Robert Capers Fayette LD 646

Greetings. My name is Bob Capers. I'm a resident of Fayette and coordinate invasive plant surveys for the Basin, David and Tilton Pond Association. By training I'm a botanist and I have extensive experience working with invasive aquatic plants.

I am writing to encourage the committee to support LD 646. The legislation would create a commission to do a literature review and hear from stakeholders about storm water pollution. It doesn't call for any expensive action itself and asks only that we educate ourselves about these pollutants, which do include poisons such as pesticides but also include bacteria and nutrients like nitrogen and phosphorus.

As a biologist who has worked a lot with invasive aquatic plants, I have to tell you that, to a large extent, the plants in our lakes are not the problem, and the problem is not whether these plants are native or not. The problem we have is with nutrients. Without the nutrients, the plants cannot become a nuisance; they cannot threaten our enjoyment of our lakes and they cannot threaten to crowd out other plants and animals in our lakes. It is only when the nutrients reach high levels that we should never seen under natural conditions that we get severe blooms of cyanobacteria, and even native plants can become so abundant that they cause problems for us and for the natural environment.

So in this context, nutrients are every bit as bad as poisons. They are dangerous, and we need to do whatever we can to keep them out of our ponds and lakes. Climate change is making this more difficult and it's going to get worse. We're getting about 6 inches more precipitation per year in Maine now than we did in the late 1800s. What's most scary is not the increase, which is continuing, year after year, but the variability. As I know you all have seen personally, we're getting more severe rainfall events each year – days when we get 2 inches of rain or even 4 inches. It's not even all that rare any more. We get 10-15 more heavy rainfall events every year than we did in the 1800s. Four-inch events are 3 times more common than they used to be.

Our storm water systems weren't designed to handle that much rain that fast so we get washouts on the roadsides and in our driveways and even lawns in some cases. And those washouts dump a lot of soil into our lakes, where it doesn't belong, and the soil carries nutrients we don't want. And this is just one of the problems we know we have. Imagine all we don't know.

Creating of a commission to figure out what we need to know and how to manage the issue would be a good investment in protecting our lake environments, not to mention the \$14 billion economic value of Maine lakes and the enormous importance of our marine fisheries. I urge the committee to give its blessing to this bill.

Incidentally, I might suggest changing the wording in Section 5 of the legislation where it refers to our "valuable waters, habitats and species along the coast." The legislation should concern all Maine waters, coastal and inland, and I suspect that was the intent of the drafters, although that might be misunderstood now.

Thank you for considering this important issue.