Beginning *with* HABITAT

An Approach to Conserving Maine's Natural Space for Plants, Animals, and People

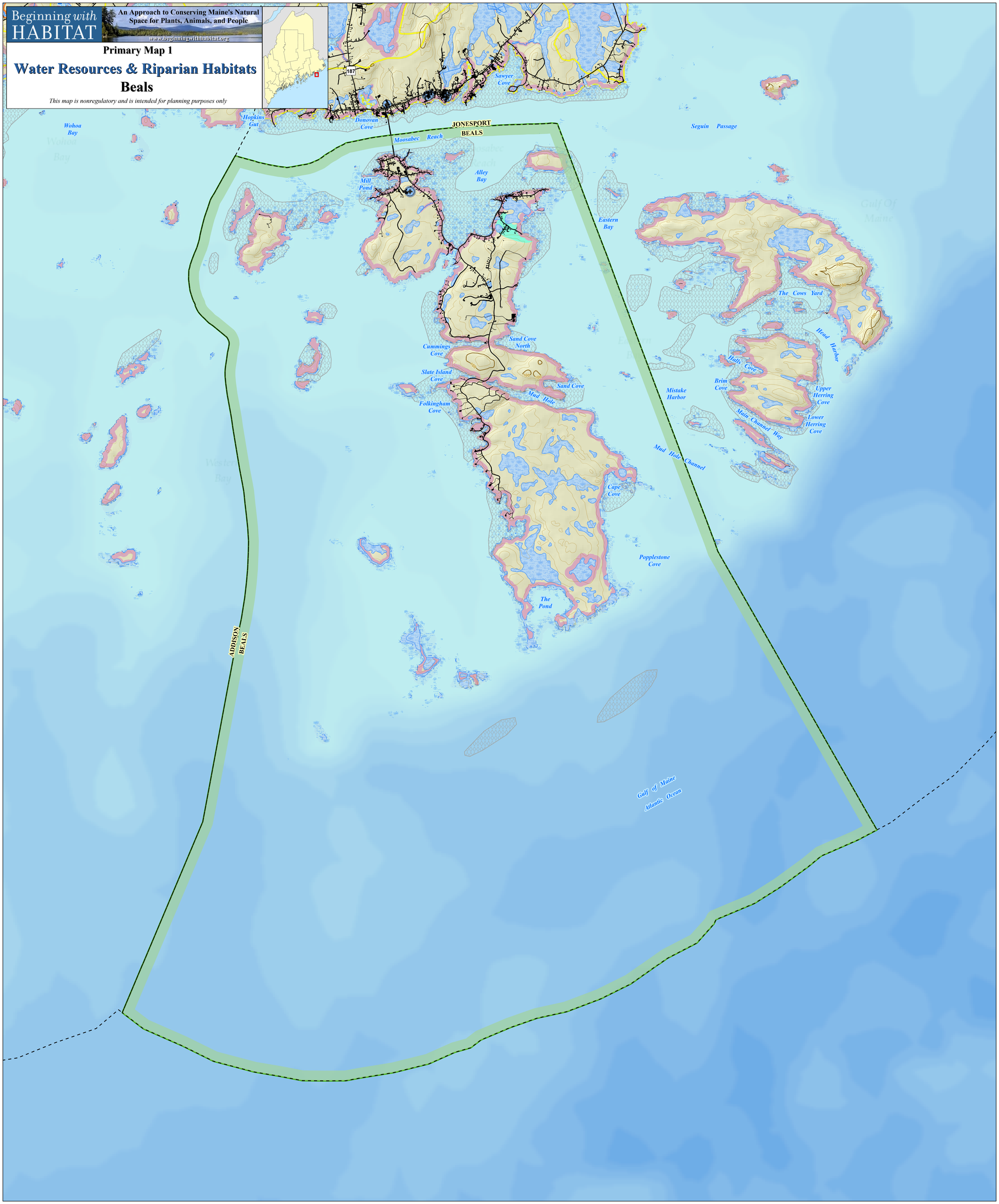
www.beginningwithhabitat.org

Primary Map 1

Water Resources & Riparian Habitats

Beals

This map is nonregulatory and is intended for planning purposes only

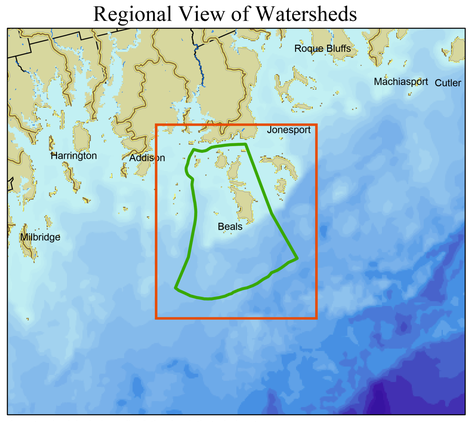


LEGEND

This map depicts riparian areas associated with major surface water features and important public water resources. This map does not depict all streams or wetlands known to occur on the landscape and should not be used as a substitute for on the ground surveys. This map should be used as a planning reference only and is intended to illustrate the natural hydrologic connections between surface water features. Protecting riparian habitats protects water quality, maintains habitat connections, and safeguards important economic resources including recreational and commercial fisheries.

- **Selected Town or Area**
- **Organized Township Boundary**
- **Unorganized Township**
- **Developed**- Impervious surfaces including buildings and roads
- **Drainage divides** - These are the smallest hydrologic units mapped in Maine. They contain watershed boundaries for most ponds and rivers in Maine.
- **NWI Wetlands** - National Wetlands Inventory (NWI) uses aerial photographs to approximate wetland locations. NWI data is not a comprehensive mapping of wetland resources and typically under represents the presence of wetlands on the landscape. The presence of wetlands needs to be determined in the field prior to conducting activities that could result in wetland disturbance.
- **Riparian Habitat** - depicted using common regulatory zones including a 250-foot-wide strip around Great Ponds (ponds ≥10 acres), rivers, coastline, and wetlands ≥10 acres and a 75-foot-wide strip around streams. Riparian areas depicted on this map may already be affected by existing land uses.
- **Shellfish Growing Areas** - The Maine Department of Marine Resources maps growing areas for economically important shellfish resources. This map depicts softshell and hard clam resources in order to illustrate the relation of these resources to streams and shoreline areas vital to their conservation.
- **Wild Brook Trout Habitat** - Streams and ponds buffered to 100 feet, where wild Brook Trout populations have been documented, or managed to enhance local fisheries.
- **Public Water Supply Wells**
- **Source protection area** - Buffers that represent source water protection areas for wells and surface water intakes that serve the public water supply. Their size is proportional to population served and/or by the type of water supply system. These buffers range from 300 to 2,500 feet in radius.
- **Aquifers** - flow of at least 10 gallons per minute

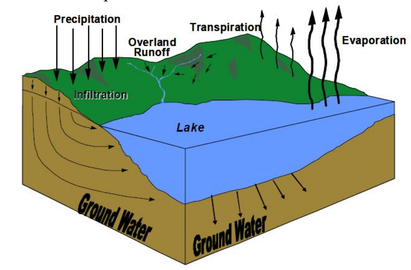
Regional View of Watersheds



A watershed includes all of the land that drains to a common waterbody. The areas within the watershed are linked ecologically by the water, sediment, nutrients, and pollutants that flow through them. For the purpose of mapping "hydrological units," watersheds are often grouped into larger drainages or divided into smaller ones depending on the map's scale. Drainage divides (shown on main map as yellow lines), are the smallest hydrological units and generally drain into small ponds, wetlands, or streams. These units are grouped into subwatersheds (HU12) and are represented on the inset map above by the yellow-brown outlines.

- **Main Map Extent**
- **Selected Town or Area**
- **Subwatersheds**
- **1 inch equals 5 miles**

Relationship of Ground Water and Surface Water



Precipitation is the source of all water. Surface water and ground water are related. Drinking water can come from either source. Ground contaminants can affect both. The relationship between ground water and surface water is part of the ***hydrologic cycle.*** ***Precipitation*** that falls from the atmosphere as rain or snow reaches the land surface and recharges rivers, lakes, wetlands, and other surface bodies of water directly through ***overland runoff***. Surface water also seeps into the ground through ***infiltration*** and eventually reaches the ground water; or through ***evaporation***, returns to the atmosphere. Water evaporates from leaves and stems of plants through ***transpiration***.

Shoreland Zoning

Maine's Mandatory Shoreland Zoning Act is intended to protect water quality, conserve wildlife habitat, and preserve the natural beauty of Maine's shoreline areas. Successful implementation requires local awareness of and appreciation for surface water resources and effective enforcement of setback and buffer requirements.

At a minimum, Maine's shoreland zones include all land within:

- 250 feet of the high-water line of any pond over 10 acres, any river that drains at least 25 square miles, and all tidal waters and saltwater marshes;
- 250 feet of a freshwater wetland over 10 acres (except "forested" wetlands); and
- 75 feet of a stream that is either an outlet stream of a great pond, or located below the confluence of two perennial streams as depicted on the most recent, highest resolution version of the National Hydrography Dataset avaiable from the USGS.

Shoreland zoning encourages towns to provide greater protection to their local water resources by applying shoreland zone protections to additional resource types such as smaller streams and wetlands, and rare terrestrial features. For specific guidance regarding Maine's Mandatory Shoreland Zoning Act contact the Dept. of Environmental Protection Shoreland Zoning Unit: Southern Maine 207-615-7044; Central Maine 207-441-7419; Eastern & Northern Maine 207-356-8318, https://www.maine.gov/dep/land/slz/

Data Sources

DATA SOURCES

TOWNSHIP BOUNDARIES
Maine Office of GIS (2020); *metwp24*
ROADS
Maine Emergency Service Communication Bureau: *Maine E911 NG_ROADS* (2022)
HYDROLOGY
USGS National Hydrography Dataset (NHD) Maine (2016)
DEVELOPED
Maine Office of GIS, Maine Department of Inland Fisheries and Wildlife (2020); *impervious_change_2015*
NATIONAL WETLANDS INVENTORY
U.S. Fish & Wildlife Service (2020); *NWI*
SHELLFISH
Maine Department of Marine Resources; *softshell_clams, hard_clams*
RIPARIAN BUFFERS
Maine Office of GIS, Maine Natural Areas Program (2011)
WELLS, WELL BUFFERS
Maine Office of GIS, Maine Department of Human Services-Drinking Water Program (2011); *wells, wellsbuf*
AQUIFERS
Maine Office of GIS, Maine Geological Survey (2011); *aquifer_polygons*
DRAINAGE DIVIDES
Maine Office of GIS (1994); *medrdvd*
BROOK TROUT HABITAT
Maine Department of Inland Fisheries & Wildlife (2022)

DATA SOURCE CONTACTS

Maine Office of GIS: http://www.maine.gov/megis/
Maine Natural Areas Program: http://www.maine.gov/dacf/mnap/index.html
Maine Department of Marine Resources: http://www.maine.gov/dmr/
Maine Department of Transportation: http://www.maine.gov/mdot/
Maine Geological Survey: http://www.maine.gov/doc/nrimc/mgs/mgs.htm
Maine Department of Inland Fisheries & Wildlife: http://www.maine.gov/ifw/wildlife/index.html

DIGITAL DATA REQUESTS

To request digital data for a town or organization, please visit our website.
http://www.beginningwithhabitat.org/the_maps/gis_data_request.html

Maine Coast Heritage Trust — A Statewide Land Conservation Organization
USDA United States Department of Agriculture — Natural Resources Conservation Service

N W E S

5,000 2,500 0 0.5 1 Miles
Feet
Meters 1,000 500 0 0.5 1 Kilometers

Scale: 1:24,000
Projection: UTM 19N
Datum: NAD 1983

Supported in part by Maine Outdoor Heritage Fund lottery ticket sales

Map Prepared by Maine Department of Inland Fisheries & Wildlife
October 2023

Supported in part by Loon Conservation Plate funds