



**STATE OF MAINE**  
**DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY**  
177 STATE HOUSE STATION  
AUGUSTA, MAINE 04333

**JANET T. MILLS**  
GOVERNOR

**AMANDA E. BEAL**  
COMMISSIONER

June 12, 2025

Dawn Hallowell  
Maine Department of Environmental Protection  
Bureau of Land Resources  
17 State House Station  
Augusta, ME 04333-0017

Via email: [necec.dep@maine.gov](mailto:necec.dep@maine.gov)

Re: Maine Natural Areas Program comments on NECEC Transmission LLC Conservation Plan submitted to Maine DEP on May 9, 2025.

The Maine Natural Areas Program (MNAP) has reviewed the NECEC Conservation Plan submitted to the Maine Department of Environmental Protection (DEP) on May 9, 2025. MNAP's comments are primarily focused on the Introduction, Section 3.2.2 Conservation Values, and 3.3.2 Habitat Connectivity. MNAP recognizes that the DEP Order and Condition did not explicitly define mature forest. However, the definition put forward in the Conservation Plan is not technically in line with the MNAP's scientific basis for defining mature forest. The Conservation Values of the property should be updated to reflect the letter from the Maine Department of Inland Fisheries and Wildlife (DIFW) on May 13, 2025, as summarized below. MNAP also encourages further considerations to enhance the protection of riparian areas to support wetland and aquatic function as well as wildlife connectivity.

Introduction: Mature Forest

The DEP Order and Condition for compliance did not explicitly define mature forest. As a result, the definition is up to interpretation which makes it difficult to define, track, or enforce. The definition put forward in the Conservation Plan is not technically in line with the MNAP's scientific basis for mature forest.

For context, there are varying definitions of mature forest applied by agencies and landowners for management, research, economic, or inventory purposes, and mature forest is not typically defined by height or basal area alone. The NECEC Conservation Plan threshold for "exceptional, mature" forest as meeting a "threshold of 50 feet or greater height with a basal area of 60 square feet of native trees" does not reflect working definitions used by the U.S. Forest Service, the Society of American Foresters and others (e.g., USFS 2024)<sup>i</sup>. Mature forest characteristics will also vary by geography, site productivity, and forest type which add to the complexity of the definition. Characteristics including tree diameter, age, basal area, understory structure, composition of dead trees or decaying wood, and evidence of disturbance are also typically incorporated into the definition and description of mature forest. For height thresholds, the SAF defines trees or even aged stands as mature once the tree or stand has

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“...attained most of its potential height growth...” which for spruce, hemlock, and northern hardwoods ranges from 60-90-plus feet, consistently taller than 50 feet (SAF Dictionary of Forestry 2018). MNAP recommends that the definition of mature forest used in the Plan not be used as a precedent for working forest easements. The Conservation Plan should also be updated to reflect MNAP differs in its characterization of mature forest.

### 3.2.2: Conservation Value

The Conservation Plan notes the ecological values of the Protected Property and references MNAP-mapped locations of special plants or rare and exemplary natural communities. MNAP has not conducted targeted field inventories of the Protected Property other than within an isolated section along Parlin Stream more than 20 years ago, as indicated in Figure 2 of the Plan. In response to Weyerhaeuser’s request for rare botanical features on the Protected Property, MNAP provided the data and noted areas of ecological survey interest on April 17, 2025 (see attached). MNAP awaits permission to access these sites. Furthermore, in a letter to Weyerhaeuser from DIFW dated May 13, 2025 (see attached), MNAP contributed comments requesting permission to update historic records on Parlin Stream and noted that, to our knowledge, limited formal biological or ecological surveys have been conducted on this property. With additional inventory, the Conservation and Forest Management Plans’ benefits for rare or significant botanical features could be expanded through recognition of and explicit management for additional conservation values.

### 3.3.2: Habitat Connectivity, Including Blocks of Habitat and Wildlife Travel Corridors

Additional descriptions and maps related to Exhibits C and D, which were not attached to the publicly available version of the Conservation Plan would be valuable in reviewing the extent of stream and wetland features and road infrastructure on the Protected Property.

The Conservation Plan includes a 100-foot no-cut buffer on perennial streams which is consistent with some habitat conservation programs. However other standards put forward by wetland protection or habitat conservation programs are not fully met in the Plan. MNAP recommends that the standards in the Plan not be used as a precedent for working forest easements.

The Conservation Plan allows for the construction of new roads or skid trails over perennial streams to support harvesting, which has the potential to disturb stream banks and riparian corridors for lengthy periods of time. The use of temporary roads and bridges wherever possible, as well as plans for removal after harvest, would help ensure the protection of streams and riparian areas over the long term.

Sincerely,

*Molly Docherty*

Molly Docherty | Director | Maine Natural Areas Program  
207-287-8045 | [molly.docherty@maine.gov](mailto:molly.docherty@maine.gov)

cc: Commissioner Amanda Beal

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<sup>1</sup> [https://www.fs.usda.gov/sites/default/files/fs\\_media/fs\\_document/Mature-and-Old-Growth-Forests.pdf](https://www.fs.usda.gov/sites/default/files/fs_media/fs_document/Mature-and-Old-Growth-Forests.pdf)



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**AMANDA E. BEAL**  
COMMISSIONER

April 17, 2025

Mark Rabon  
Weyerhaeuser

Via email: [Mark.Rabon@weyerhaeuser.com](mailto:Mark.Rabon@weyerhaeuser.com)

Re: Rare and exemplary botanical features in proximity to: 50,000-acre Weyerhaeuser property in Coburn-Parlin area, Maine

Dear Mark:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received April 11, 2025 for information on the presence of rare or unique botanical features documented from within the Coburn-Parlin forest management planning area you sent via shapefile. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in the Natural Heritage Data System files, there is an exemplary Acidic Cliff Gorge and a population of State-Threatened hairy arnica along the north side of Parlin Stream. Some portions of this area are steep, bare rock or not thickly forested, and generally inoperable, and MNAP recommends no harvest or disturbance occur within the mapped feature. If harvesting must occur here, we strongly recommend having MNAP's ecologist come out to walk the site with the forester so the most sensitive areas can be avoided. In addition, hairy arnica (*Arnica lanceolata*) grows on gravelly rivershores or wet cliffs, often where river scour helps reduce competition from other vegetation. To protect this species, we recommend no disturbance within 25 feet of the mapped population. Please see the attached shapefile for occurrence locations, and the attached factsheets for more information about the habitat and rare plant population.

The delineated occurrences and biological data for both the Acidic Cliff Gorge and the hairy arnica population are over 20 years old and considered "historical". In order to maintain the quality of these data, MNAP would like to resurvey these documented sites and update the mapped information.

Although there are no additional mapped rare or unique botanical features documented within the Coburn-Parlin site, this lack of data may indicate minimal survey effort rather than confirm the absence of rare botanical features. Through landscape analysis MNAP has identified a small number of sites where wetlands, steep slopes, or high elevation forest areas appear to have the potential to support unique ecological features. Please see the

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attached shapefile for location information. MNAP requests permission to access these identified sites for field survey to help inform forest management planning and provide an improved understanding of ecologically important non-forested wetlands or other features on the property.

Thank you for using MNAP in your review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site, or if you would like to discuss potential field surveys on the Coburn-Parlin parcel. We would welcome a response regarding our request for additional field surveys on the Coburn-Parlin parcel.

Sincerely,

A handwritten signature in black ink, appearing to read "Kristen Puryear".

Kristen Puryear | Chief Ecologist | Maine Natural Areas Program  
207-287-8043 | [kristen.puryear@maine.gov](mailto:kristen.puryear@maine.gov)

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## Maine Natural Areas Program

# Arnica lanceolata Nutt.

## Hairy Arnica

- [State Rank](#): S2
- [Global Rank](#): G3
- [State Status](#): Threatened

**Habitat:** Ledgy or gravelly shores or wet cliffs, often subalpine. [Alpine or subalpine (non-forested, upland); Non-tidal rivershore (non-forested, seasonally wet)]

**Range:** Local in east, Gaspé Peninsula and New Brunswick south to mountains of northern New England and New York. Also mountains of Alberta, British Columbia, to Colorado and California.

**Aids to Identification:** *Arnica lanceolata* has large attractive flowers resembling yellow daisies, with yellow ray flowers and yellow disk flowers on 20-50 cm tall hairy stems. Its 3-5 pairs of opposite leaves are regularly toothed, elliptic, and hairy. The basal leaves are sessile. The upper leaves are not much reduced in size from the lower.



**Ecological characteristics:** *Arnica lanceolata*, unlike many other unusual plants found on the St. John River in Maine, shows no apparent preference for calcareous or acid rocks. It does seem to require moist conditions where disturbance, lack of soil, or harsh environmental conditions restrict the vigorous growth of most vegetation. Like a number of other unusual species of the St. John River in Maine and the Gaspé, *A. lanceolata* is a Cordilleran species apparently western in origin. Some authors view the eastern populations as a distinct species, others merely a variety of the species found in the Rockies. Both in the West and in most of its few

eastern stations, *Arnica* grows in alpine or subalpine habitats. It occurs in Maine at low elevations along the St. John River, as well as on side slopes of Mt. Katahdin.



**Phenology:** Perennial, blooms July to early September.

**Family:** Asteraceae

**Synonyms:** Represented in Maine by ssp. *lanceolata*. Synonyms include *Arnica mollis* Hook. var. *petiolaris* Fern.

**Known Distribution in Maine:** This rare plant has been documented from a total of 12 town(s) in the following county(ies): Aroostook, Franklin, Piscataquis, Somerset.

**Reason(s) for rarity:** At southern and eastern limit of range; disjunct from principal distribution; possibly scarce suitable habitat.

**Conservation considerations:** Populations are small and grow in areas where natural disturbance can remove all or most individuals at one fell swoop.



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Contact Information

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# Acidic Cliff

State Rank S4

## Community Description

Sparse vegetation occurs on steep outcrops or cliffs of granitic or other acidic rock. Marginal wood fern and rock polypody are characteristic ferns; fragrant wood fern can be found on cooler sites. Rock tripe lichens may form extensive patches.

## Soil and Site Characteristics

Sites occupy nearly vertical to vertical outcrops of non calcareous, erosion resistant rocks. Most are dry, with large unvegetated areas; a moist microclimate is maintained over local areas by runoff or seeps from higher elevations, or, in gorges, by the flowing streamwater. Smaller ledges and outcrops (e.g., less than 5,000 square feet of rock exposure) should be considered as inclusions in the surrounding forest rather than distinct natural communities.

## Diagnostics

Sparsely vegetated cliffs occur below treeline, without circumneutral indicator species.



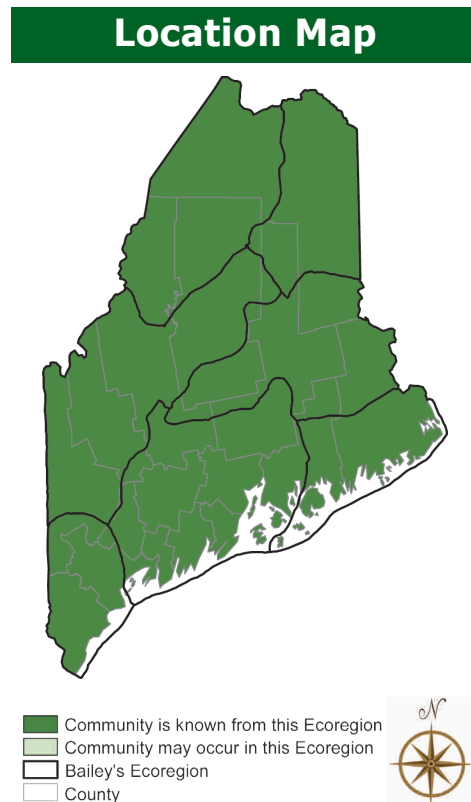
Rock Tripe and Rock Polypody

## Similar Types

Boreal Circumneutral Outcrops have circumneutral indicator species such as shrubby cinquefoil or certain uncommon herbs. Three-toothed Cinquefoil - Blueberry Low Summit Balds are on summits, not cliffs, and usually have heath shrubs mixed with the herbs.

## Conservation, Wildlife, and Management Considerations

Many sites are relatively inaccessible and minimally affected by either forestry or recreational activities. Several are within public lands or conservation ownership.



Acidic Cliff - Gorge

Common ravens, peregrine falcons, and golden eagles may nest on cliffs in western, northern and coastal Maine.

## Distribution

Essentially statewide except for extreme southern Maine, more common northward.

Landscape Pattern: Small Patch. The minimum mapping unit is 5,000 square feet of rock exposure; smaller ledges and outcrops should be considered as inclusions in the surrounding forest rather than distinct natural communities.



Acidic Cliff - Gorge

## Characteristic Plants

These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

### Herb

Brownish sedge  
Common hairgrass  
Marginal woodfern  
Rand's goldenrod  
Rock polypody

### Bryoid

Rocktripe lichen

## Associated Rare Plants

Fragrant wood fern

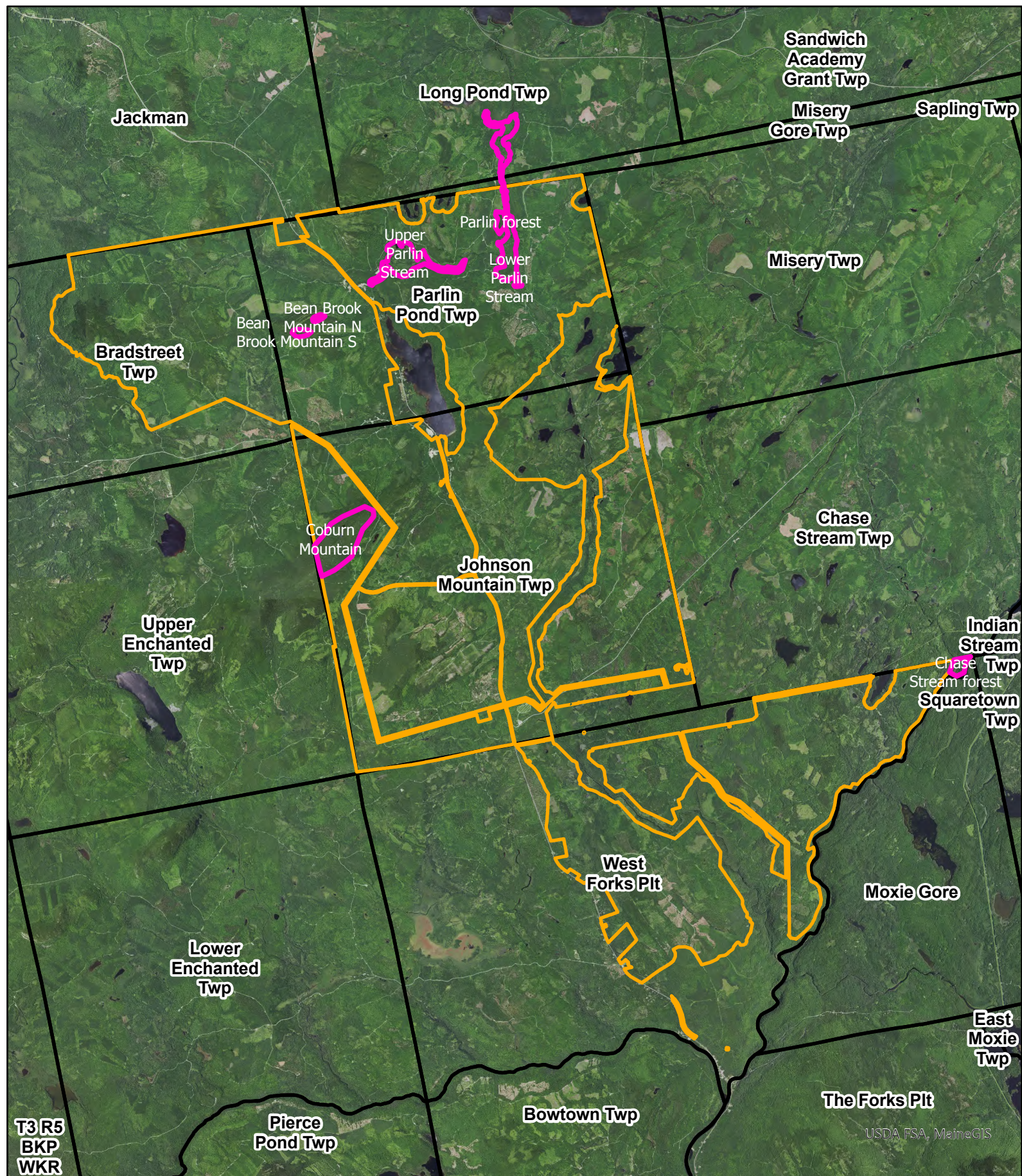
## Associated Rare Animals

Golden eagle  
Peregrine falcon

## Examples on Conservation Lands You Can Visit

- Deboullie Ponds Public Lands – Aroostook Co.
- Dunn Falls, Appalachian Trail – Oxford Co.
- Grindstone Falls – Penobscot Co.
- Mount Kineo Public Lands – Piscataquis Co.
- Tunk Mountain, Donnell Pond Public Lands – Hancock Co.





# **Coburn - Parlin Parcel** **Bradstreet Twp., Parlin Pond Twp., Johnson Mt Twp., West Forks Plt.**

- Coburn-Parlin
- SurveyInterest 2025

0 1 2 Miles





**Potential Survey Areas, Maine Natural Areas Program - 2025**  
**Coburn-Parlin Parcel, Weyerhaeuser**

Site Name	Rationale	Priority
Bean Brook Mountain N	talus field and steep slope	1
Bean Brook Mountain S	talus and steep slopes, mature forest	1
Chase Stream forest	small mature forest area	2
Coburn Mountain	high elevation (>2700 ft.) spruce fir, remote ponds	1
Lower Parlin Stream	Streamshore Ecos or Alder floodplain	2
Parlin forest	mixed forest mature appearance	2
Upper Parlin Stream	rare plant and NC updates needed; larger peatland ecosystem	1



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May 13, 2025

Mark Rabon  
Weyerhaeuser  
Via email: [Mark.Rabon@weyerhaeuser.com](mailto:Mark.Rabon@weyerhaeuser.com)

**RE: Information Request – MDIFW and MNAP Considerations for Forestry Activities on  
Proposed 50,000-acre Parlin Pond NECEC Mitigation Parcel**

Dear Mark:

The Maine Department of Inland Fisheries and Wildlife (MDIFW) appreciates the opportunity to highlight priority fish and wildlife resources on the proposed 50,000-acre Parlin Pond NECEC mitigation parcel. Specifically, MDIFW has reviewed information for locations of Endangered, Threatened, and Special Concern species; designated Essential and Significant Wildlife Habitats; and high value inland fisheries habitats associated with the proposed mitigation parcel. In April 2025 the Maine Natural Areas Program (MNAP) searched the Program's Natural Heritage Data System files for information on the presence of rare or unique botanical features documented from within the proposed NECEC mitigation parcel. MNAP's response, including GIS shapefile, tabular information, and fact sheets were sent to you on April 17, 2025 under MNAP letterhead; however, we are annotating them to MDIFW's comments here in order to provide one comprehensive response for endangered, threatened, and special concern species and habitats.

***Please note:*** Survey efforts are not complete for these lands. The below includes those species and habitats that are known or suspected to occur on the property, along with links to mapped data and attached Best Management Practices for voluntary protection, where available.

We understand that, under the terms of the conservation easement proposed for this parcel, the property will be maintained to achieve 50% of the forested area as mature forest, defined roughly as 50-foot or taller trees consisting of a mix of native species with a minimum basal area of 60 square feet per acre and that 100-foot no-cut forested buffers will be required along all perennial streams and their associated wetlands with mature forest conditions maintained from 100-330 feet. In many cases, the species-specific recommendations outlined below are subsumed by these overarching riparian buffer standards required by the conservation easement.

**Confirmed Endangered, Threatened, and Special Concern Species**

The following Endangered, Threatened, and Special Concern Species and exemplary natural communities have been documented on the parcel, with available mapped data for wildlife species here: <https://mdifw-data-maine.hub.arcgis.com/search?tags=endangered>. Additional potential habitat locations for select rare species is also available from MDIFW upon request. Available mapped data for botanical features were previously sent as a GIS shapefile to you on April 17, 2025 from the Maine Natural Areas Program. To the extent practical, MDIFW recommends that specific management actions be implemented for the following at-risk species that are known to be sensitive to certain intensive forestry practices. MNAP also



recommends specific management actions for documented botanical features, as noted below and as included in the April 17, 2025 correspondence.

- **Bicknell's Thrush-** Bicknell's thrush (State Threatened) occur along the Coburn Mountain range. This bird can be found in sub-alpine forests usually dominated by balsam fir (>30%) where a history of disturbance has resulted in a stunted dense understory, usually at elevations >2,500 feet. Because breeding individuals are known to abandon their nests as a result of disturbance, MDIFW recommends that forestry activities be avoided during the May 1 through July 31 breeding season to prevent injury or harassment of eggs, nestlings, fledglings, or adult birds, and that forest operations planned within the species habitat receive review by MDIFW biologists.
- **Rusty Blackbird-** The rusty blackbird (State Special Concern) occurs at several locations on the parcel. This species has experienced significant decline rangewide, with fewer than 50 current occurrences statewide. Rusty blackbirds typically nest in dense, young or stunted softwoods in or near a wetland or low-gradient streams. MDIFW recommends at least a 100-ft. no cut riparian buffer around any wetland complexes known to host rusty blackbird populations on the parcel.
- **Roaring Brook Mayfly-** The Roaring Brook mayfly (State Threatened) occurs on the parcel. Habitat for this species consists of clean, cold, high elevation headwater streams with coarse substrates generally at or above ~1,000 feet elevation (including unmapped streams) and bordered by relatively undisturbed mixed or hardwood forest. This species has been documented in the Mountain Brook watershed and could be present in other suitable streams draining off any of the prominent peaks in the parcel including Coburn Mountain, Parlin Mountain, Bean Brook Mountain, Johnson Mountain, and Williams Mountain, among others. MDIFW recommends that occupied streams be managed with a 250-ft. riparian management zone, within which the first 50 ft. remains uncut and a mature forest canopy condition is conserved between 50-250 ft. For Best Management Practices for Roaring Brook mayfly, see attached.
- **Hairy Arnica -** A population of hairy arnica (State Threatened) is located along the north side of Parlin Stream. This species grows on gravelly rivershores or wet cliffs, often where river scour helps reduce competition from other vegetation. To protect this species, we recommend no disturbance within 25 feet of the mapped population. Please also note that the delineated occurrence and biological data for the hairy arnica population is over 20 years old and considered "historical". In order to maintain the quality of these data, MNAP would like to resurvey this documented location and update the mapped information. See the attached factsheet for more information about this rare plant species.
- **Acidic Cliff Gorge –** An exemplary Acidic Cliff Gorge natural community is located along the north side of Parlin Stream. Some portions of this area are steep, bare rock or not thickly forested, and generally inoperable, and MNAP recommends no harvest or disturbance occur within the mapped feature. If harvesting must occur here, we strongly recommend having MNAP's ecologist come out to walk the site with the forester so the most sensitive areas can be avoided. Please also note that the delineated occurrence and biological data for the Acidic Cliff Gorge is over 20 years old and considered "historical". In order to maintain the quality of these data, MNAP would like to resurvey this documented location and update the mapped information. See the attached factsheet for more information about the natural community documented here.

### **Potential Endangered, Threatened, and Special Concern Species or Rare/Exemplary Natural Communities:**

MDIFW and MNAP databases do not indicate the confirmed presence of other State-listed Endangered, Threatened, or Special Concern Species or rare or exemplary natural communities; however, to our knowledge limited formal surveys have been conducted on this property. It is possible that other rare species or rare or exemplary natural communities may be resident or transient in the parcel based on geographic range, location of parcel, habitats present, and life history requirements; therefore, the following list should not be considered all-inclusive.

Based on desk-top analysis of the parcel, the following Endangered, Threatened, and Special Concern Species may be present. Additional survey work is necessary to confirm locations and refine management approaches.

- **Bats-** Of the eight species of bats that occur in Maine, four species are afforded protection under Maine's Endangered Species Act: little brown bat, northern long-eared bat, eastern small-footed bat, and tri-colored bat. The remaining bat species are designated as Special Concern: big brown bat, red bat, hoary bat, and silver-haired bat. While a comprehensive statewide inventory for bats has not been completed, based on historical evidence it is probable that several of these species occur on the parcel during spring/fall migration, the summer breeding season, and/or for overwintering. Note that the northern long-eared bat is also designated as Federally Endangered, while the tricolored bat has been proposed for Federal Endangered status. For federal implications regarding bats, we recommend contacting the U.S. Fish and Wildlife Service's Maine Field Office.

Bat Hibernacula - There are no known bat hibernacula on the parcel. Recent research has confirmed bats hibernating in talus slopes in Maine, and an existing data layer of cliff and talus features suggests that this habitat type could be present on the parcel. Larger (>2.5 ha) and more open (fewer than 4 trees >10cm DBH per 100 m<sup>2</sup>) talus slopes are more likely to be occupied by bats than smaller, more forested areas. Acoustic surveys in the winter are needed to confirm presence or absence of hibernating bats in any cliffs, talus, or other rocky features. If a subsurface cave or former mine occurs on the parcel, a visual inspection could confirm hibernating bat presence. If a hibernaculum is documented and confirmed to be occupied, tree removal within ¼ mile would be prohibited under MDIFW Chapter 8 Rule of the Maine Endangered Species Act without prior consultation with MDIFW.

Maternity Roosts - During the maternity season, it is probable that one or more of Maine's bat species is present on the parcel. Per MESA, tree removal is prohibited within 150 feet of any mapped maternity roost trees from June 1 through July 31. However, no maternity roosts have been documented on the parcel at this time.

For information regarding forest management practices that can benefit bats refer to: "Forest Management and Bats" and "Beneficial Forest Management Practices For WNS-affected Bats: Voluntary Guidance for Land Managers and Woodland Owners in the Eastern United States": <https://www.whitenosesyndrome.org/static-page/management-practices>

- **Great Blue Heron-** The great blue heron (State Special Concern) has experienced an 82% decline in the coastal breeding population from 1983 to 2018. Since 2009, MDIFW has been monitoring



the statewide population to determine if the decline seen along the coast is also occurring statewide. Great blue herons build large stick nests in live, dead, or dying trees, and may nest in uplands, wetlands, or on islands. Great blue herons nest in groups and generally occupy colonies from April 1st through August 15th. During this time the birds are often sensitive to disturbances caused by human intrusion, noise, and predators, and may abandon a colony as a result. MDIFW recommends that forest harvesting be avoided during this nesting period when operating within 1,320 ft of the nesting colony, and that any large overstory trees be left uncut within 660 ft of a known colony. A great blue heron colony has been documented in the vicinity of nearby Williams Mountain; however, not all colonies have been mapped in Maine, so it is possible that heron colonies occur on the parcel.

- **Northern Bog Lemming-** Northern bog lemmings (State Threatened) may occur on the parcel. This species usually occurs in alpine sedge meadows, krummholz, spruce-fir forest with dense herbaceous and mossy ground cover, acidic wet meadows, and mossy stream-sides in western mountain and northern areas of Maine. Lush mats of sphagnum moss appear to be an important habitat feature for this species. Northern bog lemmings could be present in such areas with suitable habitat conditions. MDIFW recommends that potential habitats be left undisturbed by forest operations and protected by at least 100-ft no cut forest buffer.
- **Blackpoll Warbler-** Blackpoll warblers (State Threatened), are associated with large patches of high-elevation (usually > 2500 ft) spruce-fir forest with a moderate to dense canopy of conifers of small or mixed diameter. MDIFW predicts breeding presence of this species on Coburn Mountain. Additionally, Bean Brook and Parlin Mountains may have suitable habitat. Pending confirmation of species presence, MDIFW recommends: a) conservation of mature and regenerating spruce-fir forest above 2,500 ft, b) avoidance of timber harvesting during the breeding season (May–August), and c) harvest treatments designed to regenerate dense native conifer cover, with retention of some live legacy canopy trees and snags.
- **Northern Spring Salamander-** Northern spring salamander (State Special Concern) is likely to occur on the parcel. This species occupies first and second order perennial or intermittent, higher elevation (generally above ~500 ft.) headwater streams (mapped or unmapped) in hardwood or mixed forests underlain by coarse substrate (rock, cobble, gravel). Northern spring salamanders are likely to be found in such tributaries draining off of Johnson Mountain, Cold Stream Mountain, and Bean Brook Mountain. There may be other suitable streams on the parcel and a closer examination of topographic maps and NHD hydrological layers would help to identify potential habitat. MDIFW recommends that occupied streams be managed with a 250-foot riparian management zone as described in the attached Best Management Practices document for this species.
- **Wood Turtle-** Wood turtle (State Special Concern) may occur on the parcel. Wood turtles prefer slow-moderate moving streams and rivers, often with deep pools and woody debris. Outside of the over-wintering season when they are dormant in streams, wood turtles are semi-terrestrial, occupying riparian meadows, shrub thickets, farmland, forests, forested wetlands, and floodplain vernal pools. Based on a desktop analysis, wood turtles are likely to occur in Bean Brook and Parlin Stream in Parlin Pond TWP. MDIFW recommends that occupied streams be managed with a 300-foot riparian management zone, using the Best Management Practices attached.

- **Exemplary Natural Communities and Rare Plant Populations-** As described above only one rare plant population and one exemplary community have been documented on the parcel, however this may indicate minimal survey effort rather than confirm the absence of rare botanical features. Based on desk-top analysis of the parcel, MNAP has identified a small number of sites where wetlands, steep slopes, or high elevation forest areas have the potential to support unique ecological features. Please reference the shapefile sent on April 17, 2025, for location information. MNAP requests permission to access these sites for field survey to help inform forest management planning and provide an improved understanding of ecologically important non-forested wetlands or other features on the property.

### Essential Habitat

There is no Essential Habitat mapped on the parcel.

### Significant Wildlife Habitat

Significant Wildlife Habitats are defined under the Natural Resources Protection Act. Mapped data is available for download here <https://mdifw-data-maine.hub.arcgis.com/search?tags=swh>. Occurrences within the parcel include:

- **Deer Wintering Areas/Fish and Wildlife Protection Subdistricts (DWA/P-FW):** The parcel contains DWAs that provide important overwintering cover for white-tailed deer. DWA travel corridors contain similar habitat qualities and provide the means for DWA ingress and egress. A P-FW (#080412), in Parlin Pond TWP is mapped in the northeast of the parcel. Additionally, a “Biological” Deer Wintering Area (BDWA), associated with the Moxie Stream DWA (P-FW #060065) is mapped in the southern portion of the parcel. BDWAs are areas identified as being supportive of wintering deer as documented by historic and recent survey efforts, often during times of temperature and snow depth moderation through the course of the yarding period. This BDWA complex is associated with P-FW #060065 and the adjacent Cold Stream Forest managed cooperatively for DWA habitat by the Department of Agriculture, Conservation and Forestry and MDIFW. MDIFW recommends that suitable areas be managed to promote softwood cover to enhance overwintering deer habitat, including within and expanding on the existing boundaries of Moxie Stream biological DWA #060065. Guidelines for Managing Deer Wintering areas in Northern, Western and Eastern Maine are available here. [https://www.maine.gov/ifw/docs/DWA\\_Guidelines\\_2.4.10.pdf](https://www.maine.gov/ifw/docs/DWA_Guidelines_2.4.10.pdf)
- **Inland Waterfowl and Wading Bird Habitat (IWWH):** This parcel contains IWWHs, a Significant Wildlife Habitat under Maine’s Natural Resources Protection Act. An Inland Waterfowl and Wading Bird Habitat (IWWH) area includes the wetland area plus a 250-foot-wide zone of upland habitat around the wetland. MDIFW recommends that disturbance (permanent clearings, roads, etc.) be minimized and any harvest activity closely adhere to BMPs for water quality and wetland protection (e.g. harvest on frozen or dry soils only) and be conducted using uneven-aged forest management practices. Volume removal should not exceed 30% in a 15-year period, and a well-distributed overstory should be maintained. No trees should be cut within 75 feet of the wetland edge. Within 250 feet of the wetland edge, MDIFW recommends that special consideration be given to retaining snags and live trees with cavities that will benefit cavity nesting waterfowl and many other wildlife species. For more information about IWWHs, contact an MDIFW Regional Biologist.



- **Significant Vernal Pools (SVP):** At this time MDIFW has mapped one Significant Vernal Pool (SVP) on, or immediately adjacent to, the parcel. However, a comprehensive statewide inventory for SVPs has not been completed so it is probable that other SVPs are present. Surveys should be conducted by qualified biologists to determine whether there are additional SVPs present on the parcel. MDIFW recommends that all high value vernal pools be managed using the attached Forestry Habitat Management Guidelines for Vernal Pool Wildlife.

## Aquatic Resources

- **State Heritage Fish Waters-** There are waterbodies on the parcel designated as State Heritage Fish Waters, which are lakes and ponds that host high quality populations of native wild brook trout. Brook trout require clean, well-oxygenated water and are very sensitive to changes in riparian habitat and water quality. MDIFW recommends 500-foot mature forest riparian buffers incorporated around any Heritage Fish Waters, including:

- Markham Pond- 0158
- Mountain Pond #2- 0160
- Little Wilson Hill Pond- 0162
- Toney Pond- 4078
- Wilson Hill Pond- 4064

Heritage Fish Waters data is available here: <https://mdifw-data-maine.hub.arcgis.com/search?q=heritage%20fish> .

- **Riparian Buffers:** Additionally, the parcel contains numerous other lakes, ponds, and streams that provide potentially suitable habitat for cold water fisheries, including wild brook trout. Conserving intact riparian forest buffers on these habitats is critical to the protection of water temperatures, water quality, natural inputs of coarse woody debris, and various forms of aquatic life necessary to support fish and other aquatic species. Riparian buffers also provide critical habitat and important travel corridors for a variety of wildlife species. Consistent with the terms presented in the Conservation Easement MDIFW recommends that 100-foot no cut, forested buffers be maintained along all perennial streams and associated bordering wetlands, along with conservation of mature forest conditions between 100-feet and 330-feet as measured from the upland edge of all perennial streams and any contiguous wetlands.
- **Stream Crossings:** MDIFW further recommends that stream crossings be avoided when possible, but if a stream crossing is necessary, or an existing crossing needs to be modified, it should be designed to provide for full aquatic passage. Undersized crossings may inhibit important ecological functions and become a maintenance problem that causes reoccurring damage to the resource. All new, modified, and replacement stream crossings should be sized to span at least 1.2 times the bank-full width of the stream. In addition, new stream crossings should be open bottomed (i.e., natural bottom spans) where possible. Construction Best Management Practices should be closely followed to avoid erosion, sedimentation, alteration of stream flow, and other impacts as eroding soils can travel significant distances as well as transport other pollutants resulting in impacts to fish and other aquatic life. Additionally, any necessary instream work should occur between July 15 and October 1.

May 13, 2025

In closing, MDIFW and MNAP recognize that it requires specialized expertise to identify many of the habitats occupied by the priority species highlighted above. As such, we welcome the opportunity to work with Weyerhaeuser to conduct further (remote and field-based) surveys for a more comprehensive understanding of the distribution of sensitive plant and wildlife populations on the mitigation parcel. Please contact our office if you have any questions regarding this information, or if we can be of any further assistance.

Best regards,

A handwritten signature in blue ink that reads "Nathan Webb". The signature is written in a cursive, flowing style.

Nathan Webb  
Wildlife Division Director