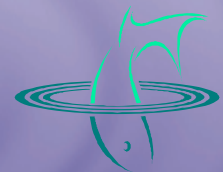


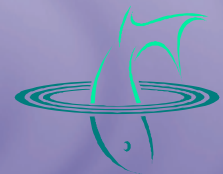
SITE SELECTION PROCEDURE

- 1. Assessment of need for a new site.**
- 2. Identification of potentially suitable areas.**
- 3. Identification of site requirements related to sediment characteristics.**
- 4. Selection of candidate sites.**
- 5. Determination of potential adverse effects at each candidate site.**
- 6. Comparison of candidate sites.**
- 7. Assessment of acceptability of potential adverse effects.**
- 8. Site selection.**



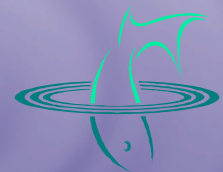
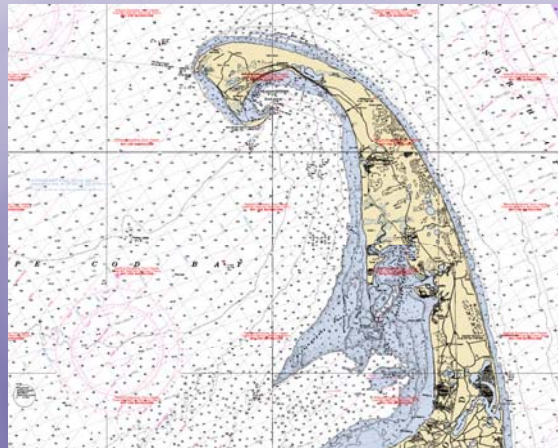
Assessment of Need

- **Other organization's needs**
- **Suitability/capacity of existing sites**
- **Acceptability of sediment for sea disposal**
- **Evaluation of alternative disposal options**



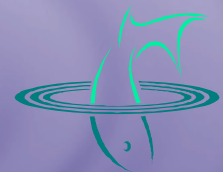
2. Identification of Suitable Areas

- **Determine Zone of Siting Feasibility**
- **Compile information on incompatible uses**
- **Screen sites**
- **Identify remaining potentially suitable areas**



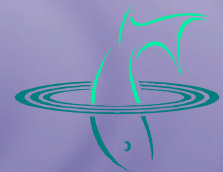
Identification of Suitable Areas

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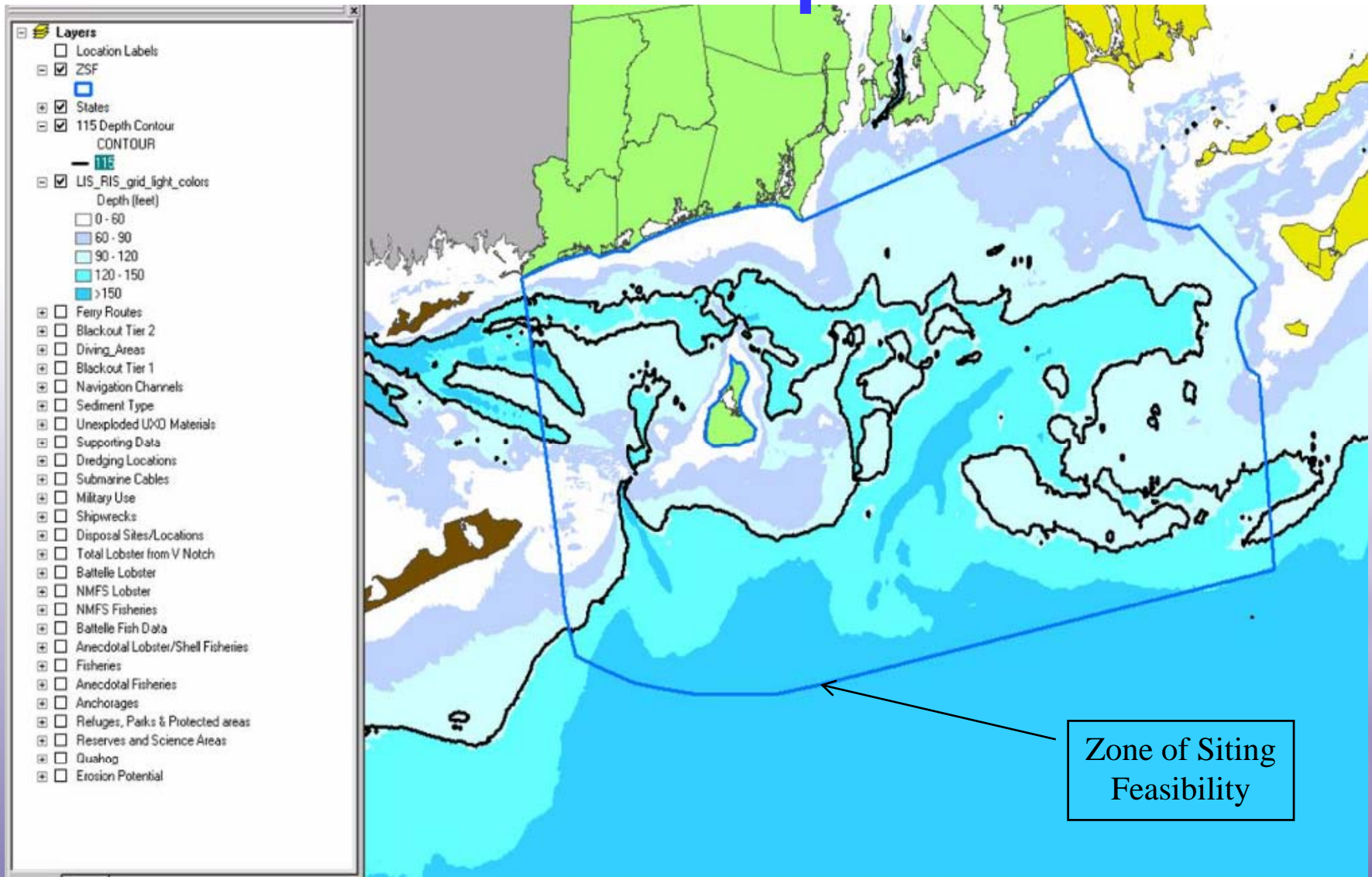


Potentially Incompatible Uses - 1

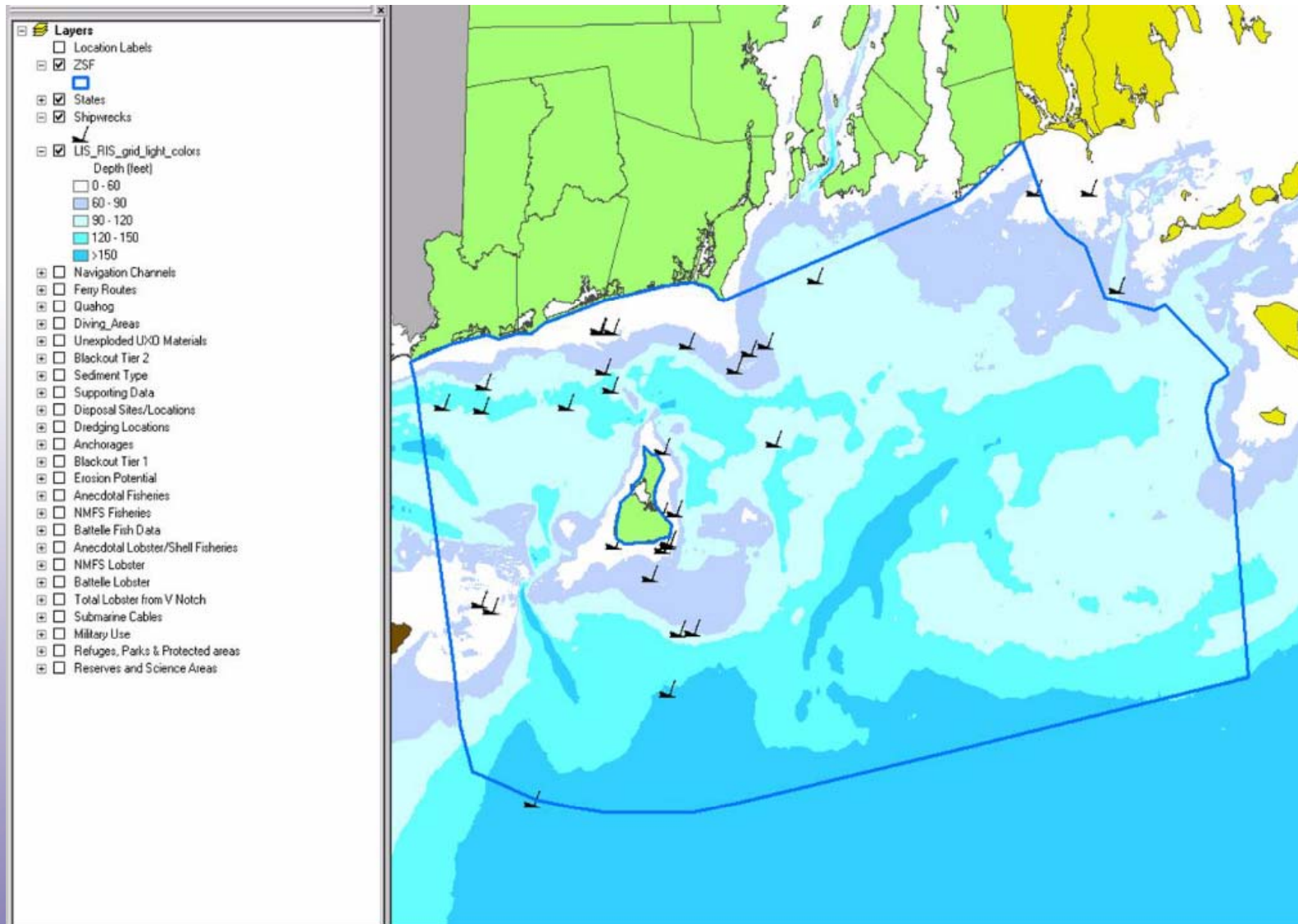
- **Subsistence, commercial and sport fishing areas**
- **Spawning, recruitment and nursery grounds of important fisheries**
- **Migration routes of marine organisms**
- **Sites used for aquaculture**
- **Engineering uses of the sea floor e.g. cables, pipelines etc.**
- **Areas used to exploit mineral resources e.g. sand, gravel, metal placer deposits**
- **Shipping lanes and anchorages**



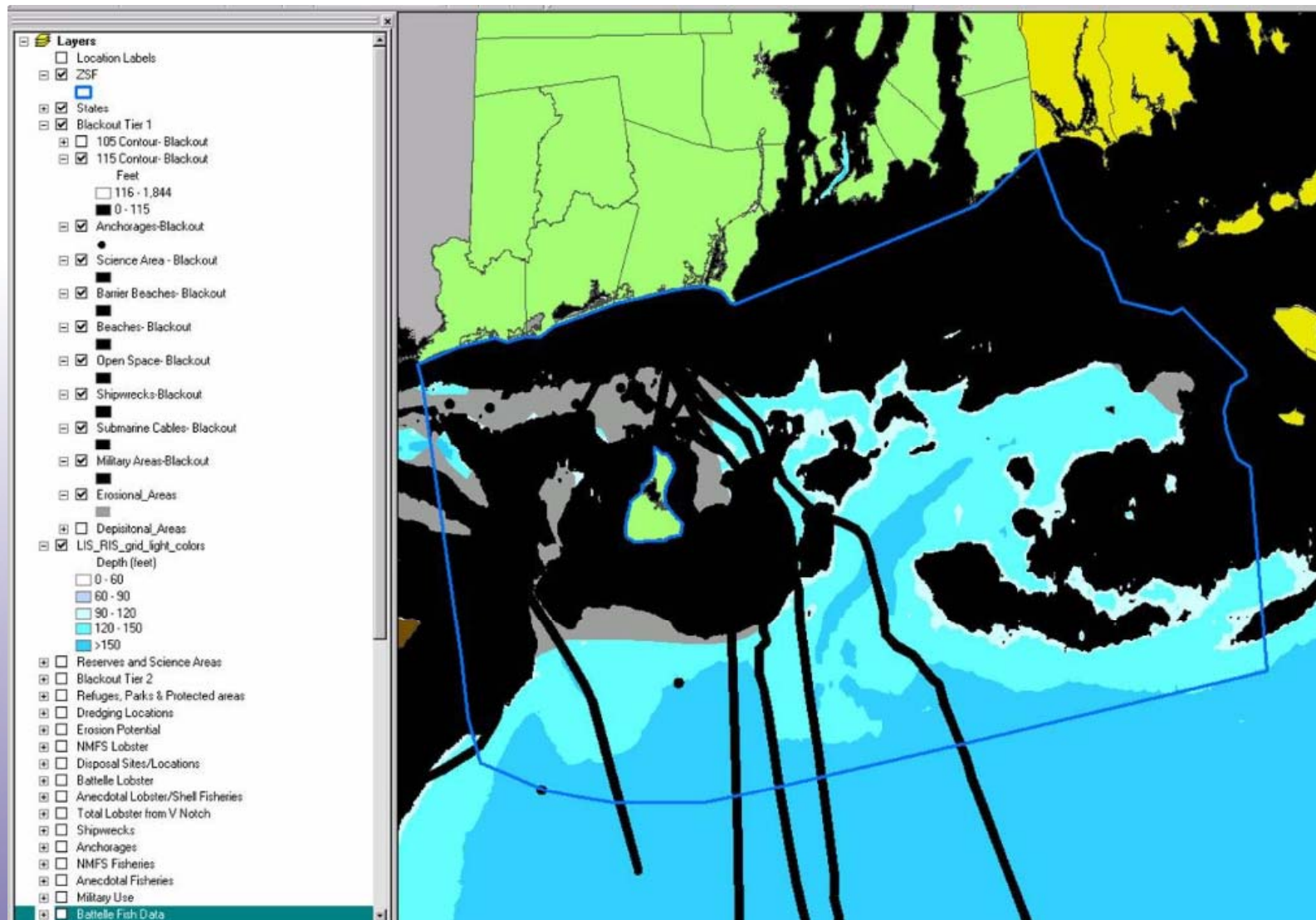
Bathymetry and Erosion Depths on GIS Map



Shipwrecks – Cultural Value

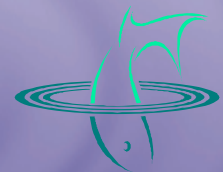


Initial Excluded Areas

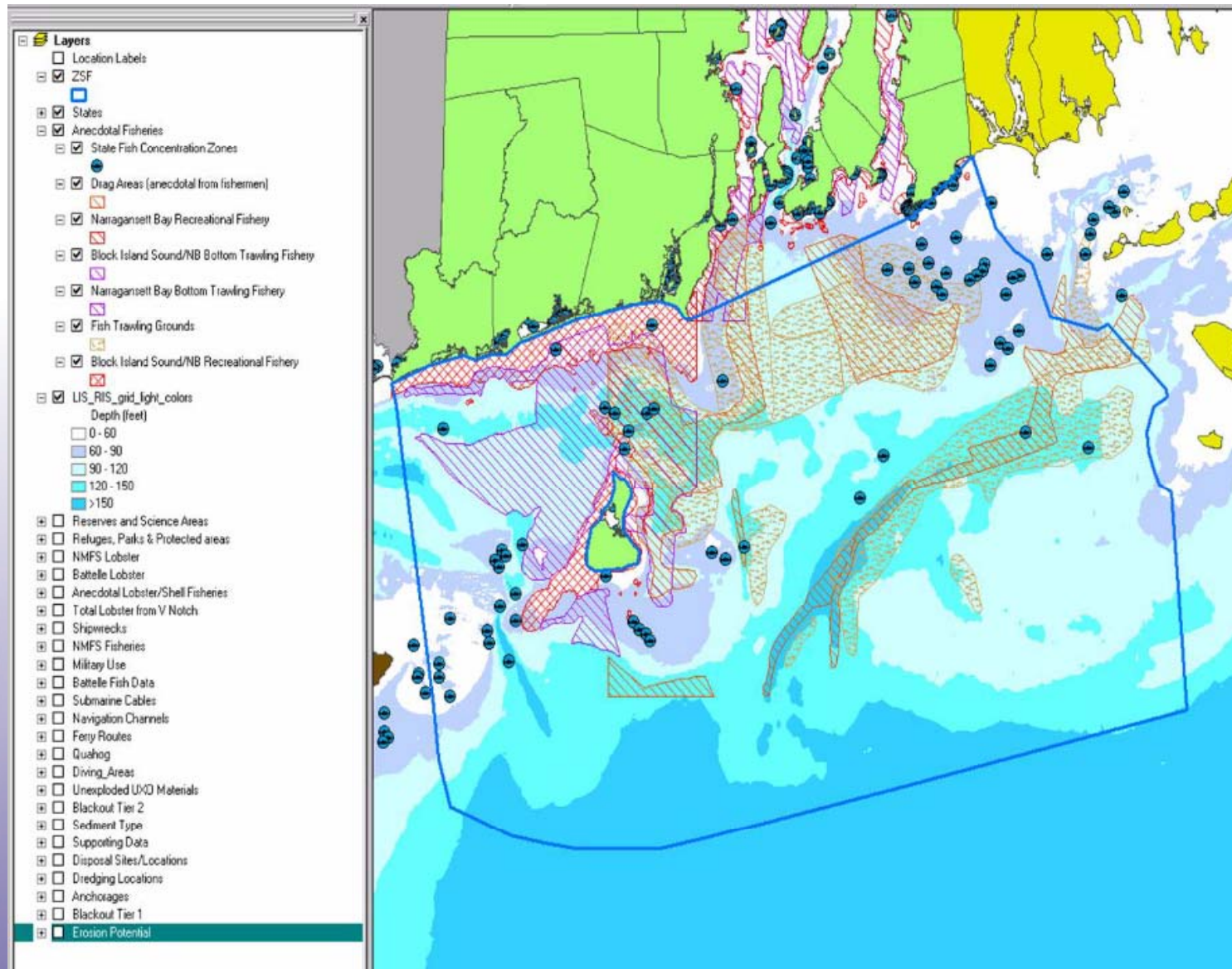


Potentially Incompatible Uses - 2

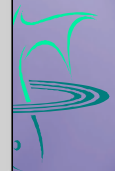
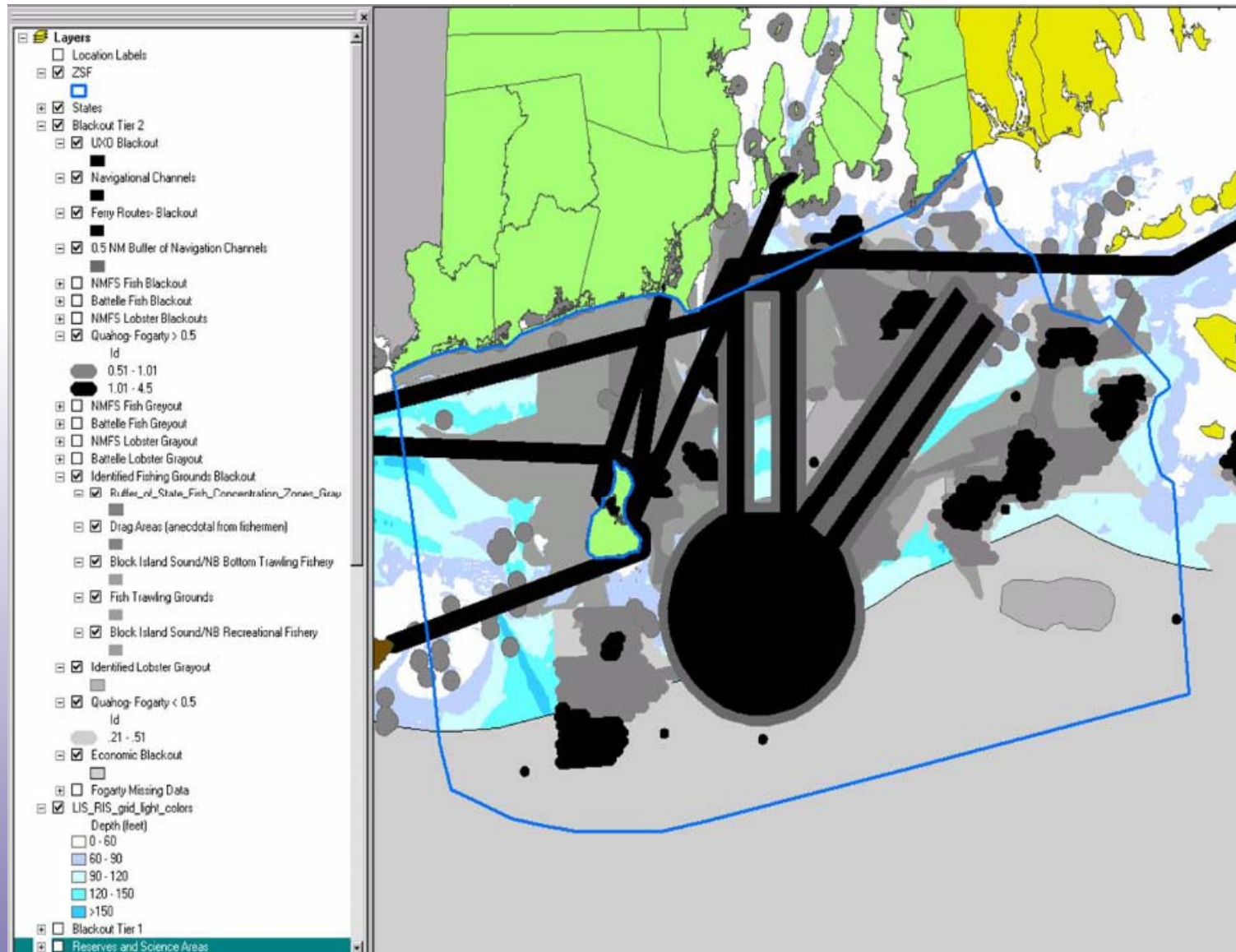
- **Military exercise areas e.g. firing ranges**
- **Areas of natural beauty or significant cultural or historical importance**
- **Areas of special importance for scientific or conservation purposes e.g. marine parks/reserves/sanctuaries**
- **Sites at which sea water is abstracted for cooling purposes,**
- **Desalination, ocean energy conversion, aquaculture etc.**
- **Recreational areas**



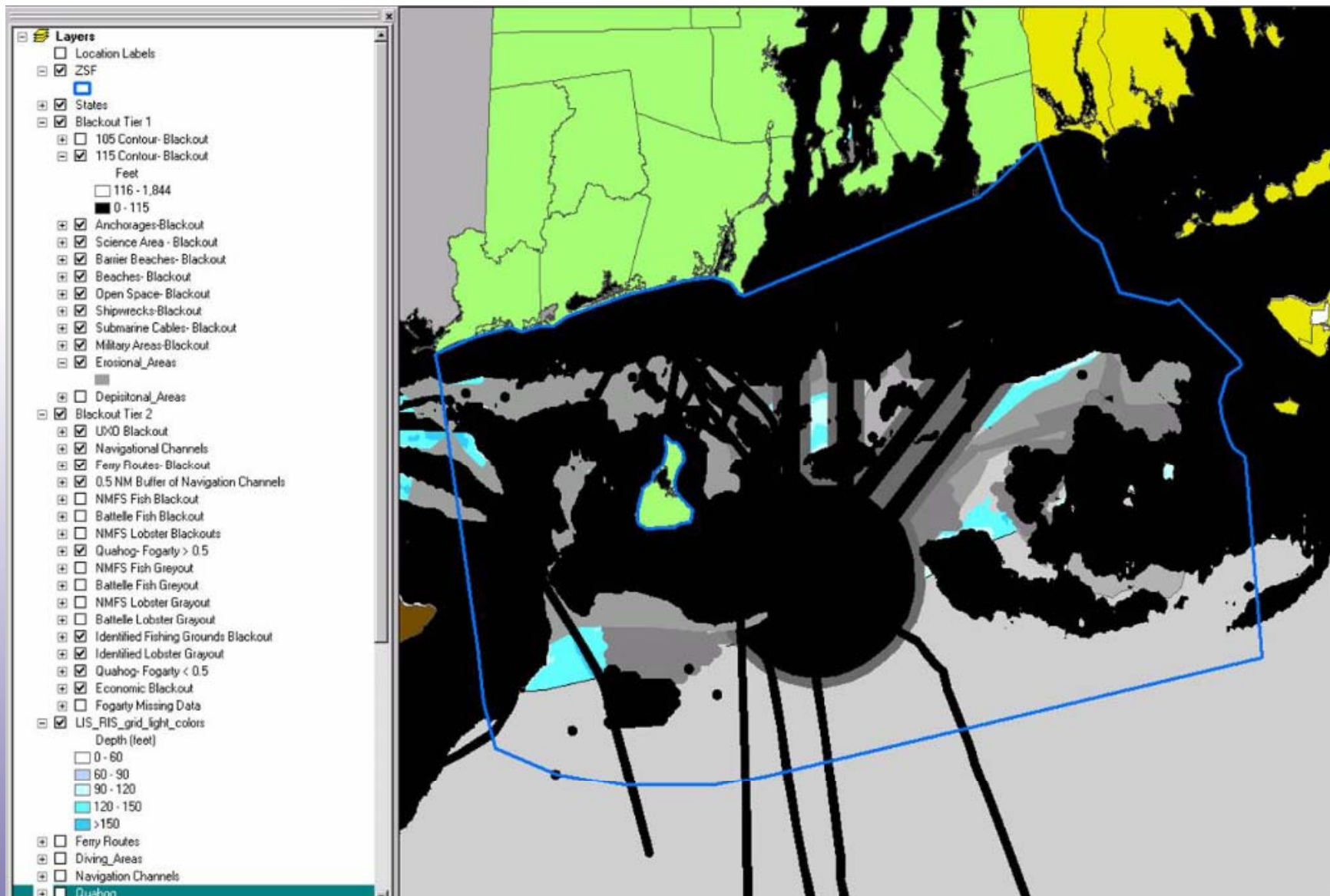
Fishing Areas



Other Excluded Areas

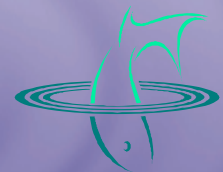


Overall Excluded Areas



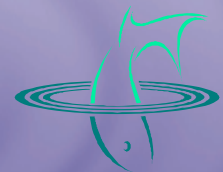
Selection of Candidate Sites

- **2 or more to allow comparisons**
- **Adequate size**
- **Physical characteristics appropriate for disposal strategy (e.g., containment or dispersion)**



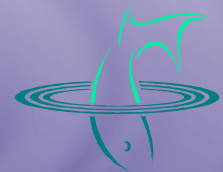
Determination of Potential Effects

- **Near- and far-field fates**
- **Short- and long-term effects**
- **Information required on:**
 - **Nature of seabed**
 - **Physical nature of water column**
 - **Chemical/biological nature of water column**
 - **Biological/ecological effects of the dredged material**



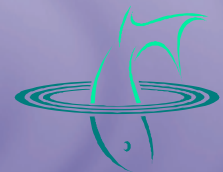
Comparison of Candidate Sites

- **Evaluate relative potential adverse effects**
- **Evaluate relative advantages**
- **Use established environmental criteria where available**
- **Use risk assessment models where appropriate**



Assess Acceptability of Effects

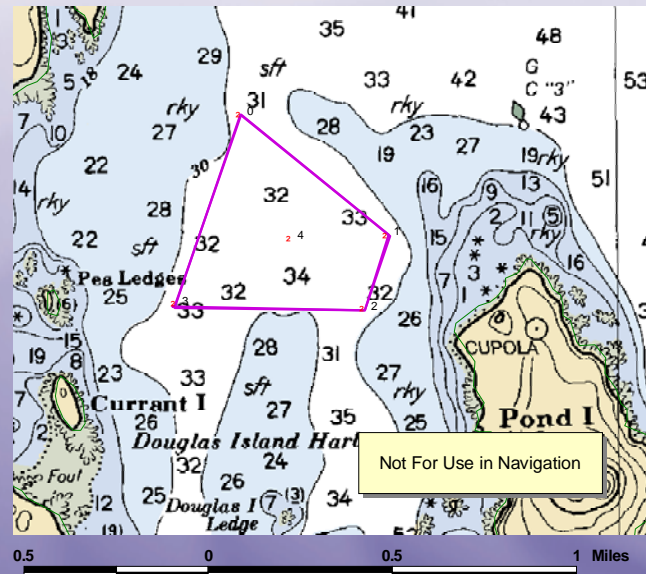
- **Assess acceptability of the potential adverse effects at each site**
- **If not acceptable, reconsider selection of sites**
- **If no preferable sites available, either potential adverse effects have to be accepted or sea disposal cannot take place**



Site Selection

Select site or sites

Narraguagus Disposal Site



Narraguagus site.shp
New England Coastline

