

Land Resources

Readfield's natural resources are an essential element for the town's health, wealth, vitality, development, and economy. In addition to providing key habitat for plants and animals, areas with significant natural resources also have aesthetic benefits for residents, and key roles for water storage and pollution filtration. The location and function of natural resources have shaped Readfield's pattern of development since antiquity. Preserving and protecting them serves to preserve and protect residents' quality of life and future.

The following chapter summarizes information about the landscape of Readfield to help explain why the town's natural resources are important, identifies the most pressing concerns facing these various but connected ecosystems, and proposes goals and policies to support the conservation and rehabilitation of these resources. This Plan should ensure that new development occurs without diminishing the natural environment, encourage landowners to protect and steward the natural resources on their properties, and spur town officials to provide resources and information to help protect Readfield's environment.

Surficial Geology:

The advance and retreat of the Late Wisconsin Period glacier molded Readfield's landscape. As the glacier advanced, the ice mass scraped loose geologic material off the surface of the ground. When it retreated, the glacier left behind this heterogeneous mixture of sand, silt, clay and stones, called till, which today covers most of Readfield. One variety of till is fine grained and compact with low permeability and poor drainage. The other is loose, sandy, and stony with moderate permeability and good drainage.

Other surficial features include:

- Swamp deposits (peat, silt, clay and sand) located in wetlands;
- Glacial-marine deposits (silt and clay) located near inlets to Maranacook Lake;
- Glacial-stream deposits (sand and gravel) just west of Tingley Brook, near Torsey Pond;
- End-moraine deposits (till and/or sand and gravel) surrounding Beaver Brook.

Bedrock outcrops interrupt the predominant, thick till blanket. Large areas of bedrock outcrop occur on the east-facing slopes of Kents Hill, from Monks Hill down to the east shore of Carlton Pond and on the hilly area just north and east of Readfield Depot.

Topography:

Readfield has a varied topography – basically extending lower to higher, from east to west. The highest elevation is just over 700 feet above sea level at the peak of Palmetter Ridge south of Kents Hill and on the Mount Vernon/Readfield town line west of Church Road. The lowest elevation, approximately 190 feet above sea level, is where a feeder stream to Little Cobbossee Lake exits the southeast corner of town. Maranacook Lake has an elevation of approximately 211 feet.

Large portions of the town have slopes that exceed 20-25 percent in grade (20-25 feet in rise per 100 feet in horizontal distance). Development becomes increasingly problematic as the slope gradient increases. Roads on steep slopes are more costly to construct and maintain and can be more dangerous to travel, particularly for emergency vehicles and school buses during winter. Steep slopes can make buildings and subsurface disposal systems more expensive to construct and maintain. The Maine Subsurface Wastewater Disposal Law prohibits new subsurface waste disposal systems on slopes greater than 20%. Additionally, steep areas are more susceptible to erosion problems. Development on slopes greater than 20% should be avoided due to the high cost of construction and likelihood of environmental damage.

Readfield's Land Use Ordinance which incorporates the Shoreland Zoning Regulation, places some limits on development of steep slopes, as well. Certain performance standards specify construction techniques or limit construction altogether on slopes. Areas of steep slope over two acres are zoned "Resource Protection" and have additional regulation and requirements.

Soils:

Soils in the Readfield area are typical of this part of Kennebec County -- dominated by loam and sand developed from glacial till and meltwater. With few exceptions, Readfield soils fall into the Hollis-Paxton-Charlton-Woodbridge Association. These are sandy loams typically found intermingled in hill and ridge areas at elevations of 200 to 700 feet. While the Hollis soils are generally shallow and do not retain water well, the Paxton-Charlton-Woodbridge soils are typically deep and moderately well drained. This soil association has historically been used for forestland, hay, pasture, orchards, cultivated crops and homebuilding.

The Natural Resource Conservation Service (NRCS) has published *Soil Survey Data for Growth Management in Kennebec County, Maine* (1989), which is considered the authority for suitability of soils for specific purposes. The predominant soils in Readfield are Woodbridge and Paxton stony fine sandy loams with 3% to 15% slopes. These soils are rated as having a relatively high potential for low-intensity development where slopes do not exceed 8 percent. Hollis soils are rated "medium" for low-intensity development.

In addition to the predominant Woodbridge and Paxton soils, there are small pockets of Scantic and Scio soils, typically associated with wetland areas and Ridgebury Fine Sandy Loams, the third soil type present in Readfield. Both types are rated very low in potential for development because of poor permeability and high-water table and are most suited for growing trees.

The Soils Map (Appendix) displays NRCS Potential Ratings for Development, based on soil suitability for development. Areas where new systems are not permitted or may not be permitted are identified. The mapping of these soils involved a degree of generalization, meaning the outlined areas may include small areas of soils suitable for

development. However, predominant soils are poor for development. The presence of poor soils does not by itself exclude development; it does, however, make it more costly.

All soils when excavated, disturbed, or scarred are subject to accelerated erosion. Eroding soils contribute to the degradation of water quality in lakes, ponds and streams. Silt can reduce visibility, harm fish populations and contribute phosphorus and other nutrients to the water body. Phosphorus is a naturally occurring nutrient which, when present in high concentrations in water bodies, can cause algal blooms. Eroding soils from uncontrolled stormwater runoff can contribute significantly to phosphorus levels in water bodies.

Approximately half of the land area of Readfield is highly erodible and/or has shallow overburden. Of particular concern are the most highly erodible areas near major water bodies or feeder stream systems. Carlton Pond, Maranacook Lake, and Torsey Pond all have highly erodible soils along portions of their shoreline.

Readfield's Land Use Ordinance contains performance standards to protect against excessive erosion during and after construction. Sections 8.10 and 8.11 require developers to provide adequate stormwater management and erosion control measures, respectively, and Section 8.12 requires phosphorus control measures for projects subject to site review within lake watersheds. The parameters the Land Use Ordinance set under Section 8.12 were obtained by DEP's *Phosphorous Control in Lake Watershed* publication (1992).

Islands:

In the Readfield end of Torsey Pond there is only one "real" island. It has a dwelling on it. There are also a couple of very small islands in Torsey and a large marsh area that at times consists of "marsh islands." There are three large and three small islands in the northern basin of Maranacook Lake. Two of the large islands and one of the small islands have structures on them.

Wildlife Habitat:

Water bodies, watercourses, and wetlands are necessary habitat for the continued survival of many wildlife species. The many watercourses, wetlands, and unfragmented blocks of land in Readfield provide sanctuary for woodland birds, animals, and aquatic species including critical habitat for certain rare or endangered species.

The extent and quality of wildlife habitat is an indicator of not just the richness and diversity of the flora and fauna in Readfield, but the overall health of the ecosystem. The availability of high-quality habitat for plants, animals, and fish is essential to maintaining abundant and diverse populations for ecological, economic, and recreational purposes.

The Maine Department of Inland Fisheries and Wildlife (MDIF&W) administers a program called Beginning with Habitat (BwH) to identify significant wildlife habitat and critical natural areas under the National Resources Protection Act.

BwH, a collaborative program of federal, state and local agencies and non-governmental organizations, is a habitat-based approach to conserving wildlife and plant habitat on a landscape scale. The goal of the program is to maintain sufficient habitat to support all native plant and animal species currently breeding in Maine. BwH compiles habitat information from multiple sources, integrates it into one package, and makes it accessible to towns, land trusts, conservation organizations, and others to use in a proactive approach to conservation. This information can be seen on Readfield's Critical Natural Resources Map, with descriptions of essential features below.

Significant habitats, as defined by MDIF&W, includes species appearing on the official state or federal list of endangered or threatened species, high and moderate value deer wintering areas, and high and moderate value waterfowl and wading bird habitats.

Before conducting any activities in, on, or over significant wildlife habitats, a National Resources Protection Act (NRPA) permit must be obtained. Activities include construction, repair, or alteration of any permanent structure; dredging, bulldozing, removing or displacing soil, sand, or vegetation; and drainage or filling. The standard for protecting significant habitats highlights mitigation and compensation. Actions must be taken to A) avoid negative impacts on habitats, B) minimize the impacts if unavoidable, C) restore or rehabilitate impacted habitats, D) reduce an impact over time, or E) replace the affected habitat.

Deer Wintering Areas:

Although Whitetail deer are reasonably common in Readfield, their existence is predicated on sufficient habitat. Summer habitat is commonly referred to as "edge habitat", which includes farm fields, orchards, and open areas adjacent to forested lands. The habitat limitations for deer occur in the winter when there is heavy snow cover with extreme cold. Deer "wintering areas" (DWA) are defined as a forested area used by deer when snow depth in the open/hardwoods exceeds 12 inches; deer sinking depth in the open/hardwoods exceeds 8 inches and mean daily temperatures are below 32° F. Non-forested wetlands, non-stocked clear cuts, hardwood types, and stands predominated by Eastern Larch are included in DWAs only if less than 10 acres in size. Agricultural and development areas within DWAs are excluded regardless of size. Deer wintering areas that have yet to be confirmed through professional survey are considered "Candidate Deer Wintering Areas" until otherwise verified.

Readfield has four "Candidate Deer Wintering Areas", as none of them have been confirmed through survey. They are in the areas of Gardiner Brook, Hoyt Brook, Bog Pond, and the westerly side of Monk's Hill. Their size varies and they are spread pretty evenly throughout town, except around the village areas.

None of these areas are threatened by development, though they may be threatened by certain forest management operations. The number of deer yards in Readfield has not changed since the 2009 Comprehensive Plan update. MDIF&W does not recommend regulatory standards with respect to preserving deer wintering areas but is willing to work with landowners to adapt management practices that will preserve their integrity.

Other Wildlife:

Raccoon, beaver and red fox are the most abundant species of furbearers in Readfield followed by mink, fisher, coyote and otter all of which are present in smaller numbers.

Accurate or even estimated population counts of waterfowl populations in municipalities are not available. The Maine Audubon Society has been conducting loon surveys throughout the state since 1983; that information is available in the Water Resources Chapter. The Maine Department of Inland Fisheries and Wildlife is also conducting an ongoing survey of wild duck populations, of which the information is yet available.

Other than generalized habitat protection measures, primarily for wetlands, the state has no coordinated program for maintaining species populations. Various conservation groups and lake associations engage in programs to promote local populations such as putting out nesting boxes, and this occurs in Readfield on an ongoing basis.

There are numerous waterfowl and wading bird habitats scattered throughout Readfield, varying in size. These habitats provide breeding, migration, and wintering grounds for a multitude of bird species. Since 2006, Maine's Shoreland Zoning Regulation requires that waterfowl and wading bird habitats designated by MDIF&W must be protected by a 250-foot buffer.

Readfield has upwards of 20 known inland waterfowl/wading bird habitats designated by MDIF&W, they can be seen on the High Value Plant & Animal Habitats Map. They are predominantly around Torsey and Maranacook Lakes, Brainard Pond, Mill Pond, Carlton Pond, Gardner Brook, Tingley Brook and Bog Stream, although there are other locations as well.

Rare, Endangered, and Valuable Species and Habitats:

Beginning with Habitat compiles data on rare, endangered, and valuable species and habitats into a map, High Value Plant & Animal Habitats of Readfield. This map includes rare, threatened, or endangered wildlife, rare or exemplary plants and natural communities, essential wildlife habitats, and significant wildlife habitats.

Animals:

A Bald eagle (*Haliaeetus leucocephalus*) is known to nest on the south portion of Torsey Pond, near Old Kents Hill Road. Typical breeding habitats include large trees, primarily old white pines, in close proximity to water where food is abundant and human

disturbance is minimal. Once prolific in Maine, they were nearly extirpated throughout their entire range due to widespread use of environmental contaminants. With bans on the use of these contaminants and habitat protection measures, bald eagles have made a recovery. In 2009 they were removed from the State's Endangered Species list, though they remain listed as Special Concern. Bald eagles and their nests are protected by the U.S. Fish and Wildlife Services under the Bald and Golden Eagle Protection Act.

Plants:

One site containing an Endanger Plant has been identified. The species' identity as well as a more definite site location have been masked for its protection. Two sites containing rare plants or plants of Special Concern have been identified, as well: one south of Kents Hill School, one on the eastern boundary of town, next to Shed Pond. More information on rare plants found in Readfield is available from the Maine Natural Areas Program books at the Town Office.

Maine Natural Areas Program through Maine Department of Agriculture, Conservation & Forestry ranks species on both a global level and a state level. Using a 5-point ranking system from critically imperiled (1) to secure (5), facilitates a quick assessment of a species or habitat type's rarity. Each species or habitat is assigned both a state (S) or global (G) ranking on the scale of 1-5. Factors such as range extent, the number of occurrences, intensity of threats, etc., contribute to the assignment of state and global ranks. The definitions for state and global ranks are comparable but applied at different geographic scales; for example, something that is state imperiled may be globally secure.

- **Stiff Arrowhead (*Sagittaria rigida*)** is a plant species classified as Special Concern. It's state ranking is S2 which is high risk for extirpation in Maine due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors. This plant's global ranking is G5 which means it is globally secure and at a very low risk for extinction globally due to a very extensive range, abundant populations, or occurrences, and little to no concern from decline or threats.



- **Habitat:** Calcareous or brackish mud or water.
- **Ecological Characteristics:** In Maine, this species is typically found in fresh to brackish tidal mud flats.
- **Range:** Maine and Quebec to Minnesota, south to Virginia, Tennessee, Missouri, and Nebraska.
- **Known Distribution in Maine:** This rare plant has been documented from a total of 13 towns in Kennebec, Lincoln, Penobscot, Sagadahoc, and York counties.
- **Phenology:** Flowers July – September.
- **Reasons for Rarity:** At northern limit of range.
- **Conservation Considerations:** Prevent degradation of marsh and estuary habitat from adjacent land uses.

- **Broad Beech Fern (*Phegopteris hexagonoptera*)** is a plant species classified as Special Concern. It's state ranking is S2 which is high risk for extirpation in Maine due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors. This plant's global ranking is G5 which means it is globally secure and at a very low risk for extinction due to a very extensive range, abundant populations, or occurrences, and little to no concern from decline or threats.



- **Habitat:** Rich, often rocky, hardwood forest (upland).
- **Ecological Characteristics:** Generally found in sunny, more open spots in moist woods.
- **Range:** Quebec and Maine to Ontario and Minnesota, south to northern Florida and Texas.
- **Known Distribution in Maine:** This rare plant has been documented from a total of 29 town(s) in the following county(ies): Androscoggin, Aroostook, Cumberland, Franklin, Kennebec, Knox, Oxford, Somerset, York.
- **Phenology:** Fruits in August
- **Reasons for Rarity:** At northern limit of range.

- **Small Whorled Pogonia (*Isotria medeoloides*)** is a member of the orchid family and is ranked at S2 which is high risk for extirpation in Maine due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors. The plant's global ranking is G2/G3 which means it is globally imperiled as well, and at a high to moderate risk of extinction (species) or collapse (ecosystem) due to range restrictions, small populations, declines, threats, or other factors.



- **Habitat:** Mid-succession mixed forests. [Hardwood to mixed forest (forest, upland)]
- **Ecological characteristics:** Small whorled pogonia typically occurs in mid-successional mixed woods with sparse shrub and herb layers and thick leaf litter. It often occurs near intermittent streamlets or where a hardpan impedes water percolation into the soil.
- **Known Distribution in Maine:** This rare plant has been documented from a total of 19 towns in the following counties: Androscoggin, Cumberland, Kennebec, Oxford, and York.
- **Phenology:** Flowers in June.
- **Reason(s) for rarity:** Unknown; rare throughout its range. This is an extremely rare orchid, often called the rarest orchid in eastern North America.
- **Conservation considerations:** Orchids attract some specialty gardeners, and populations are vulnerable to unscrupulous or uneducated collectors. Plants usually do not survive transplanting and removing them harms the natural population and may cause its eventual disappearance. This orchid has not been successfully propagated, and any plants offered for sale have been dug from the wild. Populations are vulnerable to conversion of their habitat to residential or

commercial use, which is partly responsible for the species' rarity. Partial removal of the canopy may be beneficial, as long as subsequent undergrowth does not overgrow the plants.

Habitat:

Also noted on the BwH High Value Plant & Animal Habitats Map is an exemplary natural community of a northern hardwood forest. The species found in this forest include beech, birch, and maple trees. This exemplary natural forest habitat has a state ranking of S5, meaning it is secure or at a very low to no risk of extirpation due to extensive range, abundant population or occurrences, with little to no concern from declines or threats.



These hardwood forests are characterized by a closed canopy, usually dominated by a combination of beech, yellow birch, and sugar maple. Paper birch, red maple, conifers, and red oak may be present at lower cover. Striped maple is a common subcanopy tree. The variable shrub layer is dominated by tree regeneration. The herb layer may be dominated by tree seedlings. Herbs are sparse, usually <15% cover; but cover, richness and composition vary with site conditions.

Undeveloped Habitat Blocks, Connectors, and Conserved Land:

There is a distinct, direct relationship between the number and variety of wildlife, and the size of their habitat. Obviously, there is urban wildlife like skunks or mourning doves, which do not require much open land to thrive, but other types of animals are much less conspicuous, and require unbroken patches of forest to thrive. As roads, farms, and houses intrude on the habitat of these creatures, the large habitat blocks become fragmented and the wildlife that relies on them disappears.

Development in rural areas often fragments these blocks, reducing their value for wildlife habitat. Wildlife travel corridors linking individual habitat blocks together are critical to accommodate animal movement between areas. Ensuring wildlife travel corridors helps preserve the region's biodiversity and maintain the rural community character that defines Readfield. Limiting development at the edges of unfragmented habitat also helps maintain environmental integrity by giving forest-dwelling creatures a natural buffer.

The BwH map, Undeveloped Habitat Blocks & Connectors and Conserved Land illustrates the distribution of undeveloped blocks of land in Readfield. This map also illustrates the various ownerships and conservation types of these blocks of land. Two blocks stand out as largest: an unbroken section (except for the railroad track) in the northeastern part of town (approximately 2,674 acres), and one in the southwestern part of town (approximately 2,150 acres). Both blocks include deer wintering yards, waterfowl and wading bird habitat, wetlands, as well as the endangered plant species detailed

above. In the southwestern block, a considerable portion of the land is conserved either privately or by the municipality. In the block in the northeastern part of town, there does not appear to be any conserved land.

Overall, currently there is not much development pressure in these large, unfragmented blocks, especially for large tracts of forested land, which make up most of Readfield.

Conserved land that contributes to these large, unfragmented blocks include those areas open for recreation, limited recreation, and conservation. Below is a list of conserved, protected, or open space lands in Readfield:

Recreation Areas:

Readfield Beach
Readfield Fairgrounds
Fogg Farm Conservation Area
Torsey Pond Nature Preserve
Readfield Town Farm & Forest
Mill Stream Dam
Maranacook Community School
Wyman Memorial Forest
Gannett Woods
Echo Lake Watershed Preserve
Macdonald Conservation Area
Rosmarin and Saunders Family Forest
Tyler Conservation Area
Kents Hill School
Luce Memorial Forest
Allen-Whitney Memorial Forest

Other Conserved Areas:

Readfield Recreation Lot
Parks Lot
Readfield Corner Water Association
Avery-Smith Shore Land
Westman Woods
St. Andre Fields
Carleton Pond
Torsey Pond Outlet Conservation Area
Lakeside Orchards
Kents Hill Orchard
Old Fairgrounds Field

Cemeteries:

Kents Hill Cemetery	Huntoon Cemetery
Readfield Corner Cemetery	Armstrong Cemetery
Whittier Cemetery	Dudley Plains Cemetery
East Readfield Cemetery	Case Cemetery

Threats to Readfield’s Natural Resources:

As Readfield grows and changes, there has been an increase in residential development in rural areas and in abandoned agricultural fields. While the town has no regulatory tool to prevent or redirect this development other than provisions for cluster development, new development should be strongly encouraged in the designated growth areas to prevent habitat fragmentation. Strong and appropriately applied zoning severely limits development in a majority of our most sensitive areas.

Remediation Sites:

Readfield has three remediation sites listed by the DEP. One site is the old location for the municipal landfill on North Road. It has been closed since 1994. It falls within the Messalonskee Lake Watershed. Another site is located on Route 17. This remediation site is within multiple watersheds: Pleasant (Mud) Pond, Annabessacook Lake, Maranacook Lake, and Cobbosseecontee Lake watershed. The last site is at 100 Main Street and was the location of Kents Hill Lumber Co. Inc. This remediation site falls in the Androscoggin Lake watershed. All three have been closed and are undertaking post-closure obligations.

Regulatory Protection:

The federal government and the State of Maine have an abundance of protections for environmental preservation and natural resources. Additionally, Readfield has added its own layer of protection in the form of various ordinances. The town has adopted the following ordinances that offer protection to natural and water resources:

- Land Use Ordinance
- Floodplain Management Ordinance
- Sludge Ordinance
- Junkyard Permit Application
- Solid Waste Disposal and Recycling Ordinance

One of Readfield's strongest protection efforts is the town's Land Use Ordinance, which includes the Shoreland Zoning Regulations. It is aimed at protecting and preserving natural resources, open space, and habitat, by designating specific zoning designations with specific parameters. (See Existing Land Use Chapter for more detailed information on this.)

Readfield has three zoning districts designated for protecting natural resources:

Shoreland Residential District (SR): includes all shoreland areas within 250 feet, horizontal distance, of the normal high-water mark of a great pond or the upland edge of a wetland consisting of ten (10) or more contiguous acres or as otherwise defined, other than those areas included in the Resource Protection District or the Stream Protection District. It includes areas that are appropriate for residential, recreational, and other non-intensive development activities.

Resource Protection District (RP): includes areas having current moderate or high habitat value and in which development would adversely affect water quality, productive fish or wildlife habitat, biotic systems, or scenic and natural values. However, areas which are currently developed, and which would meet the criteria of this district shall be placed in another suitable land use district. This district shall include:

- Wetlands and the areas 250 feet horizontally of the upland edge of the following wetlands: a wetland that is 10 acres or greater; wetlands associated with great ponds;

and wetlands which are rated “moderate” or “high” value by the Maine Department of Inland Fisheries and Wildlife.

- Wetlands and the areas within 25 feet horizontally of the upland edge of wetlands that are greater than 2 acres and less than 10 acres.
- Areas within 1,000 feet horizontally of the normal high-water line of Carlton Pond.
- Areas within 1,000 feet horizontally of the normal high-water line of Mill Pond, Shedd Pond and Brainard Pond.
- Areas of 1 or more contiguous acres with sustained slopes of 20% or greater.
- The following areas when they are located within 250 feet horizontally from the normal high-water line of a great pond; within 250 feet of the upland edge of a wetland; and within 75 feet horizontally of a stream:
 1. Important wildlife habitat
 2. Natural sites of significant scenic or aesthetic value.
 3. Areas designated by federal, state and local government as natural areas of significance to be protected from development.
 4. Existing areas of public access and certain significant archeological and historic sites.

Stream Protection District (SP): includes all land area within 75 feet, horizontal distance, of the normal high-water line of a stream as defined in Article 11 and other streams of local significance designated on the Official Land Use Map, exclusive of those areas within 250 feet, horizontal distance, of the normal high-water line of a great pond, or within 250 feet, horizontal distance of the upland edge of a freshwater wetland. Where a stream and its 75-foot shoreland area is located within the 250-foot shoreland area of a great pond or a freshwater wetland, that land area shall be regulated under the terms of the district in which the great pond or wetland are located.

Readfield also identifies two zoning districts aimed at preserving rural, open parts of town. The rural zoning designations are designed to emphasize and promote low density development while retaining the rural character of the town. They are detailed below:

Rural Residential District (RR): is comprised of land areas similar in nature to those in the rural district, in terms of their composition (substantial areas of open space, farmland and forest land) and their value with respect to recreational, scenic and other resource-based opportunities. This district, however, is more restrictive in terms of allowable uses, and primarily seeks to accommodate low density residential use, agriculture and forestry operation which are compatible with the preservation of Readfield’s rural character, and which are protective of sensitive natural resources and scenic/visual quality.

Rural District (R): includes areas which contain a large acreage of open space, farmland and forest land. Lands within this district are especially important for the recreational, scenic, and other natural resource-based opportunities which they offer. The purpose of the rural district designation is to ensure that proposed development and land uses are compatible with the preservation of Readfield’s open, rural character and are protective of sensitive natural resources and visual/scenic quality. The rural district also accommodates certain commercial and light industry uses and strives to maintain a

development pattern of mixed, low density use while protecting critical natural and scenic resources.

Local and Regional Coordination:

Local Partners:

Readfield has an active Conservation Commission that includes 9 volunteer members, established under Title 30-A §3261 authority granted to Maine cities, with the following duties:

- ❖ Keep records of its meetings and activities and make an annual report to the municipality;
- ❖ Conduct research, in conjunction with the planning board, if any, into the local land areas;
- ❖ Seek to coordinate the activities of conservation bodies organized for similar purposes; and
- ❖ Keep an index of all open areas within the municipality, whether publicly or privately owned, including open marshlands, swamps and other wetlands, for the purpose of obtaining information relating to the proper protection, development or use of those open areas. The commission may recommend to the municipal officers or any municipal body or board, or any body politic or public agency of the State, a program for the better protection, development or use of those areas, which may include the acquisition of conservation easements.
- ❖ Any body politic or public agency of the State conducting planning operations with respect to open areas within a municipality having a conservation commission shall notify that conservation commission of all plans and planning operations at least 30 days before implementing any action under that plan.

Powers entrusted to the commission. The commission may:

- ❖ Advertise, prepare, print and distribute books, maps, charts, plans and pamphlets which it considers necessary;
- ❖ Have the care and superintendence of the public parks and, subject to the approval of the municipal officers, direct the expenditure of all money appropriated for the improvement of those parks;
- ❖ Acquire land in the municipality's name for any of the purposes set forth in this section with the approval of the municipal legislative body; and
- ❖ Receive gifts in the municipality's name for any of the commission's purposes and shall administer the gift for those purposes subject to the terms of the gift.

Readfield's Conservation Commission works in partnership with other local and regional organizations toward protecting natural resources. The Conservation Commission is charged with working on projects on the parcels of land on which they have oversight. The Commission spearheaded a large project of mapping significant vernal pools in town to be completed in 2023. They were also involved in the development and review of the Readfield Open Space Plan.

Readfield Trails Committee plans and coordinates the development of environmentally acceptable trails within Readfield. The committee promotes safe, functional connections between the various activity centers of the town and provides linkage, where possible, between the recreation trails within the town and adjacent towns.

Readfield Recreation Board aims to provide self-supporting recreation and athletic program opportunities for citizens of Readfield through the support of volunteers. They are responsible for supporting and expanding town recreation and athletic programs. They encourage volunteer participation and improve coordination of those volunteers. The Recreation Board considers long-range public beach needs and explores the acquisition of additional shorefront areas for public use. In recent years the Board has explored opportunities to provide recreational access to the Augusta Watershed District lands surrounding Carlton Pond.

Regional Partners:

The Conservation Commission and the Town of Readfield work closely with the Kennebec Valley Land Trust toward conserving land through acquisition and easements.

The Kennebec Land Trust (KLT) is a non-profit organization that works with landowners and communities to protect the Kennebec Valley's natural features, working landscapes, and fragile ecosystems. The KLT works to preserve natural resources through land protection, stewardship, education, advocacy, and cooperation. The properties entrusted to the KLT are usually open to the public, and include:

- Avery-Smith Shore Land
- Fogg Farm Conservation Area
- Macdonald Conservation Area
- Rosmarin and Saunders Family Forest
- Tyler Conservation Area
- Torsey Pond Outlet Conservation Area
- Wyman Memorial Forest
- Echo Lake Watershed Preserve
- Gannett Woods
- Readfield Town Forest
- St. Andre Fields
- Torsey Pond Nature Preserve
- Westman Woods Preserve

Maine Farmland Trust is a statewide organization that protects farmland, supports farmers, and advances the future of farming. They strive to protect Maine's farmland and revitalize the rural landscaping by keeping agricultural lands working and helping farmers and communities. The organization partners with many entities including local and regional land trusts and municipalities. They accomplish this protection in a number of ways: through donated easements, purchased easements, stewardship, and partnering with local Land Trusts.

New England Forestry Foundation (NEFF) is another entity that works to conserve and protect forested lands such as Luce Memorial Forest and the Allen-Whitney Memorial Forest in Readfield. NEFF leads by example in forestry practices. They demonstrate that wood can be harvested while protecting the health of the forest. NEFF works directly with conservation-minded family landowners who want to ensure permanent protection for their wooded properties. They help these landowners meet their conservation goals

through use of conservation easements, conservation restrictions, planned giving, and other innovative land-protection methods.

Analysis:

Readfield has an abundance of natural resources that the town has proactively worked to protect. The Land Use Ordinance has been crafted to offer protection to areas known to possess both natural resources and open space.

Several protected species of both animals and plants make their homes in the rich habitat Readfield provides. Protecting these species ultimately comes down to protecting their habitat. With its abundance of conserved, protected areas, and large, unfragmented blocks of land, Readfield has historically taken measures to do just that.

The biggest threat to natural resources is likely residential development in rural areas or open space. The town has little in the way of nonregulatory incentives to encourage development in growth areas, though without the benefit of public water and sewer.

With the town's focus and prioritization on outdoor recreation, they will need to find a balance between residential and economic development pressures and preservation of natural resources.

Future Considerations:

- ❖ Should Readfield update the existing Open Space Plan?
- ❖ What parts of town should be prioritized for preserving natural resources?
- ❖ How can the town better promote the importance of conserved land and wildlife corridors?
- ❖ Should Readfield do more to protect its wildlife habitat land such as deer wintering yards and other land that is not formally conserved?
- ❖ Should Readfield do more to protect its rural areas?
- ❖ How can the town further support private landowners manage their Farm and Open Space and Tree Growth parcels? These lands are key for wildlife habitat and wildlife corridors.