TESTIMONY OF THE
DEPARTMENT OF INLAND FISHERIES AND WILDLIFE

BEFORE THE JOINT STANDING COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES

SPEAKING NEITHER FOR NOR AGAINST L.D. 1882

"Resolve, Directing the Department of Environmental Protection to Conduct Rulemaking Regarding Significant Vernal Pools"

Presented by Representative CLUCHEY of Bowdoinham

Date of Hearing: Monday, May 5th, 2025

Good afternoon, Senator Tepler, Representative Doudera and members of the Committee. My name is Phillip deMaynadier and I am the Wildlife Diversity Section Supervisor at the Department of Inland Fisheries and Wildlife, speaking neither for nor against LD 1882.

L.D. 1882 would require the Department of Environmental Protection to amend its rules under the Natural Resources Protection Act regarding enhanced protection for significant vernal pools. Briefly, this rulemaking would require: 1) updating definitions to include "significant vernal pool buffer" as the portion of the critical terrestrial habitat within 100 feet of the vernal pool depression, 2) updating management standards for significant vernal pool habitat to include no disturbance within the significant vernal pool buffer, 3) updating management standards so that critical terrestrial habitat bisected by property boundaries is afforded the same protections as properties where vernal pool depressions are present; and 4) adjusting dates related to pool drying under significant vernal pool habitat identification criteria.

Vernal pools are small, temporary forested wetlands that often provide valuable habitat for amphibians, reptiles, invertebrates, and other wildlife, including some rare and endangered species. In recognition of these values, major substantive rulemaking enacted by the ENR committee in 2006 operationalized the protection of significant vernal pools as Significant Wildlife Habitat under Chapter 335 of the Natural Resources Protection Act. Significant vernal pools as defined in NRPA comprise a subset of all vernal pools – specifically those of natural origin that are confirmed to host high populations of Maine's pool-breeding indicator species and/or state-listed species whose life history is tied to vernal pools – e.g., Blanding's turtle (endangered), spotted turtle (threatened). To date, significant vernal pools comprise approx. 20% of vernal pools assessed statewide (>5,100).

While vernal pools are small, they can serve an outsized role on Maine's landscape by providing specialized habitat and fuel for forest food chains. One

study reported that the biomass (living weight) of frogs and salamanders dispersing from a pool in Massachusetts exceeded that of all birds and mammals in the surrounding forest. As such, productive vernal pools can serve as animal protein nurseries, propelling high numbers of amphibians into the forest where they are preyed upon by a diversity of more conspicuous wildlife such as snakes, turtles, owls, turkeys, wood thrushes, shrews, and many fur-bearing mammals. Notably, vernal pool amphibians spend the majority of their life cycle in the forest surrounding breeding pools, up to many hundreds of feet for salamanders and thousands of feet for wood frogs. There is a substantial body of scientific literature documenting the needs of pool-breeding wildlife, and the ecosystem values of vernal pools, much of it produced by researchers in Maine.

In the experience of MDIFW, the greatest threat to vernal pools is poorly planned development, specifically the conversion of natural habitat within or in close proximity to the pool depression. To this end, the 250-ft habitat protection zone around significant vernal pools is important to their successful conservation. While partial, careful development within the 250-ft zone can be compatible with pool conservation (and is currently eligible for Permit by Rule), permanent disturbance of the immediate envelope surrounding the pool (i.e., 0-100 ft) is often detrimental to habitat and water quality, potentially rendering a formerly productive pool of little future wildlife value.

MDIFW is generally supportive of the LD's provision to remove the current exemption from significant vernal pool protection to an abutting parcel bisected by the 250-ft critical terrestrial habitat zone. This zone, informed by scientific study of amphibian movements, is critical for supporting pool-breeding amphibian life outside of the breeding season, and of course migrating wildlife are blind to property lines. Notably, the original Chapter 335 Significant Vernal Pool rule did not include this exemption. To our knowledge, there is no other protected natural resources in Maine where setbacks and other regulatory standards end at a property boundary.

Finally, MDIFW sees value in the LD's provision to adjust vernal pool dry-down dates to two weeks earlier (July 31 to July 15 in northern Maine, and July 15 to July 1 in southern Maine). Dry-down dates are used as a tool by agencies and environmental consultants when field surveys are conducted too late to confirm vernal pool breeding populations. The rationale is that vernal pools with very short hydroperiods generally do not support large populations of breeding amphibians. However, in MDIFW's opinion some potentially high value pools have been disqualified as Nonsignificant (ineligible for NRPA protection) because of unusual drought conditions, an increasing phenomenon with climate warming. By moving dry-down dates slightly earlier, fewer pools will be disqualified by virtue of this criterion alone.

Thank you, and I would be glad to answer any questions at this time or in the work session.