Natural Resources

Conditions & Trend

(1) The community's Comprehensive Planning Natural Resources Data Set prepared and provided to the community by the Department of Inland Fisheries and Wildlife, Department of Environmental Protection and the Office, or their designees.

The data set has been incorporated and updated in these maps:

- <u>Natural Resource Co-occurrence</u> for Focus Areas of Statewide Ecological Significance: Kennebec Estuary, Maine Natural Areas Program locations, Approximate Deer Wintering Areas, Moderate and High Value Freshwater Wetlands, Waterfowl/Wading Bird Habitat, Threatened or Special Concern (Bald Eagle, Ribbon Snake and Tidewater Mucket).
- <u>Water Resources and Riparian Habitat</u> for National Wetland Inventory wetland classifications, drainage divides, identified vernal pools, active public water systems.
- <u>Bowdoinham Water Resources</u> for water quality classifications. Also shown on this map are threats to water quality and habitat: a wastewater outfall and overboard discharges.
- <u>Map of Turnpike Streams</u> identify streams at risk for impairment due to their location near I-95 exits.
- <u>Undeveloped Habitat Blocks & Connectors and Conserved Land</u> and <u>Bowdoinham Constraints</u> for undeveloped lands by size, lands in conservation currently, potential wildlife corridors and habitats of interest.

For more detailed habitat information, see the State-prepared map titled <u>High Value Plant & Animal Habitats</u>, which includes the location of these High Value Plant and Animal Habitats in Bowdoinham:

High Value Plant and Animal Habitats			
Map ID #	Name	State Status	Source
1.	Eastern Ribbon Snake	SC	ETSC Animals
2.	Eaton's Bur-marigold	SC	Rare Plant
3.	Estuary Bur-marigold	SC	Rare Plant
4.	Furn-leaved False Foxglove	SC	Rare Plant
5.	Freshwater Tidal Marsh	-	Rare/Exemplary Natural Community
6.	Horned Pondweed	SC	Rare Plant
7.	Lilaeopsis	SC	Rare Plant
8.	Long's Bitter-cress	T	Rare Plant
9.	Mudwort	SC	Rare Plant
10.	Parker's Pipewort	SC	Rare Plant
11.	Pygmyweed	SC	Rare Plant
12.	Spongy Arrowhead	SC	Rare Plant
13.	Stiff Arrowhead	T	Rare Plant
14.	Tidewater Mucket	T	ETSC Animals
15.	Water Pimpernel	SC	Rare Plant
16.	Yellow Pond-lily	SC	Rare Plant

Source: Maine Department of Inland Fisheries and Wildlife, 2023

Notes: Status Abbreviations: E = Endangered T = Threatened SC = Special Concern

There are no Endangered, Possibly Extirpated or Endangered Breeding populations identified in Bowdoinham.

See the Water Resources Chapter for information on water bodies and wetlands in Bowdoinham and their associated habitats.

(2) A map or description of scenic areas and scenic views of local importance, and regional or statewide importance, if available.

Bowdoinham's physical character is shaped in large part by its scenic resources, which improve the local quality of life and enhance the economic value of surrounding properties. The rolling topography, rivers and streams, and rural agricultural landscape provide many scenic views. Perhaps the most important scenic views from conserved lands, public roads, water bodies and public recreation areas, for example, in the village area and the town landing in Philip Mailly Park.

Analysis

(1) Are any of the community's critical natural resources threatened by development, overuse, or other activities?

These areas within Bowdoinham have critical natural resources that could be threatened by development or overuse, and more generally, the Kennebec Estuary (A Focus Area of Statewide Ecological Significance), the Maine Natural Areas Program locations, forested wetlands, and select wetlands under 10 acres in size that have limited regulation by the Maine Department of Environmental Protection (DEP) and streams along the Maine Turnpike. For these locations, see the maps titled Natural Resource Co-occurrence, Water Resources, Map of Turnpike Streams and Undeveloped Habitat Blocks & Conserved Lands.

To preserve these areas, the use of conservation easements or purchases may be more tenable to residents and voters than regulations. Easements and conservation purchases result in permanent protection while municipal regulations are subject to future amendments or repeal. Protection for critical natural resources could be improved by incorporating the Beginning with Habitat information into the land use regulations and the permitting process.

(2) Are local shoreland zone standards consistent with state guidelines and with the standards placed on adjacent shorelands in neighboring communities?

The Town's shoreland zoning ordinance provisions are consistent with current State law and have been approved by the Maine DEP. Shoreland zoning districts of adjacent shorelands in the neighboring communities of Richmond and Topsham are consistent with Bowdoinham's provisions for these border area shorelands.

(3) What regulatory and non-regulatory measures has the community taken or can the community take to protect critical natural resources and important natural resources?

The Town has and can continue to ensure that its ordinances reflect current State law and that the <u>Official Shoreland Zoning Map</u> is updated on a regular basis with accurate data of lands subject to regulation.

The Town has and can continue to work with non-profit, local, state, and national groups to acquire property in critical areas for conservation outright or through easements, and to maintain and responsibly use existing conserved areas. See the local and regional partners listed below.

(4) Is there current regional cooperation or planning underway to protect shared critical natural resources? Are there opportunities to partner with local or regional groups?

No, however there are opportunities to continue to partner with these local, regional, state and national organizations and agencies, which are working to protect shared critical natural resources in our region including the Kennebec Estuary:

- Cathance River Education Alliance (Topsham)
- Friends of Merrymeeting Bay (Richmond-Bowdoinham)
- Friends of the Kennebec River Rail Trail (Brunswick)
- Kennebec Estuary Land Trust (Bath)
- Kennebec River Network (Augusta)
- Land for Maine's Future Program (Augusta)
- Maine Department of Environmental Protection (Augusta)
- Merrymeeting Audubon Society Chapter (Falmouth)
- National Park Service (Maine Office: Brunswick)
- Natural Resources Council of Maine (Augusta)
- Topsham Trail Riders (Topsham)
- University of Maine Cooperative Extension (Androscoggin and Sagadahoc Counties)