PORTLAND DISTRICT HYDROGRAPHIC SURVEYS

Portland District's Hydrographic Survey cover an area from Cape Disappointment on the southern Washington Coast to the Chetco River on the southern Oregon coast and from the Pacific Ocean on the west to McNary Dam on the east. The navigational channels, more than 400 miles worth, consist of coastal entrances, deep and shallow draft harbors and river channels. Utilizing state of the art Data Acquisition and Differential Global Positioning Systems, four full-time, in-house survey crews and one A/E Contracting crew are able to monitor monthly dynamically active reaches of the navigation channels for shoaling or scouring. An extensive data base of hydrographic surveys which include pre-dredge, progress, post-dredge, condition and material placement surveys are maintained within the District.

The vessel used to survey the Tillamook Bay channel in 2003 was the Hickson.

The Hickson is Portland District's ocean going survey vessel home ported at Astoria, Oregon. This vessel's normal area of coverage is entrance bars, harbors and approaches from Cape Disappointment, at the mouth of the Columbia River, to Cape Arago at Coos Bay, Oregon. During inclement winter weather the Hickson performs condition channel and cross line surveys from the Mouth of the Columbia River to River Mile 45. In addition to providing bathymetric surveys, the Hickson has served as a diving platform and a towing vessel for magnetometer and acoustical doppler survey operations.

Constructed 1968 by Grafton Boat Co., Inc
Hull 64' 11" Aluminum
Beam 16' 6"
Draft 4' 8"
Engines Two 700 h.p. Diesel
General Motors 12V71
Displacement 32 tons
Speed 18 -20 knots
Survey Equipment
a. Horizontal Positioning Systems
1. Two (2) Ashtech Z-12 Real Time Kinematic DGPS Receivers (RTK) with Pacific Crest VHF radio data links and starlink.

b. Depth Sounder
1. Krupp Atlas Deso 15
2. TSS Model 325B Swell Compensator

c.Data Acquisition System
1. IBM Compatible PC with Left/Right helmsman display
2. HyPack for Windows Survey System Software
3. Sutron Zoned Water Level correctors (Mouth of the Columbia only)
4. Notebook computer with modem for transmitting survey data to the District

Office

d. Supplemental Survey equipment

1. EG&G Model 260 Side Scan Sonar with Model 272 Tow Fish.