

**2010-2011 Water Quality Monitoring of Physical Parameters in
San Diego Bay, San Diego, CA
Port of San Diego Agreement No. 55783/Tierra Data Inc. No. 09-11
Status Report**

Date of Work: June 1, 2010 – June 30, 2010

Cumulative Dollar Costs Incurred: \$50,038.36

Percentage of Work Completed: 43.49%

Expected Completion Date: December 31, 2012

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1) Monitoring results:

- a) Data sondes are in place and collecting data within specified parameters and displaying expected results at all three stations. A complete summary of all collected data will be submitted with the quarterly report currently in preparation (expected submittal July 2010).
- b) Interesting data trends with respect to Chlorophyll "a" records display a defined spatial distribution pattern in relation to the distance of stations from the bay entrance and temporal fluctuations related to tide changes (Chart 1).

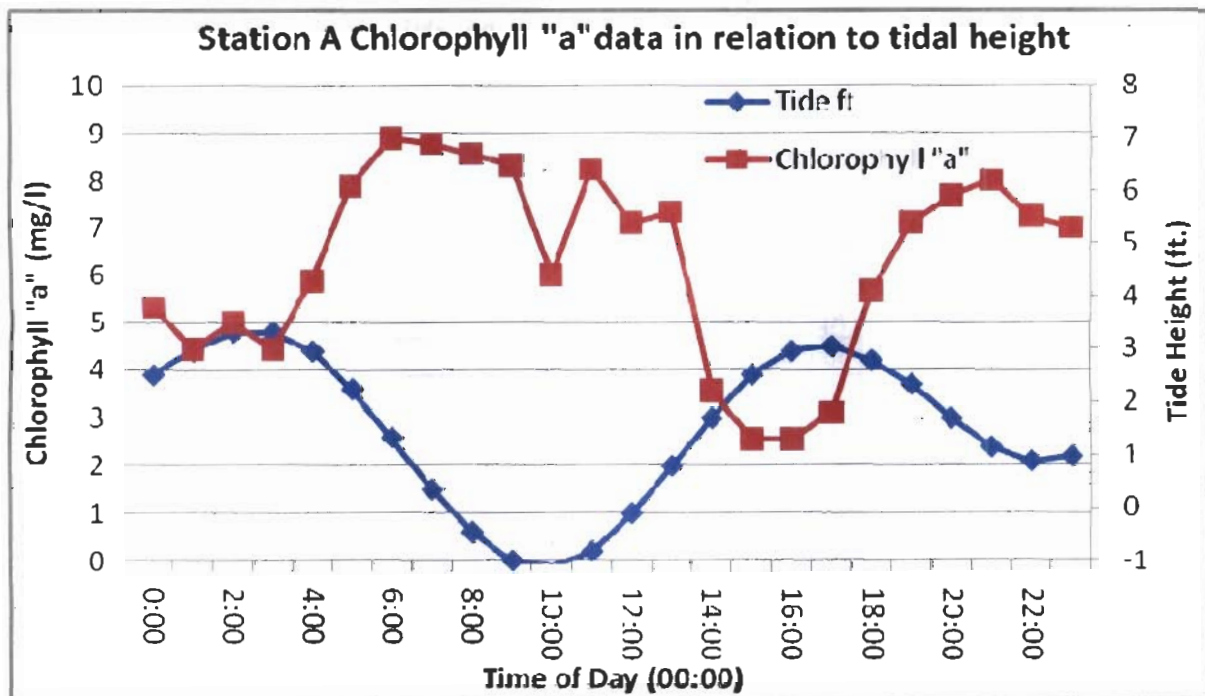


Chart 1. Chlorophyll a in relation to tidal height for May 15, 2010

2010-2011 Water Quality Monitoring of Physical Parameters - Status Report

2) Discussion of activities conducted:

- a) Initial sonde deployment occurred on April 20th, 2010 at all three stations. Water quality monitoring units, YSI 6920 V2 sondes, are currently in place and collecting data at Stations A, B, and C (Figure 1). Data was downloaded from sondes on June 2nd, June 16th, and June 30th, 2010 on regular two week intervals. Instruments displayed various degrees of biological fouling and were cleaned, calibrated, and redeployed after each bimonthly download. Data was downloaded directly to an YSI 650 MDS data logger and transferred to the Tierra Data Inc (TDI) server for archiving and review. Data files are reviewed after each servicing for accuracy and integrated into station working files for analysis and graphical display
- b) Additional data was collected on each of the three sampling by performing vertical casts using an YSI 6920 V2 sonde.
- c) Every two weeks sondes at each of the fixed stations are fully serviced, replacing batteries, wipers, and antifouling coatings. Affixed sonde housings are scrubbed to reduce data inconsistencies from attached algae and invertebrates.

3) Problems encountered/resolutions:

- a) No problems were encountered during this reporting period.

4) Activities planned for next reporting period:

- a) Subsequent sonde downloading and redeployment is expected to be performed on regular two week intervals. Upcoming service dates are projected to be July 14th and July 28th, 2010.

Table 2. Project Deliverables:

Quarterly Progress Reports	April 1, 2010 – combined with July 1, 2010 Report due to late start .
	July 1, 2010
	October 1, 2010
	January 1, 2011
	April 1, 2011
	July 1, 2011
	October 1, 2011
Draft Report	October 31, 2011
Final Report	December 31, 2011

Figure 1. Location Map for Port of San Diego Water Quality Sensors



