

## New Hampshire Fish and Game Department Spatial Data Notes

**DATA LAYER:** COASTALISLANDS  
**CONTENTS:** Coastal Islands  
**TYPE:** Polygons  
**SOURCE:** NH GRANIT – from US Geological Survey digital line graph data  
**SOURCE SCALE:** 1:24,000  
**SOURCE MEDIA:** Digital  
**AUTOMATED BY:** NH Fish and Game Department  
**HORIZONTAL DATUM:** 1983  
**TILE:** State  
**STATUS:** complete – additional attributes underway  
**LAST REVISION:** July 2005; attributes revised December 2009

### General Description of the Data

- Development of this coverage provides general coastal island locations within the state of New Hampshire. Analysis was completed for incorporation into the NH Wildlife Action Plan. Funding for the Plan was provided by State Wildlife Grants administered by the US Fish & Wildlife Service.
- The coverage contains coastal islands identified by selecting polygons within all tidal waters identified in base hydrography (USGS 1:24,000-scale DLG data available from NH GRANIT). Very small islands were grouped to their nearest adjacent neighboring island. In total, 96 polygons were combined into 48 islands, which in turn were grouped into 15 conservation units.
- The following NHB Natural Communities were added, where mapped (Sperduto and Nichols 2004):
  - Maritime shrub thicket (Star Island)
  - Maritime rocky barren (Star Island)
  - Maritime intertidal rocky shore (*none mapped*)
  - Coastal shoreline strand/swale (*none mapped*)
  - Short graminoid – forb emergent marsh/mud flat (*none mapped*)
  - Highbush blueberry – winterberry shrub thicket (*none mapped*)
  - Coastal rocky headland (Thomas Point, Newington)

### Item definitions for COASTALISLANDS polygon attributes

<u>ITEM NAME</u>	<u>DESCRIPTION</u>
FGID	unique polygon ID assigned by NHFGD
NAME	Name of island
TOWN	Town in which island is located
WATERBODY	Associated water body name
UNITNAME	Name of conservation unit (island group)
ACRES	Area (acres)
HECTARES	Area (hectares)
TOTAL_HA	Total size of island unit (hectares)
NUMPOLYS	Number of polygons that comprise the island
ELEV_AVG	Average elevation (meters)
ELEV_MAX	Maximum elevation (meters)
VEGETATED	Vegetated (Y=yes or U=unknown) <i>*Subjective/Not defined</i>
DEVELOPED	Description of development <i>*Subjective/Not defined</i>
WETAREA	Total area that is wetland-NWI (square meters)
WETPCT	Percent of island/unit that is wetland-NWI
HFKMCNT	Number of other islands within ½ kilometer

**Item definitions for COASTALISLANDS polygon attributes (continued):**

<u>ITEM NAME</u>	<u>DESCRIPTION</u>
DISTMAIN	Average distance to mainland (meters)
GAP123HA	Hectares in conservation with GAP management status 1, 2 or 3
GAP123PCT	Percent in conservation GAP management status 1, 2 or 3
ELU30VAR	Ecological land units variety (ELU30 = elevation, substrate, landform)
ELU30DATA	Y=yes, ecological land units data covers this island
A_RICH_BUF	Species richness of rare animals within their dispersal distances (2009)
A_RICH_POL	Species richness of rare animals within polygon (2009)
P_RICH_POL	Species richness of rare plants in polygon (2009)
C_RICH_POL	Richness of rare and exemplary natural communities in polygon (2009)
AREA_M2	Total area (square meters)
PERIM_M	Total perimeter (meters)
NEARDIST	Distance to nearest neighbor (meters)
SHAPEINDEX	Shape index (square has shape index = 1)
SCINAME	NHB scientific name of natural community ( <i>if applicable</i> )
IFESMEAN	Integrated Fragmentation Effects Surface score (Zankel 2005)
BUILDPC	Percent buildable (NHFGD general statewide buildout)
ESIGENSENS	Average General shoreline sensitivity value from ESI shoreline data
DEVLDP_PCT	Percent already developed (2001 NH Land Cover from GRANIT)
DISTAQFAC	Distance to nearest aquaculture operation (meters)
ECOSUB	Ecoregional subsection
CONS_AC	Conservation (acres)
CONS_PCT	Conservation (percent)
PRIORITY	WAP Priority (state and regional rank)

**NOTES:**

The list above represents the complete set of attributes developed for the WAP habitat data layer. Only select attributes are distributed in the public release version WAP data layers. For more information, please contact the NH Fish and Game Department, Wildlife Division, 11 Hazen Dr, Concord NH 03301  
Phone: (603) 271-2461 E-mail: [wildlife@wildlife.nh.gov](mailto:wildlife@wildlife.nh.gov)

All areas and shoreline lengths are software calculated (based on 1:24,000-scale USGS dlg data source).

Known contamination sources are from a groundwater hazard inventory maintained by the New Hampshire Department of Environmental Services. Potential contamination sources are from a combination of groundwater hazard inventory, above ground storage tank sites, underground storage tank sites, RCRA/locations of hazardous waste generators, registered junkyards, local pcs inventory within drinking water protection areas, NPDES outfalls, and Nonpoint potential pollution sources. All maintained by NH Dept of Environmental Services (accessed 2005).

Airport point locations provided by NH Dept of Transportation. Heliports, Staging Areas, Recreational Fishing, Marinas, Aquaculture point locations provided by NH Department of Environmental Services and NOAA's Environmental Sensitivity Index maps (copy provided by NHDES).

General shoreline sensitivity index weighted average provided for coastal islands where it is available (value of zero indicates no data available from the ESI data source). The values were derived by NHFGD from the MOSTSENSIT field of the Environmental Sensitivity Index (ESI). ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources. More than one ESI value can be assigned to a given stretch of shoreline. The value in the MOSTSENSIT field indicates the greatest ESI value assigned to that stretch. ESI values combine numbers, letters, and symbols to form 23 different possibilities. As such, for ranking local threats, ESI values were generalized to include only the number designation (1-10 from lowest to highest sensitivity).

8 March 2010

**Spatial Data Notes: COASTALISLANDS**

The fields: A\_RICH\_BUF, A\_RICH\_POL, P\_RICH\_POL and C\_RICH\_POL, provide species richness counts (number of different species potentially present in the habitat polygon) from the NH Natural Heritage Bureau as of December 2008. Care must be taken in interpreting these counts as most areas of NH have never been surveyed for biodiversity elements. See *Important Background Information for Interpreting Species Richness Counts based on NH Natural Heritage Bureau Data* for details.

**DATA SOURCES:**

NH Natural Heritage Bureau BIOTICS database January 21, 2009 (species/community richness)

NOAA Hazardous Materials Response Division. 2004. **NH Environmental Sensitivity Index Maps.** <http://response.restoration.noaa.gov> (maps/data CD provided by NH Dept. of Environmental Services)

Sperduto, D.D. and W.F. Nichols. 2004. Natural communities of New Hampshire.  
The NH Natural Heritage Bureau and The Nature Conservancy. 229pp.

Wind power raster data provided by Massachusetts Technology Collaborative (data finalized June 2003).  
Developed by TrueWind Solutions, LLC under contract to AWS Scientific, Inc as part of a project jointly funded by the Connecticut Clean Energy Fund, Mass. Technology Collaborative, and Northeast Utilities System.

Zankel, M. 2005. Integrated Fragmentation Surface for the State of New Hampshire.  
The Nature Conservancy, Concord NH. Unpublished report to NH Fish and Game Department.