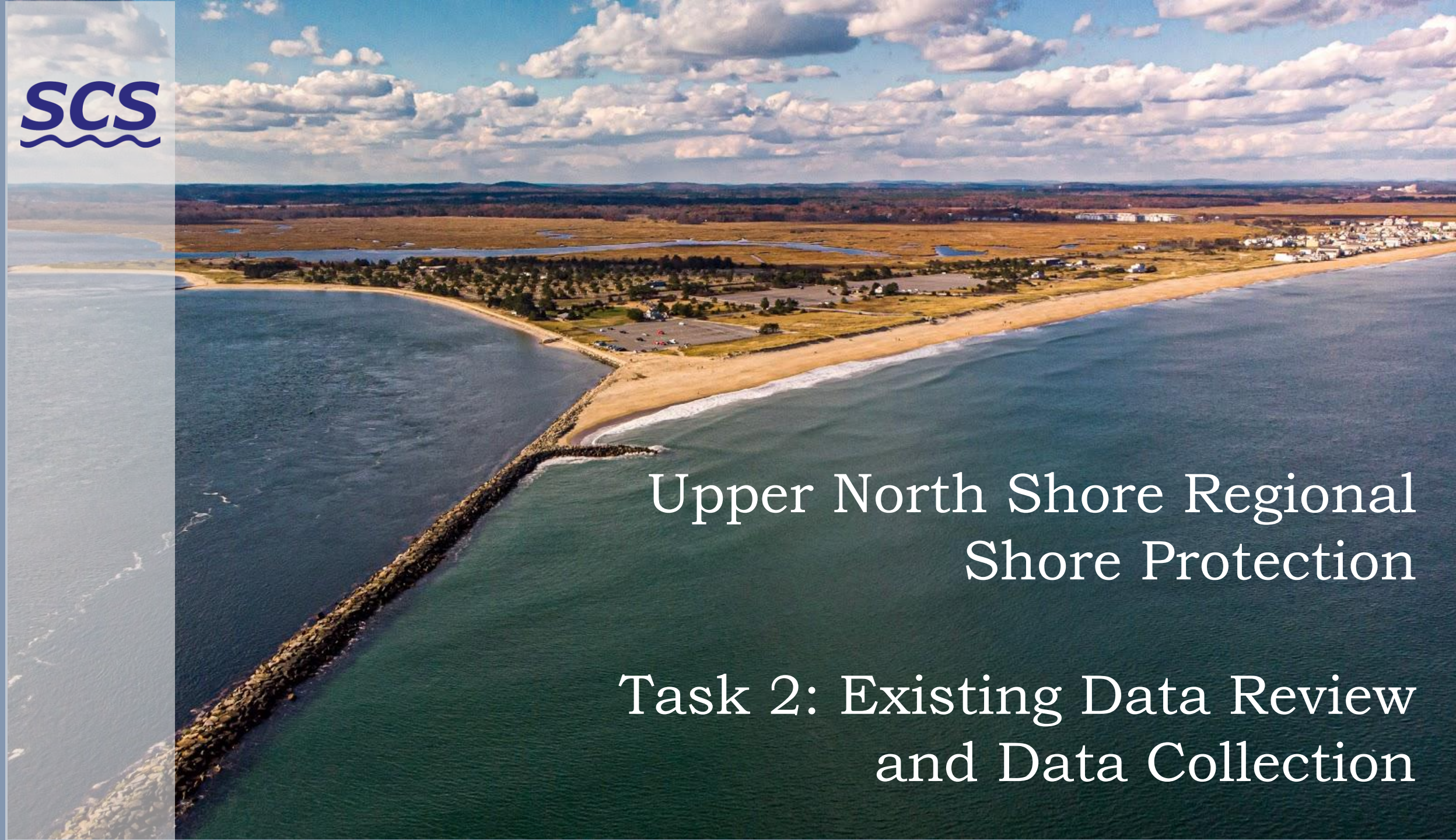


Upper North Shore Regional Shore Protection

Task 2: Existing Data Review and Data Collection

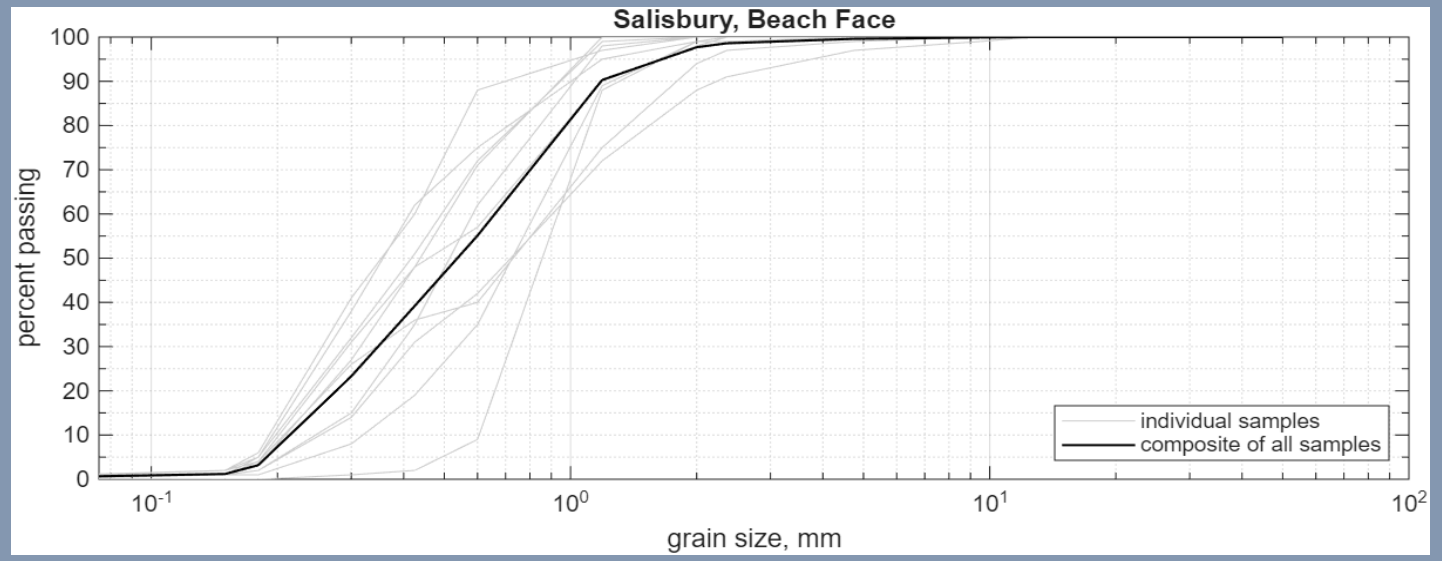
Existing data

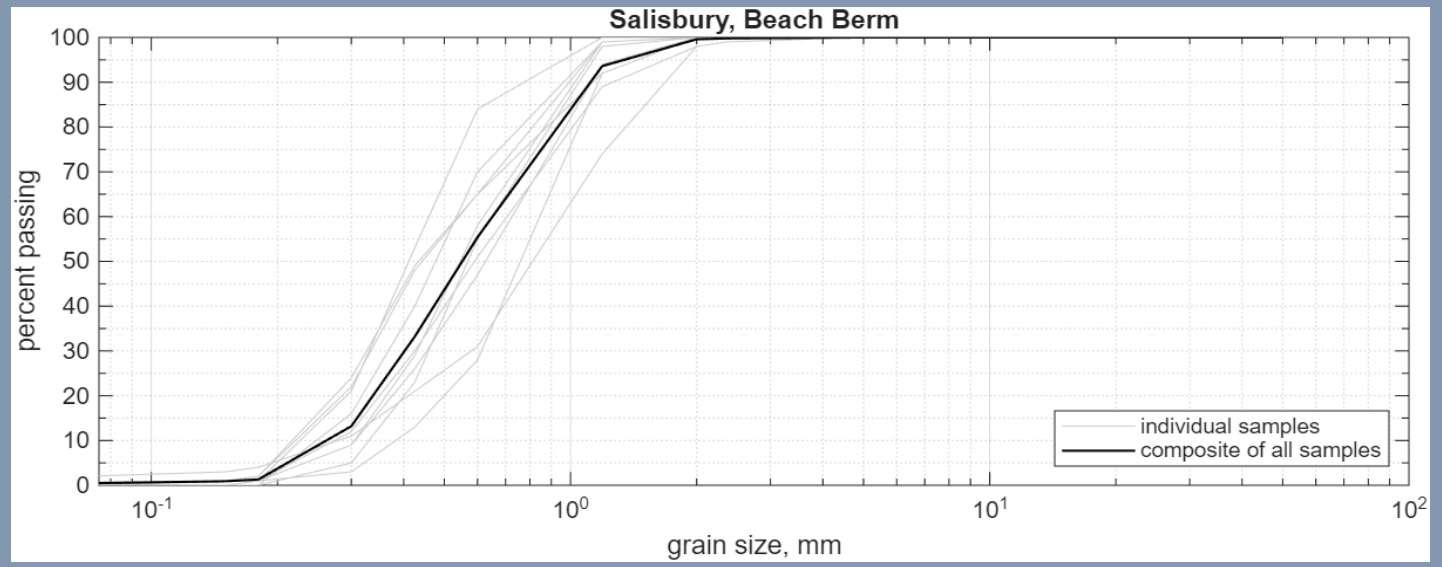
Compiled:

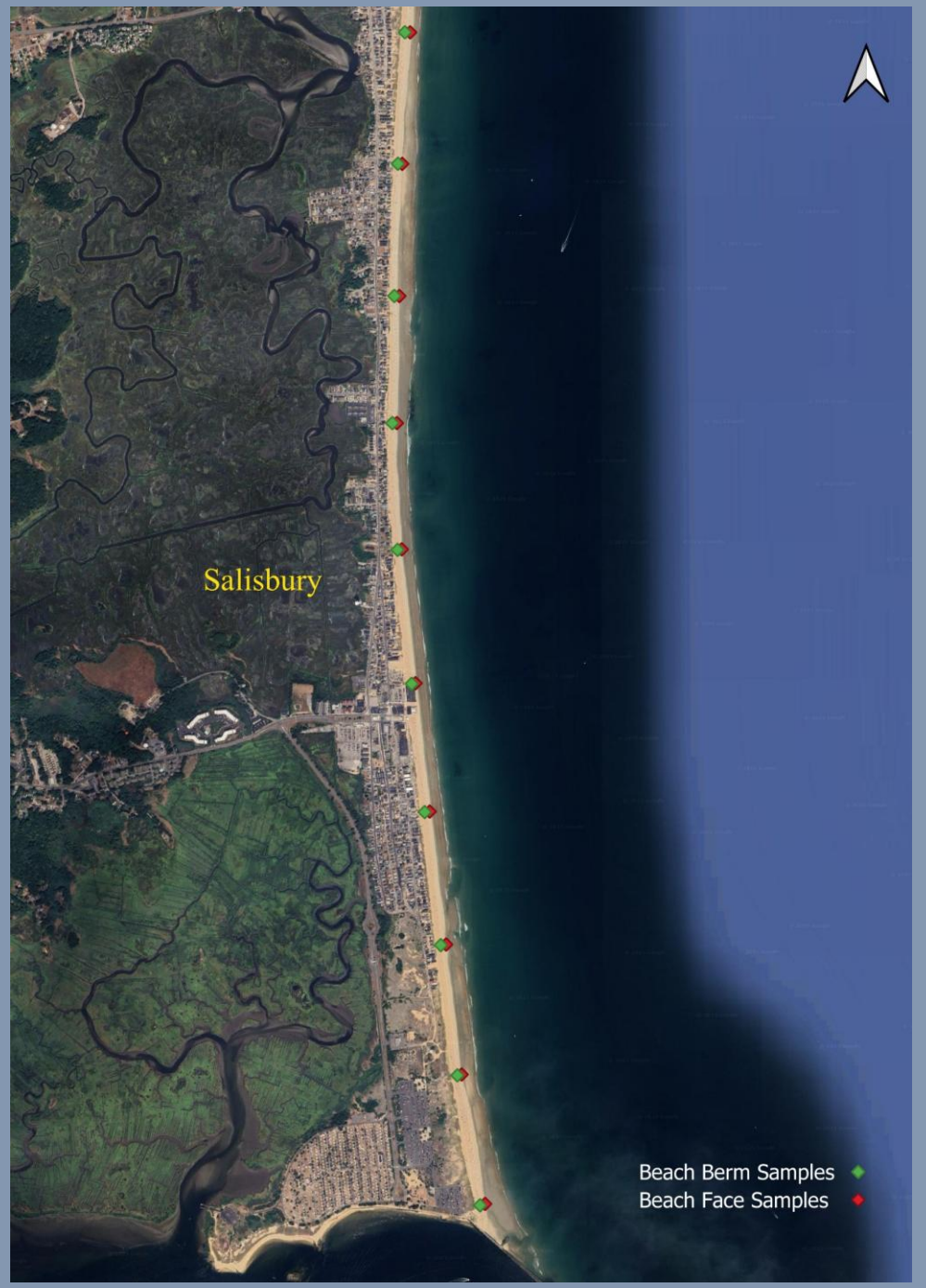
- Management log
- Historic LIDAR shorelines (pictured right)
- Bathymetry
- Wave Information Study (WIS)- determining wave conditions, magnitude and direction
- Existing coastal infrastructure inventory
- Priority Habitat and Estimated Habitat inventory
- Shellfish suitability inventory

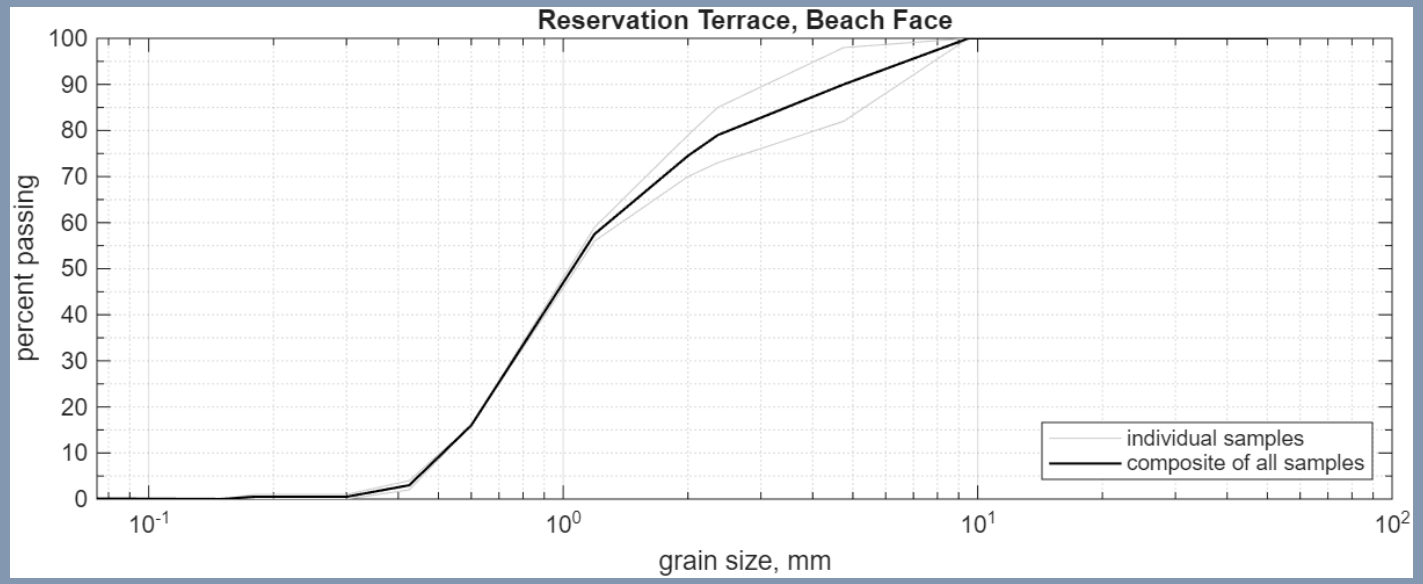
Collected data

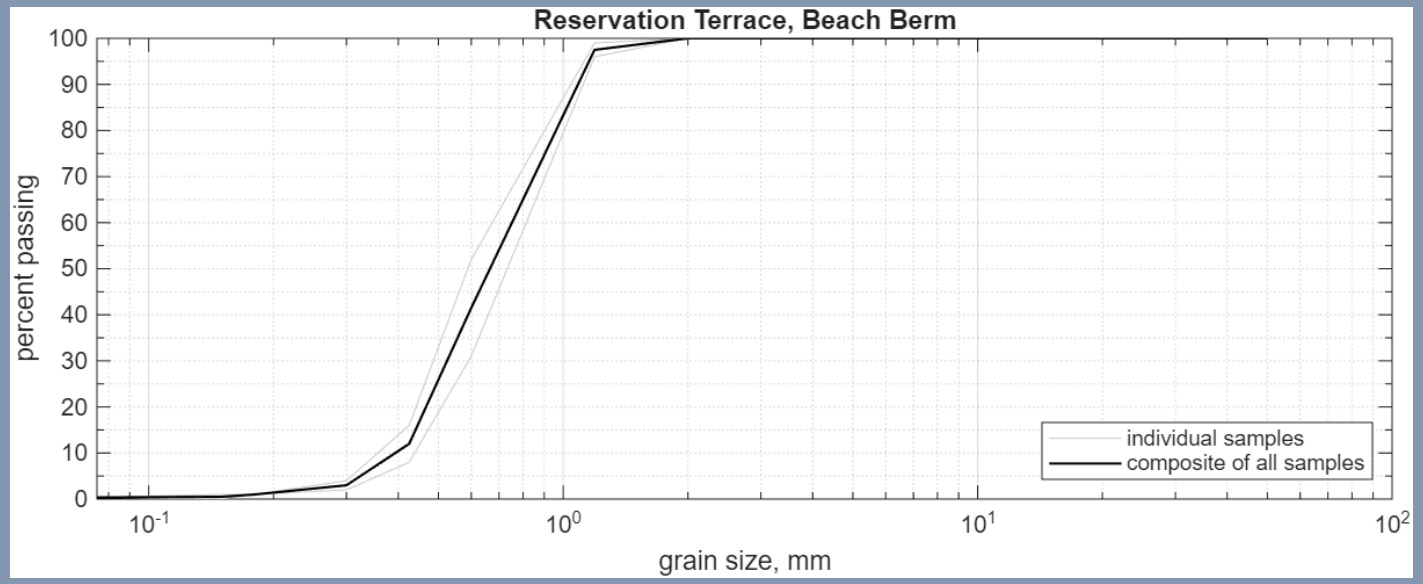
- Sediment sample and current shoreline survey – completed early January
- 32 sediment samples collected, both beach face and beach berm samples
- High water line recorded


Salisbury, Beach Face
percent passing
grain size, mm
individual samples
composite of all samples

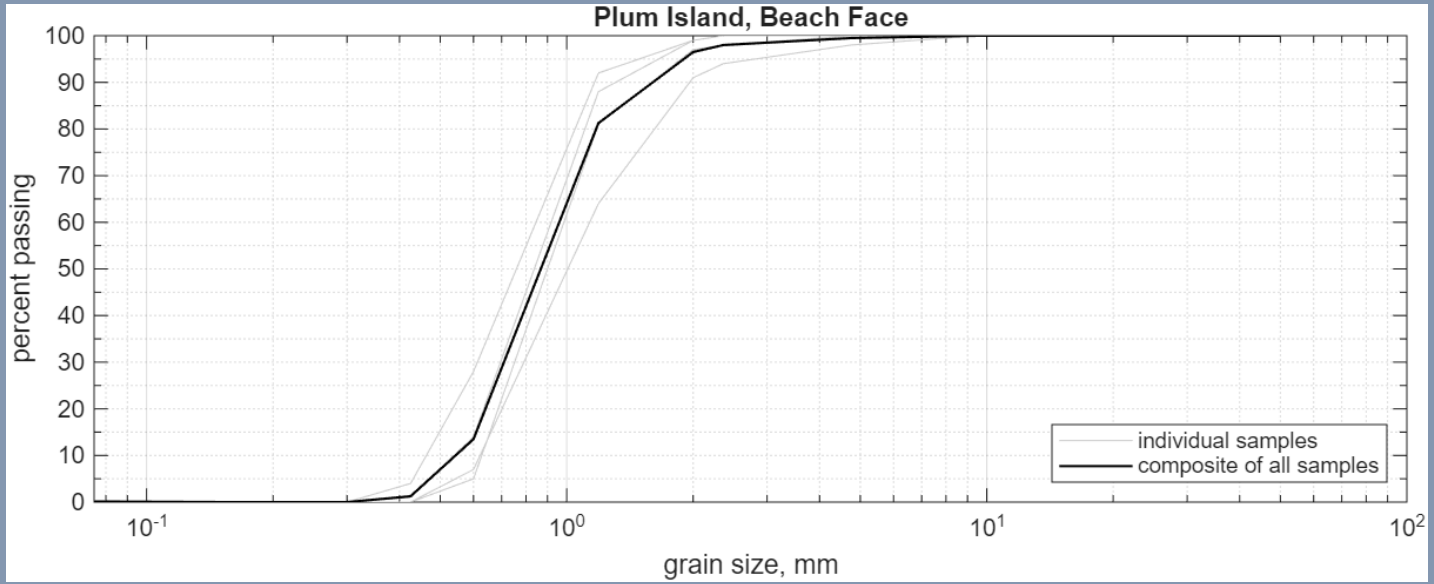

Salisbury, Beach Berm
percent passing
grain size, mm
individual samples
composite of all samples

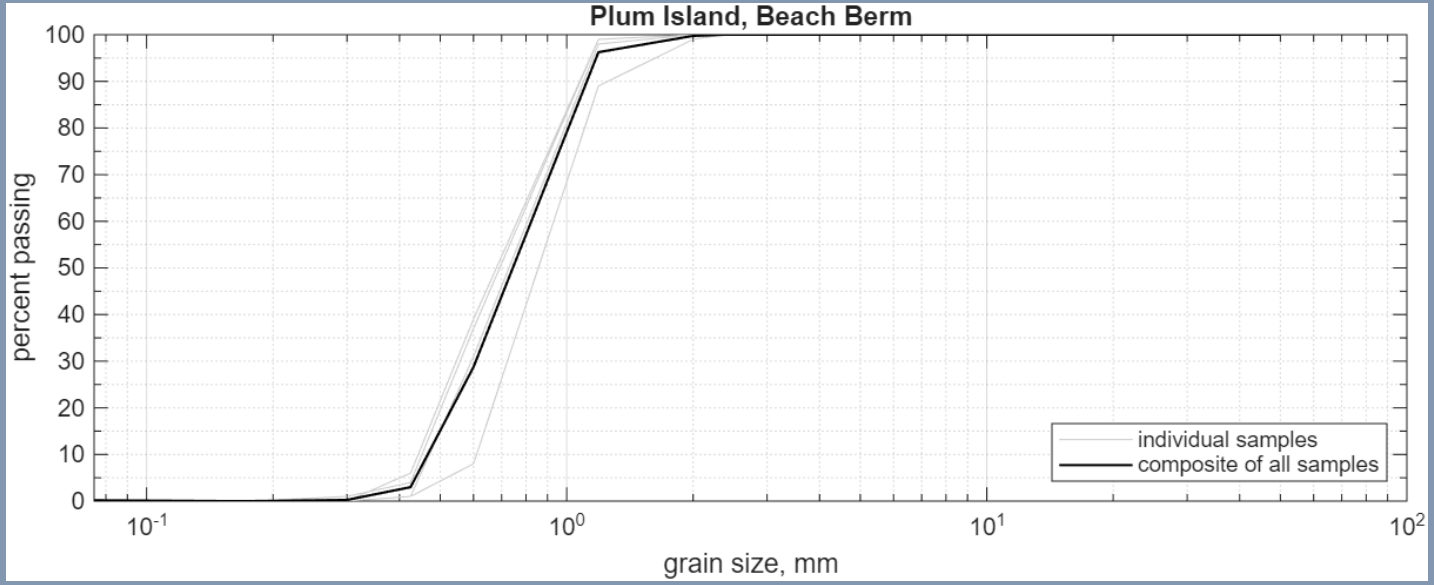

Salisbury
Beach Berm Samples
Beach Face Samples

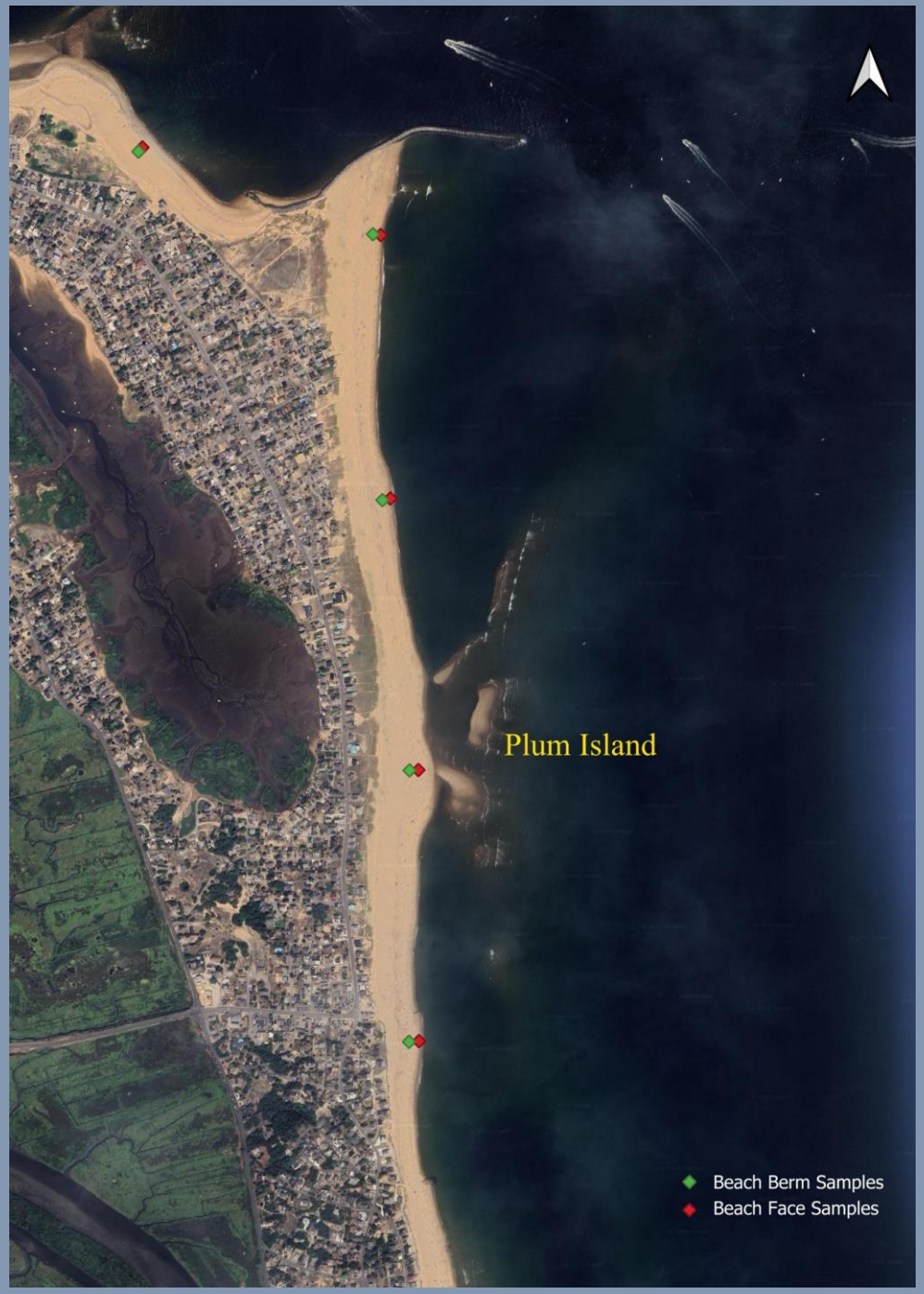

Reservation Terrace, Beach Face
percent passing
grain size, mm
individual samples
composite of all samples

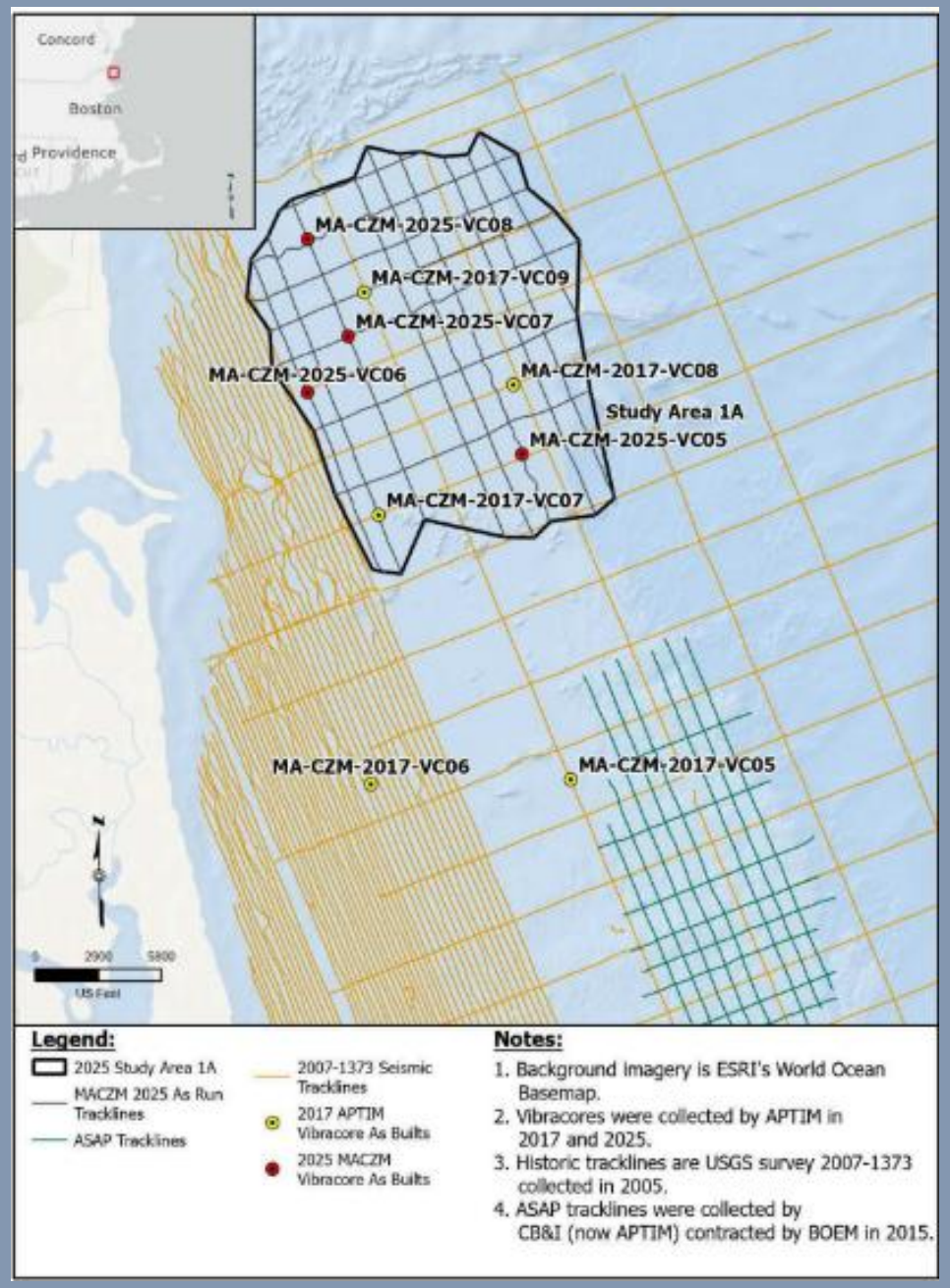

Reservation Terrace, Beach Berm
percent passing
grain size, mm
individual samples
composite of all samples


Reservation Terrace
Beach Berm Samples
Beach Face Samples

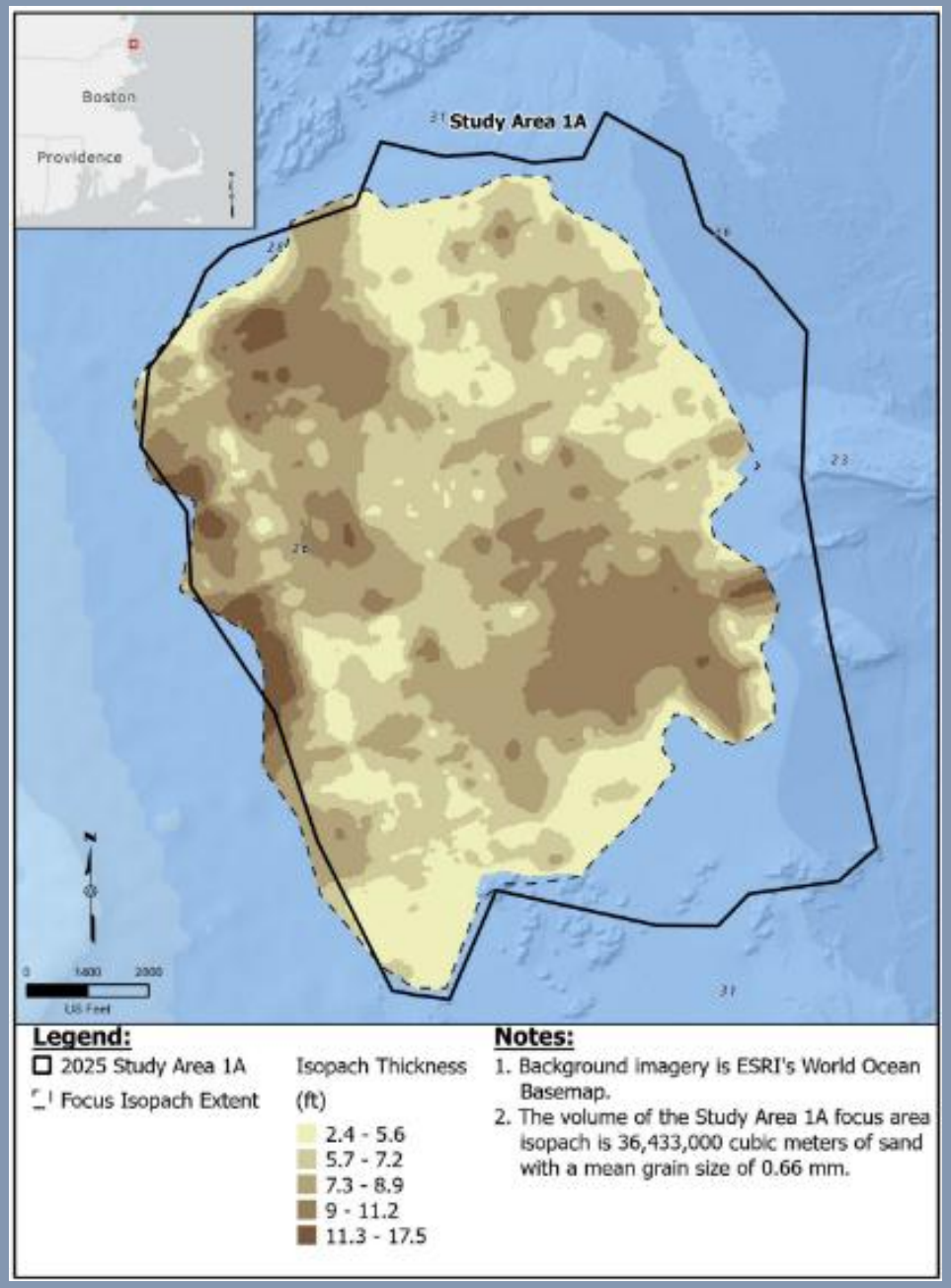

Plum Island, Beach Face
percent passing
grain size, mm
individual samples
composite of all samples


Plum Island, Beach Berm
percent passing
grain size, mm
individual samples
composite of all samples


Plum Island
Beach Berm Samples
Beach Face Samples



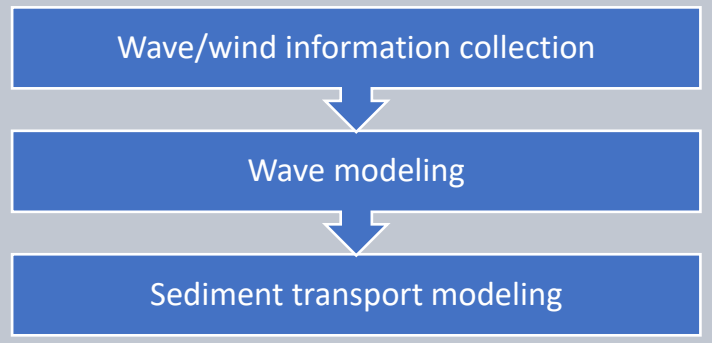
Merrimack, Vibracore As-Builts



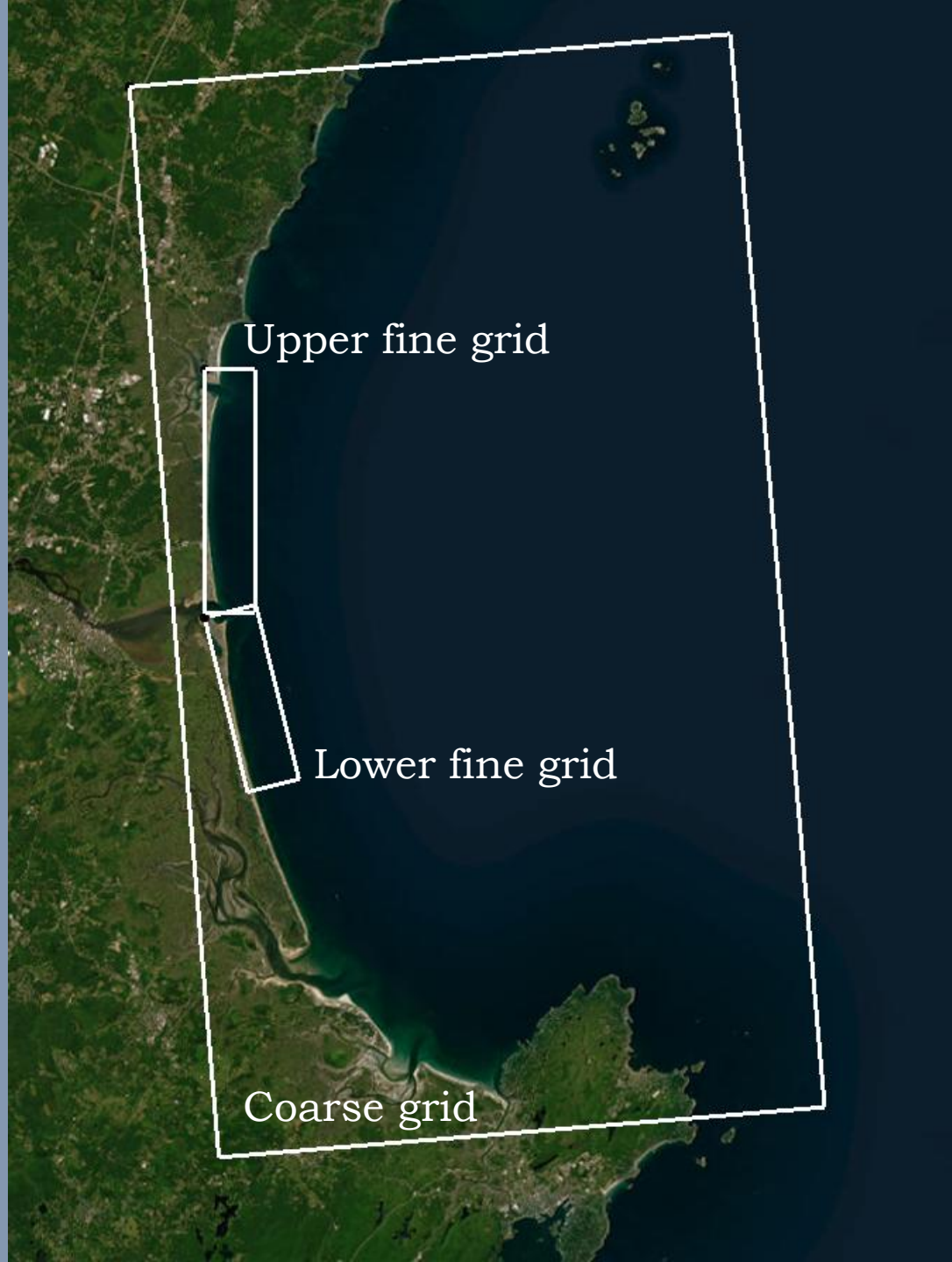
Merrimack, Focus Area Isopach

Task 3

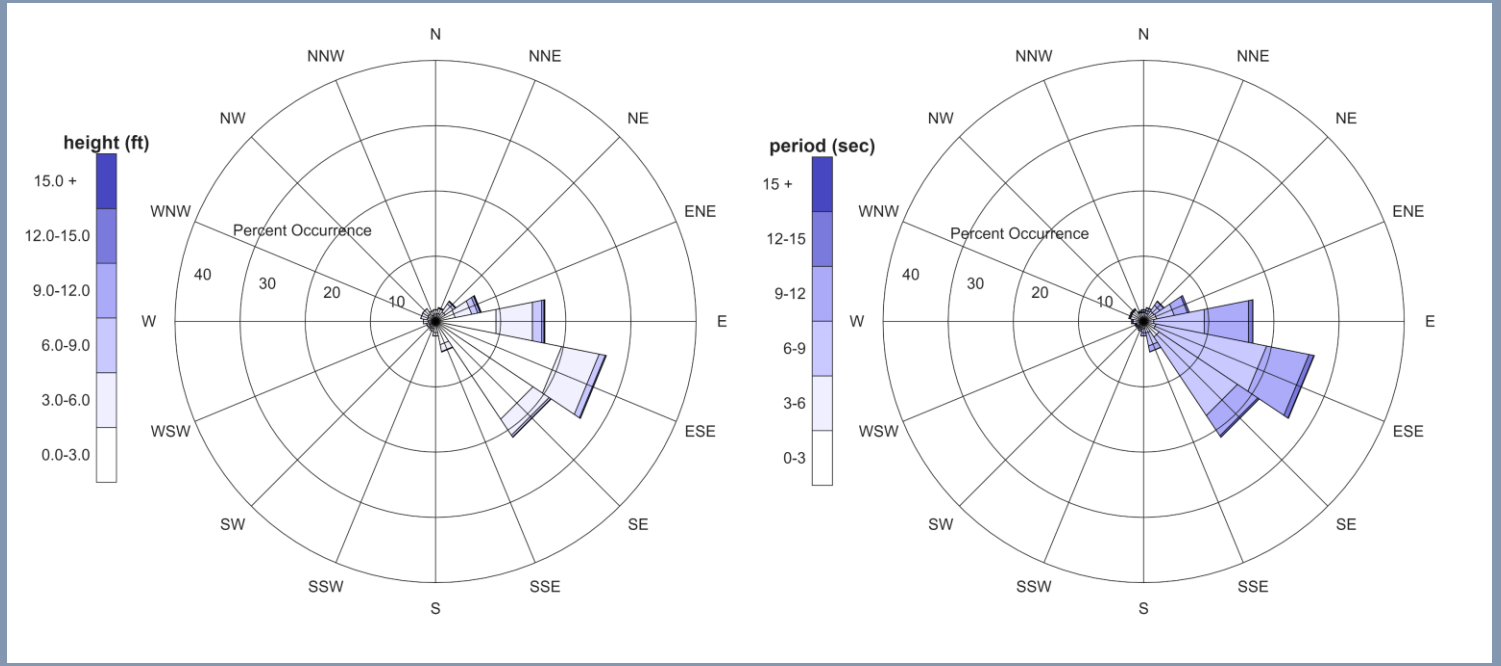
Task 3 is underway:



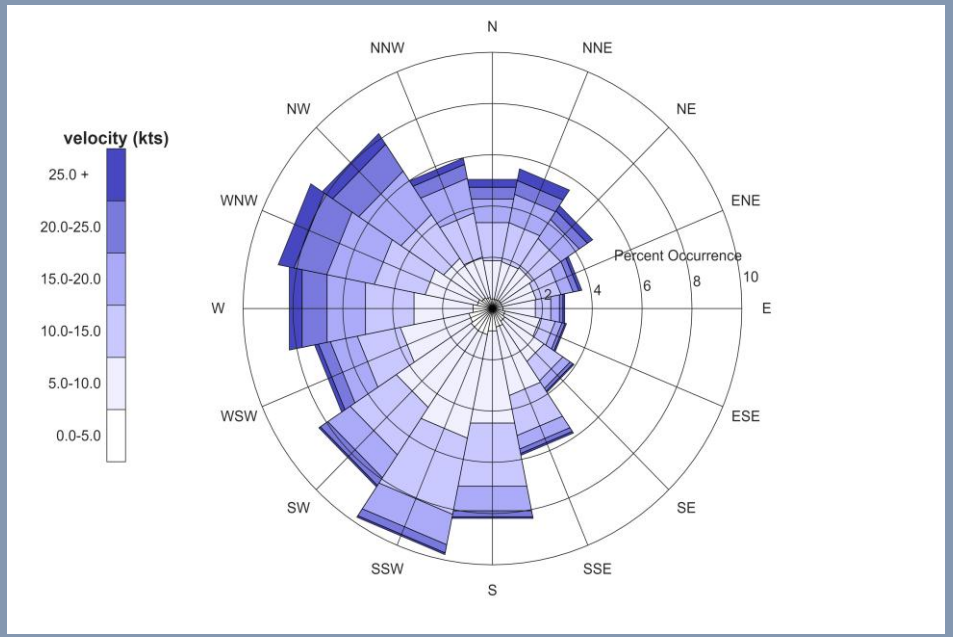
- Wave/wind information collected as a part of Task 2
- Model grids and wave conditions (inputs) for wave models are developed



Wave roses



Wind rose



Upcoming

By Feb 15: Update memo and related materials from task 2 will be uploaded to the SharePoint.

Task 3: Updated coastal processes and analysis (IN PROGRESS)

- Estimated completion date: April 15, 2026
- **Subtasks/Deliverables:**
  - Interim wave modeling update
  - Interim sediment transport modeling update
  - Update memo