

**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:** February 1, 2011 – February 28, 2011

**Cumulative Dollar Costs Incurred:** \$88,809.99

**Percentage of Work Completed:** 70.51%

**Expected Completion Date:** December 31, 2012

**Project Manager:** Derek Lerma, Senior Marine Biologist, Tierra Data Inc., 10110 W. Lilac Road, Escondido, CA 92026, phone (760) 749-2247, email: derek@tierradata.com

**1) Monitoring results:**

- a) Data sondes are in place and collecting data within specified parameters and displaying expected results at all three stations. The return to normal weather conditions prevailed throughout Southern California this month with below normal temperatures and the occurrence of substantial rainfall events materializing in conjunction with large low pressure systems sweeping south out of the Gulf of Alaska. Data collection was mostly uninterrupted and a continuous data stream was collected at stations A and B over the entire month. Access to Station C was denied on February 8<sup>th</sup> by the USCG due to a security perimeter established near the D street commercial terminal.
- b) The return of intermittent rainfall events in conjunction with spring tides has displayed notable increases in turbidity levels at each of the three monitoring stations. Individual station trends displayed spatial variability with respect to turbidity levels and tidal exchange. Temperatures remain around seasonal averages and salinity displayed expected spatial fluctuations based on their proximity to the ocean.

**2) Discussion of activities conducted:**

- a) Initial sonde deployment occurred on April 20<sup>th</sup>, 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 files were reviewed after each servicing for accuracy and integrated into station working files for analysis and graphical display. Working data files are continuously being analyzed for assimilation into quarterly reports and the January 2011 quarterly report is current in preparation.
- b) Data was collected at each of the three sampling locations and vertical casts performed using an YSI 6920 V2 sonde on February 8<sup>th</sup> and 22<sup>nd</sup>.

**3) Problems encountered/resolutions:**

Access to Station C was denied by USCG patrol boat on February 8 that could not be resolved during the site visit. A small amount of data was missed do to the conflict.

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

### 4) Activities planned for next reporting period:

- a) Upcoming service dates at regular two week intervals are planned to occur on March 8<sup>th</sup> and March 22<sup>nd</sup>, 2011.

**Table 2. Project Deliverables:**

<b>Quarterly Progress Reports</b>	April 1, 2010 – combined with July 1, 2010 Report due to late start.
	July 1, 2010 – submitted
	October 1, 2010 – submitted
	January 1, 2011 – in prep
	April 1, 2011
	July 1, 2011
	October 1, 2011
<b>Draft Report</b>	October 31, 2011
<b>Final Report</b>	December 31, 2011

### Location Map for Port of San Diego Water Quality Sensors

