Legislative Fiscal Bureau
One East Main, Suite 301 • Madison, WI 53703 • (608) 266-3847 • Fax: (608) 267-6873
Email: fiscal.bureau@legis.wisconsin.gov • Website: http://legis.wisconsin.gov/lfb

February 12, 2020

TO: Members
Joint Committee on Finance

FROM: Bob Lang, Director

SUBJECT: Assembly Bill 798/Senate Bill 725: Biomanipulation Projects to Improve Water Quality

Assembly Bill 798 and Senate Bill 725 are identical proposals that would provide one-time funding for lake biomanipulation projects. AB 798 was introduced on January 24, 2020, and referred to the Assembly Committee on Environment. On January 30, 2020, a public hearing was held. On February 3, 2020, Assembly Amendment 1 was introduced. On February 6, 2020, the Assembly Committee on Environment recommended adoption of Assembly Amendment 1 by a vote of 10-0, and recommended the bill as amended for passage on a vote of 6-4.

SB 725 was introduced on January 24, 2020, and referred to the Senate Committee on Natural Resources and Energy. On January 29, 2020, a public hearing was held. On January 31, 2020, Senate Amendment 1 was introduced. On February 6, 2020, the Senate Committee on Natural Resources and Energy recommended adoption of Senate Amendment 1 by a vote of 5-0 and recommended the bill for passage on a vote of 3-2.

BACKGROUND AND CURRENT LAW

Biomanipulation is generally described as the alteration of an ecosystem by adding and removing species. In the context of lake management, biomanipulation is intended to improve water clarity and reduce nutrient concentration in the water column by: (a) increasing the population of small animal species known generally as zooplankton, which consume phytoplankton (algae), by removing zooplankton predators, and introducing additional predators of animals that consume algae-eating species; and (b) decreasing the population of bottom-feeding fish, which stir up lake sediment, thus resuspending nutrient pollution that has accumulated in the lake bed, and which destroy plant life that contributes to habitats for species that improve water quality. By modifying these populations, biomanipulation is thought to increase consumption of phytoplankton, which tend to accumulate in nutrient-rich water bodies polluted by nonpoint source water pollution runoff. In doing so, biomanipulation is thought to increase the ability of a water body to process its existing nutrient load and improve its quality.

Biomanipulation has not been widely practiced in Wisconsin and is not a practice eligible for

reimbursement under nonpoint source water pollution abatement grants provided by the Department of Agriculture, Trade and Consumer Protection (DATCP) or Department of Natural Resources (DNR). However, the practice is eligible for certain surface water grants provided by DNR although grant awards for such activities are infrequent. Additionally, a provision in the 2017-19 biennial budget act provided $65,000 for a biomanipulation project to improve the water quality of Tainter Lake in Dunn County. Funding was provided to the Friends of the Red Cedar Basin and supported activities including a study of the lake's carp population, removal of carp, installation of fish habitat, restoration of aquatic vegetation, and a survey of aquatic vegetation density.

Under Section 303(d) of the federal Clean Water Act, DNR is required biennially to submit to the Environmental Protection Agency a list of waters in the state it declares as impaired. Generally, impaired waters have concentrations of any number of pollutants such as phosphorus, suspended sediment, mercury, or polychlorinated biphenyls (PCBs), or other detrimental characteristics, that do not allow a water body to fulfill its designated uses. The attachment provides a map of waters most recently designated as impaired, as approved by EPA in August, 2018.

SUMMARY OF BILLS

AB 798/SB 725 ("the bill") would create a biennial appropriation under DNR's Division of Environmental Management and provide it $150,000 GPR in 2019-20. The bill would direct DNR to allocate funding as competitive grants for biomanipulation projects conducted by local water improvement groups. The bill does not define "water improvement groups." The bill requires that biomanipulation projects include comprehensive fish studies, removal of zooplanktivorous (microscopic animal-eating) fish and benthivorous (bottom-feeding) fish, and introduction of piscivorous (predatory) fish. Under the bill, only projects in DNR-designated impaired waters would be eligible for funding. The bill would limit grant awards to no more than 90% of the cost of a project.

ASSEMBLY/SENATE AMENDMENT 1

The identical Assembly Amendment 1 and Senate Amendment 1 ("the amendment") would modify eligibility for biomanipulation grants to be for projects that include comprehensive fish studies and that: (a) remove zooplanktivorous and benthivorous fish, (b) introduce piscivorous fish, or (c) both. Thus, under the amendment a project that does not modify populations of all three classifications of fish would be eligible. However, the amendment directs DNR to prioritize projects that modify populations of all three classifications of fish. The amendment would maintain a maximum 90% state share for selected projects.

FISCAL EFFECT

The bill would provide one-time funding of $150,000 GPR in 2019-20 in a biennial appropriation. As a biennial appropriation, DNR would be authorized to expend or encumber these amounts until June 30, 2021. In its estimate, DNR anticipates minimal one-time costs of grant administration, which it estimates can be absorbed using current resources.

Prepared by: Rory Tikalsky
Attachment

ATTACHMENT

2018 Inventory of Healthy and Impaired Waters

Figure 1: Healthy Waters

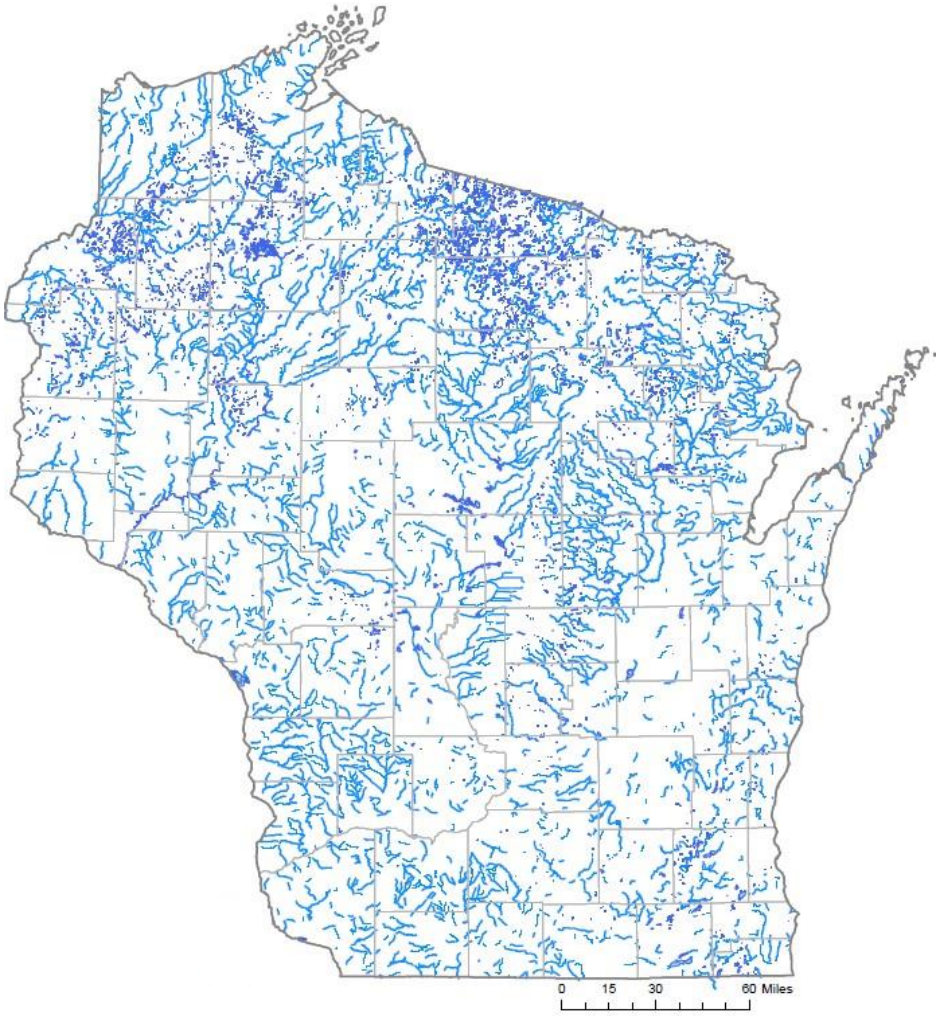
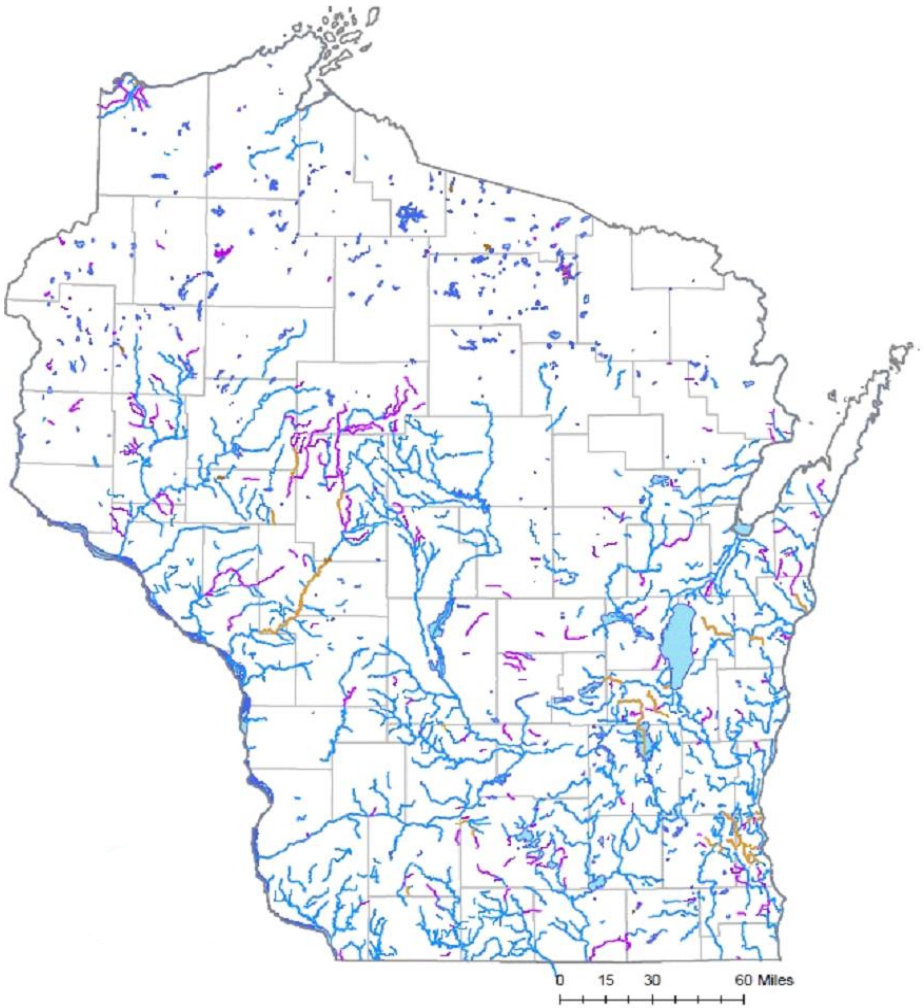


Figure 2: Impaired Waters



Source: Wisconsin Department of Natural Resources