Senator Hickman, Representative Fay, and esteemed members of the Government Oversight Committee,

I am requesting consideration of the concerns lined out in the following pages by my constituent, Nicholas Barth. The main concern is the need for a holistic approach to our state's environment and natural resources. Specifically, how our programs and departments work together, where they may overlap, and where there may be gaps in our oversight and stewardship of Maine's natural resources.

Please let me know if you need further information.

Regards, Cameron Reny State Senator- District 13

LEGISLATIVE OPEGA REQUEST TO IMPROVE SOME NATURAL RESOURCES PROGRAMS AND ACTIVITIES

Department of Marine Resources DMR

"The Department of Marine Resources is established to conserve and develop marine and estuarine resources; to conduct and sponsor scientific research; to promote and develop the Maine coastal fishing industries; to advise and cooperate with local, state, and federal officials concerning activities in coastal waters; and to implement, administer, and enforce the laws and regulations necessary for these purposes..." — Maine Title 12, Chapter 603 §6021.

DMR exercises dual responsibilities in managing marine and estuarine resources. They have been charged with both developing and conserving these resources.

In the last twenty years, the DMR has "overseen" a nearly complete collapse of Maine's Urchin population due to over harvesting, a loss of Maine's shrimp harvest, significant concern about Maine's elver harvest and whether it is sustainable (mirrored by Canadian concerns that the species is too fragile and too important to withstand any harvesting), ongoing and contradictory confusion regarding Maine's herring resources, significant concern over the smelt fishery state-wide, limited success with Maine's Atlantic salmon recovery that has been ongoing for decades, a complete lack of balanced estuary plans resulting in the issuance of aquaculture permits which, if continued unchecked, will and already has resulted in pushback by a host of other users of these systems. and the very significant emerging issues resulting in open pen farming of salmon and other species. The latter has been raised multiple times with this agency and with little to no substantive studies, response or policy changes. Meanwhile, Canada is taking this situation seriously and is even considering a ban on open pen farming.

The above are some of the marine natural resource management issues that result when there is no legislative agency mandate to address the conservation management of species/systems.

Recently DMR permitting of aquaculture leases in the Damariscotta and Medomak River estuaries has been challenged by the Towns of Damariscotta and Waldoboro respectively. Both these towns will be seeking a moratorium on the granting of more aquaculture leases.

DMR has been reluctant to develop updated, united and holistic programs and activities to conserve the Damariscotta and Medomak River estuaries. Both these estuaries currently have many aquaculture leases and ever increasing boating-related recreational uses.

At a minimum, much better balanced and updated management strategies for the above two estuaries, and other estuaries, are badly needed. This should include the conservation practice of establishing forever wild areas of one to ten acres or more, in all estuarine intertidal zones, with adequate undeveloped shoreland buffers, as complete estuarine ecosystem refuge.

There is also a need for clarifying current understanding of land-based aquaculture by the DEP and DMR as a possible alternative to some or all estuarine aquaculture, if and where the environmental impacts would be more manageable.

OPEGA is asked to consider all of the above, especially in light of the conflicting responsibilities of DMR and their reluctance to seriously incorporate conservation into their management responsibilities.

Department of Environmental Protection DEP

"Established July 1, 1972, this agency is charged with the protection and improvement of the quality of our natural environment and the resources that constitute it. It also is responsible for enhancement of the public's opportunity to enjoy the environment by directing growth and development which preserves for all time and ecologically sound environment. The Department will advocate programs and regulatory decisions that contribute to the achievement of this mission." DEP is responsible for granting permits under the Natural Resources Protection Act. The administration of this legislation, see below, involves coordination with other state and federal natural resources conservation agencies.

§480-A. Findings; purpose; short title

The Legislature finds and declares that the State's rivers and streams, great ponds, fragile mountain areas, freshwater wetlands, significant wildlife habitat, coastal wetlands and coastal sand dunes systems are resources of state significance. These resources have great scenic beauty and unique characteristics, unsurpassed recreational, cultural, historical and environmental value of present and future benefit to the citizens of the State and that uses are causing the rapid degradation and, in some cases, the destruction of these critical resources, producing significant adverse economic and environmental impacts and threatening the health, safety and general welfare of the citizens of the State. [PL 1987, c. 809, §2 (NEW).]

The Legislature further finds and declares that there is a need to facilitate research, develop management programs and establish sound environmental standards that will prevent the degradation of and encourage the enhancement of these resources. It is the intention of the Legislature that existing programs related to Maine's rivers and streams, great ponds, fragile mountain areas, freshwater wetlands, significant wildlife habitat, coastal wetlands and sand dunes systems continue and that the Department of Environmental Protection provide coordination and vigorous leadership to develop programs to achieve the purposes of this article. The well-being of the citizens of this State requires the development and maintenance of an efficient system of administering this article to minimize delays and difficulties in evaluating alterations of these resource areas. [PL 1987, c. 809, §2 (NEW).]

The Legislature further finds and declares that the cumulative effect of frequent minor alterations and occasional major alterations of these resources poses a substantial threat to the environment and economy of the State and its quality of life. [PL 1987, c. 809, §2 (NEW).]

This article is known and may be cited as "the Natural Resources Protection Act." [PL 2007, c. 290, §1 (NEW).]

DEP has been reluctant to develop updated, united and holistic processes in granting permits under the Natural Resources Protection Act. This includes any serious consideration of the cumulative effect of alterations of protected natural resources. It also includes the failure of the DEP to make use of Department of Agriculture, Conservation and Forestry, DACF, Natural Areas Program Focus Area data in natural resources permitting decisions. Further, a cursory examination of the administrative process followed by the DEP found information provided to the DEP by the Departments of DACF, Inland Fisheries and Wildlife, IF&W, and DMR is largely or entirely restricted through lines of administrative control that inhibits or prevents cross-organizational communication and big picture protective solutions.

OPEGA is asked to study all of the above and recommend improvements to use all available natural resources conservation information, and suggest ways to improve processes for coordination of state decision making in granting permits under the Natural Resources Protection Act.

Department of Agriculture. Conservation and Forestry DACF

The DACF was established on July 1, 2012. This department "serves as the steward of Maine's agricultural, forestry, water and land resources for the State."

The Division of Forestry in DCAF is responsible for guiding forest policy and management in Maine. However, the Division of Forestry has been slow to recognize forest management approaches embraced by the phrase "ecological forestry". Proponents of this "new forestry" seek to improve biodiversity and ecosystem functions in a managed forest. The goal of this

management approach is to bring managed forests closer in arrangement, function, and composition to "healthy" natural forests in all successional stages of development.

The theory for ecological forestry developed primarily from studies about retention and disturbance-based forest management practices. Retention in ecological forestry focuses on what is "retained" in a harvested stand of trees. This contrasts with traditional forestry practices where the focus is on what is "removed" in a harvested stand of trees.

Retention is not new and has been used in managing for multiaged stands of trees. Natural disturbance forest management practices have been included in ecological forestry "to provide habitat for a diversity of species and support critical forest ecosystem functions".

The Division of Forestry needs to recognize that a clear and consistent approach and vision for ecological forestry "should be rooted in an ethic that differs fundamentally from the anthropocentric utilitarian ethic underlying traditional forest management." Otherwise, we will continue to perpetuate the problems of the past endemic is some forest management practices.

The Division of Forestry also needs to undertake a "big picture" examination of Maine's forests considering climate change and biodiversity losses from industrial and timber-based forestry practices. This should include the establishment of forever wild forested areas, as controls for ecological forestry. The State should be able to work cooperatively with land trusts in this regard. And there are multiple and existing state-owned forested conservation lands that could offer excellent candidates for such a change in the way and why we manage State Forest resources.

OPEGA is asked to study all of the above and recommend comprehensive legislation that would design and implement processes for a State ecological forestry program including forever wild forested areas

NOTE: The above prepared by Nicholas Barth, retired from a broad career in natural resources conservation, in cooperation with Mark P. Desmeules, ecologist and former Maine State employee.

May 8, 2023