

Supplementary Map  
Natural Resource Co-occurrence  
Richmond

This map is non-regulatory and is intended for planning purposes only



Legend

This map represents the concentration of selected environmental asset data layers overlaid on the landscape. Its purpose is to highlight a given area's relative conservation values as an aid in planning. It offers a generalized and subjective view and should be considered as a starting point for discussion. The layers on this map include buffer zones around water features, important natural communities, listed plant and animal species, areas of undeveloped land, and conserved properties. Some of these layer attributes have been weighted based on qualitative features, such as rarity or size, and are noted below. Co-occurrence modeling is extremely flexible, allowing for the addition, substitution, and relative weighting of data and attributes that best reflect the particularities and priorities of a given area or community. This map draws on data that is depicted on the standard Beginning with Habitat map set, but should still be considered as both supplementary and as work in development.

- Organized Township Boundary
- Unorganized Township
- Selected Town or Area of Interest
- Developed: Impervious surfaces such as buildings and roads
- Conservation Land

Selected Resource Layers and Assigned Values

Geographic Information System (GIS) software provides a ready means to help identify areas of high resource co-occurrence. The selected data layers of interest are assigned a relative weight, or value, and then overlaid on one another. The values are then summed, classified, and symbolized, revealing the concentration of attributes in a given landscape. (Some of the layers listed may not apply to, or be present on, the area represented by this map.)

- Rare and Exemplary Natural Communities**
- S1 (Critically Imperiled), Value of 4
  - S2 (Imperiled), Value of 4
  - S3 (Rare), Value of 3
  - S4 and S5 with A or B viability (Exemplary), Value of 3

- Rare Plants**
- S1 (Endangered), Value of 3
  - S1S2 - S2 (Threatened), Value of 2
  - S2S3 - S3 (Special Concern), Value of 1

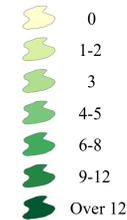
- Listed Animals**
- Endangered Species (with buffer), Value of 3
  - Threatened Species (with buffer), Value of 2
  - Species of Special Concern (with buffer), Value of 1

- Significant Wildlife Habitats**
- Shorebird Habitat, Value of 3
  - Seabird Nesting Islands, Value of 3
  - Essential Wildlife Habitat, Value of 3
  - Wading Bird and Waterfowl Habitats (inland and tidal), Value of 2
  - Deer Wintering Areas, Value of 1
  - Significant Vernal Pools (with 500' buffer), Value of 1
  - Atlantic Salmon Habitat, Value of 2
  - Heritage Brook/Trout Waters, Value of 2
  - Shellfish Beds, Value of 1

- Riparian Zones and Water Resources**
- Tidal waters 250' buffer, Value of 2
  - Great Ponds 250' buffer, Value of 1
  - Rivers 250' buffer, Value of 1
  - Streams 75' buffer, Value of 1
  - Wetlands greater than 10 acres plus 250' buffer, Value of 1
  - Wetlands less than 10 acres plus 75' buffer, Value of 1
  - Groundwater Aquifers, Value of 1

- Undeveloped Habitat Blocks**
- Areas over 1200 acres, Value of 3
  - Areas of 600 to 1200 acres, Value of 2
  - Areas of 200 to 600 acres, Value of 1

Sum of Attribute Values



Focus Areas

**Focus Areas of Statewide Ecological Significance**  
(note: not present in all regions)

Focus Areas of Statewide Ecological Significance have been designated based on an unusually rich convergence of rare plant and animal occurrences, high value habitat, and relatively intact natural landscapes (the combined elements of Beginning with Habitat Maps 1-3). Focus area boundaries were drawn by MNAP and MDIFW biologists, generally following drainage divides and/or major fragmenting features such as roads. Focus Areas are intended to draw attention to these truly special places in hopes of building awareness and garnering support for land conservation by landowners, municipalities, and local land trusts. For descriptions of specific Focus Areas, consult the Beginning with Habitat notebook or the following website: <http://www.maine.gov/dacf/mapfocusarea/index.htm>

Data and Information Sources

- DATA SOURCES**
- ROADS**  
Maine Office of GIS, Maine Department of Transportation: *Medotub* (2021)
- HYDROLOGY**  
U.S. Geological Survey National Hydrography Dataset (NHD) Maine (2012)
- DEVELOPED**  
Maine Office of GIS, Maine Department of Inland Fisheries and Wildlife, and multiple other agencies: *Imperv* (2020)
- ESSENTIAL & SIGNIFICANT WILDLIFE HABITATS**  
Maine Office of GIS, Maine Department of Inland Fisheries & Wildlife: *DWA, ETSC, Eplvtrn, Ehrtem, IWWH, Sni, Shorebird, TWWH* (2021)
- RARE NATURAL COMMUNITIES & PLANTS**  
Maine Natural Areas Program: *MNAP\_eos* (2021)
- ATLANTIC SALMON HABITAT**  
Maine Office of GIS, Maine Atlantic Salmon Commission, U.S. Fish & Wildlife Service: *Ashab3* (2020)
- CONSERVATION LANDS**  
Maine Department of Agriculture, Conservation, and Forestry, Land Use Planning Commission, Maine Department of Inland Fisheries and Wildlife: *Conserved Lands* (2021)
- DATA SOURCE CONTACTS**  
Maine Office of GIS: <http://www.maine.gov/megis/catalog/>  
Maine Natural Areas Program: <http://www.maine.gov/dacf/mnap/index.html>  
Maine Department of Inland Fisheries & Wildlife: <http://www.maine.gov/ifw/>  
U.S. Fish & Wildlife Service, Gulf of Maine Program: <http://gulf.maine.fws.gov>  
Maine Atlantic Salmon Commission: <http://www.maine.gov/asc/>  
Maine Department of Transportation: <http://www.maine.gov/mdot/>

**DIGITAL DATA REQUEST**  
To request digital data for a town or organization, please visit our website: [http://www.beginningwithhabitat.org/the\\_maps/gis\\_data\\_request.html](http://www.beginningwithhabitat.org/the_maps/gis_data_request.html)