Testimony Regarding Senate Bill 444
House Natural Resources Committee
Representative Andrea LaFontaine, Chair

Submitted in writing by
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Tip of the Mitt Watershed Council
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Tip of the Mitt Watershed Council, on behalf of its 2,500 plus members, wishes to extend our concern for Senate Bill (SB) 444 (S-5). SB 444 (S-5) would make it easier for individuals to pollute our precious waterways and destroy aquatic habitat and species. Specifically, SB 444 (S-5) would extend the applicable time period for a permit for chemical management of invasive species from one year to three, allows a permittee to expand the area of chemical management and amount of chemicals used without a review process and revision to the original permit, and authorizes the dragging of rakes behind boats on bottomlands with no oversight.

For over 30 years the Watershed Council has worked with riparian landowners and lake associations to address many water resources issues, including the control of aquatic nuisance plant growth. We certainly understand that aquatic vegetation can become an inconvenience and can be detrimental to use and enjoyment of our waterways. However, it is important to consider the larger picture, not only that of short and long-term recreational and ecological impacts, but the interests of other property owners and commercial entities, as well as the 40 million people who rely in the Great Lakes for their drinking water, jobs, or recreational activities. A balanced aquatic plant community is a vital and necessary component of a healthy aquatic ecosystem. Our native aquatic plants are the principal habitat feature of lakes and they help maintain clean water and provide the oxygen that fish and other organisms need to survive. Chemical treatment of aquatic nuisance species can be beneficial, but a system needs to be in place to assess treatment options and efficacy based on density and distribution of the vegetation as well as the potential harm that chemicals can do in an aquatic ecosystem.

Based upon our extensive work on aquatic nuisance vegetation within Northern Michigan, we have serious concerns with certain provisions of this bill. Specifically, we are concerned with the following provisions:

Moving the decision date on permits and certificates of coverage to April 15
Moving the date upon which the Department must make a decision will prevent the Michigan Department of Environmental Quality (MDEQ) from conducting diligent review. This section places an unreasonable burden upon the MDEQ to review and make a decision on thousands of permit applications in an extremely short period of time. This will hinder the ability for staff to provide a thorough and adequate review of the permit application to ensure that adverse impacts will not occur in Michigan's lakes, streams, and Great Lakes. If anything, the state needs to increase the time for chemical permits to realistically reflect the time needed for technical and public health review of these complex projects.

Additionally, as an organization that assists lake associations and landowners develop treatment programs that are both effective and have minimal impact on water resources, we know that very few, if any, individuals will begin treatment prior to the current deadline of May 1. Most aquatic plant and weed treatments will be applied when the water is warm enough, generally reaching a temperature of approximately 65°F, and when there are undesired weeds present that need treatment – this it typically in late May or early June.

Therefore, we do not believe the decision for when a permit needs to be approved or denied should be modified to April 15.

Prohibiting DEQ from denying an application submitted after the proposed treatment date
Control of invasive aquatic plants with herbicide can be complicated because efficacy and selectivity are affected by a number of factors. These include timing of application, as well as choice and concentration of herbicide, and duration of exposure of plants to herbicide. To be effective, treatments need to be conducted at a time when the target non-native invasive plant is growing and susceptible to herbicide, but also when non-target native plants are dormant and not susceptible. DEQ needs to have the ability to deny permits that will not be effective due to an applicant who missed the appropriate treatment window. Failure to deny a permit would results in an ineffective treatment that would still pose potential adverse impacts to aquatic life and the water resource.

Registry of water bodies infested by aquatic nuisance species
Information for a registry needs to be supplied by experts who can verify species, location, and density of infestation. In the absence of scientific information, managers are relying on anecdotal or local observations of impacts to fisheries and recreation and making a decision about treatment. An accurate identification of aquatic plants and algae is necessary to determine if a problem exists and the appropriate course of action to correct the problem. Otherwise some control measures can actually cause an increase in the nuisance species or cause negative impacts without providing beneficial control.

Additionally, many aquatic organisms can be difficult to identify. Some can only be identified by molecular genetic analysis or by complex taxonomic assessments that are impossible for individuals without formal training. Information from citizens and agencies can be useful to serve as potential identification. However, a registry needs to be based upon confirmed data by certified and trained experts.

Extending the term of permits to 3 years

The number and kinds of plants and animals making up a lake community continuously changes. Over the course of a few years, you can return to any location — whether it be a lake, stream, wetland, forest, or even your backyard — and you are likely to observe changes to the organisms found in the community. New plants may appear and other plants disappear. These changes may be subtle or obvious, but we can count on communities changing over time in composition, structure, diversity, and productivity. Lakes and their management needs can significantly change over the course of 3 years. Therefore, a permit extension to cover 3 years will not result in proper management and control of nuisance species.

The current permitting process accounts for the continual changes by requiring an annual review. The current program already operates under general permits and certificates of coverage for aquatic nuisance control activities where the environmental and public health risk is small to enable the program to provide timely permitting decisions. Individuals can obtain approval for treatment in an extremely short timeframe - within 15 working days of receipt of a complete application – for a nominal fee. Given the potential adverse impacts that can result to environmental and human health from improper application of chemicals, annual review under the current program is justified.

Changing the scope of activity, including expansion of area of impact and increase in volume of chemicals, without oversight

Permit decisions must consider potential negative impacts to human health, non-target species, as well as fish and fish habitat. However, this will not occur if individuals are allowed to change the scope of treatment by expanding area of impact and chemicals used without needing to revise the permit. This allows for the use of herbicides without any review which could have devastating effects and result in ineffective treatments.

As previously mentioned, many factors influence success of aquatic invasive species treatment. These same factors - timing of application, choice and concentration of herbicide, and duration of exposure of plants to herbicide – also determine the impact of herbicides on environmental and public health. MDEQ requires review of proposed treatment to ensure that the treatment will be successful and adverse impacts are minimized.

Expanding the area treated without oversight could subsequently allow chemicals to be used in areas with threatened or endangered species or in areas with drinking water intakes. It is important that chemicals used in ponds, lakes, and streams that lead into reservoirs not contaminate the public drinking water supply. Avoidance of drinking water contamination can only occur if MDEQ knows what chemicals are applied where and when. Without a requirement to revise the permit, a greater quantity of chemicals could be applied to areas with private wells in close proximity to the waterbody or in areas that have community wells, public water supplies, or potable reservoirs. This presents a huge and unacceptable risk to public health.

Additionally, allowing expansion of the area of impact could infringe upon private property rights. Part of the review process requires verification that all property owners are aware of the application and provides opportunity for individuals to voice concern. We actually receive

numerous inquiries from residents concerned with application of herbicides near their property where their children, grandchildren, and pets swim and play. The permit and revision process allows property owners to avoid being in or near waters that have been exposed to chemicals. Expansion of treatment areas without a review will mean that individuals may not be properly notified that chemicals that could be harmful are being applied.

Allowing expansion of area of impact and an increase in amount of chemicals without review completely bypasses the structure developed to ensure harm does not come to the environment or our citizens. Any change in scope to activity should be required to go through a revision process that allows for impacts to the water resources and public health to be avoided and minimized.

Raking of bottomlands without a permit

Raking of bottomlands of an inland lake or stream can have severe negative impacts upon the health of the ecosystem including aquatic fish and wildlife. Raking can result in sediment re-suspension, nutrient loading, aquatic life disturbance, aquatic plant destruction, and the spread of invasive plants and animals.

Raking, especially being used behind a boat, stirs up lake bottom sediment. The suspended sediments result in turbid water and decreased water clarity. Turbidity is a measure of the degree to which light is transmitted through the water. Turbidity impacts the ability of fish to uptake oxygen through their gills, limits sunlight penetration, decreases dissolved oxygen concentrations, and increases surface water temperatures. In addition to these impacts, raking directly disturbs bottom-dwelling species as well as fish nests, spawning, and feeding activities

The suspension of lake bottom sediments and other decaying organic matter also provide nutrients that stimulate plant and algal growth. Subsequently, raking of bottomlands could result in an increase of aquatic nuisance plants and algae. Also, if invasive plant species are present in the vicinity being raked, the activity can actually result in the spread of the invasive species. The disturbance can remove native vegetation and make the habitat favorable for the invasion of other invasive plants. Also, raking can result in vegetation fragments that can start new plants in areas not currently infested.

Conclusion

We appreciate the interest in treatment of aquatic species and agree we must remain vigilant in our efforts to protect our water bodies from these aquatic nuisance species. Our lakes, streams, and wetlands contribute recreational and aesthetic values that are crucial to the quality of life and economic vitality of Northern Michigan communities. Chemical treatments can provide relief and are an important tool for lasting control. However, there are associated risks. Improper use of aquatic pesticides may have greater ecological and public health impacts than no treatment. It is the duty of the state to ensure that control of aquatic vegetation does not have significant adverse ecological impacts on fish and wildlife or threaten human health.

If we are going to maintain the proud heritage of the "Great Lakes State" and "Pure Michigan," we must remain vigilant in our efforts to protect our most valuable resources. Many provisions in Senate Bill 444 (S-5) fail to adequately protect the health of Michigan's natural resources and citizens. We ask that you oppose Senate Bill 444 (S-5) until the concerns outlined above have

been adequately addressed. We urge you to give careful consideration to the comments provided and incorporate the recommended changes into the bill to protect the health of our ground and surfaces waters, Great Lakes, and the citizens and visitors who rely upon those water resources.

Thank you for the opportunity to comment. If you have any questions about the comments provided, please feel free to contact me at jenniferm@watershedcouncil.org or 231-347-1181.