Environmental Improvement Fund

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Environmental Improvement Fund

Prepared by

Kendra Bonderud

Wisconsin Legislative Fiscal Bureau One East Main, Suite 301 Madison, WI 53703

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Environmental Improvement Fund

Introduction

The environmental improvement fund is comprised of three separate programs: the clean water fund program, the safe drinking water loan program and the land recycling (brownfields) loan program. The programs provide financial assistance for wastewater treatment, drinking water and contaminated land cleanup projects. This paper describes background about the programs, financial assistance criteria, components of the loan and grant programs, special provisions and program administration.

The clean water fund program provides financial assistance to municipalities for the planning, design and construction of surface water and groundwater pollution abatement facilities; primarily for municipal wastewater treatment. Enacted in 1987 Act 399, the clean water fund shifted the state's financing of wastewater treatment facility construction from grants to loans, and placed an increased emphasis on preventive maintenance for existing pollution abatement facilities. The clean water fund replaced the point source pollution abatement grant program, which provided grants to municipalities for wastewater treatment systems from 1978 through 1990. The clean water fund began providing assistance to municipalities in 1991.

The clean water fund administers financial assistance through the following programs: (1) a federal revolving loan program; (2) a state leveraged loan program; (3) a state direct loan and hardship program; (4) a federal hardship program; and (5) a small loan program. The state-only programs represent the Legislature's decision to exceed the federal financial commitment to surface water pollution abatement assistance. As of June 30, 2004, the clean water fund program had entered into financial assistance agreements with

municipalities totaling \$2 billion.

The safe drinking water loan program was enacted in 1997 Act 27 to provide financial assistance to certain municipalities for the planning, design, construction or modification of public water systems, if the projects will facilitate compliance with national primary drinking water regulations under the federal Safe Drinking Water Act Amendments of 1996 (SDWA) or otherwise significantly further the health protection objectives of the Act. The safe drinking water loan program is also authorized to provide funds for a safe drinking water loan guarantee program to guarantee drinking water loans to borrowers who are not local governments and who meet certain conditions. (The loan guarantee program has not been implemented.) The safe drinking water loan program began providing assistance in 1998. As of June 30, 2004, the safe drinking water loan program had entered into financial assistance agreements totaling \$125.6 million.

The clean water fund program and the safe drinking water loan program receive federal capitalization grants for a state revolving loan fund, for which Wisconsin provides a 20% match through issuance of general obligation bonds (with debt service costs paid by general purpose revenues and interest on program loans). The clean water fund program is also funded through revenue bonds, general obligation bonds to pay for the subsidy component of the revenue bond program and repayments of clean water fund loans.

The land recycling (brownfields) loan program was enacted in 1997 Act 27 to provide financial assistance to certain local governments for the investigation and remediation of certain contaminated properties. The land recycling loan program is a subprogram within the clean water fund program and is funded from a reallocation of \$20 million of repayments of clean water fund loans. The program began providing assistance in 2000. As of June 30, 2004, the land recycling loan program had entered into financial assistance agreements totaling \$11.7 million (this figure is also included in the clean water fund total).

The Department of Administration (DOA) administers certain aspects of the financial management of the environmental improvement fund and the Department of Natural Resources (DNR) administers all other loan and grant provisions. The Wisconsin Housing and Economic Development Authority (WHEDA) is authorized to administer the safe drinking water loan guarantee program. The environmental improvement fund programs are authorized under s. 281.58 through s. 281.625 and s. 234.86, and administered through administrative rules NR 162, NR 166, NR 167 and ADM 35.

Other informational papers prepared by the Legislative Fiscal Bureau discuss additional aspects of the state's efforts to provide financial assistance to address surface water pollution concerns. (See the Legislative Fiscal Bureau's informational papers entitled, "Private Sewage System Replacement or Rehabilitation Grant Program" and "Nonpoint Source Water Pollution Abatement and Soil Conservation Programs.")

CHAPTER 1

CLEAN WATER FUND PROGRAM

Project Eligibility and Priority

General Purposes for Assistance

The clean water fund program may provide financial assistance to municipalities for three general purposes. "Municipality" means any city, town, village, county, county utility district, town sanitary district, public inland lake protection and rehabilitation district, metropolitan sewerage district, or tribe. Although all three purposes are eligible; to date, the clean water fund program has not funded nonpoint source pollution abatement or national estuary conservation plans. Eligible purposes include:

Sewage Treatment. Planning, designing, constructing, replacing or maintaining a treatment facility (defined as any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or liquid industrial waste, including intercepting sewers, outfall sewers, and sewage collection systems).

Pollution Nonpoint Source Abatement. Implementing a nonpoint source pollution control management plan established under the federal Water Quality Act of 1987. Currently, state financial assistance for the abatement of nonpoint source pollution is primarily provided by a separate program. (See the Legislative Fiscal Bureau's informational paper entitled, "Nonpoint Source Water Pollution Abatement and Soil Conservation Programs.") Nonpoint source pollution is water pollution which is not attributable to a single, well defined point or origin but which is carried by rainfall or snowmelt from a

variety of sources, such as from stormwater runoff, farm fields, barnyards, construction sites, highways, city streets and parking lots.

National Estuary Conservation Plan. Developing a conservation plan related to the national estuary program established under the federal Water Quality Act of 1987. Although the state clean water fund program does not currently provide assistance for this purpose, it was included in the state law to provide maximum flexibility if federal law changes were made. For Wisconsin, Great Lakes estuaries (the portions of the Great Lakes that extend inland to meet the mouth of a river) could become eligible for federal assistance.

Appendix I provides a glossary of key terms related to wastewater treatment. Appendix II includes a description of wastewater treatment systems.

Eligible Types of Projects

DNR and DOA are authorized to provide financial assistance for the following types of projects.

Compliance Maintenance. Projects to prevent a significant violation of an effluent limitation by a municipal sewage treatment facility.

New or Changed Limits. Projects to achieve compliance with an effluent limitation established after May 17, 1988, if the project is for a municipality that is not a violator of the specific limit that is changing. For example, if the limit for ammonia discharge is changing, as long as a municipality is complying with its existing permit with regard to ammonia, it is not considered a violator for the purposes of this eligibility requirement.

Unsewered Communities. Projects to provide treatment facilities and sewers for unsewered areas.

Nonpoint and Stormwater. Projects to abate nonpoint source pollution and to control urban stormwater runoff.

Violator. Projects to plan, design, construct or replace treatments works that violate effluent limitations contained in an existing permit. "Violator" is defined as a municipality, that, after May 17, 1988, is not in substantial compliance with the enforceable requirements of its discharge permit, for a reason that the DNR determines is, or has been, within the control of the municipality.

Criteria Used to Prioritize Projects

Administrative rule NR 162 establishes a priority ranking system which scores each project. The system ranks projects in the event funding is not available for all requested projects in a given year. The priority ranking system is based on the following:

a. The project type, which includes the following categories: (1) compliance maintenance for wastewater and stormwater projects with permits; (2) new or changed limits; (3) unsewered; (4) non-permitted urban stormwater runoff; and (5) violators of current permit limits.

b. The impact of the project on public health.

c. The impact of the project on water quality, including: (1) fish and aquatic life; (2) wild and domestic animals; (3) outstanding and exceptional resource waters; (4) local water resource priorities; and (5) other criteria related to the treatment of septage or leachate.

d. The population served by the project.

The priority system assigns a score to a project based on the criteria listed above. The priority system is designed to give emphasis to funding compliance maintenance projects. For this reason, although project type, human health and water quality have approximately the same potential weight in the project score, project type has been the most important factor in determining priority ranking. On average, the four criteria make up the total priority score in the following proportions: project type (71%); human health (12%); water quality (16%); and population (1%). The highest scoring project type is a project that DNR determines is necessary to prevent a municipality from significantly exceeding an effluent limitation in a wastewater discharge elimination permit.

DNR was required to establish a factor that gives higher priority than would otherwise be given to certain joint projects that will serve more than one municipality in small population areas. DNR implemented NR 162 rule changes effective December 1, 2003, that give slightly higher priority to such projects.

To date, funding has been sufficient to fund all eligible clean water fund projects, except for those projects requested under the hardship program (discussed in a following section). Therefore, the project priority scores have only been used in the hardship program for the purpose of distributing available funding.

Emphasis on Prevention of Discharge Violations

Facilities discharging waste to state waters are required to operate under a Wisconsin pollution discharge elimination system (WPDES) permit issued by DNR. These permits establish requirements a municipality must meet for each point source of pollution. If that standard is being exceeded at the time the permit is issued, the permit provides a compliance schedule, which is a legally binding step-by-step set of requirements regarding how and when a municipality is to achieve compliance with the permit.

Compliance Maintenance Program. In the 1970s Wisconsin provided grants to and 1980s. municipalities to help the state meet a federal Clean Water Act mandate for fishable and swimmable waters. To protect the large public investment in the former grant program, DNR promulgated an administrative rule creating a compliance maintenance program. Its purpose is to where and. necessary, encourage require municipalities to take necessary actions to avoid water quality degradation and prevent violations of WPDES permit effluent limits.

Annual Report. Municipalities must submit annual reports to the DNR assessing the physical condition and performance of their sewerage systems. The report contains a point system component to identify whether voluntary or required actions are needed to maintain or improve the existing sewerage system. Under the point system, three action levels are established: (a) "voluntary range," where the municipality may initiate longer range planning for new, upgraded or additional treatment facilities; (b) "Department recommendation range," where DNR notifies the municipality that an operation and needs review is recommended; and (c) "Department action range," where DNR requires the municipality to complete an "operation and needs review," and to implement any needed action.

Project Scoring. Projects needed to maintain compliance with existing permit limitations receive the highest priority score in the category of project type and the largest interest rate subsidy (other than financial hardship projects).

Revised Contaminant Limits. In recent years, the federal and state standards setting contamination limits for both drinking water and surface water have become more stringent and have included contaminants not previously regulated. In response to federal and state requirements, DNR promulgates new or revised administrative rules for groundwater and surface water establishing new or modified limits for toxic substances, heavy metals, and other contaminants. To assist municipalities in achieving compliance with newly added permit limitations for substances such as toxics, the program gives these project types priority second only to compliance maintenance projects when assigning priority scores.

Financial Assistance Criteria

Types of Financial Assistance

Under the clean water fund program, municipalities may receive financial assistance in the form of loans, refinancing, guarantees, purchase of insurance, credit enhancement or grants, as follows:

a. Provide loans at or below market interest rates.

b. Purchase or refinance the debt obligation of a municipality incurred for municipal treatment facilities that would otherwise be eligible under the clean water fund program.

c. Guarantee or purchase insurance for municipal obligations for the construction or replacement of a treatment facility if the guarantee or insurance would improve a municipality's access to the credit market, or reduce the interest rate the municipality would otherwise receive.

d. Provide grants under the financial hardship assistance program.

e. Make payments to the Board of Commissioners of Public Lands to reduce principal or interest payments, or both, on loans made to municipalities by the Board for projects that would otherwise be eligible under the clean water fund program.

Limitations and Conditions on Financial Assistance

Under certain circumstances, eligibility for financial assistance from the clean water fund program is restricted, as indicated below:

Previous Compliance. Any municipality that has failed to substantially comply with the terms of a federal or state grant or loan previously received for wastewater collection, transportation, treatment or disposal is ineligible.

Reserve Capacity. To be eligible for financial assistance, except a market rate loan, the amount of reserve capacity included in a project is limited to the future capacity which will be needed to serve the region ten years after the project becomes operational. (Reserve capacity is extra wastewater system capacity not currently needed, but constructed to take future growth into consideration.)

Future Development. Public sanitary sewer mains, interceptors and individual systems that exclusively serve future development are ineligible.

Most Cost-Effective Alternative. Financial assistance may be provided for a project only if that project is the most cost-effective alternative for the municipality.

Sewer Lines. Connection laterals and sewer lines that transport wastewater from individual structures to public sewers or to on-site treatment systems are not eligible.

Violators. The portion of a project designed to address a WPDES permit violation receives market interest rate loans or other assistance that result in reducing the interest rate to not less than the market rate. The purpose of this restriction is to encourage municipalities to develop plans and begin construction before any pollution limitation violations occur and thus minimize any harmful effects to the environment.

Industrial Wastes. Financial assistance for the portion of a project used to treat industrial wastes may only be provided at the market interest rate.

Length of Loans. The loan repayment period may be for no longer than 20 years after the date of the financial assistance agreement.

Local Financial Administration. To be eligible for a clean water fund loan, each municipality must: (a) establish a dedicated source of revenue for repayment of any financial assistance (except grants made under financial hardship provisions); (b) pledge any security required by DNR or DOA administrative rules; (c) develop an operation and maintenance program for the treatment facility; and (d) develop a system of user charges in compliance with federal law to ensure that each user of the treatment work pays its proportionate share of the operation and maintenance costs. (An exemption may be issued for a city or village that imposes a system of charges based on assessed property values, if it is served by a regional wastewater treatment plant operated by a metropolitan sewerage district.)

Limit Per Municipality. No municipality may receive funding that would exceed 35.2% of the total present value amount awarded during the biennium (the concept of "present value" is discussed in a following section).

Unsewered Communities. Construction projects in unsewered communities receive a reduced interest rate loan (70% of the market interest rate) only if two-thirds of the initial flow originating from the area in question, as of project start-up, is from wastewater from residences that were in existence prior to October 17, 1972. This is known as the "two-thirds rule." Projects for unsewered communities that do not meet this criteria are eligible only for assistance at market rate interest or its equivalent. An unsewered municipality which is planning to use a treatment work in another municipality for disposal of its wastewater is not eligible for assistance until it has executed an agreement with that other municipality.

In several parts of the state, the high level of the groundwater table and the type of soil combine to create a large number of ineffective or failing septic systems. This can cause adverse public health effects since groundwater and surface water can be contaminated by untreated sewage. As a result, unsewered projects may receive relatively high priority scores because of the priority given the public health effects of groundwater and surface water contamination. To date, funding has been available for all unsewered projects requested other than financial hardship assistance requests. DNR believes that some communities have not applied for clean water fund financial assistance because they do not meet the two-thirds requirement. In addition, DNR believes that the further the October, 17, 1972, date moves into the past, the more likely it is that growing municipalities and subdivisions that seek funding for providing sewers in currently unsewered areas will not meet the two-thirds rule.

Application Process

In order to be considered for clean water fund program assistance, a municipality must meet the application and construction deadlines listed in Table 1. A municipality may not submit more than one application for any single project in any 12month period, except for applications for financial assistance for additional costs of an approved project. Regular projects are funded on a continuous funding cycle. Financial hardship assistance projects are funded on an annual cycle.

Table 1: Application and Construction Deadlines for Clean Water Fund Program Financial Assistance

Deadline	Action Required
Regular Projects: Continuous Funding* Six months before beginning of fiscal year in which financial assistance will be requested.	Municipality notifies DNR of its intent to apply for financial assistance.
Anytime during year.	Municipality submits regular application, design plans and specifications.
Within eight months of application acceptance.	Municipality signs CWF financial assistance agreement.
Hardship: <u>Annual Cycle</u> Six months before beginning of fiscal year in which financial assistance will be requested.	Municipality notifies DNR of its intent to apply for financial assistance. If a sanitary district, the municipality must also submit a map of sanitary district boundaries.
Before July 1 of the following year (six months later).	Municipality submits a hardship application, designs and specifications.
By approximately October of the following year (four months after application).	DNR publishes a funding list of applicants that applied for and qualify for hardship assistance.
Within eight months of publishing funding list.	DNR issues financial assistance agreement based on the project's eligibility, priority, and available funding.

*If the administering agencies determine that the amount of present value subsidy, general obligation bonding authority and revenue bonding authority are insufficient to fund all projects for which applications will be approved during the biennium, the program would revert to an annual funding cycle. Funds would be allocated based on environmental priority scores. Municipalities would be required to submit complete applications by June 30 of affected years.

Loan Interest Rates

The interest rate on a municipality's loan under the clean water fund program is determined by the type of project, the financial capability of the municipality and other special provisions. This section discusses how interest rates are established.

Interest Rates and Project Types. The statutes require that the loan interest rate set for each application be based on the type of project.

Current law establishes four interest rates as a percent of the market interest rate and specifies which project type receives which interest rate. The market rate is effectively the interest rate of state revenue bonds. Table 2 lists the project types by interest rate. DNR and DOA may request the Joint Committee on Finance to modify the interest rates; however, no Committee action has yet been requested.

Compliance maintenance and new or changed limits projects receive the greatest subsidy (other than financial hardship assistance projects) because these projects receive the highest priority. Second priority is provided to loans for stormwater or nonpoint source pollution abatement projects. Third priority is provided to unsewered projects that meet the two-thirds rule. Market interest rate loans are provided to the portion of a project: (a) designed to address a WPDES permit violation; (b) serving industrial flow; or (c) unsewered areas not meeting the two-thirds rule.

Transition Loan Interest Rates. As part of the transition from the point source grant program to the clean water fund program, a specific group of communities was guaranteed 2.5% interest rate loans. To receive this reduced interest rate for a project, the community, at the time of the transition to the clean water fund loan program, either had: (a) grant applications pending under the former grant program for the project; or (b) had a staged compliance schedule (affects only the Milwaukee Metropolitan Sewerage District).

Transition projects were required, in general, to meet the criteria of the point source grant program rather than the clean water fund loan program. Financial assistance agreements of \$345.0 million have been entered into for eligible transition period projects as of January 1, 2005. Specific transition loan limitations exist for Milwaukee Metropolitan Sewerage District (MMSD). The total amount of transition loans that MMSD can receive during the duration of the clean water fund program is limited to \$230.9 million. The program entered into \$230.4 million in transition period project financial assistance agreements with MMSD as of January 1, 2005. There is \$545,717 remaining in additional transitional period project funding for MMSD. However, as of January 1, 2005, the interest rate for compliance maintenance or new and changed

Project Category	Percent of Market Rate] Current Rate	Estimated (October, 2004) 2005-07 Biennial Finance Plan Rates
Tibject Category		Mate	Finance I fail Mates
Compliance maintenance/			
New and changed limits	55% of Market Rate	2.365%	3.30%
Stormwater/nonpoint	65% of Market Rate	2.795%	3.90%
Unsewered	70% of Market Rate	3.010%	4.20%
Violator, reserve capacity,			
Industrial flow or unsewered			
not meeting two-thirds rule	100% of Market Rate	4.300%	6.00%
Transition	Not Applicable	2.50%	2.50%
Hardship	Variable	0.0 to 4.300	% 0.0 to 6.0%

Table 2: Clean Water Fund Program Loan Interest Rates by Project Type

limits projects is lower (at 2.365%) than the 2.5% interest rate for transition projects, so it is unlikely the remaining transition project funding will be used by MMSD until interest rates for compliance maintenance projects increases above 2.5%.

Hardship Project Interest Rates. Projects that meet certain criteria are eligible for grants and loans (see section on financial hardship assistance). Interest rates may be as low as 0% and grants may be for up to 70% of project costs. A combination of grant and loan is provided to reduce the municipality's residential wastewater treatment charges to 2% of the median household income of the municipality.

Estimated Interest Rates. The interest rates paid by a municipality partly depend on the market rate, which changes with each state clean water fund revenue bond issue. Table 2 lists current interest rates and the planning rates estimated in the 2005-07 biennial finance plan prepared by DNR and DOA. (Appendix III describes the biennial finance plan process.) The percent of market rate listed in the table is based on the project category.

The actual interest rate for a specific project may be a composite of the interest rates listed in Table 2. This occurs if the project includes components that are associated with different interest rates. For example, an adjustment is often made for the project costs that are associated with industrial discharges. These costs would be funded at 100% of the market interest rate.

Biennial Loan Cap -- "The Present Value Subsidy Limit"

To provide a financial control mechanism, the law created a concept unique to the clean water fund program, termed a "present value subsidy" limit. This limit is a means for the Legislature to control the commitment of state financial assistance to municipalities in a biennium. Because it incorporates the debt service that will be paid on bond issuances, the present value subsidy limit reflects the total cost to the state, in current dollars, of subsidizing clean water fund program projects. The present value subsidy limit acts as a cap on the sum of all assistance provided through the clean water fund program in a biennium. To the extent that actual bond interest rates are greater or less than assumed rates, the number of projects that may be funded would decrease or increase.

Definition Of Subsidy And Present Value Subsidy. The "subsidy" is the amount provided by the clean water fund program for the purposes of: (a) reducing the interest rate of loans to a level below the market rate; and (b) providing financial hardship assistance grants. The subsidy is the difference between the debt service (principal and interest) that the state pays for the revenue bonds to finance the loan and the amount the municipality pays back into the fund.

The "present value subsidy" represents the cost, in 2003 dollars, to provide 20 years of subsidy for all financial assistance to be provided during the 2003-05 biennium. The 2003-05 biennial budget act established a present value subsidy limit of \$90.0 million by discounting the estimated subsidy costs at a statutory rate of 7% per year to July 1, 2003. The October, 2004, biennial finance plan proposes a present value subsidy limit for 2005-07 of \$136.6 million. The current and proposed present value subsidy limits are shown in Table 3.

The amount of present value subsidy is intended to be the equivalent of the amount the state would expend, but not be repaid, for a given project if that entire subsidy were provided in the year the loan was made, rather than over twenty years. Conceptually, the present value subsidy is the amount the state would need to invest today at a 7% annual rate of return to receive payments equal to the annual subsidy provided to municipalities.

How The Present Value Is Established. The amount of the present value subsidy limit is

Project Category	Authoriz 2003-05 Bien Present Value (2003-04 Dollars)		Proposed (Octo 2005-07 Biennial F Present Value (2005-06 Dollars)	
3 0 0	((
Compliance Maintenance,				
New & Changed Limits				
(55% of market rate)	\$66,870,000	74.3%	\$107,000,000	78.3%
Stormwater, Nonpoint				
(65% of market)	3,330,000	3.7	2,700,000	2.0
Unsewered (70% of market)	6,300,000	7.0	6,400,000	4.7
Market rate	0	0.0	0	0.0
Transition	0	0.0	0	0.0
Hardship	<u>13,500,000</u>	<u>15.0</u>	<u>20,500,000</u>	<u>15.0</u>
-				
TOTAL	\$90,000,000	100.0%	\$136,600,000	100.0%

Table 3: Clean Water Fund Program Present Value Subsidy Limit

established in the statutes in each biennial budget. There are several factors that affect the present value, including the interest rate the municipality pays to the state, the interest rate the state pays for its bonds and the expected discount rate. All these are incorporated by DNR and DOA in calculating the present value limit that is included in the biennial finance plan for consideration by the Legislature. The limit approved by the Legislature determines the present value subsidies for all clean water fund program obligations that could be made during the biennium, including amounts for financial hardship assistance.

Distribution Of The Present Value Subsidy Limit. The statutes require that the total present value subsidy limit be distributed as 85% for the basic loan commitments and 15% for financial hardship assistance. Table 3 lists the distribution of the present value subsidy among project categories.

Loan and Grant Programs

The clean water fund program provides financial assistance to municipalities through loans and limited grants. The state's clean water fund program is broader in scope than what is required to meet federal Water Quality Act requirements. The clean water fund program includes the direct federal revolving loan program and four state-only components: (1) leveraged loans; (2) proprietary loans; (3) hardship loans and grants; and (4) small project loans. Appendix IV provides an outline of the program components.

The amount of funding and interest rate received by municipalities is determined for all projects based on the program criteria previously discussed (such as project type and priority level), regardless of which loan program is used to finance the project. DOA selects the loan program to finance a project based on the following considerations: (a) all federal grant funding is used within federal guidelines first. and restrictions; (b) state revenue bond proceeds are used for as many non-federally funded projects as possible; and (c) state general obligation bond proceeds are used for loans which can not be funded under (a) or (b) due to funding availability or other financial considerations.

The program has entered into financial assistance agreements totaling almost \$2 billion as of June 30, 2004, including \$100.4 million for hardship grant awards. Table 4 shows the amount of financial assistance agreements entered into in every fiscal year between 1990-91 (the first year of financial assistance agreements) and 2003-04. Appendix V lists the total amount of financial assistance agreements provided to municipalities. Individual municipalities have received financial

State	Grant		
Fiscal Yea	r Amount	Loan Amount	Total
1990-91	\$0	\$152,620,646	\$152,620,646
1991-92	10,144,503	252,605,656	262,750,159
1992-93	20,584,960	112,492,580	133,077,540
1993-94	11,469,235	76,354,193	87,823,428
1994-95	7,681,464	92,961,017	100,642,481
1995-96	14,587,588	82,654,586	97,242,174
1996-97	1,284,877	125,730,689	127,015,566
1997-98	1,956,066	92,745,736	94,701,802
1998-99	11,938,555	108,298,122	120,236,677
1999-00	0	109,726,508	109,726,508
2000-01	696,993	114,349,164	115,046,157
2001-02	16,733,379	293,301,555	310,034,934
2002-03	1,500,864	199,390,425	200,891,289
2003-04	1,791,314	77,151,927	78,943,241
Total	\$100,369,798	\$1,890,382,804	\$1,990,752,602

Table 4: Clean Water Fund Program, FinancialAssistance Agreements by Fiscal Year

assistance agreements with totals ranging between \$22,000 and \$566,762,000. The Milwaukee Metropolitan Sewerage District, the largest recipient of clean water fund loans, accounted for 28.5% of the financial assistance as of June 30, 2004.

Direct Revolving Loans

One subprogram of the clean water fund program is known as the direct loan component. The federal Water Quality Act of 1987 makes grants available to states for a state revolving loan fund. The individual states that choose to participate receive a percentage of the total federal funds available each year. These funds can then be loaned by the states to municipalities to use for water quality planning and pollution abatement projects. These funds are termed "revolving" because the federal act requires that municipal repayments of these loans must be deposited back into the fund, thus providing a source of future loans for other municipalities.

Intended Use Plan and Annual Report. To receive the state's share of the capitalization grant, the state must provide an annual plan to EPA that identifies the intended uses of the amounts in its revolving loan fund for the following fiscal year. At the conclusion of each fiscal year, the state is required to provide an annual report to the EPA describing how the state has met the goals and objectives for the previous year. EPA reviews the state program annually and audits the revolving loan fund, or requires the state to have an independently conducted audit. The state must demonstrate that the federal portion of the revolving loan fund and the state match are being maintained in perpetuity.

Eligible Uses Of Federal Funds. Federal law establishes three categories of eligible uses for federal funds: (a) the construction of publicly-owned treatment works; (b) controlling nonpoint source pollution; and (c) national estuary conservation plans. To date, funding has been provided only for treatment works under the Wisconsin program.

To be eligible for assistance from the revolving loan program, the municipality's project must: (a) be a publicly-owned treatment work; (b) be consistent with areawide water quality management plans and nonpoint watershed plans; (c) be on the state's priority list.

Conditions Federal For State Receipt of Capitalization Grants. То receive federal capitalization grants, the state must contribute an amount equal to at least 20% of the federal grant amount. The state match is provided with general obligation bond proceeds. The state must also meet federal regulations related to procurement, accounting and financial management. State funding in the clean water fund program, other than the 20% state matching funds for the revolving loan program, is not subject to these restrictions.

Types Of Assistance Available To Municipalities. In addition to restrictions on the broad categories of uses for capitalization grants, there are federal limitations on the types of assistance that may be provided to municipalities with the federal component of the clean water fund and the

associated state match. States are not permitted to use the federal funds or the state match to provide grants to municipalities. The funds may be used to:

1. Make loans, on the conditions that: (a) the loans are made at or below market interest rates; (b) the terms do not exceed 20 years; (c) the municipality that is the recipient of the loan must establish a dedicated source of revenue for repayment; and (d) the fund will be credited with all payments of principal and interest on all loans.

2. Buy or refinance the debt obligation of municipalities incurred after March 7, 1985 (the date the U.S. Senate began considering the Water Quality Act of 1987), for the purpose of constructing a treatment facility otherwise eligible under this program.

3. Guarantee, or purchase insurance for, local debt obligations if doing so improves the municipality's access to the credit market, or reduces its interest rate.

4. Provide loan guarantees for similar revolving funds established by municipalities.

Federal Funding Levels. In the Water Quality Act of 1987, Congress authorized initial funding with federal capitalization grants for state revolving loan programs for the period from federal fiscal year (FFY) 1989 through 1994. From FFY 1989 through 1994, Wisconsin received 2.7342% of the total available capitalization grant funds nationwide. As of January, 2005, the Clean Water Act has not been reauthorized. Federal funding in FFY 1995 through 2004 for state revolving loan programs has been provided through annual appropriations.

The revolving fund can be used to finance the costs of administering the fund, including only those activities related to federally funded projects. The state is permitted to set aside not more than 4% of federal grants received for these administrative

purposes. Table 5 lists federal capitalization grants and annual appropriations received to date, including: (a) federal grants for direct loans to municipalities; (b) the 4% of federal grants allowed for administration; and (c) the required 20% state match provided from the issuance of general obligation bonds.

Table 5: Revolving Loan Program Federal Grantsand State Match

Federal	Federal Grants		State	
Fiscal Yea	ar Loans	Administration	n Match	Total
1989	\$24,479,500	\$1,020,000	\$5,100,000	\$30,599,500
1990	25,398,100	1,058,300	5,291,000	31,747,400
1991	53,438,000	2,226,600	11,133,000	66,797,600
1992	50,427,000	2,101,100	10,505,600	63,033,700
1993	49,883,500	2,078,500	10,392,400	62,354,400
1994	30,952,000	1,289,700	6,448,500	38,690,200
1995	31,966,900	1,331,900	6,659,800	39,958,600
1996	52,362,700	2,181,800	10,909,000	65,453,500
1997	16,175,000	674,000	3,369,800	21,218,800
1998	34,947,800	1,456,200	7,280,800	43,684,800
1999	38,382,500	1,599,300	7,996,500	47,978,300
2000	34,832,300	1,451,300	7,257,100	43,540,700
2001	34,522,500	1,438,400	7,192,200	43,153,100
2002	34,599,500	1,441,600	7,208,200	43,249,300
2003*	36,037,600	1,441,600	7,292,500	44,771,700
2004	34,374,500	1,432,300	7,161,400	42,968,200
2005 est.	34,395,400	1,433,100	7,165,700	42,994,200
Total	\$617,174,800	\$25,655,700	\$128,363,500	\$771,194,000

*Includes \$1,355,800 in federal grants under the federal rural communities hardship grants program and \$67,800 in state match.

Loan Repayments Held In Perpetuity. One of the primary federal requirements the states must meet is to manage the direct revolving loan program so that the amount received in federal capitalization grants is available "in perpetuity" (for an indefinite period with no stated limit). This is accomplished through the requirement that all repayments of loans made from federal grants plus the state match be credited to the revolving fund for future loans.

The state is authorized to use up to half of the interest repayments received for loans that were originally provided from the proceeds of general obligation bonds issued to provide the 20% state match to federal capitalization grants for general obligation bond debt service. State legislation has authorized the use of \$43.8 million in segregated loan repayments through 2003-04 to be used instead of general purpose revenues for general obligation bond debt service. In 2004-05, an additional \$6 million is appropriated for general obligation bond debt service. Use of segregated (SEG) revenue loan repayments for future loans reduces the future reliance of the program on general obligation bond issuance for loan financing. The use of SEG loan repayments to replace general purpose revenue (GPR) debt service costs for general obligation bond debt service lengthens the time period that it would take for the revolving loan program to become a selfsustaining fund.

As loans are repaid on a 20-year cycle, the funds become available for new loans. Funding available in a fiscal year for new loans is equal to the influx of new federal grants and state match plus loan repayments. Figure 1 portrays the level of new financing occurring in a fiscal year (federal grants + state match + loan repayments) and identifies the gradual increase in the proportion of new loans financed with revolving funds compared to new funding. The amount of revolving loans funded from loan repayments will continue to grow for a period 20 years subsequent to the last addition of new funding. Figure 1 includes an estimated receipt of federal grants in federal fiscal year 2005 of \$35.8 million, based on projections made by DOA in the 2005-07 biennial finance plan.

Leveraged Loans

The leveraged loan subprogram provides loans to municipalities using proceeds of state revenue bonds and general obligation bonds. The program utilizes the state's general obligation bond authority to "leverage" a larger amount of capital through the sale of state revenue bonds. Through this process, the program reduces the state's use of general debt service obligations.

Revenue Bonds. The state issues revenue bonds to provide the main source of capital to make loans to municipalities for eligible projects. Revenue bond proceeds also pay bond issuance and administrative expenses associated with issuance of the bonds. Municipalities borrow money, including at lower than market interest rates, and use the loans for the costs of planning, design and construction of pollution abatement facilities.



The repayment of revenue bonds comes from four sources: (1) municipality repayment of loans made through the program; (2) revenue bond proceeds deposited to the credit reserve fund (paid at the end of the repayment period) and earnings on the credit reserve fund; (3) general obligation bond proceeds deposited to the subsidy reserve fund to pay the costs of below market interest rates; and (4) in cases of default, state aid otherwise paid to a municipality may be utilized.

Subsidy Reserve Fund. To meet conditions required for the sale of revenue bonds in the bond market, reserve funds are established. General obligation bonds are sold to create a subsidy reserve fund to pay the costs of the state subsidy to municipalities. The subsidy results because loans to municipalities are, in most cases, made at an interest rate below the market interest rate the state pays for its revenue bonds. The reserve fund is necessary to assure revenue bond holders that the subsidy costs are funded. The state's general fund pays debt service costs for the general obligation bonds that are in the subsidy reserve fund.

Credit Reserve Fund. A credit reserve fund is established with a portion of the proceeds of revenue bond issuances. The source of revenues for repayment of the bonds is repayments from municipalities that received clean water fund loans. The credit reserve fund provides security to the buyers of the state revenue bonds by providing a liquid asset from which payments to bond holders can be made in the event of default by a municipality. The reserve fund also enables the revenue bonds to be sold at a lower interest rate.

State Aid Intercept. Bond holders are also provided security for their investments through a state aid intercept provision. In the event of default on a loan, the clean water fund has the authority to intercept state aid payments made to that municipality and use those funds to pay the bond holders. In addition, the state may apply an additional charge to the amount of property taxes levied by the county in which the applicable

municipality is located.

Disbursements and Revenues. Through June 30, 2004, the leveraged loan program had disbursed \$819.0 million to 217 municipalities. Generally, funding commitments are disbursed over several years. Interest rates have ranged from 0.0% to 5.8%, and the weighted average interest rate for all loans is 3.04%.

Proprietary Loans

The clean water fund provides loans to municipalities through a proprietary loan portfolio. This method of financial assistance makes direct use of general obligation bond proceeds and is utilized when a project does not meet all the construction or financial criteria of the federal or leveraged loan programs and when the municipality is identified as otherwise eligible for assistance. It also funds the low-interest loan component of the hardship program (see the following section). In addition, because of specific restrictions on the use of revenue bond proceeds, such as a requirement that project refinancing must occur within 90 days of the issuance of the bond, the Department may temporarily finance projects through direct loans and subsequently transfer the project to the leveraged loan program under an upcoming bond issuance.

As of June 30, 2004, the program had 60 outstanding loans with an aggregate principal balance of \$19,700,100. The \$328,300 average balance of these loans is substantially smaller than the average leveraged loan, with an average of \$1.8 million, and the average direct revolving loan, with an average of \$4.1 million.

Hardship Financial Assistance

The financial hardship assistance subprogram was included in the clean water fund program to address the concern that not all communities are equally able to bear the additional costs associated with treatment plant construction or rehabilitation. Particularly in small, rural communities, the cost per capita can be high because of the limited number of individuals financing the necessary capital investment. Information developed by DNR shows that existing user charges for wastewater services vary greatly across the state.

Through June 30, 2004, the clean water fund program had entered into financial hardship assistance agreements with 74 municipalities totaling \$176,014,200. This included hardship grants totaling \$100,369,800 (including disbursements of \$94,468,500) and hardship loans totaling \$75,644,400. These municipalities are shown in Appendix V.

Eligibility and Ranking. DNR is responsible for determining which communities receive financial hardship assistance and the form of that assistance. In making these decisions, DNR is directed to consider: (1) the project's placement on the priority list for funding; (2) the municipality's eligibility for financial hardship assistance; (3) the construction and operation and maintenance costs of the project; and (4) the total funding available to provide financial hardship assistance to all qualified applicants.

Eligibility for financial hardship assistance is determined based on the following two criteria:

1. The median household income of the municipality must be 80% or less (\$39,097 or less in 2004-05) of the median household income of the state; and

2. The estimated total annual charges per residential user in the municipality that relate to wastewater treatment would exceed 2% of the median household income in the municipality without hardship assistance.

"Median household income" means median household income determined by the U.S. Bureau of the Census as adjusted by DNR to reflect changes in household income since the most recent federal census. In May, 2004, DNR received adjustment factors from the U.S. Department of Commerce to adjust 2000 Census data (1999 income) to 2002, and will apply the same factor to every municipality in a county. For municipalities that are sanitary districts, DNR obtains median household income information by: (a) obtaining a map of the district boundaries from the sanitary district; (b) gathering census block data; and (c) providing census block numbers to the U.S. Census Bureau to obtain a special tabulation of median household income for the sanitary district.

"Residential user" means a structure or part of a structure, including a mobile home, that is used primarily as a home, residence or sleeping place by one person or two or more persons maintaining a common household and that uses a publicly owned treatment work. "Residential user" does not include an institutional, commercial, industrial or governmental facility.

Types of Assistance. The program provides hardship assistance that reduces financial residential user charges to an amount equal to 2% median household income in the the of municipality (or as close to 2% as is possible with the maximum assistance). Financial hardship assistance may include grants or loans at or below the market rate. The maximum financial assistance provided to a municipality, including hardship assistance, is a 70% grant with the remaining 30% of costs provided through a 0% interest rate loan. The municipality must pay at least 30% of the eligible costs of the project.

Financial hardship assistance is provided first in the form of a low-interest loan. Then if user charges still exceed 2% of the median household income, the program adds a grant. The program may not reduce the amount of financial hardship assistance provided to a municipality if the municipality also receives funding from another source unless the combination of the financial hardship assistance plus the other funding would reduce the residential user charges to less than 2% of the median household income in the municipality.

Cap on Hardship Assistance. Funding for financial hardship assistance is statutorily limited to 15% of the total present value subsidy authorized during a biennium. In 2003-05, this equals \$13.5 million of the \$90.0 million in total present value subsidy for the biennium.

Restrictions on Assistance. The Department must comply with certain restrictions in making financial hardship awards. A municipality that is violating discharge permit pollution limitations may not receive financial hardship for that portion of the project designed to correct that violation.

All projects that receive financial hardship assistance must comply with all the criteria for general clean water fund assistance, and must be on the funding priority list. Any hardship projects that are on the financial hardship assistance funding list but do not receive funding, have not previously received funding and are in the top 20% of environmental priority ranking scores for clean water fund projects, shall receive top priority for financial hardship assistance in the following year.

Small Project Loans

The small project loan subprogram was created in 1993 to provide an alternate funding source with a simplified application and review process for municipal wastewater treatment projects costing \$750,000 or less. Administrative rule changes increased the maximum project cost to \$1,000,000 effective December 1, 2003. The program is intended to fund smaller projects, such as those that are requested: (a) to maintain compliance with current wastewater standards, such as the addition of equipment not involving major construction; and (b) to comply with a new or changed effluent limit. It has provided interest subsidies since June, 1995. The small loan program utilizes an existing program operated by the Board of Commissioners of Public Lands. The Board receives revenues, managed through the State Trust Fund, which are invested or loaned to local units of government. Trust fund revenues are derived from state land sales, fines, escheated property and other sources. The majority of the Board's funds are invested in loans granted to school districts and municipalities.

Under the small loan program, a municipality obtains a loan from the State Trust Fund to fund a wastewater treatment project. The municipality also enters into an agreement with the clean water fund program to provide an annual subsidy of the State Trust Fund loan interest rate. The clean water fund program makes payments from the Clean Water Fund to the municipality for the interest rate subsidy. Units of government that are eligible for the clean water fund small loan program include: sewerage and sanitary districts; towns; villages; cities; counties; and public inland lake protection and rehabilitation districts.

Municipalities interested in the small loan program must submit an intent to apply form to the clean water fund program by December 31 prior to the calendar year in which the municipality applies for the interest subsidy. Municipalities may submit the application for the interest subsidy at any time during the year. Approval of an interest subsidy is made within eight months of the date the application is accepted. Assistance provided under the small loan program may not exceed the amount of subsidy that would have been provided if the loan would have been made directly by the clean water fund program.

Through June 30, 2004, the small loan program had provided interest subsidy of \$1,641,600 on 53 loans that have a loan amount of \$74,983,400. Subsidized interest rates provided by the small loan program have ranged from 2.64% to 4.5%, which reduced State Trust Fund interest rates that ranged from 4.25% to 6.75%.

Rural Communities Hardship Grant Program

In March, 1999, DNR received a one-time grant of \$1,355,800 under the federal rural communities hardship grants program. DNR provided the required 5% state match (\$67,790) for wastewater treatment projects under the program by reallocating existing general obligation bonding authority (with GPR debt service).

In 1997 Act 237, as modified by 2001 Act 16, municipalities were eligible for federal assistance for project costs which were eligible for assistance under the clean water fund program if the municipality meets several criteria related to having a small and rural population, lacking centralized wastewater treatment or collection systems or needing improvements to onsite wastewater treatment systems to improve public health or reduce an environmental risk, and having a per capita annual income of residents to be served by the project that does not exceed 80% of the national per capita annual income.

DNR entered into a financial assistance commitment with the Fulton Sanitary District #2 in Rock County for a project that met the federal hardship criteria and utilized the full amount of federal hardship assistance. The financial assistance agreement amount was \$1,668,060, including \$1,355,800 in federal rural hardship assistance, \$67,790 in state match from general obligation bonding authority and \$244,470 in state hardship assistance. The project has been closed out.

Clean Water Fund Program Costs

The clean water fund program provides state financial assistance to municipalities with the use

of state general obligation bonds and state revenue bonds. General obligation bonds are repaid from the state's general fund taxes and loan repayments on clean water fund loans. Clean water fund revenue bonds are primarily repaid from the proceeds of municipal loan repayments rather than from state tax dollars.

The cost to the state under the clean water fund program accrues over time based on the debt service costs of the general obligation bonds. The debt service costs fund: (a) the costs of subsidizing interest rates; (b) the state match required for the receipt of federal grants; (c) direct (proprietary) state loans; (d) grants provided under the financial hardship program; and (e) program costs, including bond discounts, cost of bond issuance, some administrative expenses and capitalized interest.

DNR and DOA are required to attempt to ensure that increases in state water pollution general obligation debt service costs do not exceed 4% annually and that state general obligation bond debt service costs for all state water pollution abatement programs are not greater than 50% of all general obligation debt service in any fiscal year. Debt service for water pollution abatement obligations is approximately 19% of all general obligation debt service or 31% of all state general purpose revenue (GPR) debt service in 2004-05. approximately \$116.8 million, (This equals including debt service for the predecessor programs to the clean water fund program, of total general obligation debt service of \$605.3 million, which includes GPR debt service of approximately \$378.7 million).

The total cumulative amount of debt service payments for clean water fund program general obligation bonds is shown in Table 6. Total general fund debt service in 2003-04 was \$14,868,100 for clean water fund program general obligation bonds, and is estimated at \$36,017,500 in 2004-05. Debt service payments were lower in 2003-04 than

Year	Payment General Fund (GPR)	Payment from Loan Repayments	Total GO Debt Service Payment
1990-91	\$2,489,900		\$2,489,900
1991-92	6,536,600		6,536,600
1992-93	11,571,000		11,571,000
1993-94	15,213,000		15,213,000
1994-95	16,074,400	\$1,394,500	17,468,900
1995-96	18,083,300	1,858,300	19,941,600
1996-97	19,288,200	2,350,600	21,638,800
1997-98	21,863,100	4,000,000	25,863,100
1998-99	26,423,700	4,000,000	30,423,700
1999-00	27,639,800	4,000,000	31,639,800
2000-01	28,690,600	4,000,000	32,690,600
2001-02	23,698,300	10,200,000	33,898,300
2002-03	30,196,000	6,000,000	36,196,000
2003-04 *	14,868,100	6,000,000	20,868,100
2004-05			
(budgeted	l) <u>36,017,500</u>	6,000,000	42,017,500
Total	\$298,653,500	\$49,803,400	\$348,456,900

Table 6: Clean Water Fund Payments of GeneralObligation Bond Debt Service

*Principal payments were not made on certain clean water fund bond issues in May, 2004, but rather were restructured as part of the State's issuance of \$175 million in refunding bonds under 2003 Wisconsin Act 129.

the estimated amounts for 2004-05 because principal payments were not made on certain clean water fund bond issues in May, 2004, but rather were restructured as part of the State's issuance of \$175 million in refunding bonds under 2003 Wisconsin Act 129. In addition, a portion of general obligation bond debt service is paid by loan repayments received from municipalities from loans that were originally provided from the proceeds of general obligation bonds, instead of using GPR for that portion of general obligation bond debt service. The use of loan repayments for general obligation bond debt service totaled \$6,000,000 in each of 2003-04 and 2004-05.

Future and Current Costs

DNR has projected program needs for the next four years (2005-06 to 2008-09), of an estimated \$964.7 million in 2004 dollars, based on the current scope of the program and current federal and state wastewater discharge requirements. To date, the program has been authorized \$1,616 million in revenue bond authority and \$637.7 million in general obligation bond authority.

DNR and DOA are required to develop a biennial finance plan that includes estimates of costs for the program in the upcoming biennium. (See Appendix III for a description of the biennial finance plan process.) The 2005-07 biennial finance plan, submitted in October, 2004, estimated that \$9.6 million in additional general obligation bond authority and no additional revenue bond authority would be needed in 2005-07 to meet estimated clean water fund program needs.

Through June 30, 2004, the clean water fund signed financial program had assistance agreements with municipalities for 542 projects at a total value of \$1,990.8 million, including \$1,890.4 million in loans closed and \$100.4 million in grant awards. Appendix V shows these financial assistance agreements by municipality. This total includes financial assistance agreements under the land recycling loan program (discussed in a later section), which is part of the clean water fund program. Of the loans and grants awarded with signed financial assistance agreements, \$1,717.1 million in loans and \$94.5 million in grants have been disbursed. Municipalities are responsible for repaying all of the loan disbursements. The clean water fund program has received loan repayments from municipalities totaling \$782.5 million as of June 30, 2004. Interest rates ranged from 0% to 5% in 2004.

Sources and Uses of Funds

Table 7 lists the total sources (\$2.857 billion) and uses of clean water fund program funds as of June 30, 2004. The sources of program funds include revenue bonds (\$941.8 million), federal grant proceeds (\$567.4 million), general obligation bond proceeds (\$419.6 million), loan repayments (\$782.5 million), and other fund income (\$146.0 million). Uses of funds include loan and grant

Table 7: Clean Water Fund Program -- Sourcesand Uses of Funds through June 30, 2004

Sources of Funds	Amount (millions)
Revenue Bonds	\$941.8
Federal Grant Proceeds 1989-2004	567.4
General Obligation Bond Proceeds and	
CWF Subsidy Bonds	419.6
Loan Repayments	782.5
Investment Income	145.9
Land Recycling Loan Servicing Fee	0.1
Total Sources of Funds	\$2,857.2

Uses of Funds

Uses – Financial Assistance Disbursements	
Loans from Revenue Bonds	\$726.0
Loans from Federal Grants	534.9
Loans from General Obligation Bonds	208.7
Loans from Loan Repayments	207.5
Loans from Investment Income	40.0
Hardship Grants	94.5
Subtotal	\$1,811.6
Uses - Other	
Revenue Bond Debt Service	\$606.5
Program, Administrative and Issuance Expense	e 47.3
General Obligation Bond Debt Service	43.8
Transfer to Safe Drinking Water Loan Program	23.6
Subtotal	\$721.2
Commitments and Reserves	
Loan Credit and Subsidy Reserves	81.5
Financial Assistance Agreements Closed	
but not Fully Disbursed	120.6
Financial Assistance Applications Approved	
but not Closed	105.6
Subtotal	\$307.7
Total Funds Unapplied	\$16.7
Total Uses of Funds	\$2,857.2

disbursements of \$1.812 billion, revenue bond debt service payments of \$606.5 million, \$43.8 million from loan repayments for payment of general obligation bond debt service (instead of using GPR), \$47.3 million in program and administrative costs, \$23.6 million in funds transferred to the safe drinking water loan program, \$81.5 million in loan credit and subsidy reserves, \$120.6 million in loans closed but not fully disbursed, \$105.6 million in loan applications approved but not closed, and \$16.7 million in unexpended funds that are available for commitment for financial assistance agreements or administrative expenses in 2004-05 and subsequent years.

The lines in Table 7 for financial assistance disbursements include the portions of closed loans that have been disbursed to the municipal recipient of the financial assistance. The line for financial assistance agreements closed but not fully disbursed includes the portion of the financial assistance agreement that has not been disbursed to the municipality, but will be during the remainder of construction during the next few years. The line for financial assistance applications approved but not closed, includes agreements that have been approved, and the present value subsidy limit has been allocated to the project, but the terms of the financial assistance agreement have not been finalized and the agreement has not been closed.

Provisions Applicable to Selected Municipalities

One-Time Hardship Program Funding Priority for 2003-05

2003 Act 316 required DNR and DOA to restructure clean water fund financial hardship assistance that was provided to the Elcho Sanitary District (Langlade County) in 1999. The Act requires the departments to use the estimated operation, maintenance, and replacement costs shown in the financial assistance agreement entered into with the Elcho Sanitary District, rather than the mean operation, maintenance, and replacement costs that are normally used in DNR's calculation of wastewater treatment user charges. Act 316 also exempted the Elcho Sanitary District from the statutory requirement that a municipality must pay at least 30% of the eligible costs of the project. DNR and DOA implemented the act by restructuring the financial assistance agreement with the Elcho Sanitary District to convert \$597,100 of the original loan to a grant.

One-Time Hardship Program Funding Priority for 1997-99

1997 Act 27 made an exception to the requirement that the total present value subsidy limit be distributed as 85% for the basic loan commitments and 15% for financial hardship assistance by specifying that in 1997-99, \$20.16 million in present value subsidy be allocated for financial hardship assistance (22%) and the remaining \$70.4 million be allocated for basic loan commitments (78%). DNR was directed to allocate hardship assistance present value subsidy in 1997-98 in an amount sufficient to fund the Pell Lake Sanitary District and Lake Como Beach Sanitary District projects in Walworth County. The Act provided \$7.8 million in general obligation bonding authority for the projects.

1997 Act 27 provided that a town sanitary district would be allowed to submit a complete application for inclusion on the 1997-98 financial hardship assistance funding list if specified conditions are met and if the application was submitted by the effective date of the bill. The Elcho Sanitary District in Langlade County was the only eligible sanitary district.

1997 Act 27 converted a \$213,000 no-interest loan awarded to the Village of Wheeler in Dunn County under the financial hardship assistance program into a grant and provided \$112,800 in general obligation bonding authority for the project.

1997 Act 27 prohibited DNR and DOA from providing financial assistance at less than the market interest rate during 1997-99 for a wastewater treatment expansion and sewer extension or interception that meets certain conditions. It was anticipated that the provision would apply to a proposed condominium development in the community of Fish Creek in Door County.

One-Time Hardship Program Funding Priority for 1995-97

1995 Act 27 forgave the interest on \$480,000 of the financial hardship assistance loan of the Village of Wausaukee in Marinette County and exempted the loan from the statutory requirement that industrial costs must be financed at the market interest rate.

1995 Act 452 provided \$4 million in additional general obligation bonding authority, provided \$3.4 million in additional present value subsidy in 1995-97 and directed DNR and DOA to approve up to \$4 million in financial assistance during 1995-97 for a project of up to \$400,000 in financial hardship assistance in the Village of Wheeler in Dunn County and projects to serve two or more municipalities that met five specified conditions. Projects that met the conditions include a joint project by the Ithaca and Sextonville Sanitary Districts in Richland County and a project by the Hub Rock Sanitary District in Richland County that serves people living in the two towns of Henrietta and Rockbridge. The present value subsidy limit of 15% for hardship assistance did not apply to projects made eligible under Act 452.

One-Time Hardship Program Funding Priority for 1994-95

1993 Act 413 required that projects meeting a specific definition would receive a one-time exemption from all hardship program funding and eligibility limits, and be provided a 90% grant in the 1994-95 fiscal year. The Act provided \$4.4 million in general obligation bonding authority for eligible projects. A project in the Village of Pulaski in Brown County and a project in the Aurora Sanitary District in Florence County met this

statutory definition.

The Act also required that certain projects be funded in 1994-95 prior to any other projects, regardless of the project's ranking under the program's priority value system. Four projects met the statutory definition, including projects in the Village of Lannon in Waukesha County, the Calumet Sanitary District, the Village of Amherst in Portage County and the City of Wautoma in Waushara County.

CHAPTER 2

SAFE DRINKING WATER LOAN PROGRAM

Project Eligibility and Priority

Under the federal Safe Drinking Water Act (SDWA) Amendments of 1996, EPA is authorized to award federal capitalization grants to states for drinking water projects and states are required to provide a 20% match in funds. The state safe drinking water loan program provides assistance primarily to local governments (including cities, villages, towns, counties, town sanitary districts, public inland lake protection and rehabilitation districts and municipal water districts) for eligible projects to plan, design, construct or modify public water systems, if the projects will facilitate compliance with national primary drinking water regulations under the federal Safe Drinking Water Act or otherwise significantly further the health protection objectives of the Act. A "public water system" is defined as a system providing piped water to the public for human consumption if the water system has at least 15 service connections or regularly serves an average of at least 25 individuals for at least 60 days each year.

Eligible Projects

DNR and DOA are authorized to provide financial assistance to local governments for drinking water projects that have any of the following purposes:

a. Address SDWA health standards that have been exceeded or prevent future violations of rules related to contaminants with acute or chronic health effects;

b. Replace aging infrastructure if necessary to

maintain compliance or further the public health protection goals of the SDWA;

c. Consolidate water systems;

d. Purchase a portion of another public water system's capacity if it is the most cost effective solution;

e. Restructure a public water system that is in noncompliance with the SDWA requirements or lacks the technical, managerial and financial capability to maintain the system if the assistance will ensure that the system will return to and maintain compliance with the SDWA; and

f. Create a new community water system or expand an existing community water system that, upon completion, will address existing public health problems with serious risks caused by unsafe drinking water provided by individual wells or surface water sources. A "community water system" is defined as a public water system that serves at least 15 service connections used by year-round residents of the area served by the public water system or that regularly serves at least 25 year-round residents.

Ineligible Projects

The following types of projects are ineligible for assistance under the program:

a. Construction or rehabilitation of dams;

b. Water rights, except if the water rights are owned by a public water system that is being purchased through consolidation as part of a capacity development strategy; c. Reservoirs, except for finished water reservoirs and those reservoirs that are part of the treatment process and are located on the property where the treatment facility is located;

d. Projects needed primarily for fire protection;

e. Projects for systems that lack the adequate technical, managerial and financial capability, unless assistance will ensure compliance;

f. Projects for systems determined to be significant noncompliers unless funding will ensure compliance with SDWA requirements;

g. Projects primarily intended to serve future growth;

h. Projects for systems owned by state or federal agencies; and

i. Projects or portions of projects that are not reasonably necessary and appropriate to address a public health concern.

Other Eligible Activities

DNR is authorized to spend, with DOA approval, up to a total of 15% of the federal safe drinking water capitalization grant in any fiscal year for the following five activities authorized by the federal Safe Drinking Water Act (but not more than 10% of the federal capitalization grant for any one activity).

a. Provide a loan to the owner (whether or not a local government) of a community water system or a nonprofit noncommunity water system to acquire land or a conservation easement from a willing seller or grantor to protect the source of the water system from contamination and to ensure compliance with national primary drinking water regulations. A "noncommunity water system" is defined as a public water system that is not a community water system. b. Provide a loan to the owner of a community water system to: (1) implement voluntary source water protection measures in order to facilitate compliance with national primary drinking water regulations or otherwise significantly further the health protection objectives of the Safe Drinking Water Act; or (2) to implement a program for source water quality protection partnerships.

c. Assist the owner of a public water system to develop the technical, managerial and financial capacity to comply with national primary drinking water regulations (capacity development).

d. Delineate or assess source water protection areas (only available with federal fiscal year 1997 grant monies).

e. Protect wellhead areas from contamination.

DNR is authorized to spend, with DOA approval, up to a total of 10% of the federal capitalization grant in any fiscal year for the following four activities authorized by the federal Safe Drinking Water Act: (a) administration of a public water system supervision program; (b) technical assistance concerning source water protection; (c) development and implementation of a capacity development strategy required by the Act; and (d) development and administration of an operator certification program required by the Act.

DNR is authorized to spend, with DOA approval, up to a total of 2% of the federal capitalization grant in any fiscal year for technical assistance to public water systems serving 10,000 or fewer persons.

Criteria Used to Prioritize Projects

DNR is required to establish a priority ranking system that scores each safe drinking water loan program project and is used to establish a list of projects to be funded. The ranking system in administrative rule NR 166, effective August 1, 1998, and revised January 1, 2002, includes the following priorities.

a. First priority is provided for projects that address an acute public health risk, especially risk related to a confirmed waterborne disease outbreak or confirmed microbial contamination (such as from giardia or cryptosporidium).

b. Second priority is provided for projects that address chronic and longer-term health risks to people who drink the water, especially risk related to organic chemical contamination.

c. Projects receive priority ranking points if the community they serve has financial need on a per household basis, including a population less than 10,000 and a median household income equal to or less than 80% of the state median.

d. Projects also receive priority if they correct secondary contaminant violations or system compliance needs.

e. Projects also receive priority if they have implemented activities that demonstrate specific technical, financial and managerial capacity of the public water system (such as enacting an emergency action plan, private well abandonment ordinance or wellhead protection plan and ordinance).

Financial Assistance Criteria

Types of Financial Assistance

DNR and DOA are authorized to use the following methods to provide financial assistance under the safe drinking water loan program.

a. Make loans with an interest rate of 55% of market interest rate for local governments that do not meet financial need criteria established in NR 166. Table 8 shows the program interest rates.

b. Make loans with an interest rate of 33% of market interest rate for local governments that meet the following financial need criteria established in NR 166: (1) the population of the local government is less than 10,000; and (2) the median household income of the local government is 80% or less (\$39,097 or less in 2004-05) of the statewide median.

c. Purchase or refinance the debt obligation of a local government incurred after July 1, 1993, if the debt was incurred to finance costs of currently eligible projects.

d. Guarantee or purchase insurance for obligations incurred to finance the cost of eligible projects if the guarantee or insurance will provide credit market access or reduce interest rates.

Project Category	Percent of Market Rate	Current Rate	Estimated (October, 2004) 2005-07 Biennial Finance Plan Rates
Financial need communities	33% of Market Rate	1.419%	1.98%
Regular eligibility	55% of Market Rate	2.365%	3.30%

Table 8: Safe Drinking Water Loan Program Loan Interest Rates by Project Type

e. Make payments to the Board of Commissioners of Public Lands to reduce principal or interest payments, or both, on loans made to local governments for projects that are eligible for financial assistance under the safe drinking water loan program. (DNR and DOA are not currently using the small loan program for safe drinking water loan projects.)

DNR and DOA are authorized to jointly request the Joint Committee on Finance to modify the percentage of market interest rate for loans. To date, the agencies have not requested any change in the interest rates.

Application Procedures

A local government is required to submit a notice of its intent to apply for financial assistance under the safe drinking water loan program at least six months before the beginning of the fiscal year in which it intends to receive financial assistance. DNR may waive this requirement upon written request by the local government. An applicant must submit an engineering report prior application for financial to submitting an the After DNR approves assistance. local engineering report, government's the local government must submit an application for financial assistance under the program to DNR by the April 30 preceding the fiscal year in which the applicant is requesting to receive financial assistance. Applicants are limited to one application per project per year.

DNR approves applications for financial assistance after: (a) the project is ranked on the priority list; (b) DNR determines that the project meets eligibility requirements; (c) DOA determines that the project has pledged any required security, demonstrated the financial capacity to operate and maintain the project and demonstrated the ability to repay the loan; and (d) the Legislature has approved an amount of present value subsidy limit for the program for the biennium.

Local governments must, as a condition of receiving financial assistance under the program: (a) establish a dedicated source of revenue to repay the financial assistance; (b) comply with applicable federal and state statutes and rules; (c) develop and adopt a program of water conservation as required by DNR; (d) develop and adopt a program of systemwide operation and maintenance of the public water system, including the training of personnel, as required by DNR; and (e) develop and adopt a user fee system. DNR and DOA may, at the request of an applicant, issue a notice of assistance commitment financial after the application has been approved and funding has been allocated for the project. The commitment shall specify the conditions that the applicant must meet to secure financial assistance and include the estimated repayment schedules and other terms of financial assistance. If a loan is not closed before April 30 of the year following the year in which funding is allocated, DOA shall release the funding commitment allocated to the project.

Program Funding

Federal and State Funding

The safe drinking water loan program is authorized \$26.21 million in general obligation bond authority. The general obligation bonding authority would be more than the \$26.04 million needed for the required 20% state match to a federal capitalization grant amount of \$130.2 million for federal fiscal years (FFY) 1997 through 2004 (received in state fiscal years 1997-98 through 2004-05). The available amount of federal funds is \$113,744,200 in FFY 1997 through 2003 and an estimated \$16.4 million in FFY 2004. Table 9 shows the amounts of federal grant and state match by fiscal year.

Table 9: Safe Drinking Water Loan ProgramFederal Grants and State Match

Federal Fiscal Year	Total Federal Grants (Loans + Administration)	State Match	Total
1997	\$41.546.400	\$8.309.280	\$49.855.680
1998	9.548.400	1.909.680	11.458.080
1999	10.007.600	2.001.520	12.009.120
2000	10.400.800	2.080.160	12,480,960
2001	10,443,800	2,088,760	12,532,560
2002	15,946,500	3,189,300	19,135,800
2003	15,850,700	3,170,140	19,020,840
2004	16,442,800	3,288,560	19,731,360
2005 est.	16,000,000	3,200,000	19,200,000
Total	\$146,187,000	\$29,237,400	\$175,424,400

DNR and DOA are required to develop a biennial finance plan that includes estimates of costs for the program in the upcoming biennium. The 2005-07 plan, submitted in October, 2004, estimated that \$6.1 million in additional general obligation bond authority would be needed in 2005-07 to meet estimated safe drinking water loan program needs

The Governor is authorized to transfer up to 33% of the federal capitalization grant received for the safe drinking water loan program to the clean water fund program, or to transfer an amount equal to up to 33% of the federal capitalization grant received for the safe drinking water loan program from the clean water fund program to the safe drinking water loan program. This would allow the state to transfer up to \$37,084,078, representing 33% of the federal safe drinking water capitalization grants for federal fiscal years 1997 through 2004. As of June 30, 2004, DOA and DNR transferred \$23,596,056 from clean water fund direct loan repayments to the safe drinking water loan program. This leaves a balance of \$13,488,022 that could be transferred from the clean water fund program to the safe drinking water loan program.

Funds transferred from the clean water fund will first be used for refinanced projects on the current safe drinking water loan program funding list. Federal regulations generally require that capitalization grant funds loaned for refinanced projects must be disbursed over eight calendar quarters, or two years (the "eight quarters rule"). Funds transferred from the clean water fund will be disbursed to accommodate project funding needs during the time that federal capitalization grants are not available under the eight quarters rule. Without the transferred funds, safe drinking water loans for refinanced projects would have to be disbursed over several calendar quarters, with a separate loan closing required for each quarter. Additional transfers would depend on the timing of funding of any refinanced projects on the safe drinking water funding list.

Present Value Subsidy

The law created a present value subsidy limit to provide a financial control mechanism similar to that used for the clean water fund. The subsidy limit would represent the estimated state cost, in 2003 dollars, to provide 20 years of subsidy that would fund all loans to be made during 2003-05 under the program. The 2003-05 biennial budget act established a present value subsidy limit of \$12.8 million in the 2003-05 biennium for the safe drinking water loan program. The present value subsidy limit could also be used for loans funded from the transfer from the clean water fund to the safe drinking water loan programs. The October, 2004, biennial finance plan proposes a 2005-07 present value subsidy limit of \$13.5 million.

Program Costs

Intended Use Plan

The intended use plans submitted to EPA by DNR and DOA in July of 1998, 2000, 2002 and 2004 describe funds available for biennia between 1997-99 and 2003-05 and the intended uses of the funds. The federal program allows for several set-asides of funds for administration, source water protection, technical assistance, state management of public water supply systems and other drinking water activities.

Table 10 shows the set-aside amounts from safe drinking water loan program funds. These setaside amounts are being used as follows:

Table 10: Safe Drinking Water Loan Program --Administrative Set-Aside Allocations ThroughJune 30, 2004

Set-Aside Category	Allocated Amount
Administration	\$4,549,768
Source Water Protection	3,737,925
Wellhead Protection	1,184,401
Technical Assistance	2,074,732
Capacity Development	400,000
Operator Certification	500,000
State Program Management of	
Public Water Supply Systems	5,364,180
Total	\$17,811,006

a. The set-aside for administration represents less than the maximum 4% of the FFY 1997 through 2003 federal grants that may be used for administration by DNR and DOA.

b. The set-aside for source water area delineations and assessments represents the maximum 10% of the FFY 1997 federal grant that may be allocated to this use. (Subsequent federal grants may not be used for this purpose.) EPA approved the state's source water assessment program plan in November, 1999. DNR received EPA approval to extend the completion deadline to December 31, 2004.

Examples of ways the funds are being used are to: (1) model the regional hydrologic flow in several areas of the state; (2) identify significant potential sources of contamination; (3) collect digital local information for several potential sources of contamination; (4) correct discrepancies about well information in various DNR databases; (5) scan well construction reports into a format that can be displayed on a computer; (6) investigate the usefulness of groundwater age-dating techniques determine the susceptibility help to of groundwater systems to pathogens and other contaminants; (7) complete surface water system assessments for all 19 surface water systems in the state, provide the assessments to the systems, and post the information on the Internet; (8) conduct a technical peer review of a modeling tool designed to define three dimensional capture zones of certain types of wells in specified aquifer types; (9) conduct assessments of municipal groundwater systems; and (10) provide assessment information to DNR's source water protection partners. (These partners include municipal water system operators, counties, the Wisconsin Rural Water Association, the Department of Health and Family Services, the Department of Commerce, the Wisconsin Geologic and Natural History Survey, the Natural Resource Conservation Service, university researchers, and consultants.)

Wellhead protection funds have been c. used, or will be used during the 2003-05 biennium, to: (1) calculate wellhead protection areas for municipal wells in the Lower Fox River Valley; (2) make a video to promote wellhead protection; (3) print and distribute 850 copies of the video "An Ounce of Prevention;" (4) organize teacher workshops to distribute groundwater and sand tank models to schools free of charge to promote groundwater education and wellhead protection; contract with the Central Wisconsin (5) Groundwater Center to hire a half-time staff person to work with communities to promote a groundwater guardian program to encourage communities to form local teams to promote groundwater protection; (6) print and distribute two wellhead protection newsletters to local officials; (7) purchase ten copies of the video (Water Rich, Water Poor) for use by DNR staff for presentations; (8) fund DNR regional staff to finish source water assessment and perform wellhead protection activities; (9) develop wellhead protection mapping and database capabilities; (10)

fund a source water assessment and wellhead protection DNR data coordinator; (11) contract for groundwater resource characterization and hydrogeologic model maintenance and water table mapping; (12) contract for program mapping and data applications; (13) contract for well database redesign to be used for the wellhead protection complete municipal program; (14) system assessments, meet with system operators to deliver and explain the assessments, and promote wellhead protection planning based on the assessment results; (15) complete assessments for other-than-municipal community and noncommunity systems; (16) post summaries of all assessments on the Internet; and (17) continue groundwater resource characterization, in areas where it is cost effective, by updating and maintaining current hydrogeologic models and supporting water table mapping efforts.

A non-transient non-community water system means a non-community water system that regularly serves at least 25 of the same persons over 6 months per year. Examples of non-transient non-community water systems include those serving schools, day care centers and factories. A community water system means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

d. DNR has used the 2% technical assistance funds to: (1) develop operator handbooks for small systems (completed in 2000); (2) implement a oneyear contract with the University of Wisconsin-Extension to provide training sessions on new regulations affecting small systems (completed in 2001); (3) contract annually since 2000 with the Wisconsin Rural Water Association to visit otherthan-municipal systems and non-transient noncommunity systems to provide instruction and education; (4) contract with the Wisconsin Section of the American Water Works Association during 2001 through 2003 to establish 12 to 20 coalitions of small system operators to provide a forum for operators to discuss issues, network with other communities and receive information on new EPA regulations; and (5) contract with the Wisconsin Rural Water Association to conduct meetings for the 22 established municipal system coalition groups and six established coalition groups of other-than-municipal and non-transient noncommunity system coalitions (OTM/NTNC), and to create four more OTM/NTNC coalitions.

DNR is implementing a program to use e. capacity development funds to help public water systems achieve the technical, financial and managerial capacity to meet SDWA requirements. Capacity development funds have been used to: (1) prepare a capacity development strategy to address all existing public water systems; (2) hold public input sessions; (3) create a fact sheet and web page on capacity; (4) create a self-assessment document for use by other-than-municipal and nontransient noncommunity public water systems to help owners focus on technical, managerial and financial components of a public water system; (5) modify the sanitary survey process to incorporate technical, managerial and financial capacity development elements; (6) prepare reports related to the capacity development strategy for the Governor and EPA; (7) form a stakeholder work group for discussion and feedback on various elements of capacity development and review of the capacity development strategy; and (8) conduct capacity evaluations for new community and nontransient non-community systems prior to construction. (As of December 1, 2004, 68 systems have undergone capacity evaluations before construction, including 24 community systems and 44 non-community systems.) These funds must be matched by the state on a one to one basis, which is done with state general funds used to administer the public water system supervisory program.

f. Operator certification funds have been used to help other-than-municipal and nontransient non-community public water systems meet the requirement that the systems must have a certified operator by March, 2005. Funds have been used to: (1) modify DNR's existing operator certification administrative code to conform with EPA requirements; (2) contract with the Wisconsin Rural Water Association to develop an operator certification course, reference manual, exam, course script and course evaluation (completed in 2002); (3) contract with the Wisconsin Water Association to conduct classroom and on-line training of system operators from 2002 through 2005; (4) update DNR website information for small systems related to continuing education opportunities and contract operator services; (5) developing standard begin а operational procedures manual for small system operators; (6) begin developing a newsletter for operators; (7) send letters to certified operators to provide information on issues such as continuing education credits; and (8) publish information regarding certification relevant operator issues in publications. These funds have the same dollar for dollar match provisions as the capacity development funds.

g. State program management funds are being used for: (1) computer programming and public water system supervision staff for field activities by engineers and water supply specialists; (2) activities related to administration, coordination and policy development; (3) contracts with counties for inspections of non-community water systems; and (4) a contract with the University of Wisconsin for an engineering intern to complete reviews of water system expansion activities. These funds also have a dollar for dollar match requirement.

Financial Assistance Agreements

DNR and DOA are required to establish a funding list in each fiscal year that ranks approvable loan applications in the same order that they appear on the priority list. If available funds are not sufficient to fund all approved applications, DOA is required to allocate funding to projects in the order that they appear on the funding list, except that: (a) up to 15% of the available funds in each fiscal year would be reserved for projects for public water systems that regularly serve fewer than 10,000 persons; and (b) no local government could receive more than 25% of the present value subsidy limit for the biennium.

The safe drinking water loan program has entered into 47 financial assistance agreements totaling \$125.6 million through June 30, 2004. Of this total, \$110.6 million has been disbursed. Municipality loan recipients are responsible for repaying all of the loan disbursements. As of June 30, 2004, the safe drinking water loan program has received \$49.3 million in loan repayments.

Table 11 shows the amounts of the financial assistance agreements by fiscal year from 1998-99 (the first year of financial assistance agreements under the program) through 2003-04. Appendix VI lists the total amount of financial assistance agreements provided to municipalities during the same time period. The City of Oshkosh, the largest recipient of safe drinking water loans, accounted for \$29.0 million (23.1%) of the \$125.6 million in financial assistance agreements as of June 30, 2004.

Table 11: Safe Drinking Water LoanProgram, Financial Assistance Agreements byFiscal Year

State Fiscal Year	Loan Amount
1998-99	\$52,973,432
1999-00	454,324
2000-01	14,787,044
2001-02	9,293,520
2002-03	15,289,583
2003-04	32,811,206
Total	\$125,609,109

Sources and Uses of Funds

Table 12 lists the total sources (\$188.2 million)

Table 12: Safe Drinking Water Loan ProgramSources and Uses of Funds Through June 30,2004

Amount (Millions)
\$113.7
22.6
25.7
2.6
23.6
\$188.2

Uses of Funds

Uses – Financial Assistance Disbursements		
Loans from Federal Grants	\$82.1	
Loans from General Obligation Bonds	22.6	
Loans from Loan Repayments	5.9	
Subtotal	\$110.6	
Uses – Other		
State Administration and Set-Asides	\$9.8	
Committee antes		
Commitments:		
Financial Assistance Agreements Closed		
but not Disbursed	12.7	
Financial Assistance Agreements		
Approved but not Closed	22.6	
Administration and Set-Asides		
Allocated but not Expended	8.0	
Subtotal	\$43.3	
Unapplied Funds	24.5	
Total Uses of Funds	\$188.2	

and uses of safe drinking water loan program funds as of June 30, 2004. The sources of program funds include federal grant proceeds (\$113.7 million), general obligation bond proceeds (\$22.6 million), funds transferred from the clean water fund program (\$23.6 million), loan repayments (\$25.7 million) and investment income (\$2.6 million). Uses of funds include \$110.6 million in loan disbursements, \$9.8 million in administration and set-asides, \$35.3 million in loan commitments, and \$32.5 million in unexpended funds that is available for commitment for financial assistance agreements or administrative expenses in 2004-05 and subsequent years.

Table 13: Safe Drinking Water Loan ProgramPayments of General Obligation Bond DebtService

Year	Payment from General Fund (GPR)
1989-99	\$140,500
1999-00	948,700
2000-01	1,133,200
2001-02	1,139,700
2002-03	1,231,100
2003-04 *	666,000
2004-05 (budgeted)	2,018,700
Total	\$7,277,900

* Principal payments were not made on certain SDW bond issues in May, 2004, but rather were restructured as part of the State's issuance of \$175 million in refunding bonds under 2003 Wisconsin Act 129.

Debt Service Costs

The cost to the state under the safe drinking water loan program accrues over time based on the debt service costs of the general obligation bonds. The debt service costs fund: (a) the costs of subsidizing interest rates; and (b) the state match required for the receipt of federal grants. The total cumulative amount of debt service payments for safe drinking water loan fund program general obligation bonds is shown in Table 13.

Safe Drinking Water Loan Guarantee Program

1997 Act 27 created a safe drinking water loan guarantee program to guarantee up to 80% of the principal of loans for projects that improve the quality of drinking water in water systems not owned by local units of government. The program is administered by the Wisconsin Housing and Economic Development Authority (WHEDA). Eligible loans are guaranteed by funds deposited to the Wisconsin drinking water reserve fund, which
consists of deposits from the safe drinking water loan fund, funds received for the program from any other source and the interest income from the fund. DNR, with the approval of DOA, is authorized to transfer funds from the safe drinking water fund appropriations. WHEDA is required to regularly monitor the fund to ensure a balance of at least one dollar for every \$4.50 in total outstanding guaranteed principal authorized under the program.

Although WHEDA plans to guarantee 80% of the principal of an eligible loan, they have the flexibility to establish a lower percentage for all loans guaranteed or different percentages (up to 80%) for individual loans. The total outstanding principal amount for all guaranteed safe drinking water loans is not allowed to exceed \$3.0 million, unless the Joint Committee on Finance, under s. 13.10 of the statutes, permits the Authority to increase or decrease the amount. A request for additional authority must include a projection that compares the next June 30 balance, less the amount necessary to fund guarantees under the program and to pay outstanding claims, with the same balance if the request is approved.

WHEDA is required to enter into a guarantee agreement with lenders wishing to participate in the program. However, as of January 1, 2005, WHEDA awaits DNR administrative rules regulating the safe drinking water loan guarantee program while DNR and EPA negotiate policy and procedural issues related to the implementation of the program.

WHEDA may only use the Wisconsin drinking water reserve fund to guarantee safe drinking water loans. WHEDA may guarantee a loan under the program if all the following apply: (a) the borrower is not a local unit of government; (b) the borrower is either: (1) an owner of a "community water system" (a public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year round residents); or (2) is the owner of a public nonprofit water system that is not a community water system (for example, a private school); (c) the loan, as determined by DNR, either facilitates compliance with national primary drinking water regulations or otherwise significantly furthers the health protection objectives of the federal Safe Drinking Water Act.; and (d) the lender of the loan enters into a guarantee agreement with WHEDA.

All loans guaranteed under this program are backed by the moral obligation of the Legislature to appropriate any funds necessary to meet the obligations created. As of January 1, 2005, WHEDA has not guaranteed any safe drinking water loans under this program.

CHAPTER 3

LAND RECYCLING LOAN PROGRAM

1999, provides the highest priority to a site which has impacted one or more public water supply wells or private drinking water supply wells above maximum contaminant levels in DNR administrative rules. Secondary priority is provided to sites: (a) which have impacted groundwater above groundwater standards; (b) which have soil or sediment contamination; (c) where an agreement has been executed between the municipality and a private developer; (d) that are larger than five acres in size; (e) that are in agreement with a municipally-adopted plan for renewal or redevelopment; or (f) that are within an area specially designated for tax incentives or targeted public funding.

Financial Assistance Criteria

Types of Financial Assistance

DNR and DOA are authorized to use the following methods to provide financial assistance under the land recycling loan program.

a. Make loans with an interest rate of 0%.

b. Purchase or refinance the debt obligation of a local government incurred after May 17, 1988, if the debt was incurred to finance the cost of a currently eligible project.

c. Guarantee or purchase insurance for obligations incurred to finance the cost of eligible projects if the guarantee or insurance would

Project Eligibility and Priority

Eligible Projects

In 1997 Act 27, the land recycling loan program was created within the clean water fund program in the environmental improvement fund to provide assistance to local governments financial (including cities. villages, towns, counties, redevelopment authorities or housing authorities) investigation and remediation for the of contamination at sites or facilities owned by the local government if the contamination has affected, or threatens to affect, groundwater or surface water. Sites and facilities include approved and nonapproved solid or hazardous waste disposal facilities, approved mining facilities, waste sites or sites where a hazardous substance is discharged on or after May 21, 1978.

Criteria Used to Prioritize Projects

DNR is required to establish a priority ranking system that ranks each land recycling loan program project and is used to establish a list of projects to be funded. Project rankings are based of projects on the potential to reduce environmental pollution and threats to human health and, for sites and facilities that are not landfills, the extent to which projects will make land available for redevelopment after a cleanup is conducted rather than develop undeveloped land (such as agricultural cropland or green spaces).

Administrative rule NR 167, effective June 1,

provide credit market access or reduce interest rates.

d. Make payments to the Board of Commissioners of Public Lands to reduce principal or interest payments, or both, on loans made to local governments for projects that are eligible for financial assistance under the land recycling loan program. (DNR and DOA are not currently using the small loan program for land recycling loan projects.)

Application Procedures

A local government is required to submit a notice of its intent to apply for financial assistance under the land recycling loan program at least six months before the beginning of the fiscal year in which the local government will request funding. DNR may waive this requirement upon written request by the local government. A local government must submit an application for financial assistance under the program to DNR by the date established by DNR. DNR must establish at least two application deadlines per year. Applicants are limited to one application per project per year.

DNR may approve an application for financial assistance after: (a) the project is ranked on the priority list; (b) DNR determines that the project meets eligibility requirements; (c) DOA determines that the project has pledged any required security, demonstrated the financial capacity to operate and maintain the project and demonstrated the ability to repay the loan; and (d) the Legislature has approved an amount of present value subsidy limit for the biennium.

Local governments must, as a condition of receiving financial assistance under the program: (a) establish a dedicated source of revenue to repay the financial assistance; (b) comply with applicable federal and state statutes and rules; and (c) allow DNR access to the property to make inspections. DNR and DOA may, at the request of an applicant, issue a notice of financial assistance commitment after the application has been approved and funding has been allocated for the project. The commitment shall specify the conditions that the applicant must meet to secure financial assistance and include the estimated repayment schedules and other terms of financial assistance. If a loan is not closed within one year of the date on which funding is allocated, DOA shall release the funding commitment allocated to the project.

Sale of Sites Remediated Under the Program

A local government must sell a site or facility remediated under the program for not less than fair market value if the loan is outstanding. A local government that sells a site or facility remediated under the program must apply the sales proceeds first toward any state land recycling loan balance, then toward the cost of the land plus the cost of remediation, third toward any state subsidy and finally any remaining funds are retained by the municipality. If the sale price is less than or equal to the cost of the land plus the cost of remediation, the sale proceeds first has to be applied to the remaining land recycling loan balance until the remaining balance is fully paid. If the sale price exceeds the cost of the land plus the cost of remediation. 75% of the excess has to be used to repay the subsidy until the subsidy is fully repaid. Any sale proceeds remaining after the subsidy is fully paid belong entirely to the municipality.

Program Funding

Funding Level

The land recycling loan program is funded with up to \$20 million, which comes from reallocation of repayments of clean water fund program loans made with the proceeds of federal grants to the clean water fund program. If not used for the land recycling loan program, loan dollars would be used for clean water fund loans to upgrade or replace wastewater treatment plants to meet state and federal requirements.

DNR and DOA are required to jointly charge and collect an annual service fee for reviewing and acting upon land recycling loan program applications and servicing financial assistance agreements. Statutes established the fee for 1997-99 as 0.5% of the loan balance. The fee for subsequent biennia is required to be established in the biennial finance plan for the environmental improvement program. DNR and DOA are required to specify a fee in the biennial finance plan that is designed to cover the costs of reviewing and acting upon land recycling loan program applications and servicing financial assistance agreements. No changes have been made in the service fee. As of June 30, 2004, DNR and DOA have collected annual service fees totaling \$100,400.

Present Value Subsidy

The law created a "present value subsidy limit" to provide a financial control mechanism similar to that which is used for the clean water fund program. The subsidy limit would represent the estimated state cost, in 2003 dollars, to provide 20 years of subsidy to fund all loans to be made during 2003-05 under the program. The 2003-05 biennial budget act established a present value subsidy limit of \$4.0 million for the land recycling loan program. The October, 2004, biennial finance plan proposes a 2005-07 present value subsidy limit of \$3.3 million.

Financial Assistance Agreements

DNR and DOA are required to establish a funding list in each fiscal year that ranks approvable applications in the same order that they appear on the priority list. If available funds are not sufficient to fund all approved applications, DOA is required to allocate funding to projects in the order that they appear on the funding list, except that: (a) DOA is not allowed to allocate more than 40% of the funds allocated in each fiscal year to landfill remediation projects; and (b) no local government may receive more than 25% of the present value subsidy limit for the biennium.

Table 14 shows the \$11.7 million in financial assistance agreements entered into under the land recycling loan program through June 30, 2004. The projects are also included in the Appendix V list of clean water fund financial assistance agreements.

Table14:LandRecyclingLoanProgramFinancial Assistance Agreements as of June 30,2004

Municipality *	Amount
Amery	\$628,758
Clintonville	1,035,461
Plymouth	1,262,972
Sheboygan	2,738,949
Sparta	5,000,000
Tomah	<u>1,000,000</u>
Total	\$11,666,140

* All of these municipalities are cities.

ENVIRONMENTAL IMPROVEMENT FUND ADMINISTRATION

Agency Responsibilities and Funding

Funding for administration of the three programs within the environmental improvement fund is provided from segregated revenues generated from the repayment of clean water fund loans, safe drinking water loans and land recycling loans, interest earned on bond proceeds, and federal administrative grants. Appropriations for administration of the environmental improvement fund total \$5.2 million and 58.6 positions for 2004-05.

Department of Natural Resources

DNR is authorized \$4,335,400 and 51.5 positions in 2004-05. This includes: (a) \$1,780,100 SEG environmental improvement fund with 17 SEG positions (one of the positions is designated as a land recycling loan program position); (b) \$1,769,100 FED clean water fund with 23.5 FED positions; and (c) \$786,200 FED safe drinking water loan program with 11.0 FED positions. The Department manages aspects all of the environmental improvement fund program not specifically assigned to DOA. DNR's specific duties include the following.

1. Calculate project priority values.

2. Take the lead state role in relations with EPA, including agreements necessary to receive a capitalization grant for the clean water fund program and the safe drinking water loan program.

3. Cooperate with DOA in administration of the environmental improvement fund program.

4. Take the lead state role with municipalities in providing environmental improvement fund information, and cooperate with DOA in providing such information.

5. Periodically inspect project construction under the environmental improvement fund to determine project compliance with construction plans and specifications approved by DNR.

6. Submit a biennial budget request for the environmental improvement fund program.

7. Establish eligibility requirements and determine eligibility for financial assistance.

8. Make commitments of financial assistance subject to a certification by DOA that the municipality has demonstrated that it is financially able to repay the loan, and that the assistance meets any terms and conditions established by DOA relating to financial management.

9. Approve applications, facility plans and construction plans and specifications.

10. Determine which applicants receive clean water fund financial hardship assistance and manage the clean water fund financial hardship program.

11. Determine annual funding policies.

12. Prepare a biennial list of the estimated need for wastewater, drinking water and land

recycling projects.

Department of Administration

DOA is authorized \$892,400 SEG with 7.1 positions in 2004-05 to provide financial management of the environmental improvement fund program. DOA responsibilities include the following.

1. Manage and implement certain financial aspects of the environmental improvement fund program.

2. Cooperate with DNR in administering the program.

3. Accept and hold any letter of credit from the federal government.

4. Manage environmental improvement funds, issue clean water fund revenue bonds and distribute the proceeds of the clean water revenue obligations.

5. Establish terms and conditions of financial assistance, including the type of municipal obligation required for repayment. Before DNR and DOA can sign a financial assistance agreement with a municipality, DOA is responsible for certifying that the municipality demonstrated that it has the financial capacity to: (a) pay the debt service on its obligations; (b) meet operation and maintenance cost of the project for its useful life; and (c) meet the terms and conditions established.

6. Allocate the available present value subsidy to projects after DNR and DOA determine that the project and municipality meet eligibility requirements.

7. Disburse loans and collect municipal payments.

8. Direct the investments of the environmental improvement fund.

9. Audit or contract for audits of projects receiving financial assistance under the program.

Joint Responsibilities

Joint responsibilities of DNR and DOA include the following:

1. Prepare a biennial finance plan.

2. Charge and collect service fees.

3. Determine conditions of financial assistance.

4. Establish the loan payment and repayment schedule.

5. Enter into a financial assistance agreement with a municipality.

6. Submit the required reports to the Legislature and Building Commission on program implementation.

establish DNR and DOA may jointly administrative service fees for the purpose of recovering the costs of administering the clean water fund program. These fees would be charged to municipalities that obtain loans through the program. By law, transition loan projects are exempt from payment of these fees. DNR administrative rules provide that financial hardship communities will not be required to pay service fees. At this time, no clean water fund program or safe drinking water loan program service fees have yet been established. The land recycling loan program charges an annual service fee equal to 0.5% of the loan balance.

Bonding Provisions

The environmental improvement fund program contains several provisions related to the issuance of bonds, including private versus public sale of bonds, requirements for minority underwriter participation and the moral obligation requirement that can be attached to a clean water fund loan.

Private Versus Public Sale

General obligation bonds may be sold at a "private" sale to the clean water fund or safe drinking water loan program. Other sales must be "public." A public sale means that the state takes sealed bids for the bonds from all interested underwriters and awards the sale to the lowest bidder. A private sale means that the state may make the sale to an underwriter based on a negotiated price. The award does not have to be made to the lowest bidder and the state may deal with only one firm. Negotiated, or "private," sales are generally made in cases where, due to the complexity of the bond issue, there are few underwriters with the necessary expertise to fulfill the state's needs. Under current law, clean water fund revenue bonds can be sold at private or at public, competitive sale. The safe drinking water loan program does not sell revenue bonds.

Minority Underwriters

The statutes require that at least 6% of revenue and general obligation bonds and operating notes be underwritten by minority investment firms. In addition, the statutes establish a requirement that at least 6% of the services of financial advisers in the sales of bonds and notes shall be awarded to minority firms. The law specifies that all bids or proposals by underwriters or syndicates of underwriters ensure that a portion of sales are to minority investment firms. If DOA is unable to achieve the 6% participation requirement, the Secretary of DOA is required to submit a report explaining the reasons to the Joint Committee on Finance. The 6% guideline has been achieved for current clean water fund bonds.

Moral Obligation

The Building Commission is authorized to designate, by resolution, that a legislative moral obligation exists for certain loan obligations under the environmental improvement fund. If payments from a municipality on any loan designated are insufficient, DOA could certify the amount of the insufficiency to the Secretary of DOA, the Governor and the Joint Committee on Finance. The Joint Committee on Finance would be required to introduce a bill with an appropriation of the amount needed to pay the revenue obligation. The statutes express the Legislature's moral obligation to make such an appropriation.

Investment Authority

DOA may purchase or acquire, negotiate, sell or otherwise dispose of environmental improvement fund loans at the price and terms it establishes. Further, DOA is authorized to direct the Investment Board to make any investment of the environmental improvement fund if it provides a financial benefit to the fund, the action does not weaken the purposes of the fund and the Building Commission approves the investment action. The Investment Board is relieved of any obligations relevant to prudent investment in making the investments directed by DOA. The Department may also enter into agreements with the federal government, private entities or others to insure or, in any other manner, provide additional security for the state's revenue obligations.

Municipal Financing Requirements

Repayment Methods

Subject to the terms of the financial agreement between the municipality and the state, a municipality is statutorily authorized to repay environmental improvement fund loans from any legal means, including: (a) general funds; (b) proceeds of the sale of obligations; (c) proceeds of the sale of public improvements bonds; (d) proceeds of revenue obligations; (e) sewerage system user charges; and (f) proceeds of special obligation bonds. In practice, municipalities repay environmental improvement fund loans through one of the following three ways, including: (a) tax levy; (b) sewerage or water system user charges; or (c) proceeds from special assessments levied for the project.

Loan Anticipation Notes

If a municipality has received a commitment for an environmental improvement fund loan, but wishes to begin a project in advance of that loan, it may issue a loan anticipation note. This note could be refunded one or more times, and would be structured so that the note could be retired when the clean water fund loan is received, but not later than five years after the original date of the original obligation.

Municipal Repayment Requirements

DOA must notify DNR if a municipality fails to make a principal repayment or interest payment by its due date. DOA may then collect the amounts due by deducting them from any state payments due the municipality or may add a special charge to the amount of taxes levied on the county.

APPENDICES

Several appendices provide additional program information. These include:

- Appendix I provides a glossary of key terms to assist with an understanding of program terminology.
- Appendix II describes the components of a wastewater treatment facility.
- Appendix III describes the biennial finance plan process for the environmental improvement fund that includes funding and statutory requests for the upcoming biennium
- Appendix IV provides an outline of the clean water fund loan and grant programs.
- Appendix V lists clean water fund financial assistance agreements as of June 30, 2004.
- Appendix VI lists safe drinking water loan program financial assistance agreements as of June 30, 2004.

A Glossary of Key Terms

Advanced or Tertiary Wastewater Treatment. Treatment of wastewater that is required beyond the generally-required secondary treatment.

Areawide Water Quality Management Plans. Plans prepared by the Department of Natural Resources (DNR) or a designated planning agency as required by the U.S. Environmental Protection Agency (EPA) and state statute for specific planning areas of the state. These areas are defined based upon water quality-related criteria. The plans: (1) define water quality problems in each area; (2) propose solutions to these problems; (3) delineate service areas for treatment of point source pollution; (4) identify local agencies which would be responsible for pollution abatement efforts; and (5) identify "best management practices" to be utilized in nonpoint source pollution abatement efforts. Each plan requires approval by the Governor and EPA.

Collection System or Collector Sewer. The type of sewer that generally runs beneath streets and collects sewage from individual homes and commercial or industrial establishments. Collectors should not be confused with lateral sewers, which are the pipes that join an individual home or establishment with a collector sewer and are privately owned and maintained. Generally, sewage flows from lateral sewers to collector sewers, to interceptors, then to the treatment plant.

Community Water System. A public water system that serves 15 service connections used by year-round residents of the area served by the public water system or that regularly serves at least 25 year-round residents.

Compliance Maintenance. A program and actions by municipalities to maintain compliance with a WPDES permit, intended to prevent violations of discharge limits that cause degradation of water quality.

Interceptor. The type of sewer that receives sewage from collector sewers and transports it to a sewage treatment plant. Interceptors differ from collectors in that they generally do not receive sewage from individual homes or other establishments, but are only used for conveying sewage to a treatment plant.

Lateral. The type of sanitary sewer that conveys sewage from an individual residence or establishment to a public sewage collection system. Laterals are generally privately owned and maintained.

New and Changed Limits. This refers to pollution effluent limit changes that occur due to new or changed standards in the federal or state water pollution control laws. Examples are standards for toxic substances that are included in new rules on surface water pollution but were not a part of previous regulations except on a case-by-case basis.

Noncommunity Water System. A public water system that is not a community water system.

Nonpoint Source Pollution. Water pollution which is not attributable to a single, well defined point or origin but which is carried by rainfall or snowmelt from a variety of sources, such as from stormwater runoff, farm fields, barnyards, construction sites, highways, streets and parking lots.

Nonpoint Source Watershed Plan. A plan developed for an area that has been selected to receive state funding through the nonpoint source pollution abatement grant program. It contains information on water quality and sources of

nonpoint pollution as well as a program to correct the pollution.

Point Source Pollution. Water pollution emanating from a distinct, easily-definable source such as the end of a pipe.

Present Value Subsidy. The amount provided by the clean water fund for the purposes of: (a) reducing the interest rate of loans to a level below the market rate; and (b) providing financial hardship assistance grants. The subsidy is the difference between the debt service (principal and interest) that the state pays for the revenue bonds to finance the loan and the amount the municipality pays back into the fund. The "present value subsidy" represents the cost, in current dollars, of that subsidy. Conceptually, the present value subsidy is the amount the state would need to invest today at a 7% annual rate of return in order to make payments equal to the annual subsidy provided to municipalities.

Primary Treatment. The least complex and effective of three possible treatment levels, which relies on screen, filters and a settling process to mechanically remove pollutants. It is generally only 30-35% effective.

Public Water System. A system providing piped water to the public for human consumption if the water system has at least 15 service connections or regularly serves an average of at least 25 individuals for at least 60 days each year.

Publicly-Owned Treatment Works. The term used by EPA for a sewerage system, including collectors, interceptors, treatment facilities and other appurtenances owned by a governmental entity for the primary purpose of treating residential sewage.

Sanitary Sewer. Any pipe which conveys domestic wastewater (sanitary wastes) from its

origin to a treatment site or discharge point.

Secondary Treatment. Wastewater treatment more sophisticated than primary treatment, which utilizes bacteria to consume organic pollutants. Proper secondary treatment eliminates 85-90% of the pollutants in wastewater.

Sewage or Wastewater Treatment Plant. The facility in a municipal sewerage system that removes pollutants before the wastewater is discharged into a lake, stream or the groundwater.

Sewerage System. A term used to describe the entire system of sewers and treatment facilities used to transport, treat and discharge sewage.

Sludge. The accumulated wastes removed from wastewater at the treatment stage and composed of a semi-liquid mass.

Storm Sewer. A pipe that collects rain run-off and conveys it to a lake or stream in order to prevent flooding in developed areas.

Urban Stormwater Runoff. Water runoff produced by established residential, commercial, industrial, institutional, and transportation land uses where the absorptive capacity of the earth is drastically reduced, due to the creation of impervious areas such as rooftops, sidewalks, street surfaces, parking areas, and other hard surfaces. These impervious land areas collect and quickly convey large quantities of rain water or snowmelt, which can cause flooding, damage to aquatic habitat, and the transport of a wide array of pollutants associated with urban activity.

Wastewater Pollution Discharge Elimination System (WPDES). A system administered by DNR that develops permits for each discharger and spells out what requirements the municipality must meet for each point source.

APPENDIX II

Description of Wastewater Treatment Systems

In general, there are two types of systems used to treat and dispose of sewage. The first is used in urbanized areas where the density of residences and commercial establishments allow a municipal government to capture economies of scale by building a centralized system which collects wastewater from a wide area, transports it to a central site, treats the wastewater and discharges it to a nearby lake, stream or land. The other alternative is an "on-site" system, used generally in areas where residential density makes a centralized sewage system too expensive, and relies on a collection and treatment system existing on a single property which discharges the treated wastewater into the ground.

With either system, the problems to be solved are the same. The first problem is the removal of domestic sewage wastes before they can become a health problem. The second problem arises once a means of removing the wastes has been devised. These wastes must be disposed of in a way that will not pollute either surface waters--lakes or streams--or the groundwater.

Where density allows, which is generally in an urbanized area, both cost factors and the need to transport a large amount of sewage away from population areas for health reasons tend to favor a centralized sewage collection and treatment system. The major components of such a system are: (1) the collection system; (2) the transport system; and (3) the treatment and discharge system.

The Collection System

Sewage is collected from individual residences by means of a lateral sewer, which runs from the residence to a collector sewer, usually in the street adjacent to the property. If the lateral is not directly owned by a municipality, it is likely to be the resident's responsibility for maintenance purposes. The collector sewer is publicly-owned and serves many residences.

It should be noted that the sewage collection system runs parallel to, and sometimes is part of, another system, the storm water collection system. Storm water collection is necessary to remove rain and melting snow from developed areas to prevent flooding. In the older portions of some larger cities. both domestic wastes and storm water are discharged into the same pipe, which is called a combined sewer. This type of system was often installed in the late nineteenth century or the early twentieth century and many of these systems are still in place. Storm water is not generally treated, but is conveyed and discharged directly to a lake or stream. But with combined sewers, storm water mixes with the sewage already present in the pipe requiring all the water to be treated. Because storm water is generally much greater in volume, collection or treatment capacity may be exceeded, causing bypasses.

Transport System

Once sewage is collected from a residential or commercial area, it must be transported to the treatment plant, which may be located at considerable distance because of the need to treat the sewage near a suitable discharge point and, preferably, away from a residential area. Sewers that do the transporting (and do not receive connections) individual lateral called are interceptors. Interceptors can be any size, but are generally the largest pipes in the system. Interceptors transport the sewage to the treatment plant by gravity, if possible. Otherwise pump stations are used to move the sewage uphill where necessary. Sewers used to transport sewage against gravity are generally termed force mains.

Treatment and Discharge System

Once conveyed to a central site, the sewage is treated and discharged. The treatment site is referred to as a sewage treatment plant, wastewater treatment plant or publicly-owned treatment works depending on the context. At present, most sewage is treated by a method known as secondary treatment, a system which uses bacteria to consume organic pollutants and uses screens, filters and a settling process to remove solids in the water. Frequently, the water will be disinfected as well. Once treated, the water is discharged through an outfall pipe to a surface water--a lake or a stream, or is spread on land for land disposal.

The solids removed from the water are termed "sludge." Sludge disposal, often the most difficult part of the process, can be done by land application as a fertilizer in an agricultural area, disposal in a sanitary landfill, or by processing into a fertilizer which can be marketed commercially. The bestknown example of commercial marketing is "Milorganite," a fertilizer produced by the Milwaukee Metropolitan Sewerage District.

If the volume of sewage is too great to be treated by a wastewater treatment plant, it can overload a plant and cause serious damage. Preventing this damage occasionally requires the provision of storage facilities, either by increasing the size of interceptor sewers or by building separate facilities. The "deep tunnels" of Milwaukee and Chicago are examples of storage facilities. If capacity is exceeded and storage is not provided, sewage is frequently diverted from the sewer system directly into a lake or stream untreated. This practice, which must be eliminated under federal and state law, is called a "by-pass" or an "overflow." It can be present in any system which has inadequate capacity, but is a common problem with systems which contain uncorrected combined sewer problems.

APPENDIX III

Biennial Finance Plan Process

The statutes require the Departments of Administration and Natural Resources to prepare a biennial finance plan for the environmental improvement fund. This plan is to be prepared and reviewed as follows:

Project Needs List. By May 1 of each evennumbered year, DNR is required to prepare and submit to DOA a biennial needs list that includes: (a) a list of wastewater treatment projects, drinking water projects and land recycling loan program projects that DNR estimates will apply for financial assistance during the next biennium; (b) the estimated cost and construction schedule of each project on each list; and (c) the estimated priority rank of each project on the priority list. The priority score is assigned by DNR on the basis of environmental priorities defined by DNR by administrative rules.

Development of the Plan. DOA and DNR are required to jointly prepare the biennial finance plan. The plan must incorporate several elements including: (a) an estimate of wastewater treatment, safe drinking water and land recycling loan project needs of the state for the four fiscal years of the next two biennia; (b) the total amount of financial assistance to municipalities for projects during the next biennium; (c) the sources of the financial assistance to be provided or committed to municipalities during the next biennium; (d) the extent to which the clean water fund program and the safe drinking water loan program would be maintained in perpetuity; (e) audited financial statements of the past operations and activities of the clean water fund program, the safe drinking water loan program and the land recycling loan program; (f) the estimated environmental improvement fund capital available in each of the next four fiscal years for the clean water fund

program and the safe drinking water loan program; (g) the projected fund balance for the clean water fund and safe drinking water loan program for each of the next 20 years given existing obligations and financial conditions; (h) the amount of the present value of the subsidy that the state would provide; (h) a discussion of the assumptions made in calculating the present value subsidy; (i) the amount of any service fee to be charged to any applicant during the next biennium; and (j) the impact of the biennial finance plan on a guideline related to water pollution abatement debt service.

Guidelines for Biennial Finance Plan. The biennial finance plan is required to include information on the impact of the program proposed in the portion of the plan related to the clean water fund program on the guideline that all state water pollution abatement general obligation bond debt service costs should not exceed 50% of all general obligation debt service costs to the state.

Legislative Action. No monies may be expended from the environmental improvement fund unless the Legislature has approved the present value subsidy amount, the revenue bonding authorization and the general obligation bonding authorization as part of the biennial budget act. Further, DOA and DNR are directed to adhere to the present value subsidy amount adopted by the Legislature.

Biennial Finance Plan Review. By October 1 of each even-numbered year, DNR and DOA are required to submit copies of the biennial finance plan to the State Building Commission, the Joint Committee on Finance and the standing committees of the Legislature having jurisdiction over natural resources matters. Amendments to the plan reflecting the Governor's biennial budget recommendations must be provided to those committees and the Building Commission within 30 days after the Governor's biennial budget submission. No later than 30 days after the Governor signs the biennial budget act, the plan, updated with any modifications, must be submitted to these committees and the Building Commission. The Building Commission has the authority to approve or disapprove any part of the plan other than the subsidy and bonding authorizations approved by the Legislature. *Report to the Legislature.* No later than November 1 of each odd-numbered year, DOA and DNR are required to jointly submit a report to the Building Commission, Joint Committee on Finance and the appropriate standing committees of the Legislature. The report is to contain information on the operations and activities of the clean water fund program, the safe drinking water loan program and the land recycling loan program for the previous biennium.

APPENDIX IV

Components of Clean Water Fund Loan and Grant Programs

DIRECT REVOLVING LOANS	PROPRIETARY LOANS
Purpose : Loans to municipalities at or below-market rates of interest for construction of publicly-owned surface water treatment facilities.	Purpose : Same purposes as direct revolving loans. Used if project does not meet requirements of other components of program.
 Funding Source: Annual federal grants plus 20% state match made with general obligation bonds. Repayments: Loan repayments made by municipalities are deposited to the revolving fund for future loans and for general obligation bond debt service. 	Funding Source : State general obligation bonds. Repayments : Loan repayments by municipalities are used to reduce general obligation bond costs.
LEVERAGED LOANS	SMALL PROJECT LOANS
 Purpose: Same purposes as direct revolving loans. Supplements the funding provided to the state through federal grants. Funding Source: State revenue bonds fund loans and a credit reserve. State general obligation bonds fund the interest rate subsidy that municipalities receive. Repayments: Loan repayments by municipalities pay debt service costs on revenue bonds. The state's general fund pays general obligation bond debt service. 	 Purpose: Projects costing less than \$1,000,000. Funding Source: State Trust Fund administered through the Board of Commissioners of Public Lands and state general obligation bonds. Repayments: Municipality makes repayments to state trust fund. The state's general fund pays debt service on general obligation bonds associated with subsidy of interest rates.
HARDSHIP GRANTS AND LOANS	
 Purpose: Grants or reduced interest rate loans to communities with: (a) high per capita costs for construction or rehabilitation of treatment plants; and (b) median household income less than 80% of the state's median. Funding Source: State general obligation bonds. Repayments: Generally, a municipality must pay at least 30% of total project costs. 	

APPENDIX V

Municipality	Amount	Municipality	Amount
Abbotsford, City	\$722,407	Brooklyn, Village	\$640,877
Adams, City	2,464,069	Brownsville, Village	587,866
Adell, Village *	1,765,400	Brule SD	367,167
Albany, Village	535,762	Burlington, City (Racine Co.)	18,488,274
Algoma, City	5,546,679	Butte des Morts CSD #1 *	2,936,650
Allouez, Village	3,071,510	Caledonia, Town	4,175,357
Almond, Village	530,199	Calumet SD #1 *	4,317,124
Amery, City **	3,059,518	Campbellsport, Village	404,690
Antigo, City	4,316,557	Caroline SD *	312,016
Appleton, City	16,473,870	Cassville, Village	441,558
Arone Villege	1 405 515	Chain O'I also CD #1	9 001 070
Arena, Village	1,485,515	Chain O'Lakes SD #1	2,081,670
Argyle, Village * Arlington, Village	1,466,993 1,661,852	Chetek, City Chilton, City	527,883 3,418,071
Ashland, City *	11,684,694	Chippewa Falls, City	5,335,107
Aurora SD #1 *	191,860	Christmas Mountain SD	1,658,960
	101,000		1,000,000
Avoca, Village	358,641	Cleveland, Village	3,609,973
Bagley, Village	229,081	Clinton, Village	4,962,444
Baldwin, Village	262,399	Clintonville, City **	1,035,461
Bangor, Village	1,587,060	Cloverleaf Lakes SD #1	1,021,778
Baraboo, City	2,382,122	Colby, City (Clark Co.)	2,837,013
Bay City, Village	1,223,535	Coleman, Village	506,851
Bayfield, City	275,974	Columbus, City (Columbia Co.)	1,235,209
Bayshore SD	946,574	Consolidated SD #1 Town of Friendship	155,438
Bear Creek, Village	431,809	Cottage Grove, Village	506,330
Beaver Dam, City	818,675	Crandon, City	1,537,025
Belgium, Village	3,855,306	Crestview SD	289,987
Belleville, Village (Dane Co.)	2,563,400	Crivitz, Village *	2,753,364
Belmont, Village	458,107	Cross Plains, Village	895,635
Beloit, City	2,927,350	Cuba City, City	2,561,791
Beloit, Town	955,765	Cudahy, City	885,875
Benton, Village	1,100,000	Cumberland, City	927,675
Black Creek, Village	4,331,927	Cushing SD #1	116,391
Black Earth, Village	4,278,271	Dane, Village	1,227,831
Black River Falls, City	1,893,956	Darlington, City	3,650,000
Black Wolf SD #1	4,327,485	De Pere, City	9,808,634
Plaamer City	6 600 500	Deerfield Village	5 070 90 <i>4</i>
Bloomer, City Blue Mounds, Village	6,693,500 1,152,260	Deerfield, Village Delafield - Hartland PCC	5,070,284 10,000,000
Blue River, Village	281,218	Delafield, City	1,555,831
Blue Spring LMD	380,000	Denmark, Village	2,240,674
Boaz, Village *	1,086,464	Dodgeville, City	4,995,080
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Bohners Lake SD #1	8,007,212	Dover, Town	1,787,182
Boscobel, City	1,336,536	Dyckesville SD	3,126,990
Bowler, Village Brazeau SD #1	114,748 793,405	Eagle River, City Fastman Villago *	3,562,886 1,427,300
Brazeau SD #1 Brillion, City	793,405 1,064,130	Eastman, Village * Edgerton, City	1,427,309 5,016,445
Dimon, City	1,004,130	Lagerton, City	5,010,445
Bristol, Town (Kenosha Co.)	4,210,839	Edgewood-Shangri La SD	1,011,312
Brodhead, City	6,548,945	Egg Harbor, Village	508,048
Brokaw, Village	969,429	Elcho SD #1 *	2,891,067
Brookfield, City	30,606,323	Elk Mound, Village *	419,030
Brookfield SD #4	5,749,787	Ellsworth, Village	372,731

APPENDIX V (continued)

Municipality	Amount	Municipality	Amount
Fairchild, Village	\$575,000	Kelly Lake SD #1	\$2,438,725
Fairwater, Village	1,554,473	Kenosha, City	33,143,758
Fond du Lac, City	2,022,208	Kewaunee, City	1,684,316
Fontana, Village	1,060,036	Kiel, City (Manitowoc Co.)	2,469,987
Footville, Village	1,645,467	Knapp, Village	668,732
Forestville, Village	585,275	Kohler, Village	400,920
Fort Atkinson, City	14,593,965	Lake Como Beach SD *	15,502,380
Fountain City, City	450,556	Lake Delton, Village	9,612,354
Freedom SD #1	2,748,197	Lake Mills, City	1,245,823
Fremont, Village	1,866,706	Lake Nebagamon	1,538,776
Fulton SD #2 *	1,669,311	Lake Tomahawk SD #1	1,316,600
Galesville, City	1,142,992	Lancaster, City	1,688,158
Gays Mills, Village	180,185	Lannon, Village *	12,459,777
Genoa City, Village	4,226,574	Laona SD #1	746,282
Germantown SD *	342,270	Linden, Village	388,913
Goodman SD #1 *	3,591,667	Lisbon SD #1	2,848,788
Gordon SD #1 *	1,444,933	Little Elkhart Lake RD *	2,173,589
Grand Chute - Menasha West SC	12,747,391	Little Green LPRD	1,898,268
Gratiot, Village	723,629	Little Suamico SD #1	1,349,484
Green Bay MSD *	52,753,963	Lodi, City	4,049,571
Green Lake SD	8,673,929	Lomira, Village	1,931,915
Green Valley SD #1 *	468,964	Luxemburg, Village	3,178,375
Hancock, Village	150,800	Lyndon Station, Village	614,582
Harmony Grove - Okee SC	2,326,813	Madison MSD	95,409,538
Hartford, City (Washington Co.)	13,168,455	Manawa, City	1,408,334
Hartford, Town (Washington Co.) *	3,143,418	Manitowoc, City	22,017,518
Hatfield SD #1	1,134,541	Marathon City, Village	1,890,253
Haugen, Village	284,539	Marshall, Village	7,744,261
Hewitt, Village *	1,602,188	Marshfield, City (Wood Co.)	24,169,823
Highland, Village	824,848	Mattoon, Village	398,340
Hilbert, Village	2,502,460	Mauston, City	2,904,892
Hillsboro, City	160,000	Mayville, City	1,005,953
Hingham - Onion River, Village *	678,833	Mazomanie, Village	4,752,614
Hingham SD *	79,082	Menasha, Town	1,658,505
Holland SD #1	1,379,790	Menomonee Falls, Village	886,867
Howards Grove, Village	2,102,385	Menomonie, City	8,732,349
Hub-Rock SD #1 *	1,902,950	Mercer SD #1 *	4,769,971
Hudson, City	7,242,341	Merrill, City	4,044,352
Hustisford, Village	445,801	Milltown, Village	336,697
Iowa County	485,993	Milton, City	4,328,415
Iron Ridge, Village	1,440,700	Milwaukee MSD	566,762,032
Iron River SD #1	716,537	Mineral Point, City	6,883,912
Ironton, Village *	1,145,445	Mishicot, Village	717,613
Island View SD	2,764,149	Monroe, City	3,740,064
Ithaca SD #1 *	1,160,926	Montello, City	260,000
Ixonia SD #1	1,339,941	Montfort, Village (Grant Co.)	779,050
Jackson, Village	6,130,258	Monticello, Village *	4,033,418
Janesville, City	5,506,030	Morrison SD #1 *	2,937,649
Jefferson, City	7,533,927	Morrisonville SD #1 *	824,608
Juneau, City	271,000	Mosinee, City	1,382,570
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APPENDIX V (continued)

Manadata	A		A
Municipality	Amount	Municipality	Amount
Mount Calvary, Village *	\$1,536,234	Poy Sippi SD	\$223,000
Mount Horeb, Village	3,435,694	Poynette, Village	2,287,561
Muscoda, Village (Grant Co.)	897,991	Prairie du Chien, City	4,105,820
Nashotah, Village	285,677	Prairie du Sac, Village	205,400
Necedah, Village	2,937,094	Prentice, Village	544,000
Neenah SD #2 *	3,056,893	Prescott, City	5,348,532
Neillsville, City	3,237,767	Pulaski, Village (Brown Co.) *	5,091,382
Nekoosa, City	2,435,469	Racine, City	91,224,967
Nelson, Village *	781,610	Random Lake, Village	464,256
New Glarus, Village	3,502,948	Readstown, Village	178,000
New Holstein, City	1,100,000	Redgranite, Village *	5,537,215
New Lisbon, City	1,052,895	Reedsville, Village	2,768,023
New Richmond, City	3,320,105	Rhinelander, City	5,136,397
Newburg, Village (Washington Co.)	1,549,070	Rib Mountain MSD	1,976,697
Niagara, City	180,905	Richland Center, City	6,997,928
North Fond du Lac, Village	2,591,575	Richmond SD #1 (St. Croix Co.) *	46,884
		· · · · ·	40,884 6,337,088
North Freedom, Village	498,048	Ripon, City	0,337,088 1,009,322
North Hudson, Village	640,849 6,227,685	River Falls, City (Pierce Co.)	, ,
Norway SD #1		Roberts, Village	81,477
Oakdale, Village *	452,118	Rockland, Village	967,311
Oakfield SD #1 *	22,000	Rockland SD #1 *	885,930
Oconomowoc, City	5,449,057	Rosholt, Village	662,272
Oconomowoc, Town	6,819,232	Roxbury SD #1	939,610
Oconto, City	3,843,974	Royal Scot SD *	1,494,150
Oconto Falls, City	527,728	Salem, Town (Kenosha Co.) *	8,457,771
Ogema SD #1	190,020	Saukville, Village	11,331,624
Oliver, Village	588,000	Seneca SD #1 *	130,000
Omro #1 *	3,124,776	Sextonville SD *	641,864
Oneida Utilities Commission *	1,507,211	Sharon, Village	634,801
Oregon, Village	6,784,531	Shawano, City	252,492
Orihula SD	2,521,626	Sheboygan, City	10,364,510
Osceola, Village	298,367	Sherwood, Village	2,710,650
Oshkosh, City	28,376,484	Shorewood, Village	2,511,820
Osseo, City	1,575,170	Shullsburg, City	686,556
Packwaukee SD #1 *	1,137,353	Silver Lake, Village	2,318,400
		6	
Park Falls, City	1,468,574	Silver Lake SD (Washington Co.) *	3,461,172
Pell Lake SD #1 *	19,178,411	Silver Lake SD (Waushara Co.) *	2,263,601
Pensaukee SD #1 *	4,264,592	Slinger, Village	2,632,688
Pepin, Village	363,096	Somerset, Village	2,980,623
Pewaukee, City	8,049,176	South Milwaukee, City	6,412,908
Pewaukee, Village	8,191,015	South Wayne, Village *	1,387,982
Phillips, City	2,233,227	Sparta, City **	15,726,198
Pleasant Springs SD #1	1,029,086	Spring Green, Village	949,856
Plover, Village	3,403,560	Spring Valley, Village (Pierce Co.)	120,038
Plum City, Village	248,891	Stetsonville, Village	1,140,962
Plymouth, City **	5,848,472	Stevens Point, City	13,560,005
Portage, City	4,341,108	Stoughton, City	9,463,309
Portland SD #1	294,519	Summit, Town	7,831,586
Potosi, Village	291,485	Sunset Point SD	685,894
Potosi/Tennyson SC	1,543,111	Sussex, Village	11,028,515
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APPENDIX V (continued)

Municipality	Amount	Municipality	Amount
Tomah, City **	\$16,429,641	Webster, Village	\$204,020
Tomahawk, City	3,026,143	West Salem, Village	4,990,006
Trempealeau, Village	1,558,545	Westboro SD #1 *	278,608
Twin Lakes, Village	5,941,180	Westby, City	416,803
Two Rivers, City	1,608,245	Western Racine County SD	1,311,830
Union Center, Village *	995,704	Weyauwega, City	3,284,569
Union Grove, Village	8,705,940	Wheeler, Village *	359,745
Valders, Village	1,537,527	Whitelaw, Village	1,494,310
Valley Ridge CWC *	6,185,231	Whitewater, City (Walworth Co.)	1,563,900
Viroqua, City	3,062,954	Winneconne, Village	1,668,622
Walworth, Village	331,950	Winneconne SD #3	2,078,897
Walworth County MSD	19,993,876	Wisconsin Dells - Lake Delton SC	1,935,060
Washington, Town (Door Co.) *	658,367	Wisconsin Rapids, City	11,669,989
Watertown, City (Jefferson Co.)	30,534,659	Wolf TPC	12,847,006
Waukesha, City	42,071,787	Wrightstown, Village	1,426,725
Waupaca, City	10,913,057	Wrightstown SD #1	1,080,930
Waupun, City	6,249,200	Wyocena, Village	389,253
Wausaukee, Village *	3,219,189		
Wautoma, City *	3,233,999	Total	\$1,990,752,602
Wauzeka, Village	128,137		

SD	=	Sanitary District	MSD	=	Metropolitan Sewerage District
SC	=	Sewage Commission	CSD	=	Consolidated Sewerage District
TPC	=	Treatment Plant Commission	RD	=	Rehabilitation District
LMD	=	Lake Management District	LPRD	=	Lake Protection and Rehabilitation District
CWC	=	Clean Water Commission	PCC	=	Pollution Control Commission
*	=	Includes financial hardship assistance	**	=	Includes a land recycling loan

APPENDIX VI

Safe Drinking Water Loan Program Financial Assistance Agreements As of June 30, 2004

Municipality	Amount
Algoma SD #1	\$8,029,114
Arcadia, City *	1,078,030
Ashland, City *	2,325,000
Benton, Village *	601,600
Bowler, Village *	679,005
Brownsville, Village	428,997
Cameron, Village *	364,885
Cedar Grove, Village	576,593
Chilton, City	526,734
Chippewa Falls, City	2,257,879
Cochrane, Village *	454,324
Dickeyville, Village	1,078,163
Eagle, Village	2,161,248
Fairchild, Village *	165,000
Fontana, Village	1,664,500
Footville, Village	485,135
Goodman SD #1 *	611,093
Greenville SD #1	350,915
Hustisford, Village	1,057,341
Janesville, City	1,391,250
Marinette, City	5,511,051
Mattoon, Village *	229,742
Milwaukee, City	19,358,172
Mount Hope, Village	386,498
Mukwonago, Village	2,513,797
Nekoosa, City	4,273,175
Oakfield, Village	2,200,000
Oregon, Village	432,818
Oshkosh, City	29,033,949
Plover, Village	3,326,712
Port Washington, City	3,403,700
Prairie du Chien, City *	539,262
Racine, City	12,594,655
Sheboygan, City	3,152,000
Tomah, City *	1,049,932
Two Rivers, City	4,269,641
Viroqua, City *	1,017,329
Warrens, Village *	583,621
Waupaca, City *	827,807
Wautoma, City *	3,613,642
Williams Bay, Village	884,800
Withee, Village *	<u> 120,000</u>
Total	\$125,609,109

SD = Sanitary District

* = Received 33% of market interest rate based on financial need criteria