



Legislative Fiscal Bureau

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Joint Committee on Finance

Paper #599

Contaminated Sediment Removal Bonding (DNR – Water Quality)

Bill Agency

[LFB 2007-09 Budget Summary: Page 426, #9]

CURRENT LAW

The Department of Natural Resources (DNR) is currently authorized a total of \$7 million in general obligation bonding authority for contaminated sediment cleanup in Lake Michigan or Lake Superior or a tributary of one of the two lakes under s. 281.83 of the statutes. Section 281.83 authorizes DNR to perform activities to clean up or to restore the environment in an area that is in or adjacent to Lake Michigan or Lake Superior or a tributary of one of the two lakes if the activities are included in a remedial action plan that is approved by the Department. Debt service is paid from the segregated environmental management account of the environmental fund.

GOVERNOR

Authorize a new appropriation of \$17,000,000 in general obligation bonding authority to fund a portion of the costs of a project to remove contaminated sediment from Lake Michigan or Lake Superior or their tributaries if federal funds are provided for the project under the Great Lakes Legacy Act. Create a sum sufficient appropriation from the segregated environmental management account of the environmental fund to pay debt service costs. No debt service costs would be estimated for the 2007-09 biennium.

DISCUSSION POINTS

1. The administration indicates that the funds are intended to be used for cleanup of

two areas of contaminated sediment in Milwaukee. While the bill specifies that projects must be in Lake Michigan or Lake Superior or a tributary of one of the two lakes, the intent is that the first areas cleaned up with the funds would be the Kinnickinnic River and the impoundment in the Milwaukee River north of the Estabrook dam in Lincoln Park. The funding would be expected to leverage \$31 million in federal funds under the Great Lakes Legacy Act. At the Joint Committee on Finance briefing regarding the DNR budget, Secretary Hassett indicated that the funds could potentially be used for cleanup of the Sheboygan River and the St. Louis River in Superior.

2. The federal Great Lakes Legacy Act of 2002 (GLLA) authorized up to \$270 million in funding over five years, from federal fiscal year 2004 through 2008, to assist with the remediation of contaminated sediment in 31 designated U.S. Areas of Concern (AOCs). In federal fiscal years 2004 through 2007, approximately \$111.2 million was appropriated for remediation projects. The GLLA requires a 35% non-federal match. Funding priority is given to projects that have been identified in a remedial action plan and are ready to be implemented, including commencement of remediation within one year after receipt of federal funding.

3. The AOCs are severely degraded areas within the Great Lakes basin whose beneficial uses are impaired because of changes to the physical, chemical, or biological integrity of the system. The four major categories of beneficial use impairments are contaminated sediments, habitat loss or destruction, nonpoint source pollution, and beach issues. AOCs generally experienced many years of discharges of pollutants from industrial sources, including contaminants such as polychlorinated biphenyls (PCBs), heavy metals, and polycyclic aromatic hydrocarbons (PAHs). The five AOCs in Wisconsin are the: (a) St. Louis River and Bay (between Superior, Wisconsin and Duluth, Minnesota); (b) Menominee River (between Marinette, Wisconsin and Menominee, Michigan); (c) Lower Green Bay and the Fox River; (d) Sheboygan River (which flows into Lake Michigan at the City of Sheboygan); and (e) Milwaukee Estuary.

4. In 2005, a contaminated sediment removal project in Superior, Wisconsin, was the second completed GLLA project in the country. Under the \$6.3 million project, 60,000 tons of contaminated sediment was removed from the mouth of Newton Creek and Hog Island Inlet. GLLA funds provided \$4.1 million and DNR's environmental cleanup bonding authority (described in a separate budget paper) provided \$2.0 million of the \$2.2 million non-federal share (Murphy Oil USA Inc. provided the remaining \$200,000).

5. The Milwaukee Estuary was designated an AOC in the mid 1980s. It includes the lower five kilometers of the Milwaukee River downstream of North Avenue Dam (which has been removed), the lower 4.8 kilometers of the Menomonee River downstream of 35th Street, the lower four kilometers of the Kinnickinnic River downstream of Chase Avenue, the inner and outer harbor, and the nearshore waters of Lake Michigan, bounded by a line extending north from Sheridan Park to the City of Milwaukee's Linnwood water intake. Sediments are contaminated with PCBs, PAHs, and heavy metals. DNR and citizens groups have identified 11 of 14 potential beneficial uses as impaired, such as restrictions on fish and wildlife consumption, eutrophication and undesirable algae, beach closings, degraded fish populations, degradation of aesthetics, loss of fish and wildlife habitat, and restrictions on dredging activities.

6. The first project likely to use the funding in the bill would be the Kinnickinnic River. In 2002, the EPA Great Lakes National Program Office provided a grant to DNR to study the extent of contaminated sediments in the Kinnickinnic River in the Milwaukee Estuary AOC. In 2004, a consultant for DNR and the U.S. Army Corps of Engineers completed the "Concept Design Documentation Report," which described a selected alternative calling for dredging up to 170,000 cubic yards of contaminated sediments (approximately 90% of the PCB mass in the project area), creating an 80 foot-wide navigational channel of 20 to 24 feet deep with sides sloped to 11 feet. DNR received preliminary approval of an EPA grant of approximately \$100,000 for design work on the remedy. DNR anticipates it would use non-federal salary dollars to provide the state match for the federal funds. DNR officials hope to complete design work this year, then let bids for the sediment removal project, and potentially remove the PCB sediment in 2008. Preliminary cost estimates for the project are \$12 million. Actual costs would be determined after the project is bid. DNR anticipates GLLA funds would provide \$7.8 million (65%), and the bonding authority under the bill would provide \$4.2 million as the non-federal share.

7. The second project anticipated to be funded under the bill would be the Estabrook impoundment in Lincoln Park along the west shore of the Milwaukee River north of the dam. This area is between the Cities of Milwaukee, Glendale and Whitefish Bay. In 2005, DNR completed the "Estabrook Impoundment Sediment Remediation Pre-Design Study," which found that the Estabrook impoundment contributes the greatest mass loading of PCBs (over 100,000 cubic yards) to the Milwaukee River and Milwaukee Harbor. Some of the PCB concentrations are among the highest in the state and exceed federal thresholds for classification as hazardous waste. Sediments with these higher concentrations would have to be disposed of at an out-of-state hazardous waste landfill.

8. DNR has not been able to identify specific sources of the PCBs in Lincoln Park. Anticipated remediation costs for the project area range from \$18 to \$36 million, depending on the quantity of contamination that may be found and the remediation approach that may be selected. Design work will be required to determine the remediation method and more precise cost estimates. The bonding authority provided in the bill is based on the \$36 million cost estimate, and assumes a federal share of \$23.4 million and a state share of \$12.6 million.

9. The Lincoln Park/Estabrook project is not currently eligible for GLLA funds because it is located outside the Milwaukee Estuary AOC. The Estabrook dam is upstream of the former North Avenue dam, which is the upstream boundary of the AOC. In October, 2006, DNR submitted a request to EPA to amend the boundaries of the AOC to include the Estabrook impoundment (Lincoln Park) area. DNR anticipates that EPA will make a decision on the request later this year.

10. The DNR inspected the Estabrook dam and identified a need for either significant repair work or removal of the dam. Milwaukee County owns the dam and has indicated it does not intend to remove the dam. While the future of the dam has not been resolved, DNR officials indicate resolution of the dam safety issue is not affecting the timeline for the cleanup of the Estabrook impoundment. However, DNR officials indicate that what happens to the dam may

affect the type of action taken (and associated costs) to remove the PCB-contaminated sediments.

11. While DNR indicates that neither the Kinnickinnic River nor the Lincoln Park/Estabrook project has environmental priority over the other, the Kinnickinnic River project is closer to being ready for funding because: (a) EPA has already provided funding for the Kinnickinnic River study about the extent of contamination; (b) the Kinnickinnic River is currently in the AOC; (c) preliminary design work has been done; and (d) DNR is ready to do final design work and implementation within the next year.

12. The GLLA funding is provided on a rolling application process. DNR anticipates that, while EPA does not have a specific funding priority list, the Kinnickinnic River project would be a high priority for EPA. DNR would have to sign a project agreement with EPA before DNR could begin counting staff costs as part of the non-federal share.

13. It is possible that Milwaukee County, other local governments, and nearby riparian property owners, may be able to provide some of the non-federal share of project costs. It is unlikely that DNR would be able to identify specific parties responsible for all of the contamination, or to recover cleanup costs from responsible parties in amounts sufficient to pay for much of the cleanup.

14. DNR has expended or encumbered \$4,663,000 of the existing \$7 million in general obligation bonding authority for contaminated sediment cleanup for three projects. First, \$1,356,800 was spent to remove and cap contaminated sediments located behind the North Avenue Dam on the Milwaukee River in the City of Milwaukee when the dam was removed. Second, \$3,057,400 was spent to clean up a three-acre PCB hotspot in the Fox River, known as "deposit N" near Kimberly, as a demonstration project to test the effectiveness of large-scale hydraulic dredging of contaminated sediment. Third, \$248,800 was paid to Minergy Corporation in Neenah to determine the cost-effectiveness of vitrification (conversion to glass) of PCB-contaminated sediment from the Fox River.

15. DNR plans to use most of the remaining \$2.3 million in existing contaminated sediment bonding authority at a project in a lagoon near the Blatz Pavilion in Lincoln Park that is also in the Estabrook impoundment project. DNR hopes to clean up the Blatz Pavilion lagoon in 2007. The purpose of the project is to remove approximately 3,900 cubic yards of sediment contaminated with PCBs and PAHs to reduce the potential risks of contaminated sediments to the environment and human health. In March, 2007, a consultant for DNR completed the remedial investigation/feasibility study for the project. DNR made a decision to accept the report recommendations, held a public meeting on April 17, 2007, and is holding a 30 day public comment period which ends May 7, 2007. After that date, DNR will prepare a formal response to the public comments, and will issue a final record of decision (ROD). The ROD will be used to let bids for the final design and implementation of the sediment removal, with the removal action anticipated for the fall of 2007.

16. A recent preliminary estimate of the Blatz Pavilion lagoon project cost is \$1.2

million. However, a more precise cost will not be known until a contract is signed to remove, transport, and dispose of the contaminated sediment. DNR plans to reserve the entire \$2.3 million in existing contaminated sediment bonding authority for the Blatz Pavilion project until more exact project costs are determined. If any existing bonding authority remains after the project is completed, it would be available for other projects. DNR officials indicate the Kinnickinnic River and Estabrook impoundment projects would be the next highest priority projects.

17. The GLLA also includes maintenance of effort requirements so that federal funds will not substitute for current non-federal efforts in a project area. The non-federal sponsor of the project must calculate its average level of expenditures for sediment remediation programs in the AOC in which the proposed project is located, for the two years before a project agreement is signed, and maintain that level of expenditures during the term of the project agreement. DNR indicates that the work on the Blatz Pavilion lagoon project could potentially count towards maintenance of effort requirements for the two proposed projects.

18. The contaminated sediment bonding authority under the bill would not be expected to result in debt service costs in 2007-09, but would be anticipated to increase debt service costs in future biennia as bonds are gradually issued to pay for contaminated sediment cleanup projects. If work on the Kinnickinnic River sediment removal project begins in 2008, some of the bonding authority may be issued during the biennium, and debt service costs would begin on the issued amounts approximately six to 12 months after issuance.

19. Debt service costs on \$17 million in general obligation bonds would be approximately \$1,350,000 annually when all of the bonds are issued (assuming a 20-year term). While it appears that some debt service costs could be incurred in the 2009-11 biennium, it is unlikely that debt service amounts would reach the full amount in 2009-11. As the amount authorized and spent for contaminated sediment cleanup increases, the amount spent for debt service would increase. The \$1.35 million in potential annual debt service would equal approximately 5% of the revenue to the environmental management account in 2008-09.

20. It is likely that the debt service requirements for \$17 million in bonding authority would either increase the need for additional revenue to the environmental management account or require future reductions in expenditures for contaminated land and brownfields cleanup activities. [Separate budget papers describe funding sufficiency issues related to the vehicle environmental impact fee and environmental repair tipping fee revenues to the environmental management account.]

21. It is likely that other contaminated sediment projects could utilize some of the proposed bonding authority and federal GLLA funds in the next several years. It is also likely that other contaminated sediment removal projects which do not receive GLLA funds, or are not eligible for GLLA funds, could draw on existing environmental fund supported cleanup authority. However, these sources are not expected to be adequate to fund all currently identified projects. Therefore, it is likely that there would be future discussions of increasing the level of bonding or expenditures for contaminated sediment removal projects.

22. If the Committee wishes to approve some, but not all, of the bonding authority, the Committee could consider approving bonding for the Kinnickinnic River project since that project is closer to being ready to proceed. Bonding authority of \$4.2 million would be sufficient to fund the non-federal share for the estimated \$12 million project (Alternative 3). Debt service costs would be approximately \$335,000 annually once the entire \$4.2 million is issued.

23. The Committee could consider providing sufficient bonding authority for the lower range of the cost estimate for the Estabrook Impoundment project instead of the higher range. The Committee could provide \$6.3 million in bonding authority to fund a potential \$18 million project cost (the low end of the 2004 cost estimate) instead of \$12.6 million for the \$36 million high end of the cost estimate. Debt service costs for \$6.3 million in bonding authority would be approximately \$500,000 annually after full issuance. However, if \$6.3 million in bonding authority is provided for an \$18 million project, and if the actual cost eventually exceeds \$18 million, there may be a need approve additional bonding authority at a later date to meet the non-federal share required to obtain GLLA funds to complete the project. On the other hand, local contributions, responsible parties, the allocation of state funding for DNR staff time, or other resources may be able to provide a portion of the non-federal match requirement. A total of \$10.5 million in bonding authority could be approved to fund the anticipated cost of the Kinnickinnic River project (\$4.2 million in bonding authority for a \$12 million project) and the lower cost estimate of the Lincoln Park/Estabrook project (\$6.3 million in bonding authority for an \$18 million project).

24. It could be argued that the environmental management account is an appropriate funding source for this use of contaminated sediment bonding authority, since the account is currently used for contaminated land and sediment cleanup activities. Others would argue that the environmental management account may not have sufficient long-term revenues to fund the increase in debt service costs unless current contaminated land and brownfields cleanups, grants, and administrative activities are reduced in the future.

25. It could be argued that the contaminated sediment cleanup of the Milwaukee Estuary and other eligible Great Lakes Areas of Concern benefits a large enough portion of the state's population that the cleanup costs should be paid from the general fund rather than the environmental management account. The Committee could consider approving all or part of the proposed general obligation bonding authority, and creating the debt service appropriation to be paid with GPR instead of environmental management SEG.

26. If the Committee chooses to approve the proposed \$17 million in bonding authority, and if it is not all needed for the Kinnickinnic River and Lincoln Park/Estabrook projects, the bonding authority could be used for other projects that would receive GLLA funding.

27. The proposed \$17 million in bonding authority could enable the state to obtain \$31 million in federal funding for 65% of project costs for eligible projects. It is uncertain whether Great Lakes Legacy Act funding will be reauthorized after federal fiscal year 2008, whether the program will be modified, or what amount will be appropriated in 2008. It could be argued that authorizing the full \$17 million now would help the state obtain substantial federal funding (approximately

\$1.80 in federal monies for each state \$1) for a number of Wisconsin sites where contamination levels pose environmental and public health risks.

28. If the \$17 million in bonding authority is not provided, the state would have to look for other ways of providing the non-federal share to obtain GLLA funds. Both projects would likely be delayed. It is possible that local governments, responsible parties, and property owners might be able to provide a portion of the non-federal match.

ALTERNATIVES TO BILL

1. Approve the Governor’s recommendation to: (a) authorize \$17,000,000 in general obligation bonding authority to fund a portion of the costs of a project to remove contaminated sediment from Lake Michigan or Lake Superior or a tributary of Lake Michigan or Lake Superior if federal funds are provided for the project under the Great Lakes Legacy Act; and (b) create a sum sufficient appropriation from the segregated environmental management account of the environmental fund to pay debt service costs.

ALT 1	Change to Bill Revenue	Change to Base Revenue
BR	\$0	\$17,000,000

2. Approve the Governor's recommendation, as modified to provide \$10,500,000 instead of \$17,000,000 in general obligation bonding authority, with debt service costs paid from the environmental management account. (This would provide \$4.2 million BR to fund the 35% nonfederal share of the estimated \$12 million Kinnickinnic River project and \$6.3 million for up to \$18 million in Lincoln Park/Estabrook project costs.)

ALT 2	Change to Bill Revenue	Change to Base Revenue
BR	-\$6,500,000	\$10,500,000

3. Approve the Governor's recommendation, as modified to provide \$4,200,000 instead of \$17,000,000 in general obligation bonding authority, with debt service costs paid from the environmental management account. (This would be sufficient to fund the estimated \$12 million Kinnickinnic River project, but not the Lincoln Park/Estabrook project.)

ALT 3	Change to Bill Revenue	Change to Base Revenue
BR	-\$12,800,000	\$4,200,000

4. Approve Alternative 1, 2, or 3, but provide a GPR sum sufficient debt service appropriation (instead of environmental management account SEG) to pay debt service costs.
5. Delete provision.

ALT 5	Change to Bill Revenue	Change to Base Revenue
BR	-\$17,000,000	\$0

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