



Legislative Fiscal Bureau

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August 4, 2009

TO: Members
Joint Committee on Finance

FROM: Bob Lang, Director

SUBJECT: Natural Resources: Governor's Section 13.10 Request for Use of Federal Economic Stimulus Funding for Water Quality Planning Activities -- Agenda Item XV

REQUEST

The Governor requests approval of \$1,070,200 received under water quality provisions of the American Recovery and Reinvestment Act of 2009 (ARRA). Funding would be distributed as follows: (a) \$613,600 for certain DNR water quality monitoring projects; (b) \$28,500 in federal reimbursements for the costs of administering federal grants; and (c) \$428,100 in grants to organizations for local and regional water quality planning activities.

BACKGROUND

The Clean Water State Revolving Fund (CWSRF) is a program under the federal Clean Water Act (CWA) that provides low-interest loans for municipalities to plan, design, construct or replace a wastewater treatment facility, or finance nonpoint source pollution abatement or urban storm water runoff control projects. The ARRA increased CWSRF state assistance grants by approximately \$3.9 billion, of which Wisconsin is allocated \$107,593,000 under the state clean water fund program. Of the total federal allocation, approximately 1% is set aside for the state to conduct water quality planning activities or provide direct grants for such planning. Wisconsin has a set-aside of \$1,070,200 under the CWSRF funds authorized under ARRA. Set-asides under both the normal CWSRF and the ARRA supplements are intended to facilitate sound planning, and planning processes are required prior to the construction of major facilities and infrastructure for water treatment or conveyance.

The request would augment funding provided in several appropriations under DNR's Bureau of Watershed Management. Of the request, \$613,600 intended for Department projects would be available under a FED continuing appropriation for general program operations [s. 20.370(4)(mm)].

Expenditures under this appropriation are budgeted at approximately \$10.4 million annually in 2009-11.

DNR administers local water quality planning aids under a GPR annual appropriation and a FED continuing appropriation. The Governor's request of \$428,100 would be available under the FED appropriation [s. 20.370(6)(dm)]. The GPR appropriation is provided \$252,700 annually under 2009 Act 28. The FED appropriation has expenditures estimated at \$150,000 annually. DNR expended \$316,600 GPR and \$124,300 FED in 2008-09 under these planning aids appropriations.

The remaining \$28,500 would be available under a continuing appropriation for federal reimbursement of the costs of administering grants [s. 20.370(8)(mz)]. Expenditures under this appropriation are estimated at \$7.4 million each year.

DNR Water Quality Projects

DNR has identified eight departmental projects to be supported with \$642,100 in ARRA funds. The projects are listed in Table 1 and described below in greater detail.

TABLE 1

Water Quality Planning Projects

<u>DNR Project</u>	<u>Operations</u>	<u>Administration</u>	<u>Total Funding</u>
Regional Watershed and TMDL Planning Support	\$206,100	\$0	\$206,100
GIS Support of Watershed Planning	43,300	5,600	48,900
Natural Community Reference Site Monitoring	192,100	7,900	200,000
Watershed/TMDL Data Management Support	35,700	4,500	40,200
Citizen-Based Stream Monitoring Coordinator	48,000	6,200	54,200
Lake Michigan Tributary and Shore Monitoring	25,100	500	25,600
SWIMS Data Management Support	28,300	3,800	32,100
Upper Fox River Monitoring	<u>35,000</u>	<u>0</u>	<u>35,000</u>
	\$613,600	\$28,500	\$642,100

Contracts for Regional Watershed and TMDL Planning Support. This request would allocate \$206,100 for contracts to assist DNR in watershed planning and total maximum daily load (TMDL) analysis, which are two functions of DNR's Bureau of Watershed Management. Watershed planning refers to DNR's assessment of watersheds for substances that impair the waters of the state. Impaired waters are listed on the section 303(d) list, which is submitted to the federal government. DNR is required to develop TMDLs for impaired waters, and TMDLs form the basis

for practices limiting the introduction of nutrients, sediments or other substances that are detrimental to the quality of surface waters in an area. DNR is also developing a statewide TMDL for mercury deposition affecting more than 300 waters throughout the state. Under this project, the contracted entity or entities will assist DNR staff in: (a) the entry, management and analysis of data gathered through monitoring efforts; and (b) public outreach, including outreach through hearings and informational meetings on updates to area-wide water quality management plans. DNR indicates it tentatively plans to contract for these activities through UW–Extension.

Geographic Information Systems (GIS) Support of Watershed Planning. This request would allocate \$48,900 for one full-time equivalent (FTE) of limited-term employees to support GIS elements of programs used by DNR to manage data on watersheds throughout the state. GIS capabilities assist DNR in watershed planning and TMDL development. DNR also makes geographical water quality information available publicly on its Internet-based surface water data viewer.

Stream Natural Community Reference Site Monitoring. The request would allocate \$200,000 for monitoring and classification of Wisconsin streams to evaluate DNR's "natural communities" model for flowing water bodies. The natural communities approach classifies streams and rivers into 11 different categories based on flow volume and water temperature, among other factors. Flow and temperature are thought to be primary predictors of fish communities that will inhabit the class of water body. This study would attempt to verify the natural community classification system by sampling and analyzing fish, insects and water chemistry at 320 streams throughout the state. DNR indicates the use of ARRA funds for this project will also allow the Department to make other uses of funding received under section 106 of the CWA, such as surface water monitoring and LTE staffing to meet the state's CWA requirements. DNR would otherwise use CWA funds for this monitoring project.

Watershed Planning and TMDL Data Management Support. The request would allocate \$40,200 for one FTE of limited-term employees for data entry and management related to area-wide water quality management plans. These plans form the basis for TMDLs as well as permit issuance and evaluations of nonpoint source grant applications.

Citizen-Based Stream Monitoring Coordinator. The request would provide \$54,200 for one limited-term FTE coordinator of the Citizen-Based Stream Monitoring (CBSM) program. The CBSM is one level of the Citizen-Based Water Monitoring Network, a cooperative effort of DNR, UW–Extension and the River Alliance of Wisconsin, in which citizens contribute to collection of water quality data throughout the state. Data collected may be used by management agencies such as DNR. The CBSM coordinator position has previously been housed under the River Alliance, with equal funding provided by both the River Alliance and federal funds received by DNR. The coordinator is responsible for training citizen monitors, maintaining equipment, generating summary reports of monitoring results and other administrative duties.

Lake Michigan Tributary and Shore Monitoring. The request would provide \$25,600 for two monitoring components related to algal growth along the Lake Michigan shore caused by phosphorus deposition. The first component will consist of one year of monthly water sampling for levels of phosphorus, nitrates and nitrites, other nitrogen-based compounds and suspended sediment. Sampling sites will include locations along major Lake Michigan tributaries such as the Milwaukee, Sheboygan, Manitowoc, Fox and Menominee rivers. This monitoring may begin as early as October of 2009. The second component will consist of monitoring in July and August of 2010 to determine nutrient concentrations and biomass of Cladophora algae in waters near the Lake Michigan shore. DNR reports that Cladophora algae have been accumulating on the Lake Michigan shore, and the prevalence of decaying algal mass may be detrimental to recreational beach use, business, and public health. Monitoring is intended to determine phosphorus loading mechanisms to inform future reduction plans, possibly to include Wisconsin Pollution Discharge Elimination System (WPDES) permits.

Data Management Support Staffing. The request would provide \$32,100 for a 0.75 limited-term FTE. This item would continue funding for a position that currently provides data management support for the CBSM program. Additional ARRA funding would expand responsibilities to include data management for the Surface Water Integrated Monitoring System (SWIMS), DNR's primary system for cataloging and holding chemical, physical and biological data gathered on the waters of the state.

Upper Fox River Basin Monitoring. The request would provide \$35,000 for water quality monitoring in the Upper Fox River Basin. Monitoring activities will determine deposition of sediment and phosphorus in the basin, which impairs water quality in Lake Winnebago. Reducing nutrient and sediment deposition to Lake Winnebago will also reduce loadings in the Lower Fox River, for which the U.S. Environmental Protection Agency (EPA) is currently developing TMDLs in consultation with DNR. Much of the Upper Fox River monitoring will be done on a contract basis with the U.S. Geological Survey.

Pass-Through Grants

The request also includes 10 grants for a total of \$428,100 in federal economic stimulus funds, which DNR will distribute primarily to local organizations. Stimulus funds received would be distributed through DNR's FED appropriation for environmental planning aids. Each of the projects is listed by recipient or project in Table 2, and each project is described below in greater detail.

TABLE 2

Pass-Through Water Quality Planning Grants

<u>Recipient/Project</u>	<u>Aids</u>
Upper Mississippi River Basin Association	\$45,000
Lake St. Croix TMDL Planning	40,000
Lafayette County TMDL Planning	10,000
Black Earth Creek Monitoring	30,000
Clark Creek Water Quality Management	30,000
Willow Creek (Sheboygan River) Improvement	31,700
Spring Creek Restoration (Sussex)	36,000
Lake Mallalieu/Willow River (St. Croix County)	25,500
Plum and East Rivers (Brown County)	40,000
Supplemental Water Quality Planning Funds:	
Capital Area Regional Planning Commission	57,100
Southeastern Wisconsin Regional Planning Commission	60,000
East Central Regional Planning Commission	12,800
Brown County Planning Commission	<u>10,000</u>
Total Aids	\$428,100

Upper Mississippi River Basin Association Water Quality Planning Grant. The request would provide \$45,000 to the Upper Mississippi River Basin Association (UMRBA) for activities related to: (a) refining designated uses of the Mississippi River as established for planning purposes, such as fish and wildlife habitat, recreation, water supply and commerce, and determine appropriate criteria or indicators that define achievement of water quality goals for the uses; (b) nutrient monitoring and analysis of the impacts of elevated nutrients on aquatic life and other prevalent resources of the Upper Mississippi River; (c) identification of gaps in data or gaps in data-sharing abilities among various monitoring programs throughout the Upper Mississippi; and (d) collaboration with other Mississippi River basin programs to use water quality information in the selection of ecosystem-restoration projects. The UMRBA is a group consisting of representatives of water management agencies of Wisconsin, Minnesota, Iowa, Illinois and Missouri, as well as advisory representatives of federal agencies.

Lake St. Croix TMDL Planning. The request would provide \$40,000 for a TMDL to be developed for Lake St. Croix along the Wisconsin-Minnesota border. Funding would represent Wisconsin's share of the cost of creating a structure to implement a basin-wide TMDL, which is being completed by a contractor hired by the Minnesota Pollution Control Agency (MPCA). The implementation of TMDL goals would further the objectives of the St. Croix Nutrient Reduction Agreement, which intends to control phosphorus deposition throughout the St. Croix basin. DNR and MPCA signed the agreement in 2006. The final recipient or recipients of this grant are not yet determined, but may include county or regional entities in Wisconsin and the MPCA.

Lafayette County TMDL Planning and Assessment. The request would provide \$10,000 to Lafayette County for staffing and costs of identifying farm-based sources of sediments deposited into the Sugar and Pecatonica rivers. Source identification is intended to allow for implementation of management practices on the farms to achieve TMDL goals for the basin.

Black Earth Creek Monitoring and Analysis. The request would provide \$30,000 to the Capital Area Regional Planning Commission (CARPC) for equipment and gauges to monitor and identify conditions of water chemistry in Black Earth Creek (Dane County) that are inhibiting the trout fishery. The project would also analyze the feasibility of a real-time alert system that would notify DNR of conditions causing runoff that could induce fish kills.

Clark Creek Water Quality Management. The request would provide \$30,000 to the Sauk County Land Conservation Department for a comprehensive planning project prior to restoration of Clark Creek, a Baraboo River tributary. The planning and restoration would address significant sediment deposition to the stream and floodplain, such as that which occurred during flooding in the summer of 2008, as well as further management efforts intended to preserve fish habitat and mitigate future impacts of flooding on roads and structures. The project would be coordinated by the Clark Creek Watershed Group, a cooperative organization consisting of local, state and federal agencies.

Willow Creek Watershed Protection and Improvement. The request would provide \$31,700 to the Sheboygan River Basin Partnership for development of a comprehensive watershed plan for Willow Creek in the Sheboygan River basin. Activities supported by funding would include data collection, mapping, modeling and stakeholder meetings. The final plan is intended to guide creation of best management practices (BMPs) to preserve water quality and fish and wildlife habitat near areas that are being developed.

Spring Creek Restoration Planning. The request would provide \$36,000 to the Village of Sussex in Waukesha County for the study of removal of culverts and other stream barriers to restore a natural stream flow. The study would also focus on the ability of a restored stream, including nearby vegetation and buffer areas, to naturally handle nutrient loadings caused by urban runoff.

Lake Mallalieu/Willow River TMDL Implementation Plan. The request would provide \$25,500 to St. Croix County for the development of an implementation plan to achieve TMDL goals for Lake Mallalieu and the Willow River. The plan would detail point and nonpoint source controls to manage phosphorus deposition that has impaired the lake. This project would also include an update of the area-wide water quality plan, and would coordinate with the Lake St. Croix TMDL planning described above.

Plum and East River Watershed TMDL Planning. The request would provide \$40,000 for the Brown County Land and Water Conservation Department to evaluate management practices and pollution-control measures in the Plum and East Rivers. The project would include collection of nutrient management data from area farmers, gathering of data from some untested fields, and GIS mapping. This planning project is intended to further goals of the Lower Fox River TMDL being developed by the EPA in conjunction with DNR.

Supplemental Water Quality Planning Funds. The request would provide \$139,900 in supplemental funding to several regional planning commissions as described below.

Capital Area Regional Planning Commission. Provide \$27,100 for a project coordinator for Yahara CLEAN, a partnership initiated by an MOU between DNR, the Department of Agriculture, Trade and Consumer Protection, Dane County, and the City of Madison. The partnership is intended to address nutrient, sediment and bacteria introduction to Dane County lakes and beaches. The coordinator would be responsible for various management and administrative duties, and would supplement the work currently done by a voluntary board. The ultimate goal of Yahara CLEAN is to create a plan to assess nutrient and sediment loadings in the Yahara Lakes and implement practices to limit the loadings.

Capital Area Regional Planning Commission. Provide \$30,000 for the update of the Dane County Water Quality Management Plan. The update would address monitoring and planning that may be needed for activities that change conditions and trends in water quality, including climate change, agricultural manure reuse, plant-based alternative energy production, and impacts of land-use changes on aquatic wildlife.

Southeastern Wisconsin Regional Planning Commission (SEWRPC). Provide \$20,000 for distribution to the Southeastern Wisconsin Watersheds Trust to evaluate the effectiveness of "green infrastructure," including rain gardens, bioswales and green roofs, in improving water quality in the Kinnickinnic River watershed.

Southeastern Wisconsin Regional Planning Commission. Provide \$40,000 for SEWRPC to update the area-wide water quality management plan, with a focus on updating aspects related to urban areas under the greatest development pressures.

East Central Wisconsin Regional Planning Commission. Provide \$12,800 for a study in conjunction with the Wisconsin Geologic and Natural History Survey to conduct data collection and GIS mapping to determine areas in the region that are likely to be highly functional groundwater recharge areas. The Commission includes Calumet, Fond du Lac, Green Lake, Marquette, Menominee, Outagamie, Shawano, Waupaca, Waushara and Winnebago Counties.

Brown County Regional Planning Commission. Provide \$10,000 for a pilot study that would use color infrared imagery to identify wetlands and wetland boundaries in the county. The study will include field verification of sites identified through infrared technology.

ANALYSIS

All of the projects described above fulfill water quality planning requirements under the federal Clean Water Act (CWA). DNR indicates that the selection of both in-house projects and pass-through grants was determined by DNR staff based on the need in a given area to begin, or make further progress on, area water quality plans. DNR further indicates the need for continued planning is determined in part by impaired waters on the state's 303(d) list for which planning and water quality improvements are most necessary. In-house projects are intended to further data

collection needed to create and implement water quality plans for areas in which DNR is the principal agency in the planning process. Conversely, pass-through grants will be used by local organizations and agencies to conduct water quality planning that DNR is delegating to local groups. These delegations are generally due to limited departmental resources and the concurrent ability of local organizations to arrange or conduct for the planning. DNR reports that organizations receiving pass-through funding are in some cases long-term recipients of local water quality planning grants.

Following DNR's selection of projects, the distribution was submitted to EPA for approval. EPA announced its approval of the DNR plan on July 23. DNR indicates that all projects, whether in-house or pass-through, will have a project officer to conduct review and oversight of the project's progress and expenditures. DNR anticipates establishing reporting processes for these project officers, with reporting occurring on a biweekly or monthly basis. The Bureau of Watershed Management will also submit to the EPA quarterly reports that contain the ARRA funding received and the amounts under each project that have been expended or obligated.

The Committee could approve the Governor's request, as it has been approved by federal authorities as conforming to ARRA requirements. Conversely, the Committee could consider modifications to the funding distribution, or denying the Governor's request. If the Committee modified or denied the request, it is likely that changes to the funding distribution would need to be resubmitted by DNR to the EPA for a subsequent approval. The Committee would also be required to approve a subsequent request by the Governor. Further, DNR reports that the state's water quality planning allocations must be in compliance with federal requirements. If EPA were to find that the state was not allocating planning funds in a manner sufficient to achieve water quality requirements, planning funds could be lapsed from the set-aside to the revolving fund.

ALTERNATIVES

1. Approve the expenditure of \$1,070,200 in federal stimulus funds for DNR water quality planning projects.
2. Deny the request.

Prepared by: Paul Ferguson