



U.S. ARMY

National Sediment Management Framework (Sediment Placement Framework)

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AAPA Harbors and Navigation Committee Meeting
10 NOV 2022



Atchafalaya River CDR #1-21
 Atchafalaya Bar Channel HDR #1-20
 Atchafalaya River Miles 17-36 & Devil's Elbow
 Various Bar Channels CDR #3-21
 Atchafalaya River Southwest Pass CDR #1-21
 Atchafalaya River Southwest Pass HDR #3-21
 Atchafalaya River Southwest Pass HDR #4-21
 24 Cutterhead Tenn-Tom
 24 Cutterhead BW&T
 24 Cutterhead Biloxi
 24 Cutterhead GIWW
 MATOC: Ouachita/Black R



US Army Corps
of Engineers

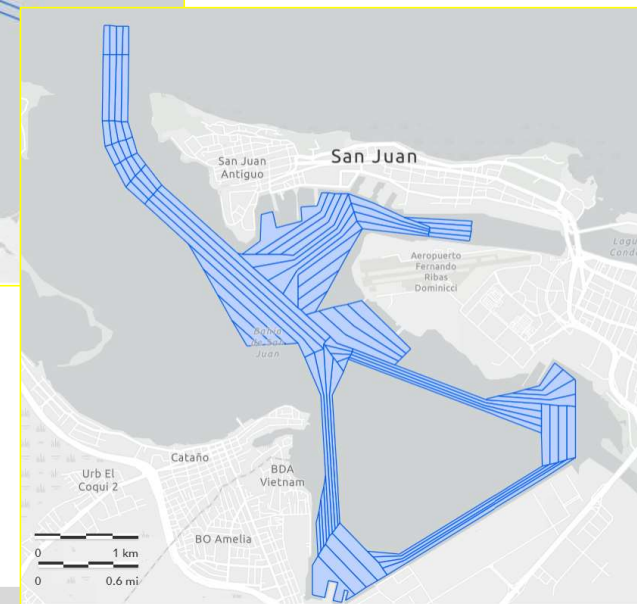
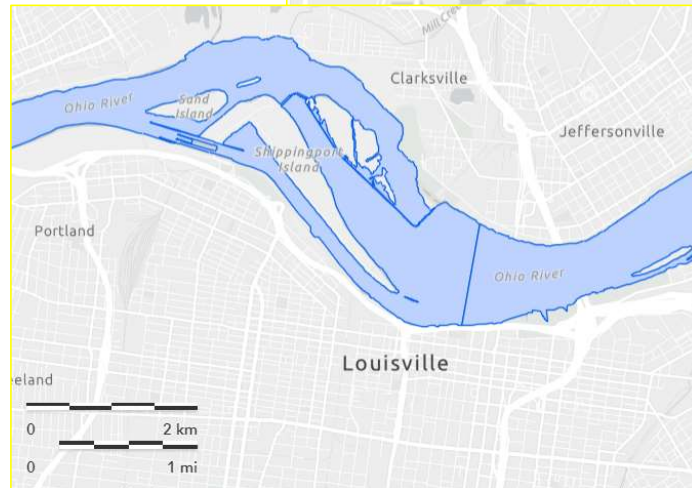
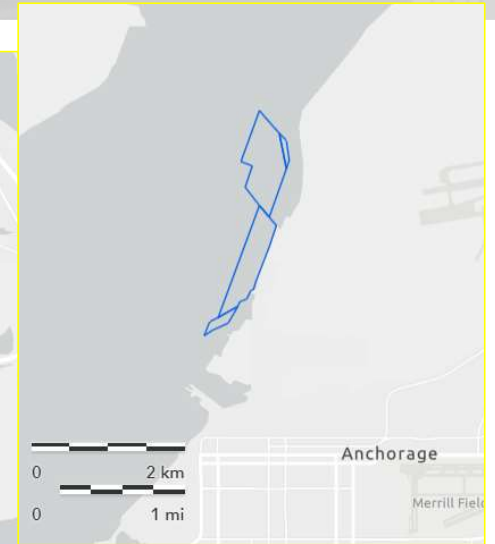
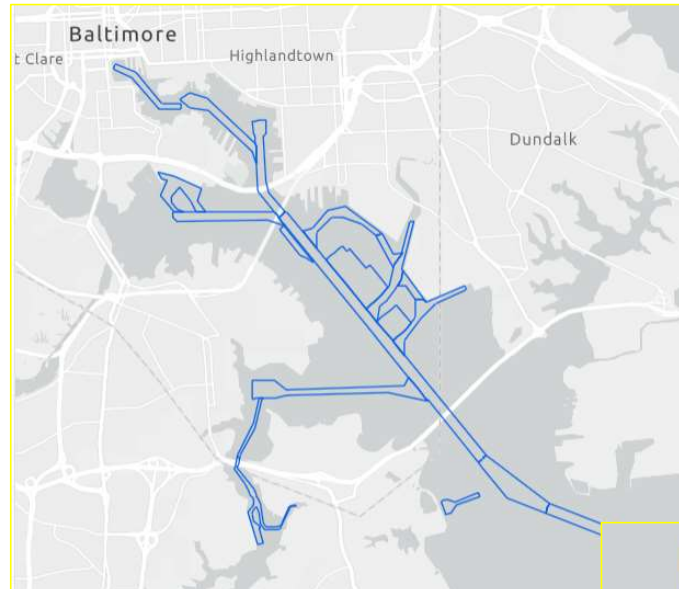


BACKGROUND

- The USACE National Channel Framework was a multi-year effort to develop and assemble a unified geodatabase of federally authorized navigation channels.

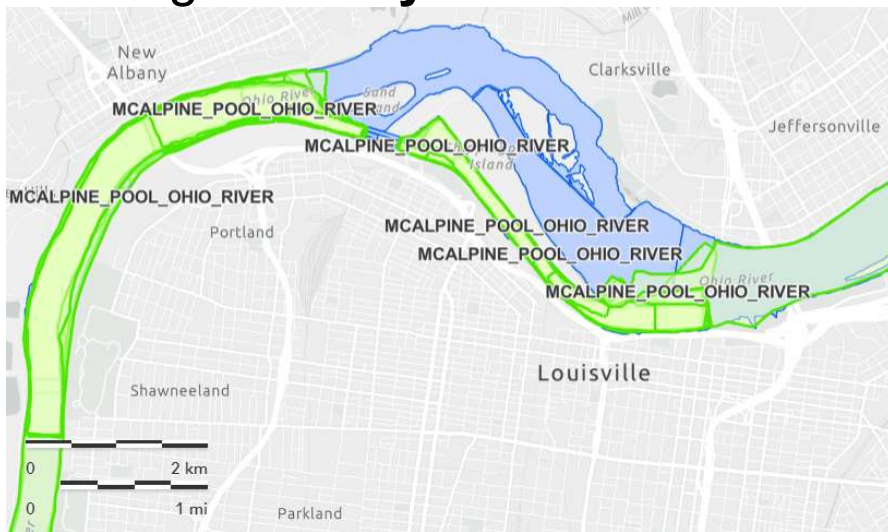
Download the National Channel Framework at:

<https://geospatial-usace.opendata.arcgis.com/maps/9227967a2748410983352b501c0c7b39/about>







BACKGROUND

- Districts remain the owners of the channel boundary and hydrographic survey data.
- Hydrographic survey results submitted in a standardized format through the **eHydro** interface.





Select Survey:
List is limited to 50 records. To see older surveys, configure a custom date range or zoom in on the map to limit results.

	District: CEPOA Name: Anchorage Harbor Survey Date: 10/20/2022 Download: AK_16_ANC_20221020_CS_IS50
	District: CEPOA Name: Anchorage Harbor Survey Date: 10/17/2022 Download: AK_16_ANC_20221017_CS_IS49
	District: CEPOA Name: Anchorage Harbor Survey Date: 10/13/2022 Download: AK_16_ANC_20221013_CS_IS48
	District: CEPOA Name: Anchorage Harbor Survey Date: 10/10/2022 Download: AK_16_ANC_20221010_CS_IS47

[Survey List](#) [Recently Updated](#)

Number of Surveys

 **694**
15 last 60 days



0 1 km
0 0.6 mi

Kenai Peninsula Borough, Matanuska-Susitna Borough GI

eHydro website <https://www.arcgis.com/apps/dashboards/4b8f2ba307684cf597617bf1b6d2f85d>

NEEDS STATEMENT

- Need for standardized enterprise-wide database of USACE **sediment placement areas** and **sediment borrow areas** comparable to, and compatible with, the existing USACE National Channel Framework
- Map placement areas of all types:
 - upland
 - bankside, beach, wetlands
 - in-water

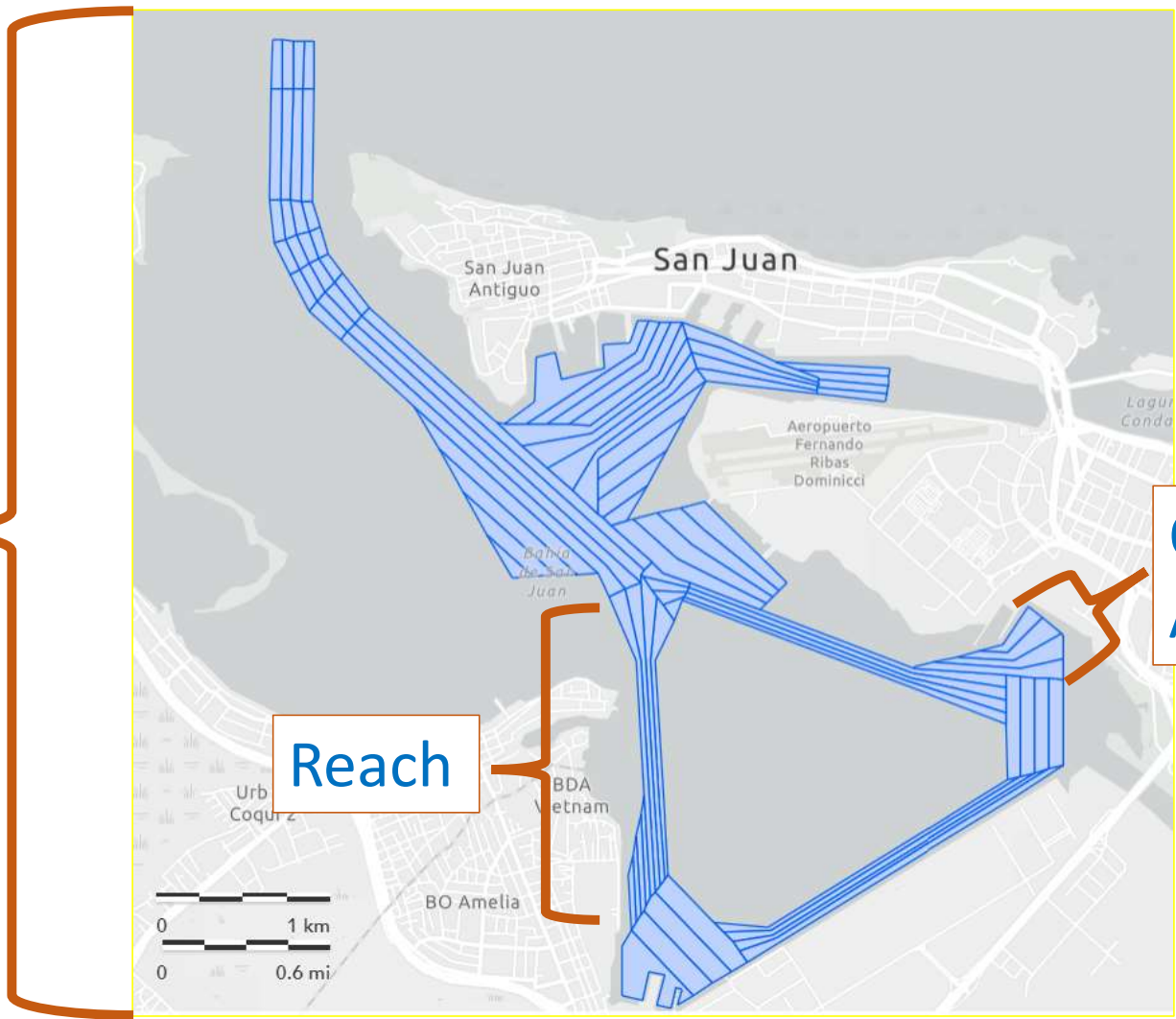


PROJECT PLAN

- Build on success and lessons learned of the National Channel Framework
- Recognize previous efforts in tracking placement areas
- Initial phase:
 - Establish geodatabase criteria (attributes)
 - Map boundaries --**Where are these places on the surface of the earth?**
 - NOT designed for activity tracking. Other systems already track sediment sampling results, certain dredge activity, habitat types, etc

NCF: NESTED SPATIAL HIERARCHY

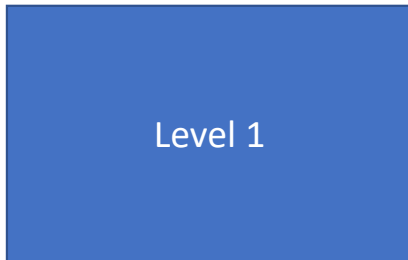
Project Channel



Quarters A, B, C, D

Reach

NATIONAL SED. PLACEMENT AREAS: PROPOSED NESTED SPATIAL HIERARCHY OPTIONS



Level 1 – populated
Level 2 – blank
Level 3 - blank



Level 1 – populated
Level 2 – populated
Level 3 - blank



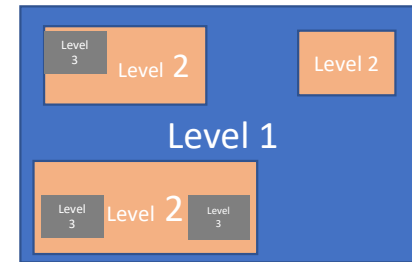
Level 1 – populated
Level 2 – populated
Level 3 - populated



Level 1 – populated (multiple unique ID polygons, not overlapping)
Level 2 – blank
Level 3 - blank



Level 1 – populated (multiple unique ID polygons)
Level 2 – populated (multiple unique ID polygons)
Level 3 - blank



Level 1 – populated
Level 2 – populated (multiple unique ID polygons)
Level 3 - populated (multiple unique ID polygons)

Thank you for your time today!

Marin Kress

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