B-4-10-PS Activity Summary

Between June 21 and June 23, 2010 personnel from USGS CMG, USGS BRD (CRRL), and the Washington State Dept. of Ecology (Table 1) participated in a field activity (B-4-10-PS) to collect bathymetric and topographic information at Pt. Monroe, located at the northeast corner of Bainbridge Island, Washington State. During the three-day survey, 34 km of continuous topography measurements were made on foot using 2 RTK GPS backpack systems (fig. 1). Twenty five km of acoustic data were collected using a 420 kHz single-beam echosounder from a single BRD boat. Acoustic data will be analyzed to extract bathymetric information as well as characterize the distribution of seagrass within the study site. Approximately 1.2 km of underwater video data were collected to ground-truth the acoustic data. Thirty six sediment samples were taken by hand during low tide and will be analyzed for grain size characteristics.

FIGURE 1. RTK-GPS BACKPACK SYSTEM (LEFT) AND ACOUSTIC SYSTEM (RIGHT) USED TO COLLECT TOPOGRAPHIC AND BATHYMETRIC INFORMATION.

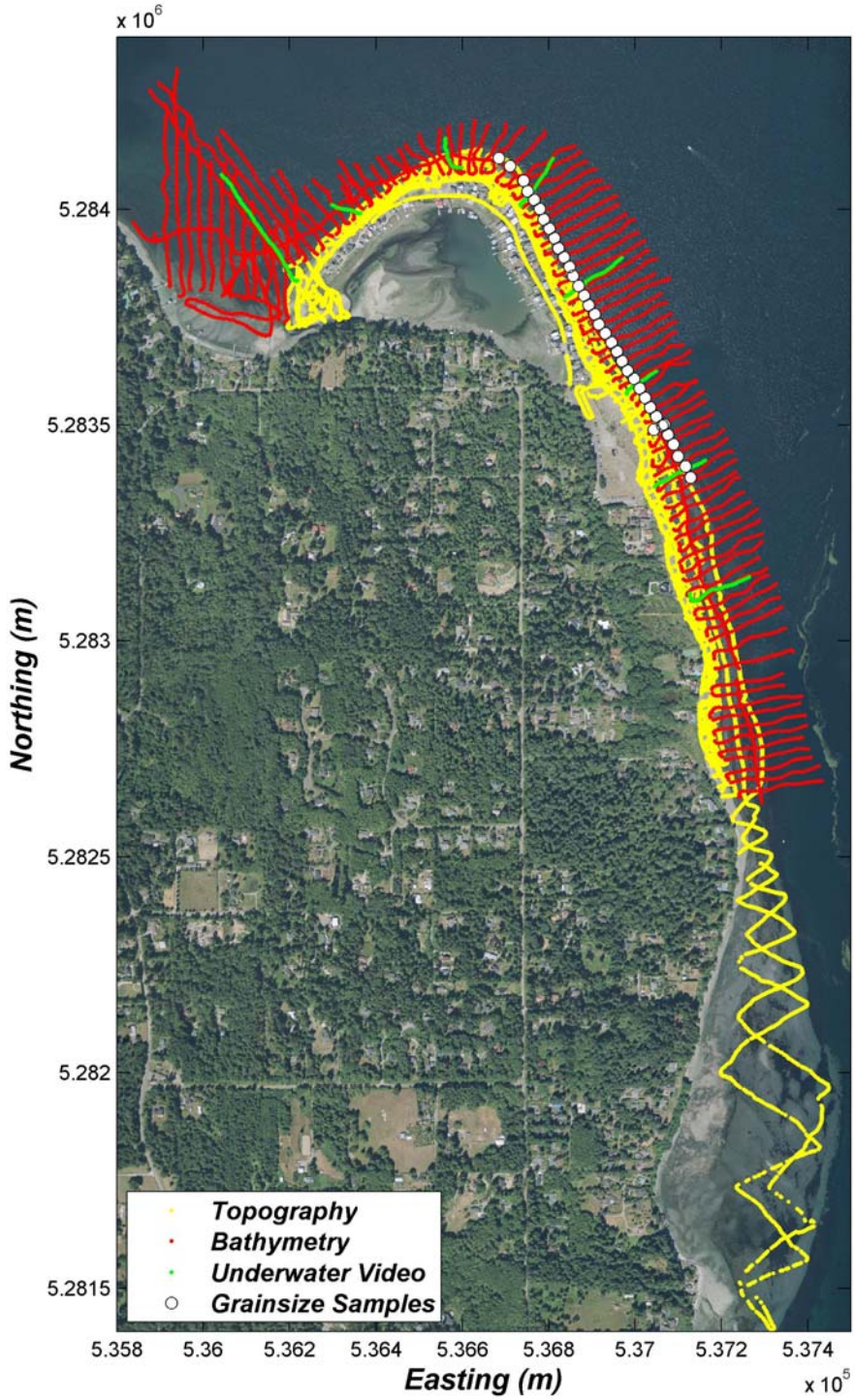

FIGURE 2. DATA COLLECTED DURING ACTIVITY B-4-10-PS

TABLE 1. SURVEY PARICIPANTS

PERSON	RESPONSIBILITY	AFFILIATION
Jessie Lacy	Chief Scientist	USGS CMG
Collin Smith	Chief Scientist	USGS BRD
Andrew Stevens	Technician	USGS CMG
Andrew Schwartz	Technician	WA State Dept. of Ecology