

Alaska CIAP State Tier 1-10:

Geohazard Evaluation & Geologic Mapping for Coastal Communities



Presenter:

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Division of Geological & Geophysical Surveys

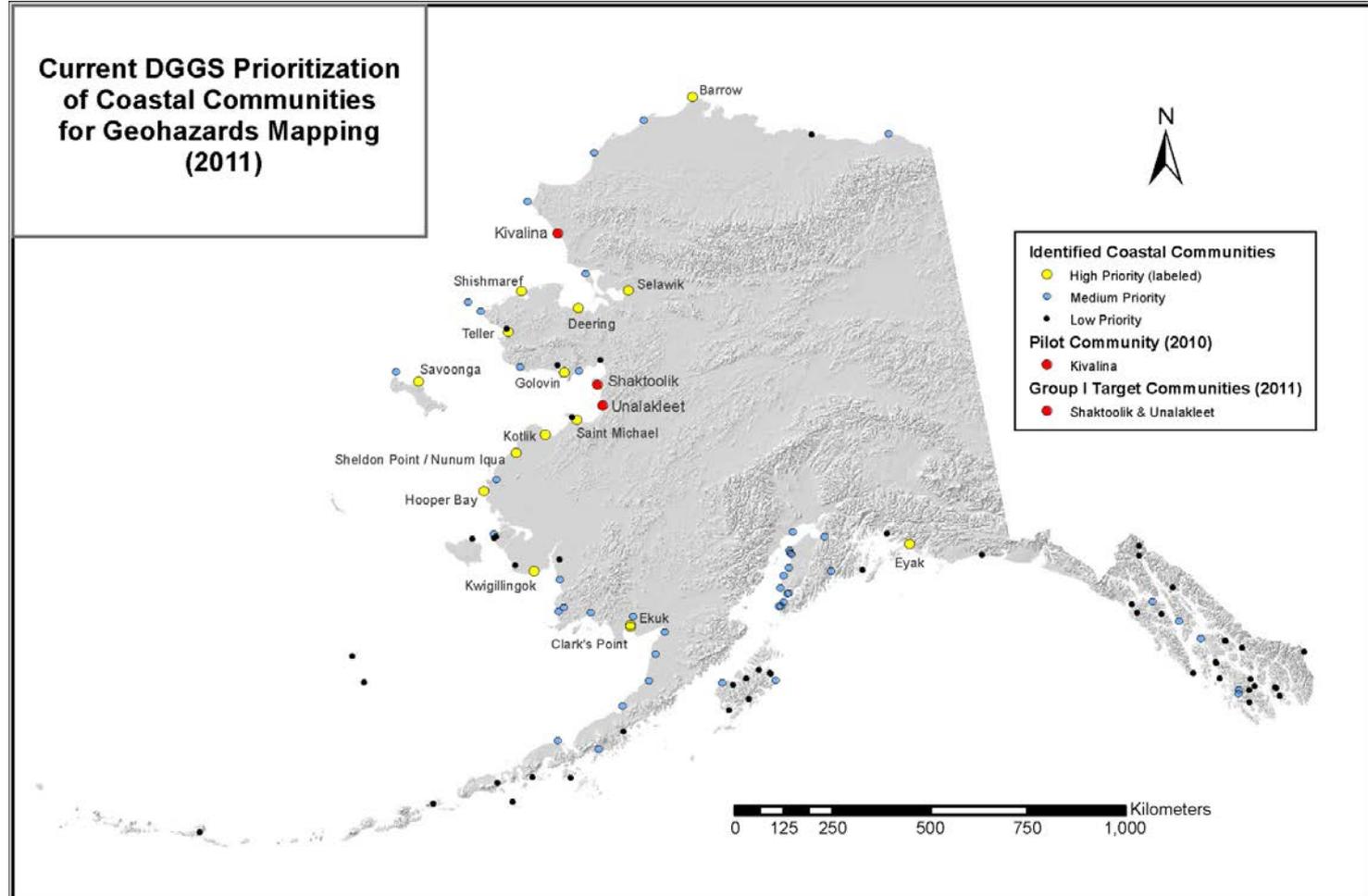
Department of Natural Resources

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Location & Timeline

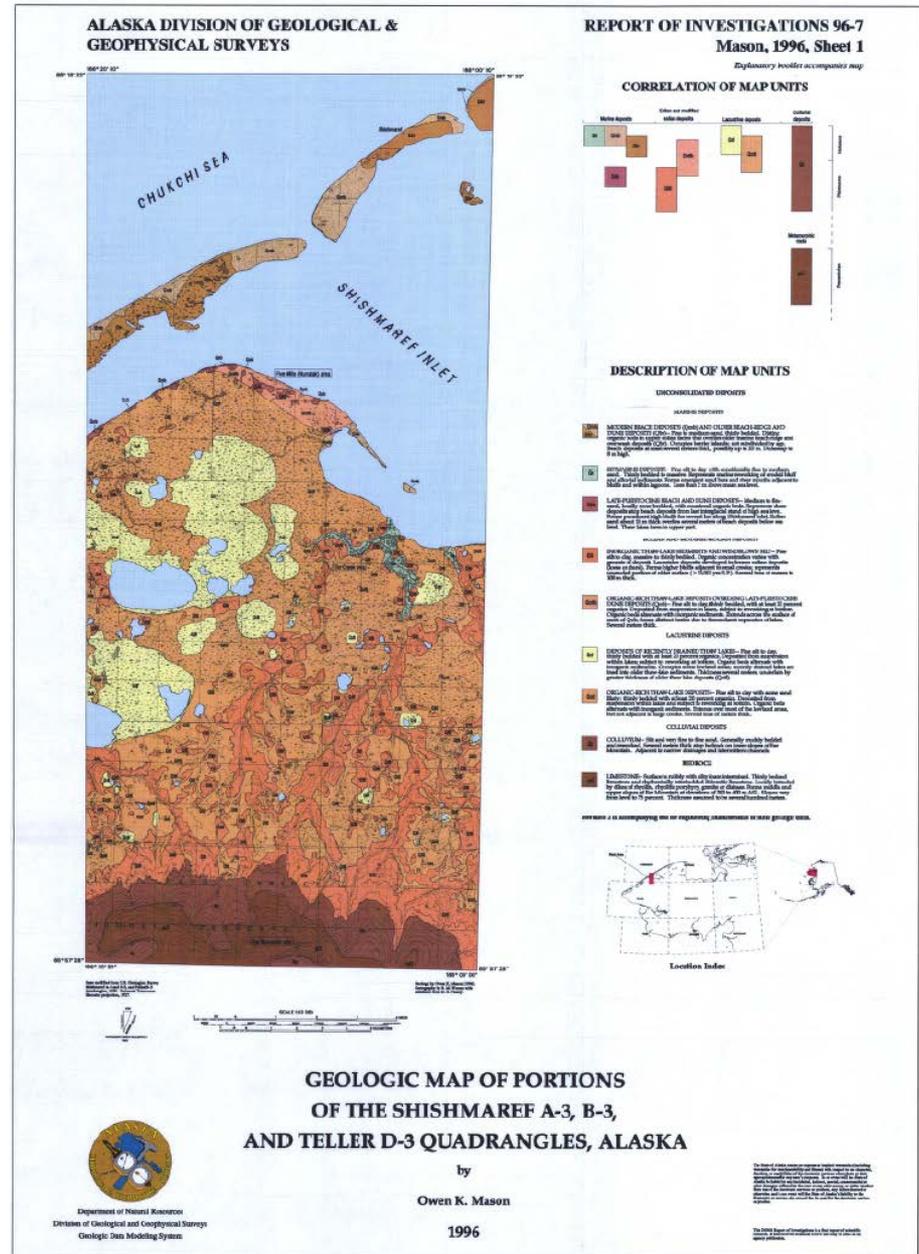


- 2+ communities/year... at least 9 communities by 2013
- 2 map products + 1 report per community
- Community prioritization will evolve with outside input & shifting needs

Map Products

1. Surficial Geologic Map

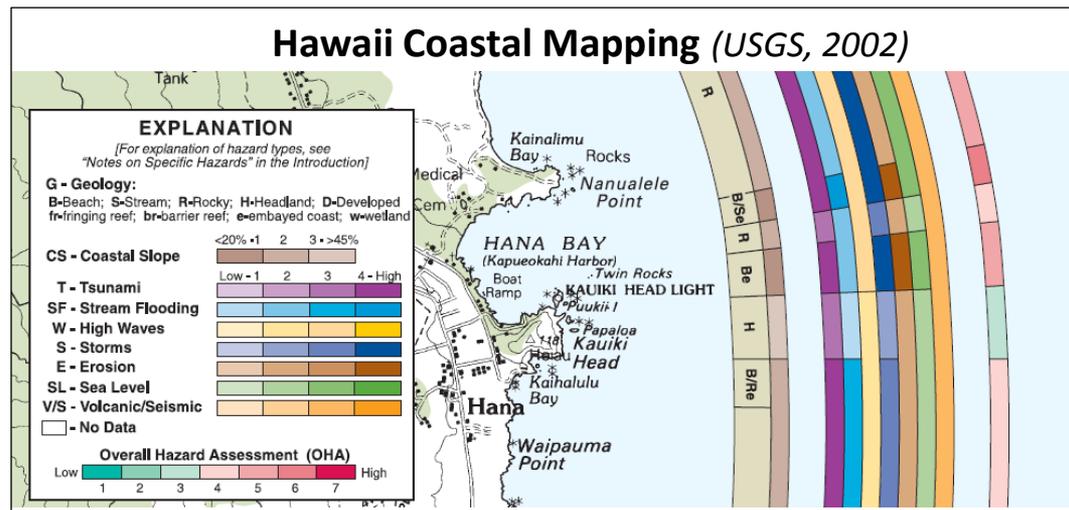
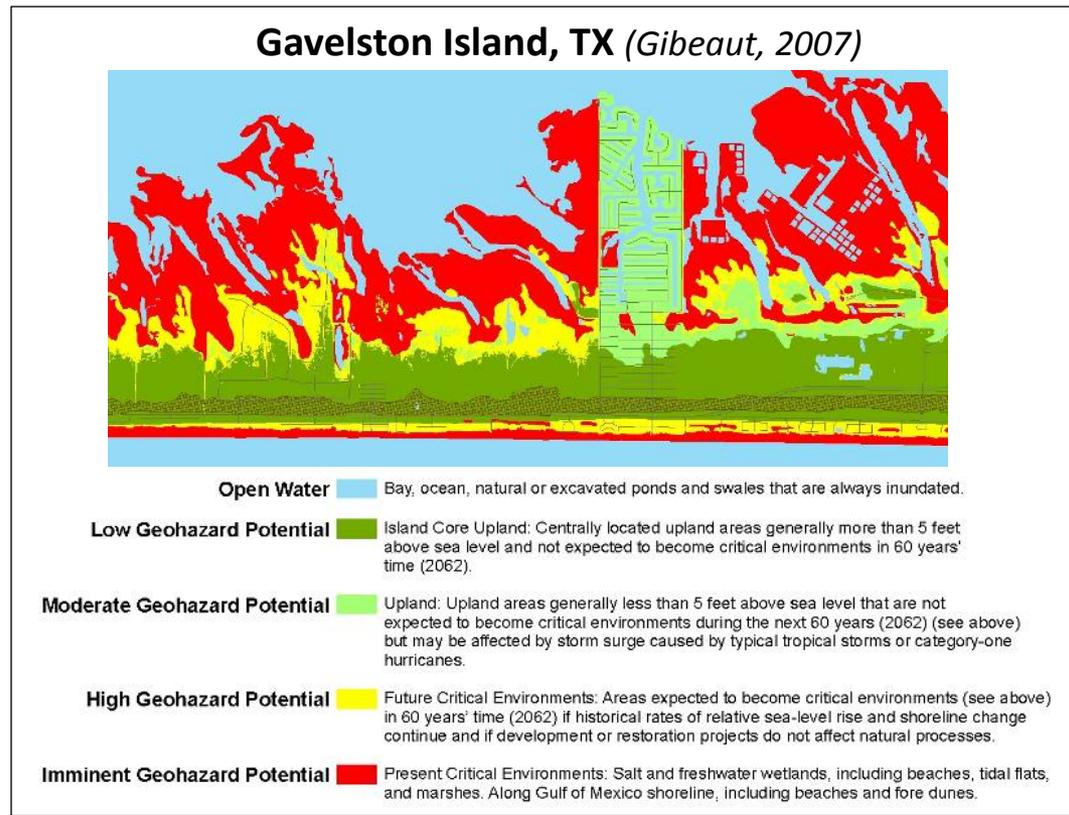
- Scale: 1:63,360
- Describes composition, structure and engineering properties of the earth's surface
- Distribution of loose materials (i.e. sand, gravel) and exposed bedrock
- Primary uses:
 - Baseline geologic data
 - Ground conditions
 - Construction material sources



Map Products

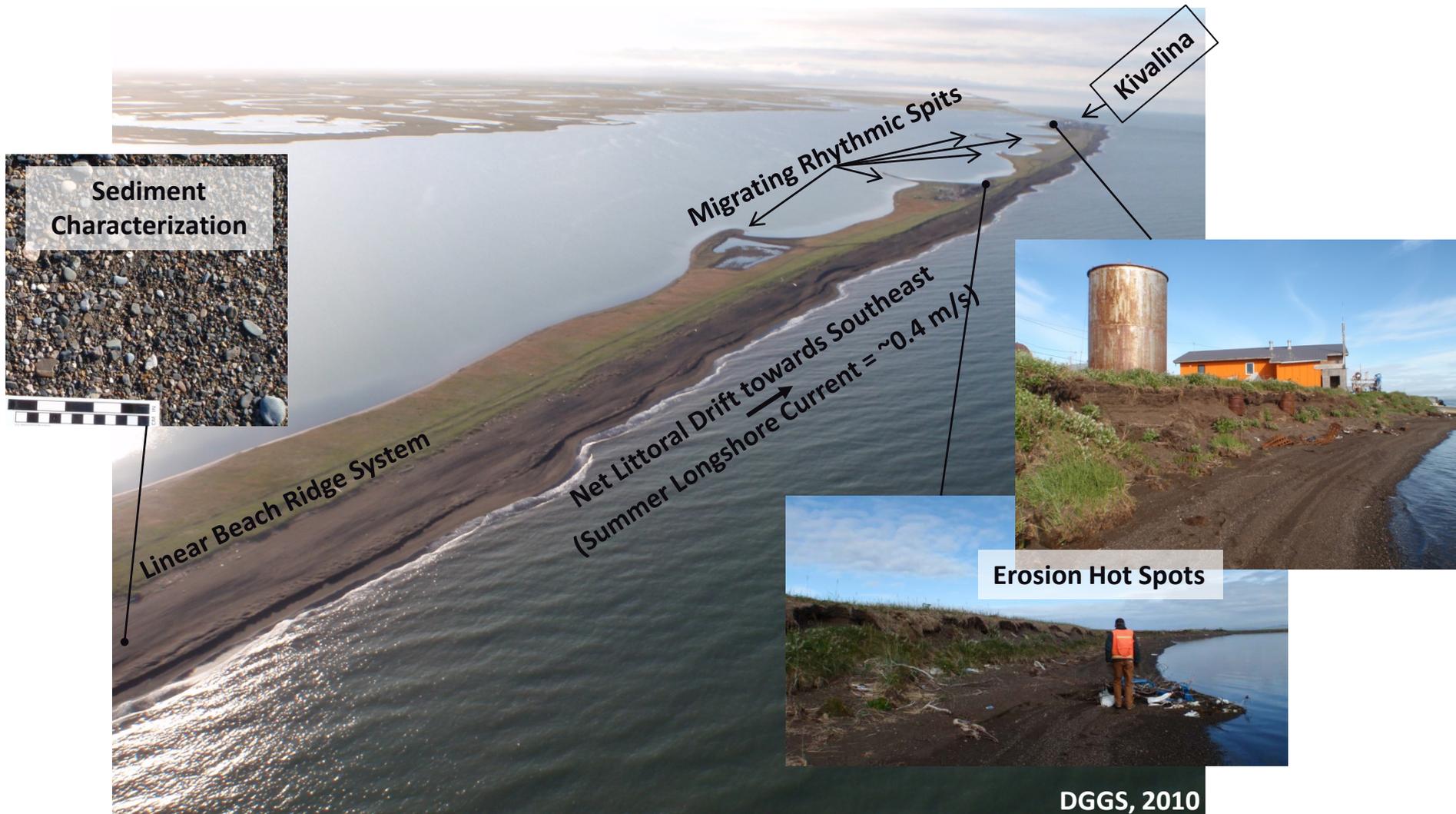
2. Hazard Zonation Map

- Multi-hazard mapping approach for Alaska coastal zone is under development
- Emphasis on relative risk
- Identify areas prone to hazards such as:
 - Erosion
 - Landslides
 - Wave attack
 - Flooding
 - Permafrost thaw
 - Earthquakes
- Primary uses:
 - Synthesized hazard information for project sites
 - Development & administration of coastal management plans
 - Designation of natural hazard areas



Summary Report

- Emphasis on *regional* geologic setting and coastal processes
 - Improves understanding & identification of local geologic hazards
 - Provides baseline data for community and district planning (or relocation)



2011 Field Season

Unalakleet



June 29-July 11

Shaktoolik



July 16-30

