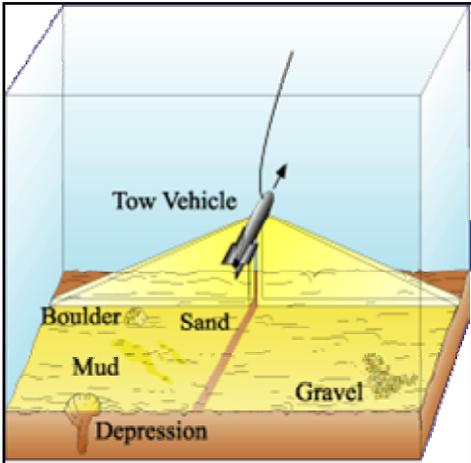
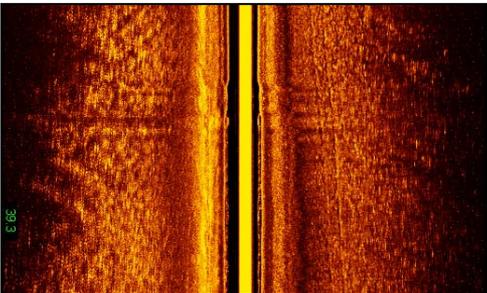
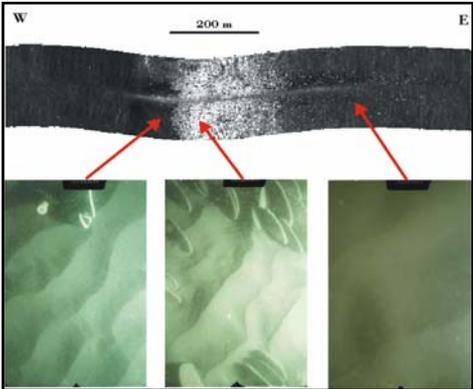
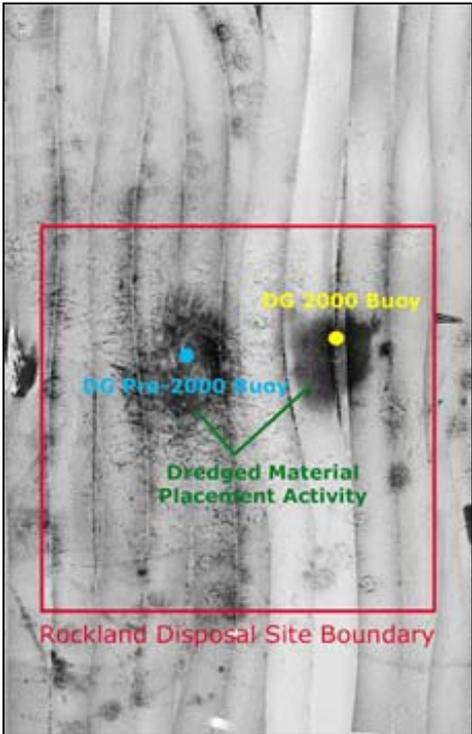




Summary View of Side-scan Sonar Survey Technique



Application	Data Coverage	Resolution			Key Points
		Vertical	Horizontal	Image	
Surface Sediment Characterization	Wide Swath 5-15 times water depth Imagery Data	m	N/A	cm-m	<ul style="list-style-type: none"> • Geo-referenced composite image • Trade-offs between resolution and swath coverage • Common Mapping Frequency Ranges: 100 – 500 kHz • Characterize surface sediment and identify objects • Moderate complexity and cost for acquisition and processing
Data Collection ¹		Raw Data ²			Processed Data ³
 <p>The intensity of sound received by the side-scan sonar tow vehicle from the sea floor (backscatter) provides information about the distribution and characteristics of the surface sediments.</p>  <p>Side-scan sonar tow vehicle on a NOAA ship</p>		 <p>Side-scan sonar image from a sandy-bottom habitat.</p>  <p>Side-scan sonar image with related photos: here the alignment of the sand dollars accounts for the high backscatter feature in the side-scan data, as opposed to a difference in bottom geology.</p>			 <p>Side-scan sonar mosaic from the Rockland Disposal Site clearly indicating the presence of past disposal operations around prescribed buoy locations.</p>

N/A = Not applicable

¹Data collection images from U.S. Geological Survey and NOAA Coast Survey. ²Raw data and processed data images from NOAA Coastal Services Center and U.S. Geological Survey.

³Processed data image from Science Applications International Corporation.