

Distilling Alaska's Hydrographic Data for Clean Water Action

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Background

- Clean Water Act 1972
- Produce a biennial Report of Water Quality
- Delegated to Alaska Dept. of Environmental Conservation
 - Accurate
 - Simple
 - Durable

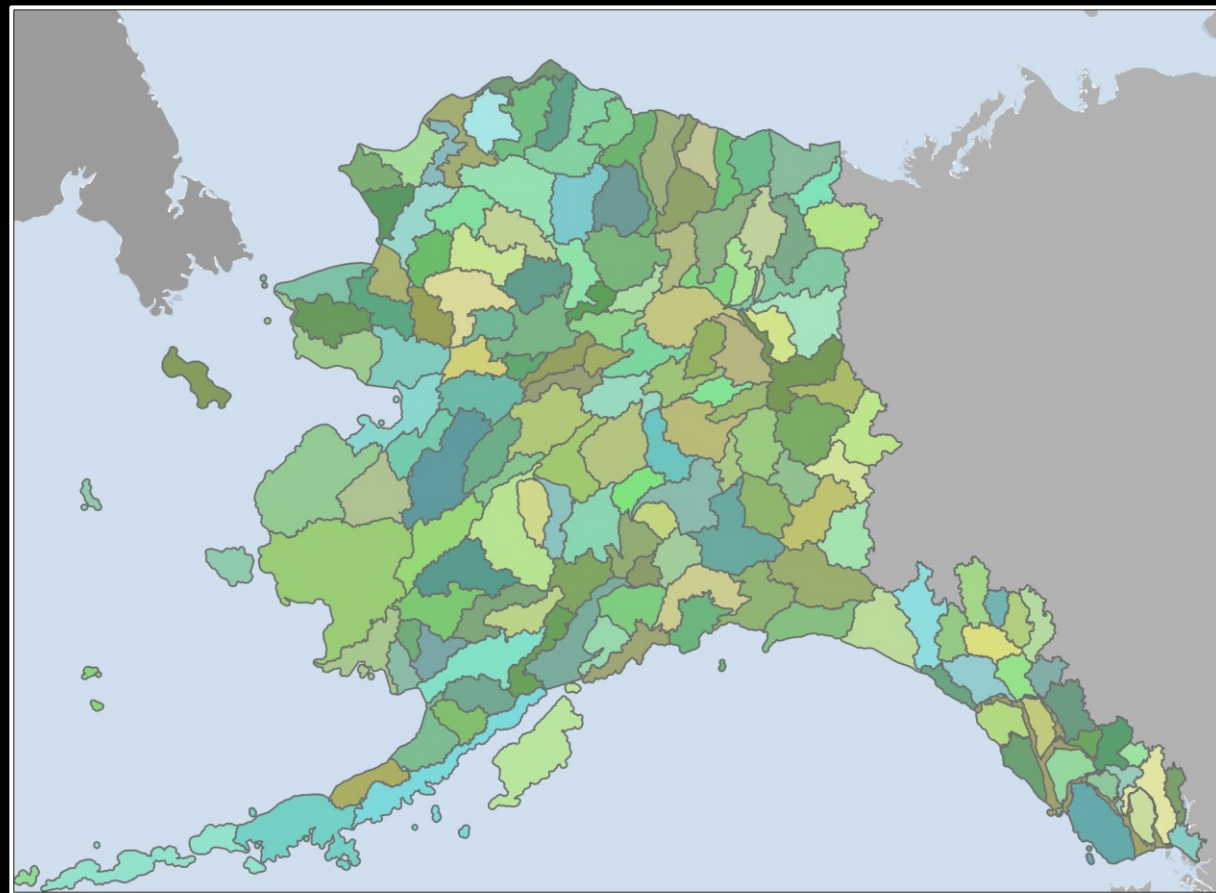
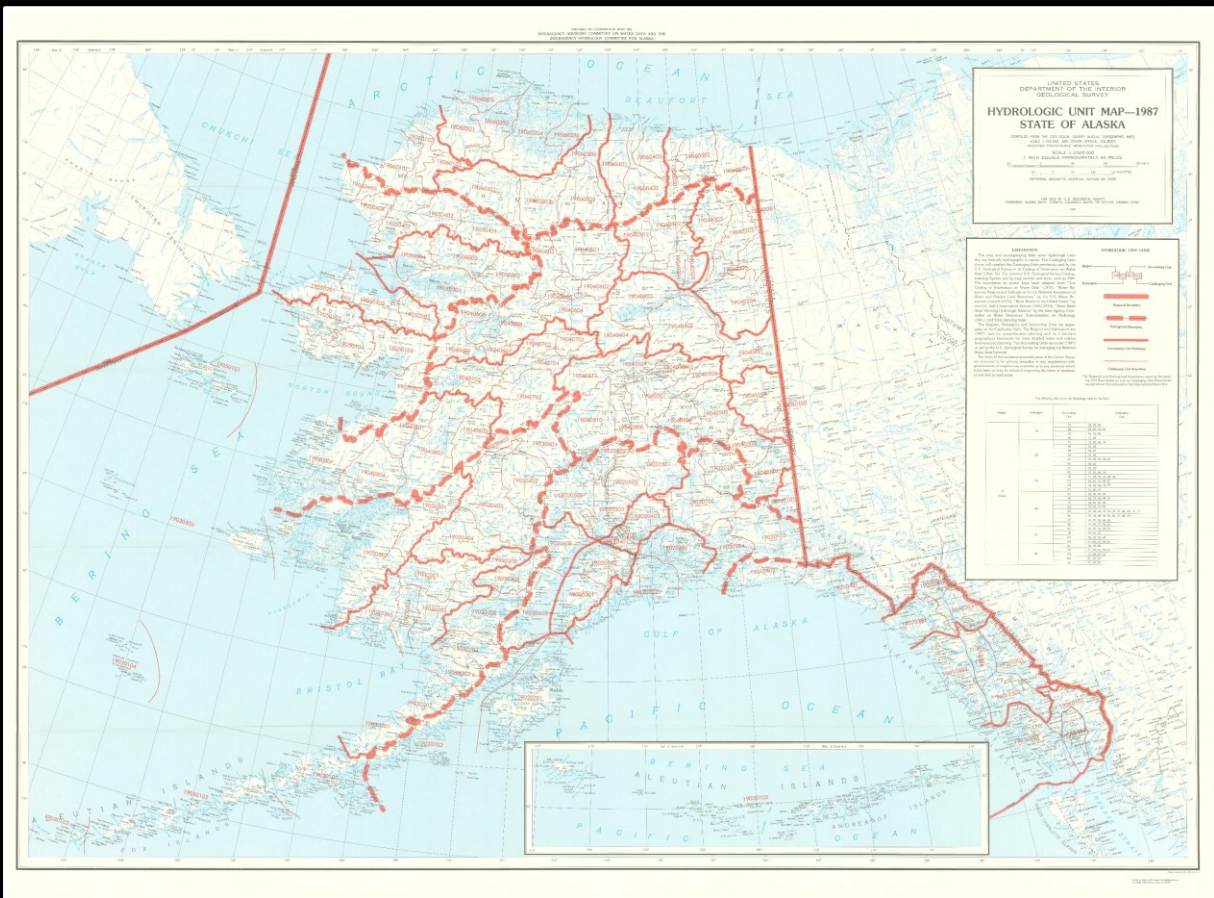
Accurate?

NHD circa 1987

136 HUC8 Sub basins

NHD 2023

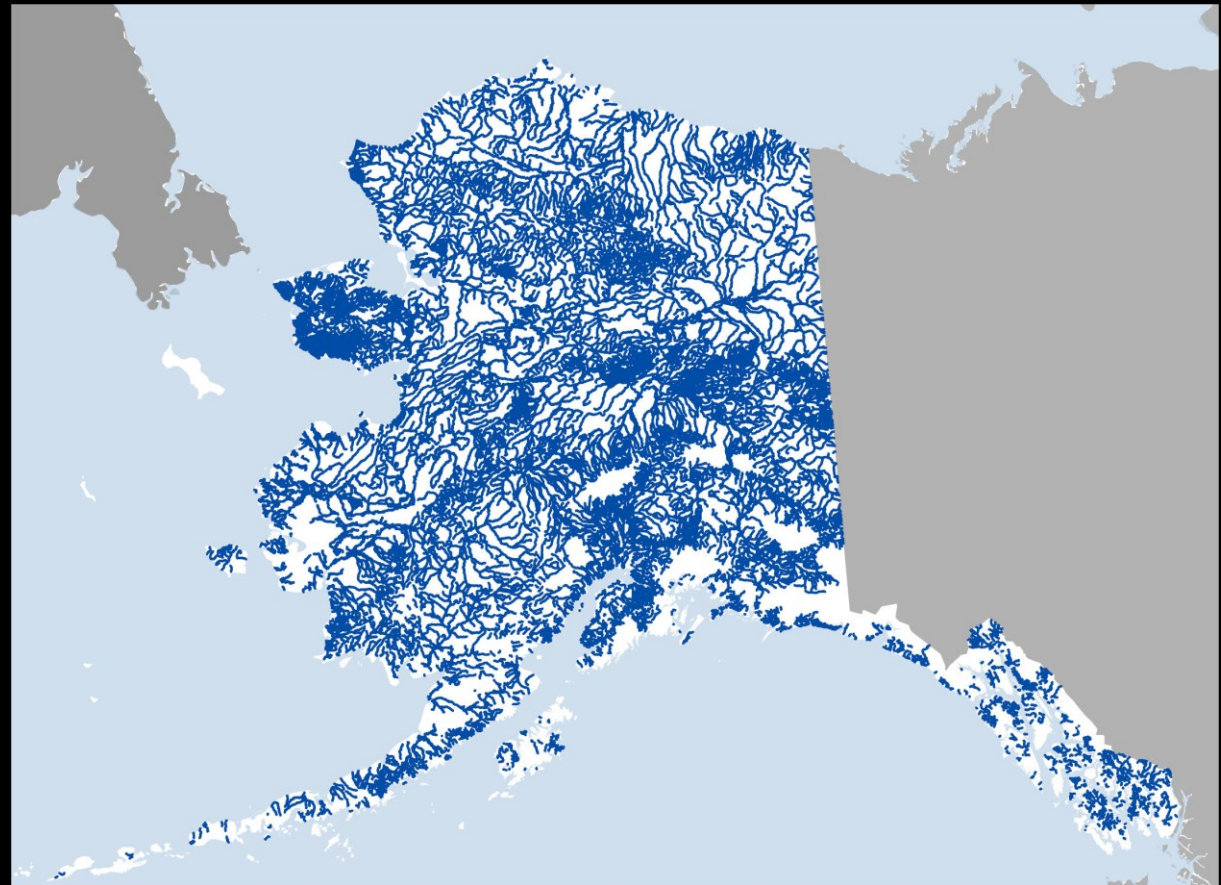
163 HUC8 Sub basins



Methods: Simple?

NHD 2023 ~ 2.9 M Stream lines

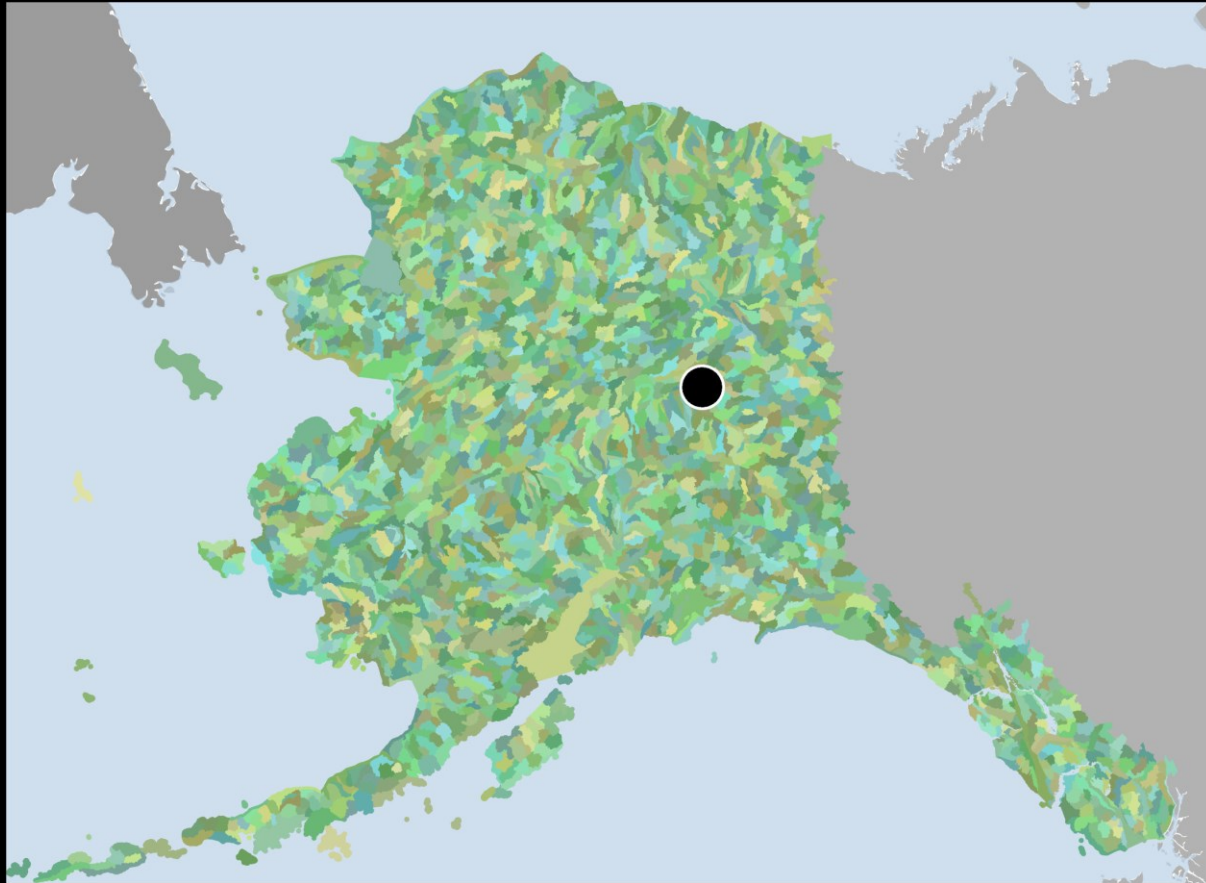
~ 271k Named Stream lines



Methods: Simple?

NHD/WBD 2023 - 2,388 HUC10s

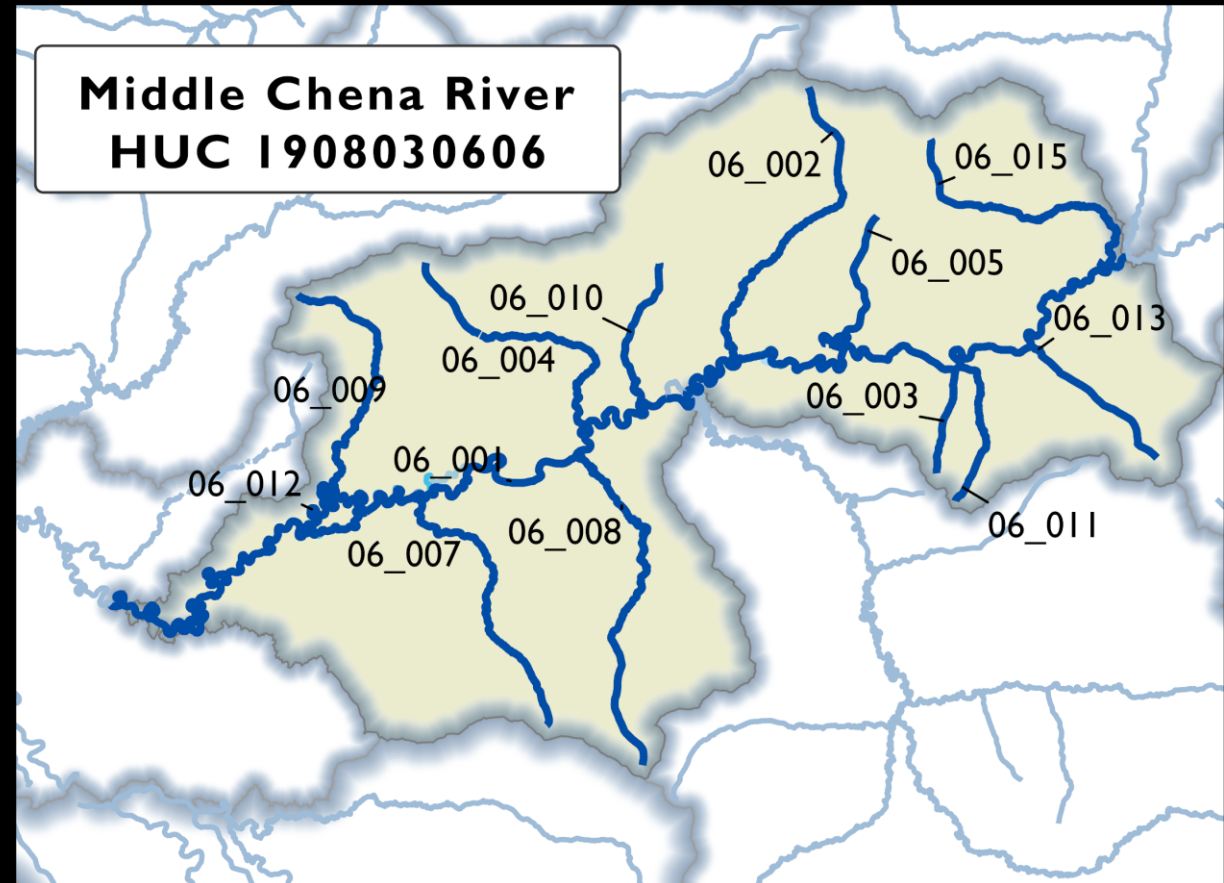
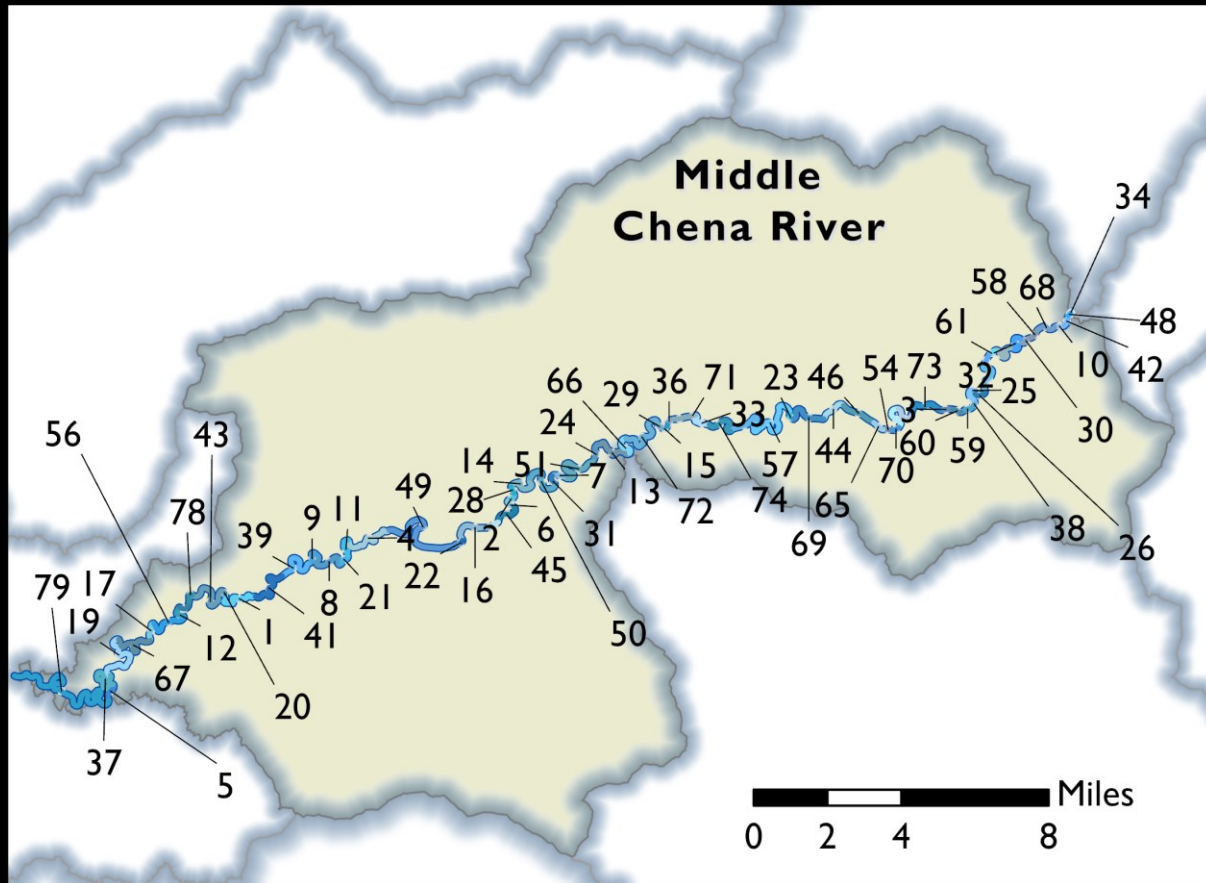
Intersect named Streams w/
HUC10



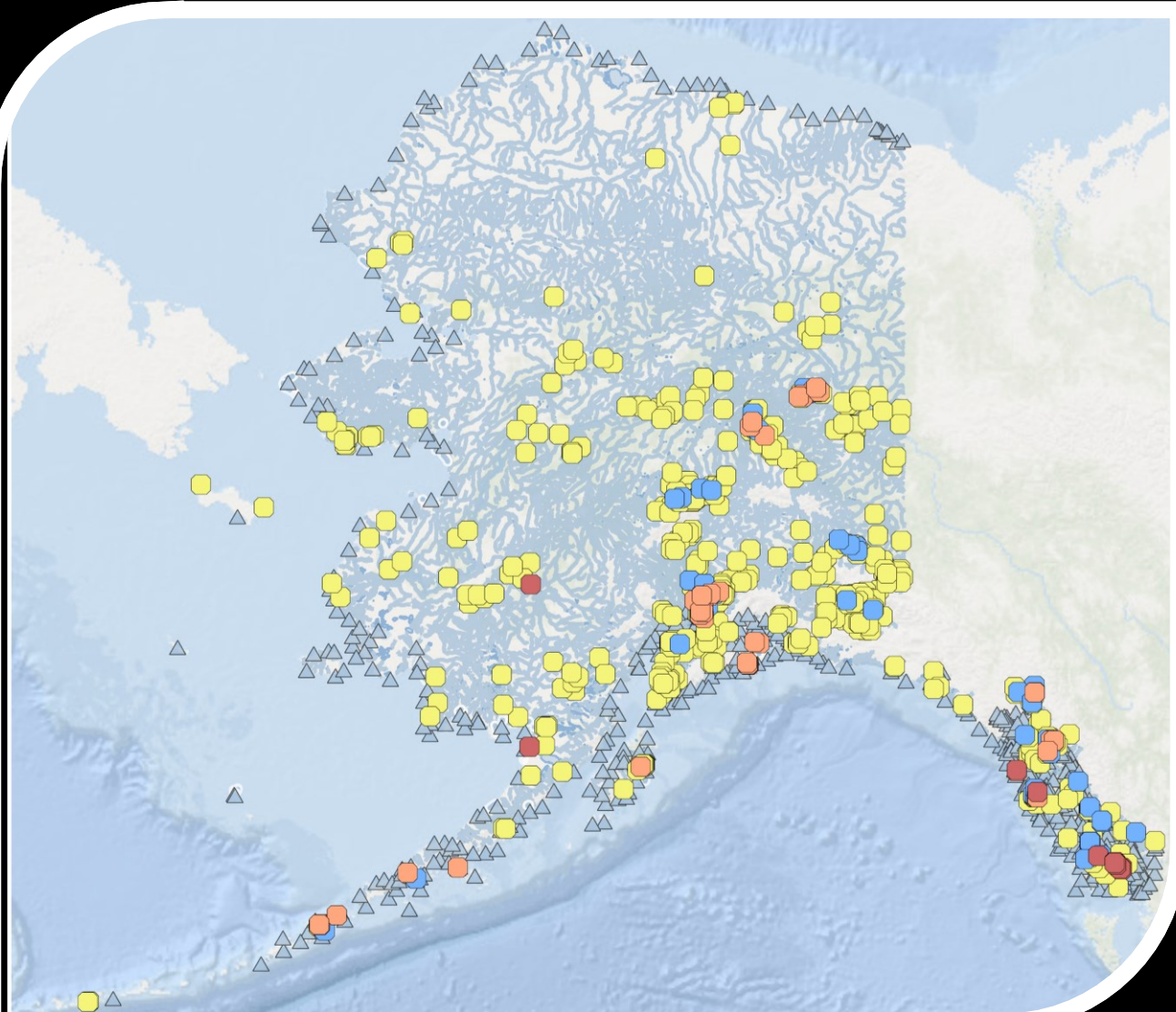
Methods: Simple?

Multi part feature -> dissolve into a single feature per HUC10

Intersect named Streams w/ HUC10 assign unique IDs



Results – Durable?



All Assessed Waters

- Impaired (Category 5) - [12]
- Impaired with a recovery plan (Category 4) - [52]
- Not enough information (Category 3) - [541]
- Attaining water quality standards (Category 2) - [52]

BASE UNITS

- Marine - all - [556]
- Beaches - all - [242]
- Rivers -all - [10,451]
- Lakes - all - [2,947]

Public Access – ADEC website

Alaska Department of Environmental Conservation
DIVISION OF WATER

Search DEC

You Are Here: DEC / Water / Water-Quality / Integrated Water Quality Monitoring And Assessment Report

INTEGRATED WATER QUALITY MONITORING AND ASSESSMENT REPORT

Find address or place

Waterbody Category

- 2 (Attaining)
- 3 (Not enough information)
- 4A (Impaired)
- 4B (Impaired)
- 5 (Impaired)

Waterbody Category

- 2 (Attaining)
- 3 (Not enough information)
- 4A (Impaired)
- 4B (Impaired)
- 5 (Impaired)

POWERED BY

<https://dec.alaska.gov/water/water-quality/integrated-report>

Lessons Learned / Recommendations

- NHD and WBD are very dynamic
- Data users should establish a baseline dataset
- USGS/WBD could issue NHD as annual or semi-annual versions (date stamped? like ADF&G's Anad. Waters Catalog? – AWC_2023)
- USGS could inform users of updated HUCs in each version (Web Map?)

Questions / Comments

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