

EHYDRO: STANDARDS & SHARING

William Gavin
Geographer
USACE Mobile District

Hydrographic Surveys powered by eHydro

List is limited to 100 records. To see older surveys, configure a custom date range or zoom in on the map to limit results.

- District: CEMVN
Name: SOUTHWEST PASS - SHEET 4
Survey Date: 9/14/2023
Download: SW_04_SWP_20230914_CS
- District: CEMVN
Name: SOUTHWEST PASS - SHEET 5
Survey Date: 9/14/2023
Download: SW_05_SWP_20230914_CS
- District: CEMVN
Name: SOUTHWEST PASS - SHEET 6
Survey Date: 9/14/2023
Download: SW_06_SWP_20230914_CS
- District: CEMVN
Name: SOUTHWEST PASS - SHEET 7
Survey Date: 9/14/2023
Download: SW_07_SWP_20230914_CS
- District: CEMVN
Name: SOUTHWEST PASS - SHEET 8
Survey Date: 9/14/2023
Download: SW_08_SWP_20230914_CS
- District: CEMVN
Name: SOUTHWEST PASS - SHEET 9
Survey Date: 9/14/2023
Download: SW_09_SWP_20230914_CS
- District: CEMVN
Name: SOUTHWEST PASS - SHEET 10
Survey Date: 9/14/2023
Download: SW_10_SWP_20230914_CS

Number of Surveys
92,489
1,681 last 60 days

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  <TopicCatCd value="014"/>
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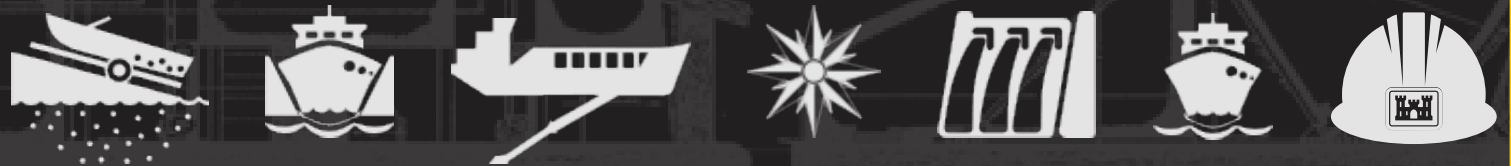
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OUTLINE



Data sharing of navigation products, data, and services
Standards & Stewardship
Technological advancements
Mission-critical Requirements
Improvements



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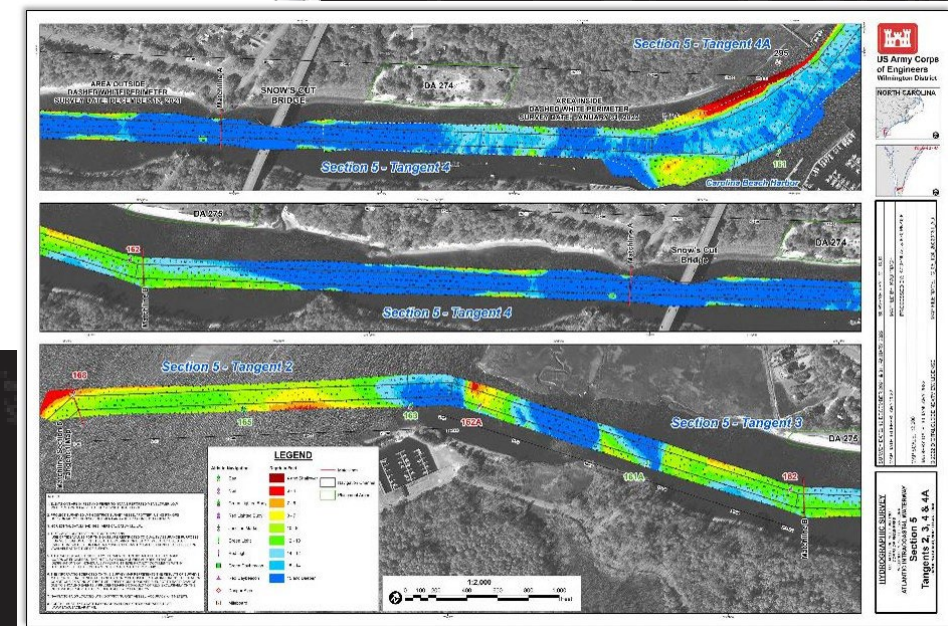
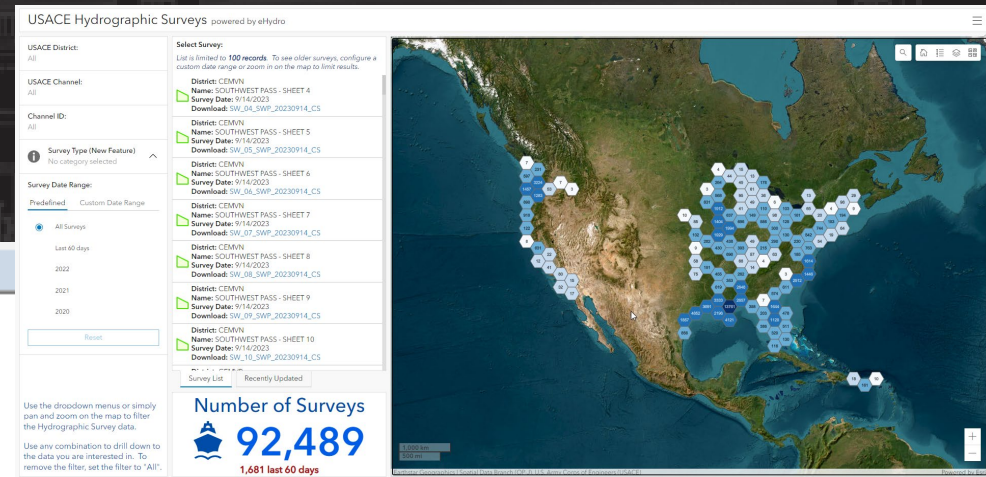
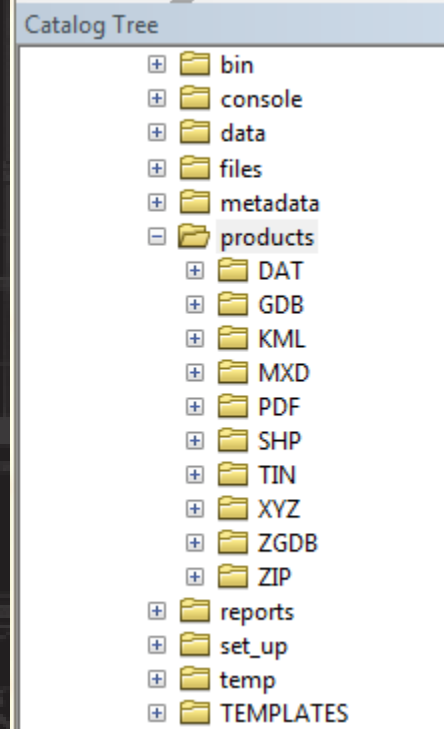
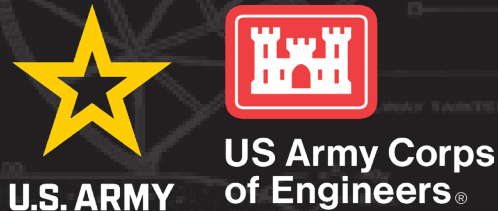
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EHYDRO DATA

Hydrographic Surveys Dashboard

- Standard XYZ ascii files
- Common File Geodatabase Format
 - Upgrading to be in sync with SDSFIE
- KML exports
- Shapefile exports
- District curated project maps
 - Emphasized for dredging purposes

Dredging Operations
Channel Maintenance
Post-Natural Disaster Events



STEWARDSHIP & STANDARDS

38 USACE Districts (36 w/ navigation mission)

- Albuquerque & Fort Worth (non-nav missions)

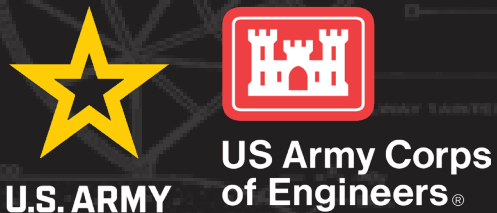
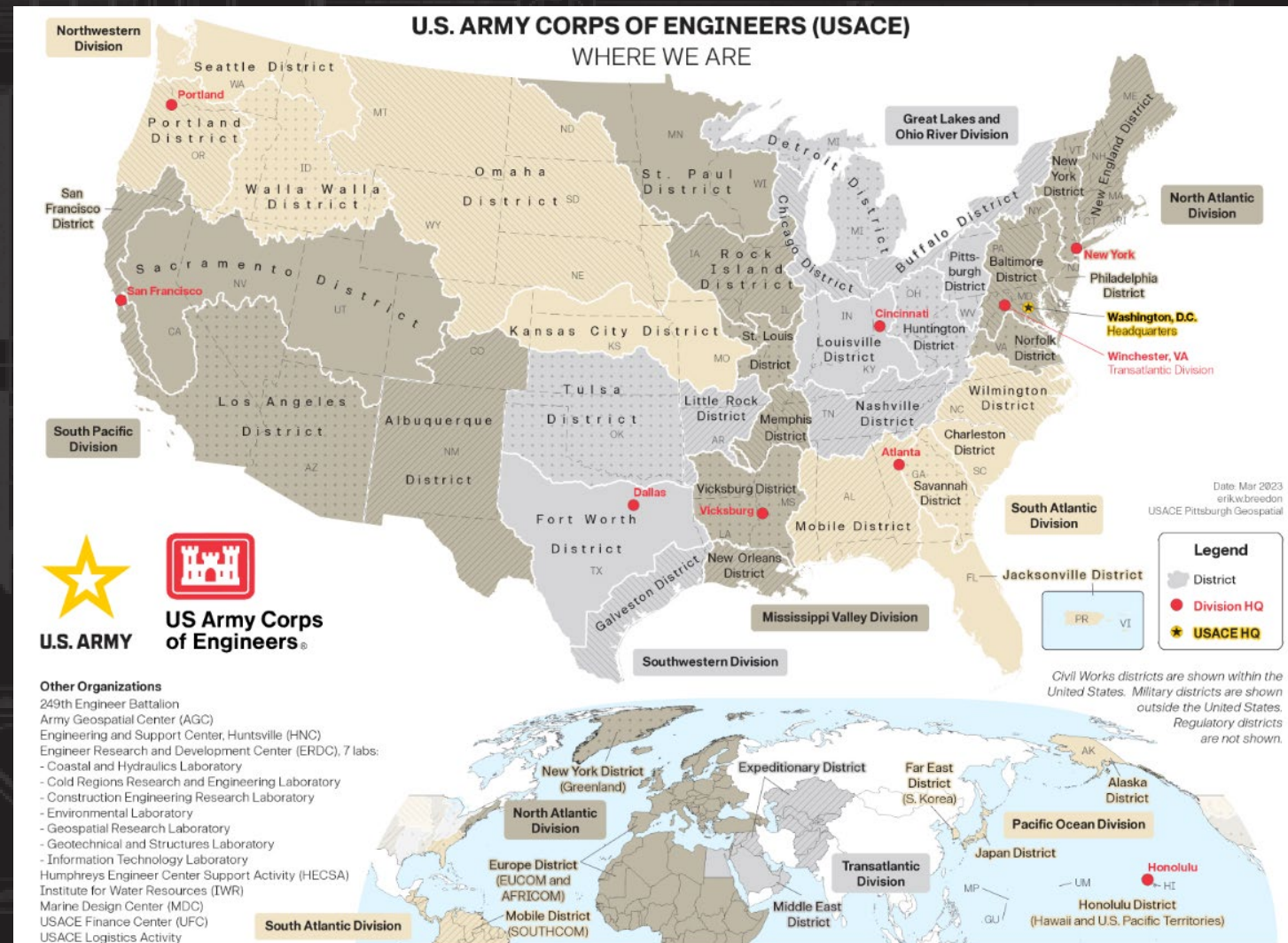
8 CONUS Divisions & Transatlantic (TAD)
OCONUS

Metadata is being standardized into ISO 19115

- eHydro automates the importing and updating of district metadata

Data schema being integrated with SDSFIE for USACE

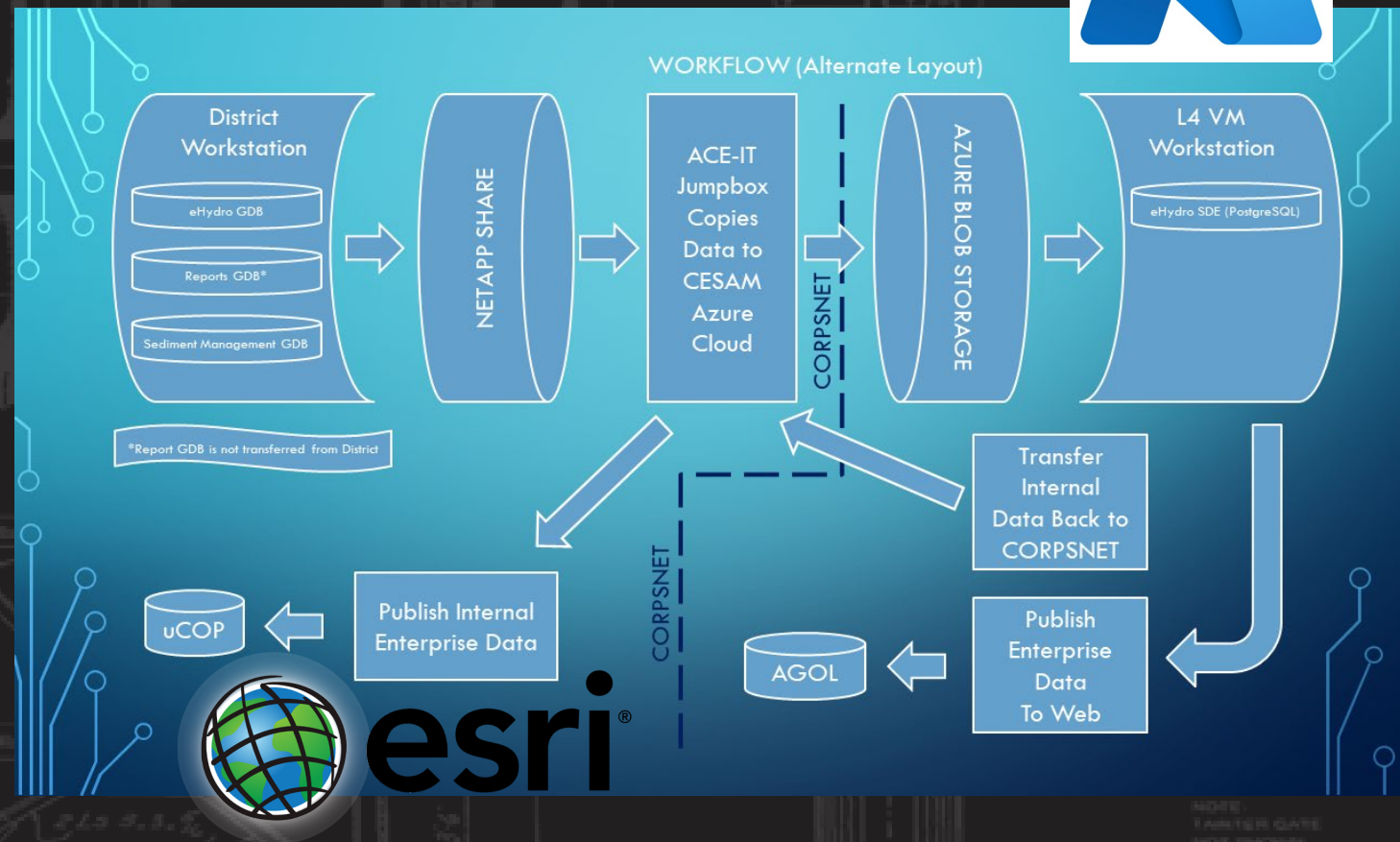
15 Business Day Requirement (Ping to Publish)





TECHNOLOGY

Metadata – ISO 19115
Catalog – JSON
Storage – Azure Services & SDE
Sharing – ESRI Services
Automation - Python



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MISSION CRITICAL

Hydro Surveys provided

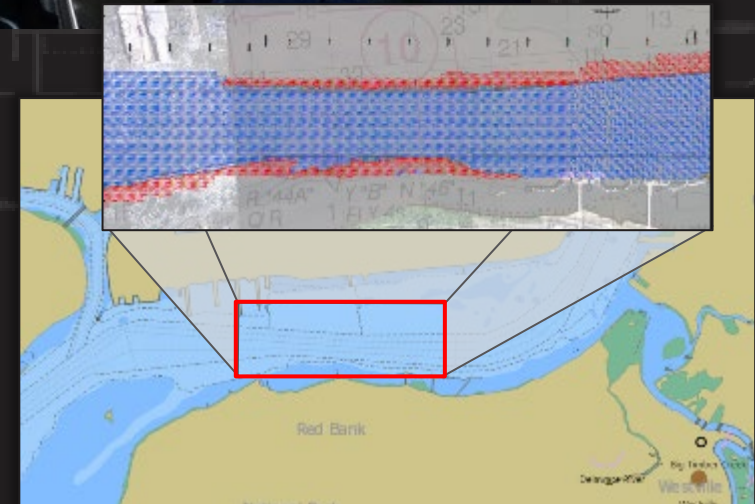
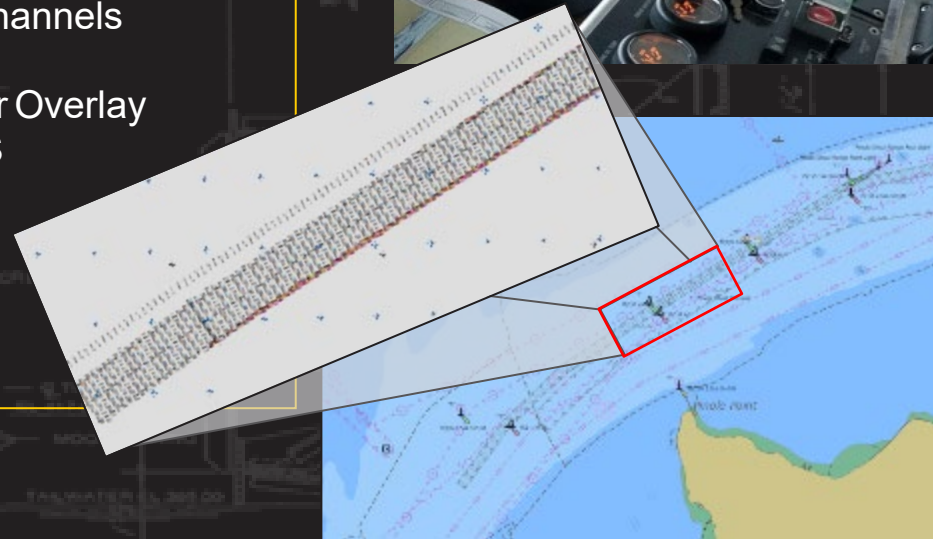
- Timely
- Consistently
- Accurately

NOAA - CATZOC Rating (where possible)

- Multibeam not used in all channels

US Coast Guard - S57 Contour Overlay

- Displayed on vessel ECDIS
- Quickly place buoys



CATZOC A1 for Pinole Shoal Channel in San Francisco Bay (Approved APR 2020)

CATZOC improvement to A2 accomplished on DE River



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IMPROVEMENTS

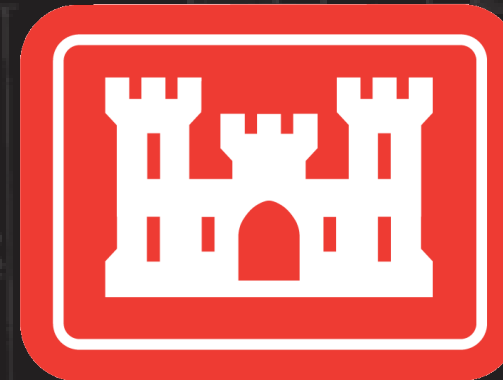
Enhance OCS Collaboration effort

- Define ISO 19115 CATZOC Specifications
- Create machine-to-machine readable data

Enhance data sharing and availability

- Better direct access to data in support of S57 Overlay generation

Increase the use of web enabled services, data standards and formats



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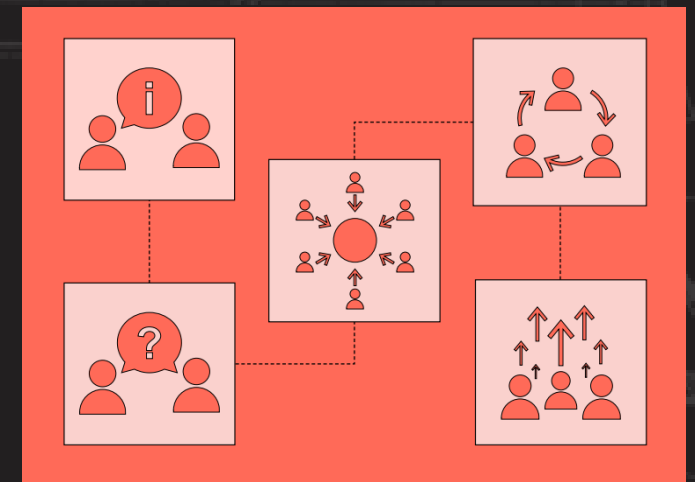
CONCLUSIONS

Standardization
Data Stewardship
Cutting-edge Tech

Thank you for the invite.

For questions, please email:

ehydrosupport@usace.army.mil



QUANTUM COMPUTING



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