

Natural Resources

Wetlands and Habitat Areas

What is a wetland?

Wetlands are areas where water covers the soil or is present either at or near the surface of the soil all year or for varying periods of time during the year. Wetlands include marshes, wood swamps, bogs, sedge meadows, and vernal pools. Wetlands are important for cleansing water, providing flood control, protecting shorelines from erosion, maintaining stream flows, and supporting wildlife habitat.

What are critical habitat areas?

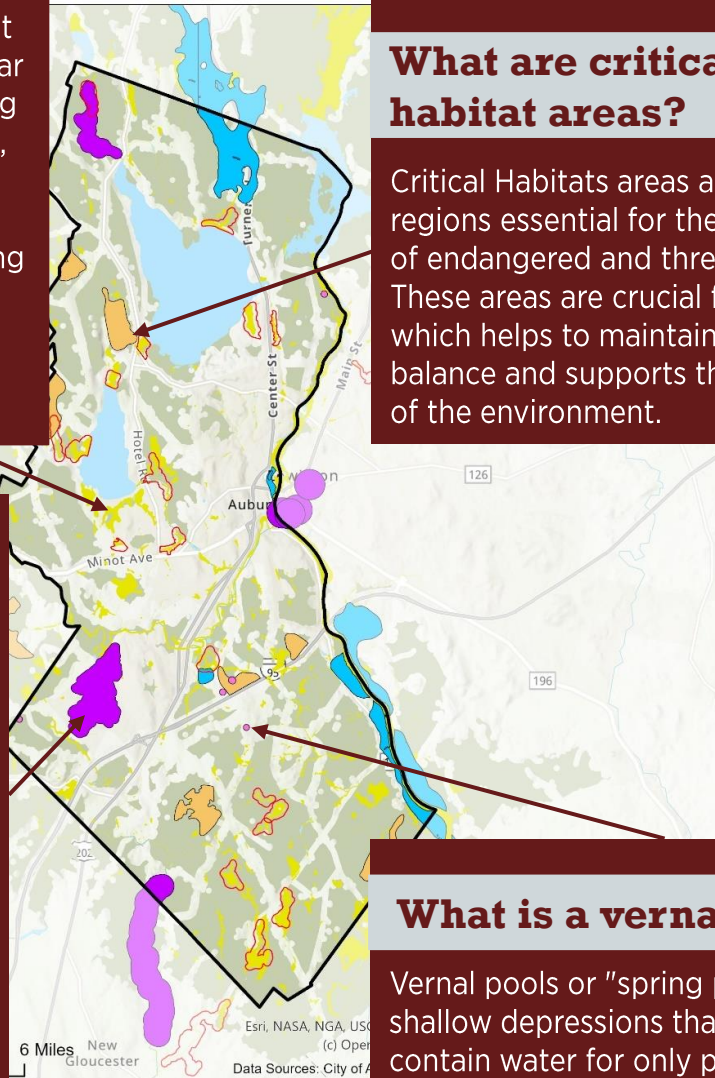
Critical Habitats areas are specific regions essential for the conservation of endangered and threatened species. These areas are crucial for biodiversity which helps to maintain ecological balance and supports the overall health of the environment.

Rare animal species in Auburn:

- Peregrine falcon
- Scarlet bluet
- Upland sandpiper
- Wood turtle



Photo credit: Johnathan Mays (Maine DIFW)



BWV Natural Resources

- | | |
|--|--|
|  City Boundary |  Deer Wintering Area |
|  Wetlands |  Inland Waterfowl and Wading Bird Habitat |
|  Aquifers |  Endangered Threatened and Special Concern Wildlife |
|  Significant Vernal Pools | |
|  Undeveloped Blocks | |

What is a vernal pool?

Vernal pools or "spring pools" are shallow depressions that usually contain water for only part of the year. Vernal pools are a type of wetland that serve as essential breeding habitat for certain species of wildlife, including salamanders and frogs, which provide an important food source for other animals. Many amphibian species need access to vernal pools to survive and must return to the pond in which they were born to breed. In Maine, vernal pools with high value for wildlife are called significant vernal pools. It is likely that most vernal pools within Auburn are not mapped and are not actively being protected.

To learn more:

Maine Department of Environmental Protection (DEP)

<https://www.maine.gov/dep/water/wetlands/>

National Wetlands Inventory

<https://www.fws.gov/program/national-wetlands-inventory>

Of Pools and People

<https://www.vernalpools.me/>

Natural Resources

Lakes and Watersheds

What is a watershed?

A watershed is a land area that channels rainfall and snowmelt to streams, rivers, and, eventually, to the ocean or a bay. Water that runs off the land can pick up pollutants, which adversely affect the watershed's ecology and its receiving waterbody. Keeping watersheds healthy is critical to the overall health and well-being of communities.

Lake Auburn

- ✓ 2,260-acre lake and reservoir
- ✓ Auburn and Lewiston's primary water supply
- ✓ Supports a variety of fish species, including salmon, lake trout, brook trout, largemouth bass, and chain pickerel

Lake Auburn Watershed

- ✓ 15 square miles
- ✓ Covers parts of Auburn, Lewiston, Minot, Hebron, Turner, and Buckfield
- ✓ Managed by the LAWPC

Taylor Pond

- ✓ 625-acre body of water
- ✓ Supports smallmouth bass, white perch, yellow perch, chain pickerel, and American eel
- ✓ Has limited public access
- ✓ Monitored by the Taylor Pond Association

Dams

Dams are barriers that hold back water to raise its level, forming a reservoir used to generate electricity or as a water supply. There are 11 active dams in Auburn, maintained by the Public Works Department. Dams impact stream ecosystems, including stream continuity, habitat quality, and fish migration. Currently, all dams in Auburn block Atlantic salmon habitat.

How is Auburn water quality being protected?

- ✓ The Maine DIFW manages Lake Auburn, providing continuous monitoring to help prevent issues like algal blooms and regularly stocks the lake to support recreational fishing.
- ✓ Activities, such as swimming, fishing, ice fishing, and animal wading, are restricted at Lake Auburn.
- ✓ Motorized boating and fishing are carefully regulated on Lake Auburn.
- ✓ The southernly portion of the Lake Auburn is a no-activity zone.
- ✓ The LAWPC works to protect water quality through management, conservation, and education.
- ✓ The Taylor Pond Association monitors water quality and ecological health of the pond.
- ✓ The City has secured funding to remove the Little River Dam.

To learn more:

Lake Auburn Watershed Protection Commission
<https://lakeauburnwater.org>

Taylor Pond Association
<https://taylorpond.org/>

Natural Resources

Rivers and Floodplains

What is a floodplain?

Floodplains are low, mostly flat areas adjacent to rivers, streams, ponds, and the ocean and are periodically covered by rising water during major periods of rain or snowmelt. The mapped 100-year floodplain has a 1% chance of being flooded during any year. Floodplains are mapped and regulated by the Federal Emergency Management Agency (FEMA). The most recent Flood Insurance Rate Maps (FIRMs) for Auburn were published and made effective July, 8, 2013.

Flood Risk

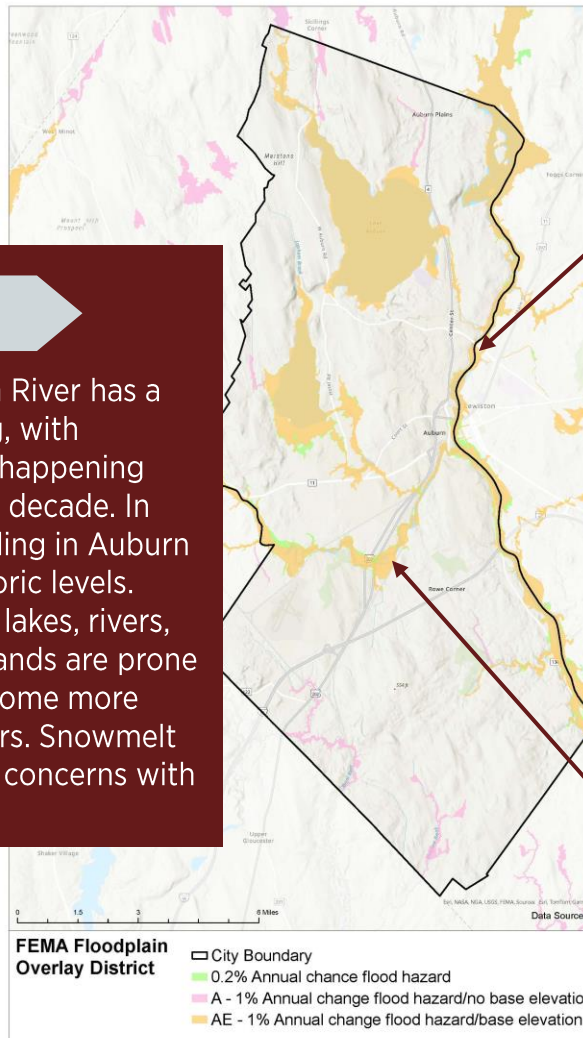
The Androscoggin River has a history of flooding, with significant events happening multiple times per decade. In 2023, severe flooding in Auburn reached near-historic levels. Many of the City's lakes, rivers, streams, and wetlands are prone to flooding, with some more resilient than others. Snowmelt compounds these concerns with additional runoff.

Androscoggin River

- ✓ 178-miles long
- ✓ Flows from NH to the Gulf of ME
- ✓ Drops 1,200 feet
- ✓ 3,500 square mile drainage basin
- ✓ Habitat for Atlantic salmon, smallmouth bass, northern pike, trout, largemouth bass, fallfish, rock bass, and black crappie.

Little Androscoggin River

- ✓ Is a 51.4-mile tributary of the Androscoggin River
- ✓ Originates from Bryant Pond in Woodstock, ME
- ✓ Habitat for brook trout, rainbow trout, brown trout, smallmouth bass, northern pike, Atlantic salmon, American shad, alewife, and American eel



Flood Prevention and Mitigation

Auburn participates in FEMA's National Flood Insurance Program (NFIP) to help manage flood risks. Through this program, Auburn adopted a floodplain management ordinance that defines building standards in high-risk flood zones, establishes review procedures for development in flood hazard areas, and creates a Floodplain Overlay District. This allows residents to be eligible to purchase NFIP insurance and to receive disaster assistance for flood-related damage.

To learn more:

Federal Emergency Management Agency
<https://www.fema.gov/floodplain-management>

Maine Department of Environmental Protection
<https://www.maine.gov/dep/water/rivers-streams>

Maine Rivers
<https://mainerivers.org/>

Natural Resources

Sustainability and Resiliency

What is sustainability?

Sustainability is the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability can refer to fiscal, economic, development, and environmental actions.

What is resiliency?

Resiliency is the ability to withstand or recover quickly after an event or period of adversity, such as a fire, flood, economic downturn, or public health event.



Source: Maine DEP

Sustainability & Natural Resources Board

Auburn established the six-member Sustainability & Natural Resources Board (SNRB) in 2015 to advance Auburn's commitment to sustainability by serving as a research, advisory, and advocacy group on environmental issues and natural resource management within the City. The SNRB has identified community actions in the following priority areas:

- ✓ Accelerate the Transition to Electric Vehicles
- ✓ Improve Mobility and Reduce Vehicle Miles Traveled (VMT)
- ✓ Advance Clean Energy Adoption
- ✓ Transition to Clean Energy
- ✓ Support Maine's Natural Resource Economy
- ✓ Support Clean Energy Jobs and Businesses
- ✓ Protect Natural and Working Lands and Waters
- ✓ Plan for Community Resilience
- ✓ Reduce Flood Risk
- ✓ Strengthen Public Health
- ✓ Assess Climate Vulnerability of Infrastructure
- ✓ Utilize Climate-ready Standards
- ✓ Designs and Practices to Improve Infrastructure
- ✓ Increase Public Awareness of Climate Change Impacts and Opportunities to Take Action
- ✓ Engage the Business Community and Recognize Climate Leadership

Key Sustainability Initiatives

- ✓ Hydropower adoption
- ✓ Solar installations for City facilities
- ✓ EV charging stations
- ✓ EV fleet vehicles
- ✓ Geothermal heating and cooling system at ELHS
- ✓ Composting food waste
- ✓ School Food System Innovation Grant
- ✓ Maine Community Resilience Partnership



Source: City of Auburn

To learn more:

Sustainable Auburn
<https://www.auburnmaine.gov/Pages/Neighborhood/Sustainable-Auburn>

Maine Department of Environmental Protection
<https://www.maine.gov/dep/sustainability>