COLLABORATION
SEATTLE DISTRICT
NAVIGATION PROGRAM AND
NOAA

Seattle District
18 April 2017

“The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation.”
CORPS OF ENGINEERS NAVIGATION MISSION

Provide safe, reliable, efficient, effective and environmentally sustainable waterborne transportation systems for movement of commerce, national security needs, and recreation.
SEATTLE DISTRICT NAVIGATION PROGRAM

USACE Self-Performs
- Hydrographic surveys
- Snagging/Debris Removal
- Backup oil skimmer for USCG

USACE Contracts
- Sediment Characterization
- Clamshell and Hydraulic Dredging
- Revetment and Breakwater Construction
- FY 16: Executed $28.6M total program

Legend
- Deep Draft
- Shallow Draft
- Without Channel
- High Use
- Moderate Use
- Low Use

23 Active Channels/Harbors
- 3x High-Use (>10M-tons)
- 4x Moderate Use (>1M-tons)
- 16x Low-Use (<1M-tons)
- 12x Deep Draft Channels (>14’)
- 7x Shallow Draft
- 4x No Channel (breakwater/jetty/dike)

Not shown:
- Stilthole (no channel)
- Waterway connecting Oak Bay and Port Townsend (LDD)
- Westhaven Marina (GO)
CORPS NAVIGATION ISSUES

- Budgets fixed while dredging costs increasing
- Dredged Material Placement Issues
- Environmental ‘Windows’: Increasing restrictions on when dredging can be performed
- Low Use Navigation Projects funding

- NEED: Low Cost agency-wide process to provide valuable, timely, quantitative survey data to the nation
- SOLUTION: eHydro
EHYDRO DATA FEATURES

- NAIP Imagery
- Federal Channel geometry
- Controlling depths
- Official NAVAIDs
- Channel condition reports
- xyz, metadata, and pdfs

From processed data to posting in a few days
EHYDRO STATUS IMPLEMENTATION

STATUS

• Last 5 years posted for High and Moderate Use Ports
• Developing channel frameworks for low use Ports in 2017
• Posting of ALL survey data by 2018

• http://www.nws.usace.army.mil/Missions/Civil-Works/Navigation/
VITAL NOAA PRODUCTS FOR USACE SEATTLE DISTRICT NAVIGATION

- Nautical Charts
- Tides and Current data
- Tidal forecasts, river outflows
- Weather data
- National Geodetic Survey products
- Online Positioning User Service (OPUS): project controls
- Vdatum

Photo credit: Don Wilson
**West Waterway**
- Authorized depth: -34 feet MLLW
- Existing depth: -50 to -60 feet MLLW
- Limiting depth: -42 feet MLLW
- Effective width: 500 feet wide

**East Waterway**
- Authorized depth: -34 to -51 feet MLLW
- Existing depth: -34 to -53 feet MLLW
- Limiting depth: -51 feet MLLW
- Effective width: 500 feet wide
STUDY TIMELINE & PUBLIC INVOLVEMENT

- Summer 2016
  - Draft Feasibility Report / Environmental Assessment Available for Public Review

- Spring 2018*
  - Final Feasibility Report / Environmental Assessment Released

- 2019*
  - Design & Construction (subject to Congressional authorization and funding)

* Contingent on funding
HYLEBOS WATERWAY HAZARD TO NAVIGATION

- Rock Barge sank 11/15
- Barge removed 12/15; rock left on bottom
- Pilots implemented draft restriction 3/16
- USACE, USCG, NOAA coordinated VATON, charting and removal request 3/16
- Rock removed 6/16
- Draft restriction lifted July 2016 and VATON removed
SEATTLE DISTRICT NAVIGATION PROGRAM POINT OF CONTACT

Kym Anderson
Chief, Navigation Section
Kymberly.Anderson@usace.army.mil
206-764- 6908