

CBCD San Diego Bay Mapping Project for period 7/1/2012 – 9/30/2012

This progress report outlines work effort that has been conducted in the Summer/Fall 2012, email updates of the ongoing work and progress also have been sent to the Port of San Diego during this period.

Task 1. Acquire Swath Bathymetry in San Diego Bay (100% complete). As reported in our previous update, we have completed the swath mapping of San Diego Bay using our Reson 7125 swath bathymetry system onboard the *R/V Point Loma*. We are processing the data and have generated bathymetry maps for the Bay as well as high-resolution images to examine the relationship between geologic substrate and biohabitats.

Processing of the swath bathymetry is finalized. We have generated GIS shapefiles for San Diego Bay to merge with onshore LiDAR data. During the data merger, we identified some noisy beams and we are further editing the swath bathymetry data to clean up a few noisy returns.

Task 2. CHIRP Subbottom Imaging of San Diego Bay (70% complete).

Since the previous report, we have acquired more CHIRP subbottom data mostly from the eastern portion of the Bay. We are still acquiring data in the western and southwestern portions of the Bay and plan to complete this task by late Spring 2013.

Task 3. Link Between Geology and Biohabitats (40%)

We have been meeting with our colleagues at SDSU to examine the interplay between geological substrate and biohabitats. Target dives are ongoing and should wrap in Summer 2013.

Task 4. Merging LiDAR with bathymetry data (35%)

Together with our colleagues at SDSU, we are merging the onshore LiDAR data with the bathymetry data to create a seamless depiction of the watershed.

Funds.

During this quarter, we have spent \$20,071.74 of the project funds; the total awarded was \$143,077 and thus, the expenditures for this quarter represent 14% of the total budget. During the spring/summer 2013, we expect to exhaust the remaining funds.