



Committee on Agriculture, Conservation, and Forestry
c/o Legislative Information Office
100 State House Station
Augusta, ME 04333

January 24, 2022

RE: LD 736, An Act To Enhance the Ecological Reserve System

Dear Senator Dill, Representative O’Neil, and Members of the Committee:

Thank you for the opportunity to submit testimony in support of LD 736, An Act To Enhance the Ecological Reserve System, on behalf of Maine Audubon and our 30,000 members and supporters. Maine Audubon supports this bill, and the amendment that has been shared with the Committee in advance of the hearing by bill sponsor Representative Nicole Grohoski, because it is a crucial step toward conserving Maine’s biodiversity and ecosystem health, as well as the state’s climate goals. That said, our testimony recommends a minor amendment to the bill sponsor’s amendment, described below.

Maine’s Ecological Reserves System was created by the Maine Legislature in 2000 to maintain effective representations of all natural community types in Maine. Ecological reserves conserve biodiversity, enhance our understanding of biological and ecological change on the landscape, and protect sufficient habitat for plant and animal species whose habitat needs are not likely to be met on lands managed for other purposes. To date, the Maine Bureau of Parks and Lands (Bureau) manages 19 ecological reserves encompassing about 96,000 acres, including iconic areas such as the Bigelow Preserve, Nahmakanta, the Mahoosucs, and Mt. Abraham. The Bureau and the Maine Natural Areas Program (MNAP, a program within the Department of Agriculture, Conservation, and Forestry) have done exemplary work stewarding these areas to meet the purposes of the 2000 law, however, the system does not yet contain representations of all natural community types due to current statutory limitations. This bill would allow the Bureau to acquire additional ecological reserve lands and achieve the system’s original purpose at a critical time.

Maine’s Biodiversity is at Risk

The Maine Climate Council’s Scientific and Technical Subcommittee’s (STS) *Scientific Assessment of Climate Change and Its Effects in Maine* (2000), describes climate change as already having a dramatic effect on biodiversity of Maine. Approximately one-third of the 442 plants and animals, 21 habitats, and Species of Greatest Conservation Need found in the state are affected by climate-change related threats, including habitat shifts and alterations, droughts, temperature extremes, and storms and flooding, and therefore are highly vulnerable to climate change. Still one-third more are considered moderately vulnerable. This includes iconic Maine species such as moose, Canada lynx, loons, eastern brook trout, and Atlantic puffins. As these species’ presence in

Maine wanes, so does Maine’s biodiversity. The best way to maintain biodiversity is to ensure a network of biologically and geographically diverse lands that are well connected so that plants and animals can move across the landscape to find the places they need for breeding, feeding, resting, and raising their young. Maine’s Ecological Reserve System plays an important role in meeting that purpose.

Ecological Reserves Can Help Maine Meets Its Climate Goals

Maine’s 2020 Climate Action Plan, *Maine Won’t Wait*, includes increasing conservation lands in the state, with focused “conservation on high biodiversity areas to support land and water connectivity and ecosystem health” among its primary goals. The Maine Climate Council recognizes that conservation lands not only protect biodiversity, but are key to the state achieving its carbon neutrality commitment by 2045. Conserving natural lands maintains their potential to draw back carbon from the atmosphere. Emerging results from a new study on ecological reserves indicates that reserves both store and sequester significant amounts of carbon (Puhlick and Weiskittel 2021). On average, ecological reserves store 30% more above ground carbon than Maine’s managed forests on a per-acre basis. Ecological reserves are a top natural climate solution.

Maine’s Ecological Reserve System is Incomplete

The Maine Natural Areas Program is finalizing an assessment of accomplishments and gaps in Maine land conservation, including ecological reserves. The draft report finds that many forest types are under-represented in ecological reserves among Maine’s ecoregions. While results vary by ecoregion, no ecoregion has adequate representation of all natural community types within ecological reserves or similarly managed lands and does not meet the threshold of the Maine Forest Biodiversity project, which led to the creation of the Ecological Reserve System.

The draft report finds that while high elevation and emergent wetlands are well represented on Ecological Reserves and similarly managed lands, lower elevation forest types are under-represented in several ecoregions. This includes northern hardwood forests in low elevation settings; northern white cedar swamps in northern Maine; lower elevation forest types including oak-pine forest, oak-northern hardwoods forest, and hemlock forest in the Central, Western, and White Mountains; spruce flats in the eastern lowlands-central foothills ecoregion; and all matrix forest types in the Seacoast Plain-Ossipee ecoregion. The report’s key takeaways, as they relate to ecological reserves, is that new conservation of ecological reserves targeting large blocks of forest in southern Maine, and northern hardwood forest and cedar swamps in northern Maine could help fill gaps in Maine’s network of ecological reserves.

Proposed Bill Language

The bill language presented to the Committee by the sponsor serves to increase the ability of the Bureau to protect biodiversity, meet the state’s climate goals, and complete Maine’s Ecological Reserve System as originally intended, as well as otherwise improve the system.

Section 5 of the bill would update the existing “cap” on the Ecological Reserve System. The intention of this section is to increase the Bureau’s flexibility in designating lands within the Bureau’s jurisdiction as ecological reserves, while preserving an adequate amount of operable

timberlands for timber management within the Bureau's land holdings to financially support the Bureau.

The Bureau of Parks and Lands is funded exclusively by revenue from the sale of timber from their lands. Ecological reserves, a subset of lands managed by the Bureau, do not allow for timber harvesting. It is in the interest of the Bureau to maintain enough operable timberlands for timber management to support their operations. Currently, the Bureau maintains 428,994 acres of operable timberlands across their land holdings. Current statute states that “[n]o more than 6% of the operable timberland acres on [public lands] may be designated as ecological reserves.” The bill sponsor's amendment would update the 6% figure to 8%, as well as eliminate other limits on the size of the Ecological Reserve System contained in Section 5.

Maine Audubon supports eliminating other limits on the system, namely, that “total land acreage designated as ecological reserves may not exceed 15% of the total land acreage under the bureau or 100,000 acres, whichever is less.” Both figures place arbitrary limits on the system that are not related to the purpose of the system, nor are related to maintaining funds to support the Bureau.

Maine Audubon also supports updating the “6% of operable timberlands . . . [that] may be designated as ecological reserves”, however, we recommend that that figure be updated to 10%, as opposed to the sponsor's recommended 8%. Figures contained in a 2022 memo from the Bureau titled “BPL Ecological Reserves, Current Status and Financial Considerations” suggest that 10% less of operable timberland acres would not unduly impact their budget. This figure (10%) would allow the Bureau to designate 20,144 additional operable timberland acres as ecological reserves (currently, 22,755 acres of ecological reserves are located on operable timberlands that count toward existing statutory acreage limitations). Eight percent, the figure in the sponsor's amendment, would allow for the designation of approximately 14,000 additional acres. This change (from 8% to 10%), is a small, but meaningful difference with regard to biodiversity protection and ecological system health. The addition of a few thousand acres could make a measurable difference in increasing a couple reserves to a size that more meaningfully protects particular natural community types or to link existing parcels to support habitat connectivity.

Ten percent is consistent with the goals of the Harvard Forest's Wildlands and Woodlands program, which recommends that 10% of the New England landscape be managed in a manner consistent with ecological reserve management by 2060 in order to protect biodiversity. Of course, this bill *would not* allow for 10% of Maine lands to be designated as ecological reserves. However, it *would* allow the Bureau to lead by example and potentially designate up to 10% of operable timberlands acres on public land (of which there are currently 428,994 acres) as ecological reserves.

It must be noted that the sponsor's proposed bill language (or any other language) would not require the Bureau to decrease operable timberland acreage on public lands for timber management. Instead, it would create a ceiling that is sufficient to support the Bureau's operations that could grow as the Bureau's land holdings grow. It is the prerogative of the Bureau to designate ecological reserves. Upon each possible designation of an ecological reserve, the Bureau may assess the possible impact of the reserve on their budget and act accordingly. They need not, and very well may not, reach that limit. However, this bill language would give that flexibility should

they determine it is consistent with the purpose of ecological reserves and in the interest of the Bureau's budget, among other considerations.

The bill sponsor's amendment also includes modifications to the **introductory paragraph** of 12 M.R.S. §1805 (1999). Current law provides that when the Bureau proposes to designate an ecological reserve, the director of the Bureau must notify the joint standing committee of the Legislature having jurisdiction over matters pertaining to public lands. The amendment provides that when the Bureau proposes to remove a parcel that is greater than 10 acres from the Ecological Reserve System, the director must submit a report to the same committee. That committee may report out a bill pertaining to the subject matter of the report.

The purpose of these changes is to give due consideration prior to the removal of a substantive portion of an ecological reserve parcel. As described previously, the values of ecological reserves are numerous (biodiversity and ecological system protection, scientific research, carbon sequestration, etc.) and provide great benefit public. Another important value is the ability to monitor and track natural changes over a long period of time; any effort to remove an existing reserve would eliminate this scientific benefit. The proposed amended language would allow full consideration of a proposed removal by the Legislature, so that it may weigh the costs and benefits of removing a substantial portion of a reserve parcel. The 10-acre threshold is meant to provide the Bureau flexibility for more minor management changes. Maine Audubon support this addition.

Section 1, as proposed by the bill sponsor, would add "gathering of materials for cultural and traditional use by a member of a federally recognized Wabanaki Indian nation, tribe or band in this State" to allowed uses within an ecological reserve. This use must be compatible with the purpose of an ecological reserve and may not cause significant impact on a reserve's natural community composition or ecosystem process. Moreover, this allowed use acknowledges and respects the rights of indigenous Mainers to continue their traditional practices on the natural landscape. Maine Audubon supports this addition.

Conclusion

Biodiversity conservation is fundamental to Maine Audubon's mission. That is why this bill is among our top legislative priorities this session, as well as why biodiversity conservation is our top focus in implementing Maine's Climate Action Plan. The best way to maintain biodiversity is to ensure a network of biologically and geographically diverse lands that are well connected so that plants and animals can move across the landscape to find the places they need for breeding, feeding, resting, and raising their young. Maine's Ecological Reserve System plays an important role in meeting that goal. The Bureau must not be unduly restrained by statute to complete the system as originally intended, however, it is crucial that the designation of ecological reserves not restrict funding for the Bureau. We strongly believe that the amendment presented by the bill sponsor and as modified in this testimony strikes this balance.

Sincerely,

A handwritten signature in black ink that reads "Eliza Donoghue". The signature is written in a cursive style with a large initial 'E'.

Eliza Donoghue, Esq.
Director of Advocacy