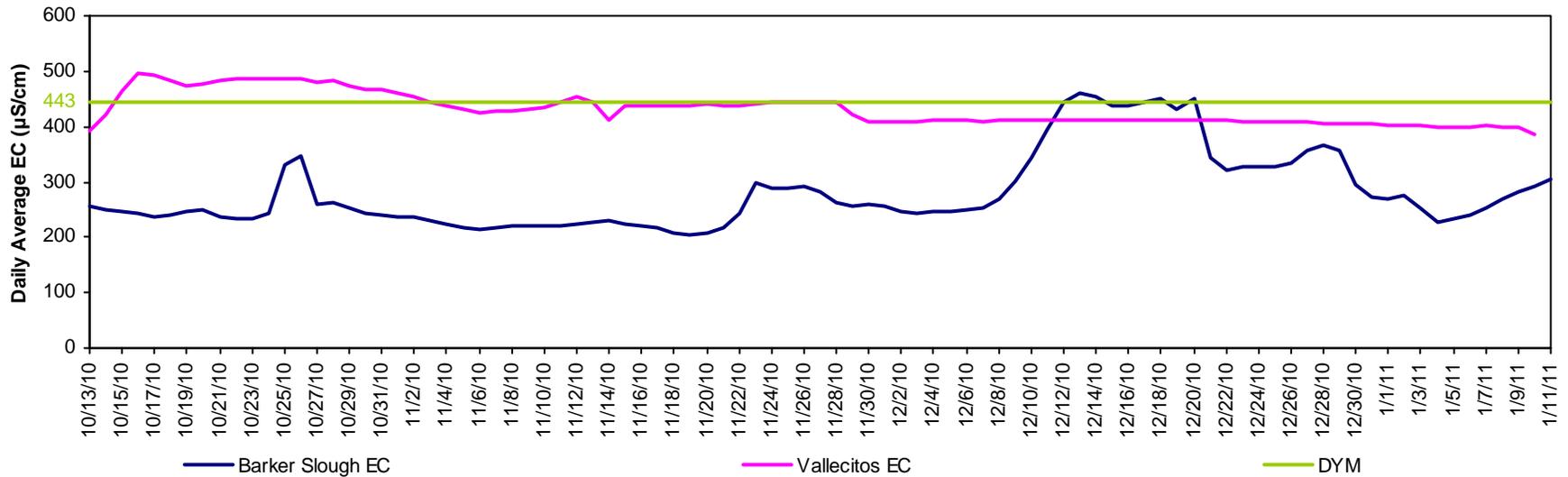
| Water Quality Parameters | Objective | Range | Harvey O. Banks PP KA000331 | Check 29 KA024454 | Check 41 KA030341 | Devil Canyon KA041288 | NBA at Barker Slough KG000000 | Vallecitos KB002250 | Check 13 O'Neill Forebay Outlet KA007089 | Edmonston PP Milepost 293.45 |
|--------------------------|------------|---------------------------|--------------------------------|--|---|--------------------------|----------------------------------|------------------------|---|---------------------------------|
| EC (μ S/cm) | 733** | 12/7/2010 | 434 | 511 | 490 | | 253 | 410 | | |
| | | 1/10/2011 | 237 | 315 | 308 | | 291 | 385 | | |
| | | % change | -45 | -38 | -37 | | 15 | -6 | | |
| | | 34-day Avg. | 333 | 439 | 428 | No | 337 | 406 | | |
| Bromide (mg/L) | 0.05* | 12/7/2010 | 0.185 | 0.24 | 0.23 | Data | 0.07 | 0.17 | | |
| | | 1/10/2011 | 0.067 | 0.11 | 0.10 | | 0.10 | 0.15 | | |
| | | % change | -64 | -54 | -57 | | 43 | -12 | | |
| | | 34-day Avg. | 0.12 | 0.19 | 0.18 | No | 0.12 | 0.17 | | |
| Turbidity (NTU) | | 12/7/2010 | 11.9 | 2.3 | 2.7 | Data | 28.3 | 3.0 | | |
| | | 1/10/2011 | 25.8 | 11.1 | 20.3 | | 53.2 | 8.5 | | |
| | | % change | 117 | 383 | 652 | | 88 | 183 | | |
| | | 34-day Avg. | 22.5 | 7.3 | 14.2 | | 53.9 | 4.7 | | |
| DOC (mg/L) | 3.0* | 12/7/2010 | 2.1 | | | | | | 2.4 | 2.3 |
| | | 1/10/2011 | 5.5 | | | | | | 4.5 | 4.4 |
| | | % change | 162 | | | | | | 88 | 91 |
| | | 34-day Avg. | 3.8 | | | | | | 3.0 | 2.9 |
| 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) | 12/7/2010 | ND -2 | ND - 1 | No Data | 1 | No Data | No Data | No Data |
| Geosmin (ng/L) | 01/10/2011 | 2 - 5 | 3 - 4 | No Data | 3 | No Data | No Data | No Data | No Data | No Data |

*CBDA Objective; **Article 19 Monthly Average (converted from 440 mg/L to 733 μ S/cm); ND = Non-detect.

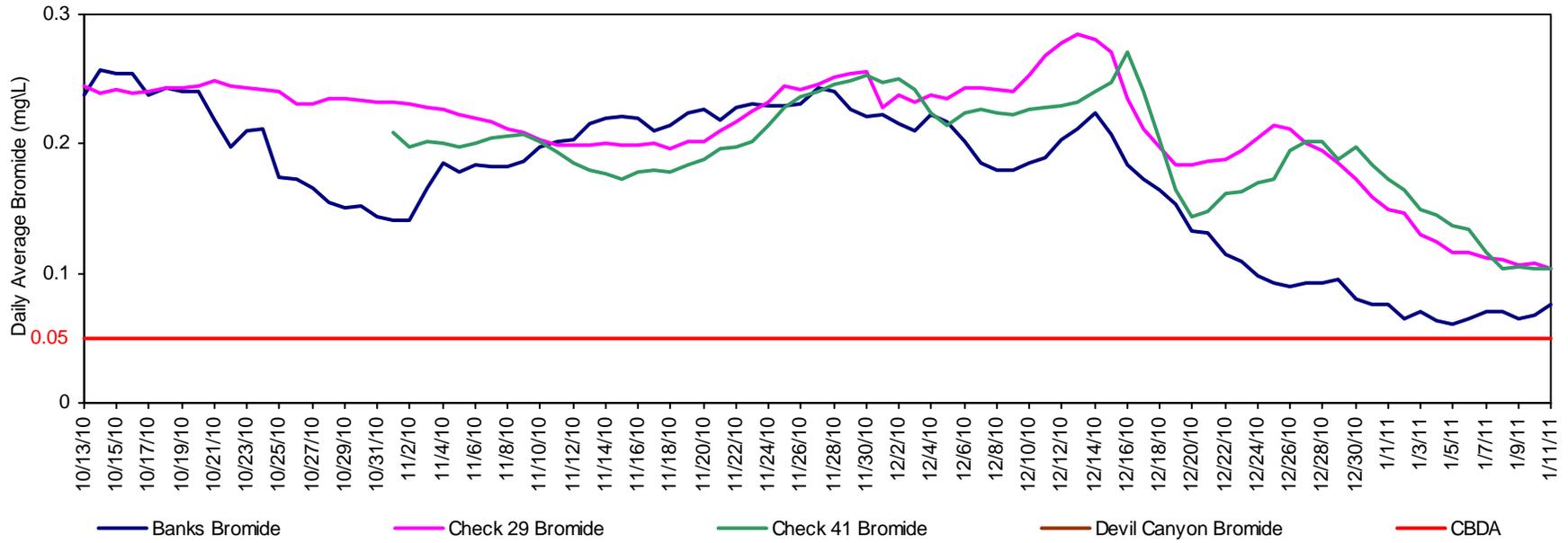
California Aqueduct - Electrical Conductivity



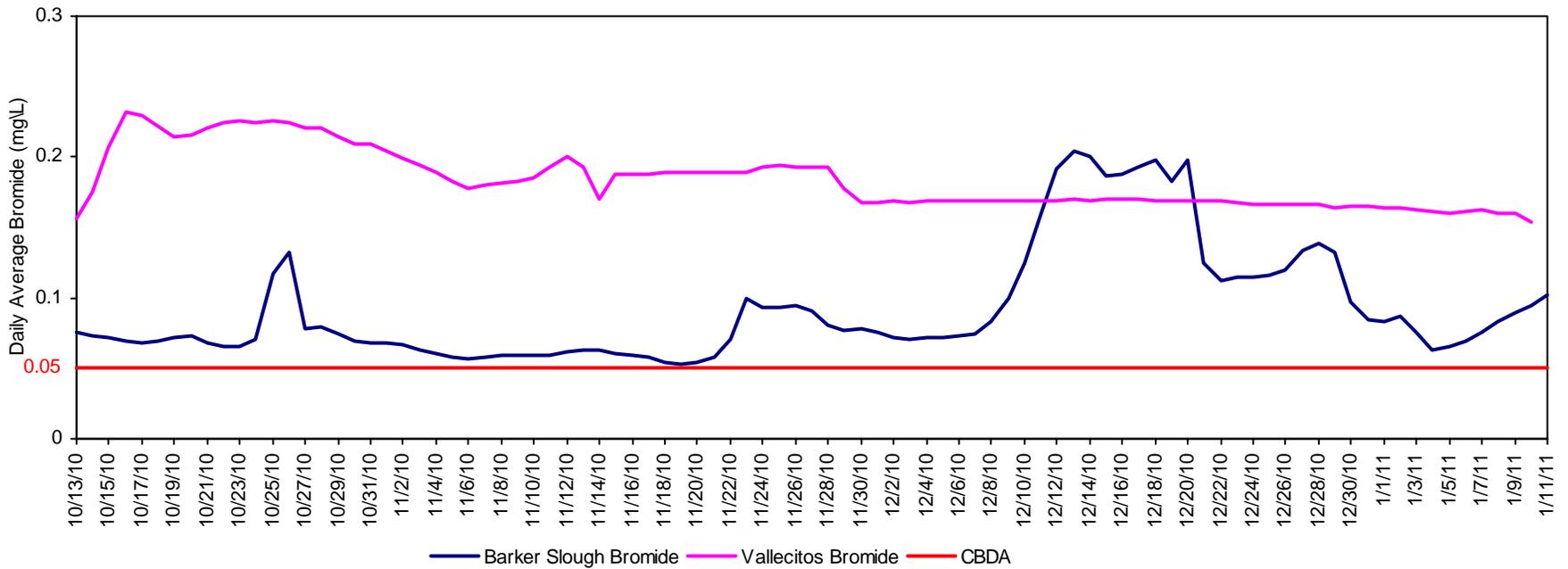
North and South Bay Aqueduct - Electrical Conductivity



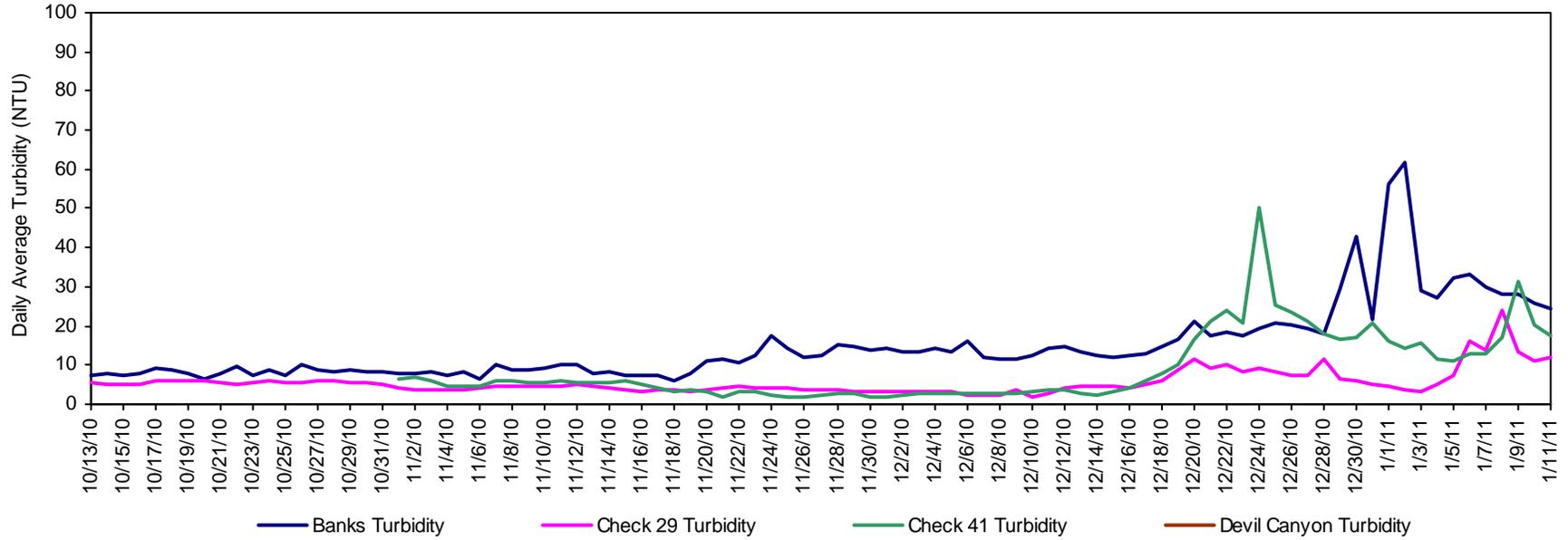
California Aqueduct - Calculated Bromide



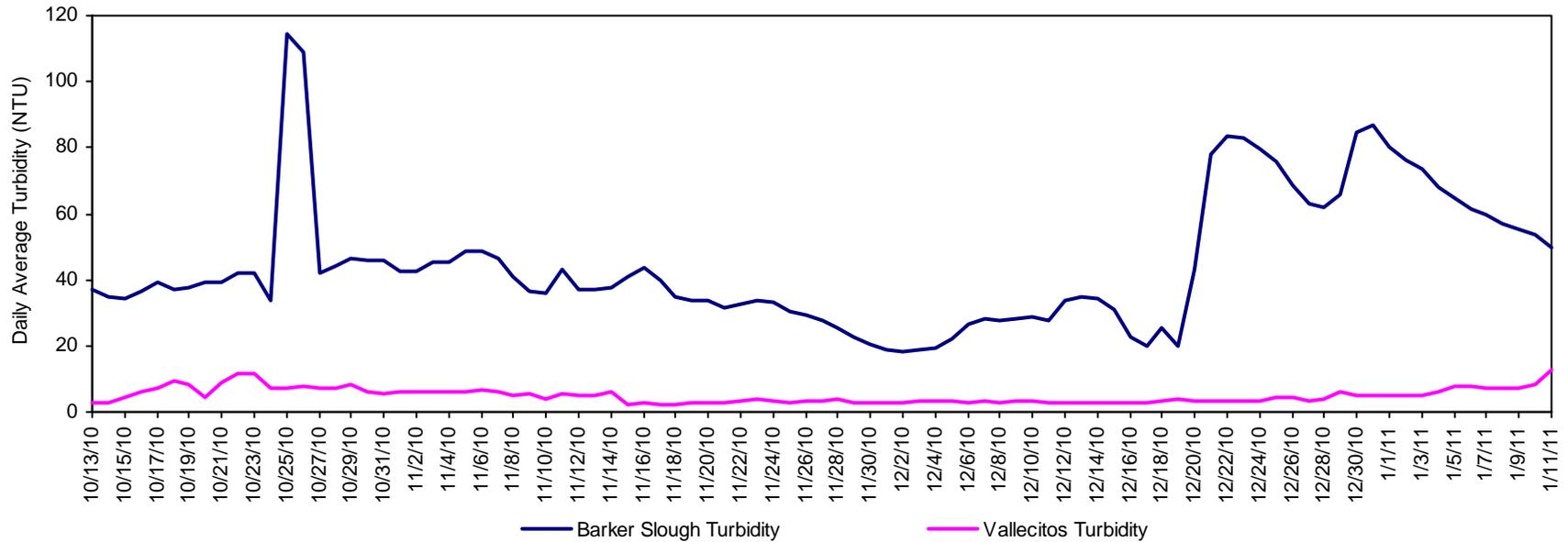
North and South Bay Aqueduct - Calculated Bromide



California Aqueduct - Turbidity



North and South Bay Aqueduct - Turbidity



California Aqueduct Calculated Dissolved Organic Carbon

