TESTIMONY OF Patrick Keliher Commissioner

The Department of Marine Resources (DMR) is testifying in Opposition to

L.D. 1452 An Act To Allow Municipalities with Shellfish Conservation Ordinances To Request Permission To Prohibit Marine Worm Harvesting

Sponsored by Representative Gerzofsky Date of Hearing: January 22, 2014

Senator Johnson, Representative Kumiega, and members of the Joint Standing Committee on Marine Resources, my name is Patrick Keliher, Commissioner of the Department of Marine Resources, and I am testifying on behalf of the Department in opposition to LD 1452.

As printed, the bill would allow any municipality with a shellfish conservation ordinance to petition the Department to close any area that has been closed for conservation to the taking of clams, to the taking of marine worms as well. Under existing regulations, a municipality may request a conservation closure for to protect clams for a range of reasons, including but not limited to: small natural clams, winter digging, flat rotation, or because it is a seeded flat.

The conflict between wormers and clammers that this bill seeks to address has been going on for decades. In 2001, a paper by Beal and Vencile sought to determine the actual effects of each fishery on the clam resource, and was published in the Journal of Shellfish Research. From the abstract:

Any effect due to clamming or worming on cultured clams or wild individuals of similar size was masked by clam losses exceeding 95% in the unprotected control plots. Intense predation by horseshoe crabs, *Limulus polyphemus* L. and the nemertean worm, *Cerebratulus lacteus* Leidy, are blamed for the high mortalities among clams. Only in protected plots was any effect detected and this depended on clam origin. Compared to the fate of cultured clams in protected controls, worming had no effect, but clamming contributed an additional 15% loss. Both types of commercial harvesting reduced wild clam numbers significantly compared to controls, but effects due to worming were more benign than effects due to clamming probably because wormers excavate less volume of sediments than clammers do as commercial size *G. dibranchiata* are shallow burrowers compared to commercial size *M. arenaria*. Unless clam managers actively take steps to deter predators by using netting or other means, blood wormers should continue to harvest commercially from areas closed to shellfishing without

reprisal or fear that they are causing damage to populations of juvenile soft-shell clams.

In short, their main finding was that without affirmative action to protect the clams (maintenance of predator netting) natural predation has a greater effect on the clam resource than does worm harvesting. The Department's Green Crab Summit held in December presented results from the green crab survey, which found that green crabs are present in most of the towns in numbers that are detrimental to bivalve shellfish resources. Nothing is achieved by protecting clam flats from wormers if they remain vulnerable to predation by green crabs or other predators.

For these reasons, the Department would support a much more narrow construction of the bill which would protect certain flats from harvesting by either sector, as long as they have been actively protected with netting. The netting is important because so far, it is the only tool that has been proven effective in protecting clam seed. Rather than require each municipality to come forward to petition the Department for such a closure, it would be simpler and more direct to simply make it a violation of marine resources law to raise, damage, or otherwise disturb netting that has been placed by a municipality in order to protect a conservation closure from predation. This would eliminate the need for the Department to evaluate these requests on a site by site basis.

Thank you for your consideration, and I would be glad to try to answer any questions you may have.