

Private Onsite Wastewater Treatment System Grant Program



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Introduction

The private onsite wastewater treatment system replacement or rehabilitation grant program, also referred to as the Wisconsin Fund, provides financial assistance to owners of a principal residence (residence which is occupied at least 51% of the year by the owner) and small businesses (commercial establishments) who meet certain income and eligibility criteria, to cover a portion of the cost of repairing or replacing failing private onsite wastewater treatment systems. A private onsite wastewater treatment system is a sewage treatment and disposal system serving a single structure with a septic tank and soil absorption field located on the same parcel as the structure.

This paper describes the requirements of the program. The Department of Safety and Professional Services (DSPS) administers the program. The program was administered by the Department of Commerce prior to 2011-12. The Department of Commerce was repealed under 2011 Wisconsin Act 32, the 2011-13 biennial budget act, and the program was transferred to the Department of Safety and Professional Services (the former Department of Regulation and Licensing). The program was appropriated \$2,338,600 in each year of the 2011-13 biennium from the general fund.

There are two general types of systems utilized to treat and dispose of sewage--centralized sewage collection and treatment systems, and "private onsite wastewater treatment systems" (POWTS). The term in the statutes was changed from "private sewage system" to POWTS in 2011 Act 146. Many areas are not served by centralized sewage systems, primarily rural areas

or areas where the housing density is too low to justify a centralized sewer system. In these areas, residential or commercial development requires the use of a private onsite wastewater treatment system.

The private onsite wastewater treatment system replacement or rehabilitation grant program was created in 1978 to provide funding to address the problem of system failures. From 1978 through 2012, the State has awarded \$99.5 million in grants to assist 40,900 residences and businesses to replace or rehabilitate private onsite wastewater treatment systems. The program is authorized in s. 145.245 of the statutes. DSPS administers the grant program under administrative rules SPS 387 of the Wisconsin Administrative Code. DSPS renumbered the rules from the former Comm 87, effective December 1, 2011. Administrative rules for the installation and maintenance of all POWTS are found in administrative rules SPS 383, renumbered from the former Comm 83, effective December 1, 2011.

DSPS estimates that there are 772,000 private onsite wastewater treatment systems (POWTS) in the state. During calendar years 2010 and 2011, approximately 11,000 permits per year were issued for POWTS. Of these, about 30% were for newly-constructed and 70% were for replacement systems. In addition, an unknown number of homes that previously used POWTS are connected to centralized municipal wastewater treatment systems every year, and the private systems are no longer used. DSPS indicates that estimates of the number of POWTS have become more precise as counties have begun to compile an inventory of private onsite wastewater treatment systems and will become more precise during the next few years as they complete the inventory.

Counties have reported approximately 83% of the estimated number of systems have been inventoried.

Failing POWTS tend to produce health hazards, water pollution, or both. Health hazards occur when a private onsite wastewater treatment system does not operate properly, discharging untreated wastewater into groundwater where it can contaminate drinking water supplies, or to the ground's surface, where persons coming into contact with it can be exposed to disease-bearing micro-organisms.

Failing systems can also result in wastewater discharges directly into a stream or lake, resulting in water pollution. For example, the eutrophication of lakes--the process by which lakes "fill" with decomposed matter and become "marshy" in character--can be accelerated in many lakes surrounded by residences with failing POWTS because of the organic pollutants added by the discharges from these systems.

In 1999 Wisconsin Act 9, a loan program component was created and funded from the segregated environmental improvement fund. DSPTS and the Department of Administration (DOA) administer this program. To date, no counties have used the loan program.

Several appendices provide additional information about the distribution of grants in each county (Appendix I), how a grant is calculated (Appendix II), how a typical private onsite wastewater treatment system functions (Appendix III), and the legislative history of the program (Appendix IV).

County Participation

Wisconsin counties and Indian tribes may apply to DSPTS to participate in the grant program

to assist homeowners and small commercial establishments with the rehabilitation or replacement of failing onsite wastewater treatment systems. Counties participate because they are responsible for the regulation of POWTS installations. Participation in the grant program is voluntary. Five counties (Ashland, Crawford, Douglas, Florence and Milwaukee) are not participating in 2012-13. Two counties used to participate but withdrew, including Crawford after the 2000-01 grant cycle and Florence County after 1999-00. Bayfield County did not participate between 1998-99 and 2006-07, and resumed participation with applications for the 2007-08 grant cycle.

Milwaukee County does not perform POWTS regulation functions, and the City of Franklin is the only participating governmental unit in that county. Indian tribes and bands are also eligible to participate in the program and the Oneida Tribe participates. References to "counties" in this paper, therefore, also apply to the City of Franklin in Milwaukee County and the Oneida Tribe.

County Responsibilities. Counties that choose to participate in the program must:

1. Adopt a resolution stating that the county will administer the program in compliance with state law and disburse state grant funds to eligible owners;
2. Agree to establish a program of inspection and maintenance for all new or replacement POWTS constructed in the county;
3. Establish a system of user charges and cost recovery, if the county considers this to be appropriate, which may include the cost of the grant application fee and the cost of supervising installation and maintenance; and
4. Certify that: (a) the individual owner eligibility requirements are met; (b) the grant funds will be properly disbursed; and (c) the

recipients' POWTS will be properly installed and maintained.

All counties are responsible for adoption and enforcement of the maintenance program for private onsite wastewater treatment systems, whether or not a county has chosen to participate in the grant program. Under 2005 Act 347, as amended by 2009 Act 392 and 2011 Act 134, the county POWTS maintenance program was moved out of the POWTS replacement or rehabilitation grant program and into the general duties of the Department of Safety and Professional Services. A county is required to conduct, complete, and maintain an inventory of all POWTS located within the jurisdiction, and complete the initial inventory before October 1, 2017. (2011 Act 134 changed the date from October 1, 2013.) A county is required to develop and implement a POWTS maintenance program before October 1, 2019, that includes the inventory, and a process for recording each inspection, evaluation, maintenance and servicing report for a POWTS. (2011 Act 134 changed the date from October 1, 2015.)

The owner of a failing private onsite wastewater treatment system, either of a principal residence or a small commercial establishment, may obtain grant application forms from the county after a determination of a failure of the POWTS has been made. Sixty-five of 69 participating counties (67 counties, the City of Franklin and the Oneida Tribe) charge a fee to applicants to offset county administrative and maintenance costs. The fee averages \$118, and ranges from \$25 to \$350. All applications are reviewed at the county level, and the fee is charged only for applications determined to be eligible for a grant. The county submits eligible applications to DSPS and disburses grant funds to eligible individuals. Appendix I shows the date each county entered the program, the distribution of grants made in each county in 2012-13, and the cumulative distribution amount.

Eligible Projects

Replacement or rehabilitation of a private onsite wastewater treatment system serving a home or small commercial establishment may be eligible for financial assistance if:

1. The system was installed before July 1, 1978;
2. The dwelling is not located in an area served by a municipal sewer;
3. The residence or small commercial establishment is occupied at least 51% of the year by the owner;
4. The owner of the principal residence or business meets certain income criteria, (discussed in the next section);
5. The system is a category 1 or 2 failing POWTS (see the next section for description of categories); and
6. A determination of failure is made prior to the rehabilitation or replacement of the failing private onsite wastewater treatment system. A "determination of failure" is defined as either: (a) a determination that the system is failing based on an inspection by an employee of the state or a governmental unit who is certified to inspect private sewage systems by DSPS; or (b) the owner has been issued a written enforcement order by the appropriate local governmental unit, DSPS, or DNR, to correct a violation of the private onsite wastewater treatment system statutes and rules.

Since the inception of the private onsite wastewater treatment system grant program, program design and eligibility criteria have been modified by the Legislature a number of times.

Appendix IV describes these changes.

Residential Properties. The annual family income of a residential property owner may not exceed \$45,000. "Family income" is defined as the federal adjusted gross income of the owner and the owner's spouse for the taxable year prior to the year in which the determination of system failure is made.

Applicants with income below \$32,000 receive the maximum eligible grant. The grant for homeowners with income between \$32,000 and \$45,000 is reduced by 30% of the amount by which the homeowner's income exceeds \$32,000, (which means that for each \$1 in income above \$32,000, the grant is decreased by 30 cents). Rental residential properties are not eligible. The grant formula is shown in Table 1.

Table 1: Private Onsite Wastewater Treatment System Program Grant Formula for Residential Properties

Income	Grant Formula Amount
Under \$32,000	Full Eligible Grant
\$32,001 - \$45,000	Full Eligible Grant Minus [(Income - \$32,000 x 30%)]
Over \$45,000	No Grant

Small Commercial Establishments. In order to be eligible for grant funds, a commercial establishment must have a maximum daily wastewater flow rate of less than 5,000 gallons per day. In addition: (a) the commercial establishment must have been owned and occupied by the applicant when the determination of private onsite wastewater treatment system failure was made; and (b) the annual gross revenue of the business that owns the commercial establishment may not exceed \$362,500. Income is defined as the gross revenue of the business for the taxable year prior to the year in which the determination of failure is made. There is no proration based on

income for commercial establishments as there is for residential properties. In each fiscal year, grant funding for all commercial establishments cannot exceed 10% of the total funds available. Grants for commercial establishments are prorated so that the total awards for commercial establishments do not exceed 10% of total funds available.

Types of Failing Private Onsite Wastewater Treatment Systems. The types of failing POWTS are divided into three categories. Categories 1 and 2 are eligible for grant assistance. The types of systems are:

1. Category 1 systems are those which fail by discharging sewage to surface water, groundwater, drain tiles, bedrock or zones of saturated soils. These are considered the most serious types of failure, and are given highest priority for grant assistance.
2. Category 2 systems are those which fail by discharging sewage to the surface of the ground. This type of failing system is eligible for a grant, but has a lower priority for funding than Category 1 systems.
3. Category 3 systems are those which fail by causing the backup of sewage into the structure served. This type of failing system is not eligible for grant assistance.

Grant Determination

Seven categories of costs, called "work components," are eligible for reimbursement. The work components are:

1. Site evaluation and soil testing;
2. Installation of a replacement or addition-

al anaerobic treatment component (septic tank);

3. Installation of a dosing component and lift pump or siphon;

4. Installation of a non-pressurized or in-ground pressure treatment or dispersal component (soil absorption area). The grant amount is based on systems sized according to either: (a) the percolation rate in minutes for water to fall one inch; or (b) soil morphological conditions, that is, the design loading rate in gallons per square foot per day;

5. Installation of an at-grade or mound treatment or dispersal component (soil absorption area);

6. Installation of a holding tank component; and/or

7. Installation of a replacement exterior grease interceptor.

Costs allowable in determining grant funding may not exceed the costs of rehabilitating or replacing a private onsite wastewater treatment system by the least costly method, except that a holding tank may not be used as the measure of the least costly method for rehabilitating or replacing a POWTS other than a holding tank. Statutes limit the state grant share to \$7,000, or the amount determined by the Department in grant funding tables, whichever is less. In addition, SPS 387 of the Wisconsin Administrative Code limits the maximum allowable grant to 60% of the total replacement cost or the amount determined in the grant funding tables, whichever is less.

DSPS is required to prepare and publish grant funding tables that specify the maximum state share amounts for eligible work components and costs. The grant funding tables must be designed to pay approximately 60% of the average cost of

rehabilitation or replacement. DSPS is required to revise the grant funding tables when it determines that 60% of current costs of private on-site wastewater treatment system rehabilitation or replacement exceeds the amount in the tables by more than 10%. The tables may be revised no more than once every two years. The tables were last revised in 2008 for applications received on or after October 1, 2008, for funding in 2009-10 and subsequent years. Appendix II illustrates examples of how the grant is calculated for various types of POWTS under the grant funding tables that went into effect in 2009-10.

DSPS is required to withhold grant awards for applicants that the Department of Workforce Development determines are delinquent in their child support or maintenance payments until the applicant submits a certification of full payment from the Clerk of Courts in the county where the child support or maintenance payments are delinquent or has a payment agreement on file at the county child support agency. For the grant cycles from 1997-98 through 2009-10, 11 delinquent grant applicants did not provide the required certification by December 31 of the calendar year of the grant cycle so their grants expired. For the 2009-10 grant cycle, one applicant was delinquent but developed a payment schedule and subsequently received the grant award. For 2010-11 through 2012-13, no applicants were delinquent in child support. (For 2012-13, if there had been delinquent applicants, they would have until December 31, 2013, to provide required certification to restore grant eligibility.)

Experimental POWTS Grants

Up to 10% of private onsite wastewater treatment system grant funding may be allocated for experimental private sewage systems. This equals \$233,900 of the \$2,338,600 appropriated

in 2012-13 plus 10% of unobligated funds carried over from the prior year. DSPS is authorized to exempt grants for experimental systems from: (a) the statutory \$7,000 limit on POWTS grants; (b) the requirement that the grant not exceed the costs of replacing or rehabilitating the system; (c) the requirement that the grant not exceed the least costly method of replacing or rehabilitating the system; (d) the formula that decreases the grant amount for applicants with income between \$32,000 and \$45,000; and (e) proration if the appropriation is insufficient to fund 100% of grants.

Administrative rule chapter SPS 387 specifies how DSPS will select, monitor and allocate the state share for experimental POWTS. Prior to 2000-01, no awards for experimental private sewage systems were available. SPS 387 authorizes DSPS to determine on a case-by-case basis the maximum allowable grant for the installation and monitoring of an experimental POWTS, and to prorate available funds for experimental systems.

In the 2000-01 grant cycle, 11 property owners met eligibility requirements and received grants of \$138,677 (\$12,607 per property) to fund the installation of an experimental system consisting of a constructed wetland system to serve a small community. In addition, the former Department of Commerce granted \$29,085 to monitor the system for up to five years from the date of installation, for a total of \$167,762 for installation and monitoring. A constructed wetland is an aquatic treatment system that typically consists of one or more lined cells that are planted with wetland type vegetative species. Wastewater flows from a septic tank through the cells where it is treated by microorganisms that are present on the plant roots and in the supporting media. The wastewater then is dispersed into soil where final treatment takes place. The vegetation in a wetland system releases some of the water as vapor into the atmosphere and also removes nitrogen and phosphorus via plant uptake

and biological and chemical processes.

The objective for the experimental project was to provide a more natural looking system (the constructed wetland) with lower energy and operation and maintenance costs than a traditional system, while producing wastewater of a quality that meets code requirements. Commerce received the final report for the project in July, 2006. Commerce officials indicated that the system met wastewater standard code requirements and did not have operational problems during the winter, but the system did appear to require labor intensive maintenance due to the need to regularly remove invasive species and monitor water levels in the wetland cells.

In 2001-02, Commerce awarded \$14,895 for a constructed wetland system serving one home. The grant included \$5,500 for installation of the system and \$9,395 for monitoring for up to five years. No experimental system grants have been awarded since 2001-02. DSPS officials indicate that private sewage system code changes in 2000 increased the types of allowable private sewage system options, and reduced the need for experimental systems. They further indicate that if the Department determines that research is needed on additional private sewage system components or treatment methods, DSPS would ask for proposals for experimental systems that could potentially be funded under the experimental system grant component of the program.

Administration and Allocation System

Funding Cycle. Grant funds are allocated on an annual cycle. To receive funding, the owner of a failing private onsite wastewater treatment system must submit an application to the county within three years after the county notifies the owner that the POWTS has failed. The county

reviews the application and makes an initial determination as to whether the system and owner are eligible. For the 2012-13 funding cycle, county applications were due to DSPS before February 1, 2012. The county application includes a list of property owners approved by the county as eligible and the maximum state grant share for each property owner. Each county application is reviewed by the state. If any property owner listed in the county application did not meet the eligibility requirements, the grant award to the county is reduced accordingly. DSPS awarded 2012-13 grants to counties in August, 2012.

Counties may request partial grant payments as individual homeowners complete the required work. The Department conducts a desk audit to: (a) verify that the county has inspected the system and signed off on the final inspection; (b) ensure that each system meets the state plumbing code; and (c) verify that the type of work identified in the application is consistent with the work actually performed. DSPS makes actual grant payments to the county after the replacement or repair work is completed. Each county is responsible for disbursing all grant awards to property owners. All work done with 2012-13 grant funds must be completed by December 31, 2013.

Prioritization. If approved applications exceed available funding, DSPS is required to prioritize funds to counties based on potential environmental harm associated with different types of private onsite wastewater treatment system failures. The Department pays category one grants (discharge to waters) in full before category two grants (discharge to dry surface) are eligible for any funding. If there are insufficient funds to provide payment for all category one grants, then these grants are prorated, and no funds are provided for category two systems. If funds are adequate to fully fund category one grants, then remaining funds are used for category two grants. If these cannot be fully funded from remaining funds, these grants are prorated. Counties may

not establish a backlog of claims in which applicants who would not receive 100% grant funding would be placed on a waiting list to receive funding in the next fiscal year.

Funding

Table 2 shows program appropriations and expenditures by fiscal year during the 15 years from 1998-99 through 2012-13. The number of funded applications peaked at 1,808 in 1995-96, declined to 661 in 2009-10, but increased to 869 in 2011-12, and included 859 in 2012-13.

Table 2: Private Onsite Wastewater Treatment System Grant Program, Appropriations and Expenditures

Fiscal Year	Appropriations	Expenditures*
1998-99	\$3,500,000	\$3,571,900
1999-00	3,500,000	3,200,100
2000-01	3,500,000	3,585,700
2001-02	3,169,100	3,479,800
2002-03	2,999,000	2,852,800
2003-04	2,999,000	3,023,700
2004-05	2,999,000	2,960,700
2005-06	2,999,000	3,075,700
2006-07	2,999,000	3,040,500
2007-08	2,999,000	3,003,100
2008-09	2,999,000	2,965,200
2009-10	2,815,000	2,748,600
2010-11	2,815,000	2,892,900
2011-12	2,338,600	2,358,800
2012-13	2,338,600	2,358,800**

*Expenditures vary from appropriations and annual awards due to carryover of unexpended funds from prior years and expenditures that are made in a fiscal year after awarded.

**Expenditures are awards made in August, 2012, including awards which are pending until further information is obtained from the applicant. Grants will be paid after work is completed, but no later than December 31, 2013. After the 2012-13 awards were made, approximately \$11,500 in unobligated funds remained to accommodate pending application determinations of eligibility, pending awards made in prior years, or appeals of Department decisions.

Prior to 2001-02, the program was appropriated \$3,500,000 per year from the general fund. As part of general fund appropriation reductions made in many agencies by 2001 Act 109 (the 2001-03 budget adjustment act), the appropriation was reduced to \$3,169,100 in 2001-02, and to \$2,999,000 beginning in 2002-03.

From 2002-03 through 2008-09, funding continued at the amount of \$2,999,000 in each year. Under 2009 Act 28 (the 2009-11 biennial budget act), the appropriation was reduced to \$2,815,000 in each of 2009-10 and 2010-11 as part of general fund appropriation reductions made in many agencies. Under 2011 Act 32, the appropriation was reduced to \$2,338,600 in each of 2011-12 and 2012-13 as part of general fund appropriation reductions made in many agencies.

Grants awarded in 2007-08 through 2012-13 are summarized in Table 3. The grant award amounts in Table 3 differ from the actual expenditures shown in Table 2 because funds are sometimes expended in a fiscal year following the year the grant is awarded.

In 2007-08, category one grants were prorated to 94% of the eligible grant amount, and no category two grants were awarded. In 2008-09, category one grants were funded at 100% of the eligible amount, and category two grants were prorated to 33% of the eligible amount. Grants awarded in 2009-10 fully funded all eligible amounts for 661 category one and two applicants. In 2010-11, payments for 809 category one grants were prorated to 86% of the eligible grant amount. In 2011-12, payments for 869 category one grants were prorated to 68% of the eligible grant amount, and in 2012-13, payments for 859 category one grants were prorated to 68% of the eligible grant amount. No funds were available for category two grants in 2010-11 through 2012-13.

Table 4 shows the total grant award amount

Table 3: Distribution of Private Onsite Wastewater Treatment System Grant Applications and Awards

	Eligible Applicants	Application Amount	Prorated Grant Amount	Grant as Percent of Application*
2007-08 Final				
Category 1	783	\$3,544,159	\$2,990,615	94%
Category 2	<u>28</u>	<u>76,370</u>	<u>0</u>	0
Total	811	\$3,620,529	\$2,990,615	NA
2008-09 Final				
Category 1	744	\$3,282,461	\$2,961,028	100%
Category 2	<u>22</u>	<u>59,125</u>	<u>18,398</u>	33
Total	766	\$3,341,586	\$2,979,426	NA
2009-10 Final				
Category 1	643	\$2,955,757	\$2,724,487	100%
Category 2	<u>18</u>	<u>50,252</u>	<u>50,252</u>	100
Total	661	\$3,006,009	\$2,774,739	NA
2010-11 Final				
Category 1	809	\$3,517,646	\$2,847,676	86%
Category 2	<u>28</u>	<u>70,884</u>	<u>0</u>	0
Total	837	\$3,588,530	\$2,847,676	NA
2011-12 Award				
Category 1	869	\$3,768,944	\$2,357,657	68%
Category 2	<u>16</u>	<u>40,300</u>	<u>0</u>	0
Total	885	\$3,809,244	\$2,357,657	NA
2012-13 Award				
Category 1	859	\$3,681,037	\$2,358,836	68%
Category 2	<u>11</u>	<u>29,087</u>	<u>0</u>	0
Total	870	\$3,710,124	\$2,358,836	NA

*The statutes limit grants for small commercial establishments to 10% of the total funds available in any fiscal year. Such grants were reduced by 23% in 2007-08, 22% in 2008-09, 37% in 2009-10, 40% in 2010-11, 56% in 2011-12, and 48% in 2012-13.

for 2012-13 grants before and after the effect of income factoring and proration to award grants within available funding. Before the effects of income factoring and proration to stay within the appropriated funding amount, 870 applicants (859 category one and 11 category two) would have been eligible for a total of \$3,911,400 in eligible work components. Applicants with income equal to or less than \$32,000 were eligible for the maximum grant amount. Applicants with income equal to or less than \$32,000 accounted

Table 4: Distribution of Grants by Applicant's Income -- 2012-13

Applicant's Income	No. of Grants	Grant Before Income Factoring	Grant After Income Factoring	Prorated Grant Amount	Average Prorated Grant
\$0-32,000	668	\$2,995,890	\$2,995,890	\$1,964,827	\$2,941
32,001-38,000	92	418,937	343,912	227,412	2,472
38,001-45,000	55	257,975	131,772	82,328	1,497
45,001-362,500*	<u>55</u>	<u>238,560</u>	<u>238,550</u>	<u>84,269</u>	<u>1,532</u>
Total	870**	\$3,911,362	\$3,710,124	\$2,358,836	\$2,711

*Applicants with income over \$45,000 were small commercial establishments. The annual gross revenue of a small commercial establishment may not exceed \$362,500.

**859 category one grants were funded at 68% of the eligible grant amount. The remaining 11 applications were for category two systems and were not funded because no funds were available.

for 77% of this amount, applicants with income between \$32,000 and \$45,000 accounted for 17% and small commercial establishments with income over \$45,000 accounted for 6%. After income factoring, the applicants were eligible for \$3,710,100 in grants. Applicants with income equal to or less than \$32,000 were eligible for 81% of all grant award dollars, applicants with income between \$32,000 and \$45,000 were eligible for 13% of grant award dollars and applicants with income over \$45,000 (all of which were small commercial establishments) were eligible for 6%. Eligible awards for small commercial establishments were reduced by 48% to keep awards for those systems to less than 10% of the total funds available. Awards totaling \$2,358,836 were made to the 859 applicants with category one systems, the awards were prorated to 68% of the eligible amount to remain within available funding, and the 11 eligible applicants with category two systems received no grant award.

In 2012-13, the average grant award for the 859 category one awards was \$2,746. Grants equal to or less than \$3,000 comprised 63% of grants and accounted for 45% of the total award dollars. A total of 37% of grants were between \$3,001 and \$5,000, with 55% of awarded dollars. No grants exceeded \$5,000 because of the proration of all grants to remain within available funding. In comparison, in 2010-11, grants that ex-

Table 5: Distribution of Grants by Grant Amount -- 2012-13

Amount of Grant	Number of Grants	Amount	Average
\$1-1,000	27	\$18,239	\$676
1,001-2,000	224	353,720	1,579
2,001-3,000	286	691,188	2,417
3,001-4,000	93	307,331	3,305
4,001-5,000	229	988,358	4,316
5,001-6,000	0	0	0
6,001-7,000	<u>0</u>	<u>0</u>	<u>0</u>
Total	859	\$2,358,836	\$2,746

ceeded \$5,000 totaled 28% of grants and 43% of total award dollars. The distribution of grants in 2012-13 by final grant amount (after proration) is shown in Table 5.

In 2012-13, grants were made for five types of private onsite wastewater treatment systems listed in Table 6. (See Appendix III for a descrip-

Table 6: Distribution of Grants by Type of Replacement or Rehabilitated Private Onsite Wastewater Treatment System -- 2012-13

Type of System	Number of Grants	Amount	Average
Mound	304	\$1,202,477	\$3,956
In-ground Pressure	154	352,687	2,290
Conventional	172	287,998	1,674
At-grade	121	306,846	2,536
Holding Tank	107	208,454	1,948
Other	<u>1</u>	<u>374</u>	<u>374</u>
Total	859	\$2,358,836	\$2,746

tion of how these systems function.) Mound systems accounted for 35% of grant awards and 51% of total award dollars. Mound systems are generally a more expensive system than others because of the need to build a mound on top of the soil. (See Appendix II for sample calculations of grants for different system types).

Loan Program

In 1999 Wisconsin Act 9, a private sewage system replacement and rehabilitation no-interest loan program was created. In a year in which DSPS must prorate funds under the private onsite wastewater treatment system replacement and rehabilitation grant program, counties may apply to DSPS for a loan. Counties may only use the loan to increase the grant amount to eligible persons to the amount that the persons would have been eligible to receive if DSPS had not had to prorate grants. In years where grants are funded at 100% of the eligible amount, there is no loan eligibility.

The loan program is provided \$1,500,000 segregated revenue (SEG) from the environmental improvement fund. The fund primarily provides loans to municipalities to upgrade or replace wastewater treatment plants to meet state and federal requirements. Further information about the environmental improvement fund can be found in the Legislative Fiscal Bureau's informational paper entitled, "Environmental Improvement Fund."

The loan amount may not exceed the difference between the amount the county would have received if DSPS had not prorated grants and the amount that the county did receive. If the amount available for loans under the program is insufficient to provide loans to all eligible counties in a year, DSPS is required to prorate loans in the same manner as under the grant program.

A no-interest loan may not be for a term longer than 20 years, as determined by DOA, and must be fully amortized no later than 20 years after the original date of the loan. DSPS and DOA will enter into a financial assistance agreement with an eligible county. DOA, in consultation with DSPS, may establish terms and conditions of a financial assistance agreement that relate to its financial management, including what type of municipal obligation is required for the repayment of the loan. DOA is responsible for disbursing the loan to the county.

If a county fails to make a principal repayment when due, DOA could collect the past amounts due by deducting those amounts from any state payments due to the county or may add a special charge to the amount of state tax apportioned to and levied upon the county.

To date, no counties have applied for a loan under the program. Counties were eligible to apply for a cumulative total of \$5,195,500 between 2000-01 and 2012-13. The amount equals the difference between the eligible and prorated final grant amount for years in which the grant was prorated.

Summary

The failure of private onsite wastewater treatment systems is a statewide problem that can result in water pollution and health hazards. The private onsite wastewater treatment system replacement or rehabilitation grant program provides partial funding for replacement or rehabilitation of POWTS serving owners of principal residences or small commercial businesses in participating counties if potential environmental harm exists, the owner of the private onsite wastewater treatment system meets certain income criteria, and other program requirements are met. This program, in conjunction with other

grant programs administered by DSPS and DNR, is designed to reduce the problem of water pollution in order to provide cleaner lakes, rivers, streams and groundwater in this state.

Since the program's inception in 1978-79, it has awarded \$99.5 million to assist 40,900 owners of principal residences and small commercial establishments in replacing or repairing their private onsite wastewater treatment system.

APPENDIX I

Private Onsite Wastewater Treatment System Grants -- Award Summary by County

County	Year Entered Program	2012-13		Cumulative Total*		County	Year Entered Program	2012-13		Cumulative Total*	
		# of Systems	Amount	# of Systems	Amount			# of Systems	Amount	# of Systems	Amount
Adams	1992	9	\$15,307	292	\$786,688	Marathon	1979	22	\$68,331	1,237	\$2,733,374
Barron	1980	8	32,402	850	1,516,981	Marinette	1994	0	0	133	401,207
Bayfield	1990	3	8,908	61	177,724	Marquette	1998	5	12,648	76	242,964
Brown	1990	16	62,159	496	1,794,068	Menominee	1993	0	0	4	12,537
Buffalo	1990	4	7,606	272	723,953	Monroe	1980	12	34,834	747	1,857,652
Burnett	1983	12	29,284	486	1,198,724	Oconto	1989	8	23,904	616	1,609,494
Calumet	1980	21	80,723	733	2,139,969	Oneida	1980	3	9,690	1,605	2,613,330
Chippewa	1990	4	5,974	599	1,441,926	Oneida Tribe	1991	0	0	3	10,856
Clark	1980	14	36,131	517	1,103,568	Outagamie	1989	45	150,865	632	2,082,645
Columbia	1986	3	11,475	790	1,665,933	Ozaukee	1982	10	41,981	405	1,196,763
Crawford **	1979	0	0	246	376,504	Pepin	1980	1	1,904	240	491,991
Dane	1980	9	25,290	1,834	4,476,539	Pierce	1980	3	9,177	645	1,479,322
Dodge	1986	4	13,481	813	2,230,107	Polk	1987	4	12,695	423	980,889
Door	1980	46	151,819	922	2,766,123	Portage	1980	2	5,124	1,082	2,228,221
Dunn	1990	7	25,024	347	977,920	Price	1986	0	0	203	527,283
Eau Claire	1991	8	25,320	546	1,510,085	Racine	1981	3	13,379	520	1,529,662
Florence **	1990	0	0	36	73,163	Richland	1980	49	132,384	826	1,941,204
Fond du Lac	1979	1	3,189	873	2,600,697	Rock	1985	6	19,433	304	849,420
Forest	1991	4	9,292	144	308,733	Rusk	1988	6	19,453	497	1,072,166
Franklin City	1991	0	0	5	19,116	St. Croix	1983	3	11,458	716	1,581,032
Grant	1981	122	227,276	1,187	2,428,334	Sauk	1980	18	54,018	1,324	3,359,179
Green	2003	38	88,560	231	770,624	Sawyer	1980	9	19,633	954	1,718,542
Green Lake	1984	0	0	285	611,122	Shawano	1991	46	135,279	826	2,063,457
Iowa	1980	59	122,103	896	2,086,903	Sheboygan	1984	2	6,732	451	1,343,476
Iron	1980	4	13,138	164	343,174	Taylor	2002	9	24,978	95	255,780
Jackson	1980	13	33,870	785	1,607,502	Trempealeau	1982	2	5,916	728	1,709,864
Jefferson	1990	1	2,941	173	576,547	Vernon	1980	5	12,393	554	1,319,035
Juneau	1984	11	27,863	726	2,186,786	Vilas	1979	1	4,097	569	1,013,751
Kenosha	1981	7	19,889	577	1,350,880	Walworth	1984	2	4,862	458	952,215
Kewaunee	1985	15	51,897	761	2,281,699	Washburn	1980	6	9,588	406	760,842
LaCrosse	1983	7	21,591	238	612,098	Washington	1979	6	23,087	1,235	3,113,724
Lafayette	1986	17	37,480	275	658,228	Waukesha	1979	4	16,796	1,566	3,423,604
Langlade	1980	5	11,985	402	648,300	Waupaca	1990	5	15,246	392	1,128,682
Lincoln	1991	17	38,911	357	913,871	Waushara	1999	4	14,093	44	149,429
Manitowoc	1985	37	125,551	1,062	3,527,228	Winnebago	1980	3	7,830	164	413,401
						Wood	1985	<u>29</u>	<u>70,589</u>	<u>1,234</u>	<u>2,834,288</u>
						TOTAL		859	\$2,358,836	40,895	\$99,493,098

*Equals cumulative awards made. Actual expenditures may be less than awards.

**These counties withdrew from participation (the last grant cycle is in parentheses): Crawford (2000-01) and Florence (1999-00). Bayfield County withdrew in 1997-98 and rejoined the program effective with the 2007-08 grant cycle.

APPENDIX II

Examples of Calculation of Private Onsite Wastewater Treatment System Grant Amount

Component	Grant Awards*	Total Eligible Grant Amount			
		Example 1	Example 2	Example 3	Example 4
Site evaluation and soil testing	Flat \$250	\$250	\$250	\$250	\$250
Installation of replacement or additional POWTS anaerobic treatment component	\$500 to \$950, depending on tank size	550	550	550	
Installation of a POWTS dosing component and lift pump or siphon	\$1,100 to \$1,250, depending on number of bedrooms		1,200	1,200	
Installation of a non-pressurized or in-ground pressure POWTS treatment or dispersal component	\$1,400 to \$2,750, depending on percolation rate and number of bedrooms	1,925	1,925		
Installation of a high groundwater mound POWTS treatment or dispersal component	\$2,550 to \$4,775, depending on number of bedrooms			4,100	
Installation of POWTS holding tank component	\$2,800 to \$4,775, depending on number of bedrooms				2,800
Total grant amount before income proration		\$2,725	\$3,925	\$6,100	\$3,050

POWTS = Private onsite wastewater treatment system.

*The grant funding levels were revised in administrative rules, to the levels shown effective with the 2009-10 grant year.

Example 1 = Replacement of a conventional system, 3-bedroom house.

Example 2 = Installation of an in-ground system, 3-bedroom house.

Example 3 = Installation of a high groundwater mound system, 3-bedroom house.

Example 4 = Installation of a holding tank, 3-bedroom house.

APPENDIX III

Description of a Typical Private Onsite Wastewater Treatment System

Private onsite wastewater treatment systems (POWTS) collect and/or treat sewage on the premises of a residence or commercial establishment. The systems are sometimes referred to as private sewage systems or septic systems. The first stage of a typical private onsite wastewater treatment system is a septic tank, where a natural settling and flotation process allows some solids to settle out, fats and oils to rise, and bacteria to partially decompose the pollutants and treat the wastewater.

The second stage of a typical system is an absorption field. Clarified wastewater flows by gravity or pump through a series of pipes with small holes in them designed to spread the wastewater evenly over a wide area. The pipes are buried beneath the surface of the ground, usually on a bed of gravel and sand. As the wastewater trickles through the soil beneath the field, it is cleansed of its remaining biological pollutants. Once the discharged water reaches the groundwater it is adequately treated. Nitrates are partially treated in a typical POWTS.

If an absorption field cannot be installed, a holding tank is installed to hold wastewater for transport to off-site treatment. The holding tank has to be pumped out when it fills.

Private onsite wastewater treatment systems require soils that possess the correct properties. The soil must permit the wastewater to "percolate" or trickle through it fast enough to prevent the water from "ponding" and reaching the surface but slowly enough that it can be treated before it reaches groundwater. Even if the soils

are adequate, the groundwater must not be too near the surface or proper treatment with a standard system becomes impossible. Finally, private onsite wastewater treatment systems must be properly designed, installed and maintained or they may malfunction, causing inconvenience, health risk and expense to the owner. Siting a system on proper soils and using a system designed to assure even distribution are often adequate to overcome soils or groundwater contamination problems.

Other types of systems exist to allow on-site treatment where conditions are inadequate for in-ground gravity systems. The best-known of these is the "mound" system, which requires the construction of a soil absorption field of sand on top of existing soils. Another system is the "in-ground pressure distribution" system, which uses a pump to discharge a precalculated volume of wastewater to be evenly distributed from a septic tank to an absorption field. Another system is the "at-grade" system, which is a step between the in-ground pressure system and the mound system. It incorporates distribution piping laid on gravel on prepared ground (but no sand fill as in a mound system), that is then covered by a mound of soil.

Administrative rule SPS 383 (renumbered from Comm 83, effective December 1, 2011) allows for other technologies that may permit treatment of wastewater to a higher level than is possible with a traditional septic tank and soil absorption system. These technologies provide the property owner with additional wastewater treatment options.

APPENDIX IV

History of the Private Onsite Wastewater Treatment System Replacement or Rehabilitation Grant Program

In Chapter 418, Laws of 1977, the Legislature created three grant programs to address water pollution problems. The major share of grant funding was devoted to point source pollution problems with the objective of bringing municipalities into compliance with federal and state pollution discharge laws. The point source program (which has since been replaced by the clean water fund program) addressed those problems most likely to arise in an urbanized area. A second initiative, the nonpoint source program, addresses those pollution abatement problems most typically associated with rural, agricultural areas. Finally, the creation of the private sewage system replacement or rehabilitation grant program provides funding for a set of problems found in developed but relatively less dense suburban and rural areas--private sewage system failures.

Original Program. The original private sewage system replacement or rehabilitation grant program was established in DNR. When the program was created, funding was set at three percent of the point source pollution abatement grant program. This provided approximately \$2,000,000 GPR per year for the first three years of the program.

The original statute determined that the state's share of private sewage system replacement or repair would be 60% of actual costs up to a maximum grant of \$3,000. There were no income limitations for residential or small commercial establishment owners. Small commercial establishments included business places with maximum daily waste flow of 300 gallons.

1983 Wisconsin Act 545: DNR was required to develop grant funding tables which specified the 60% state share of actual costs for various types of systems or components of systems. These tables were based upon minimum size and other requirements specified in the state plumbing code. DNR implemented grant funding tables, which provided a "flat-rate" grant based on the size and type of the system and the type of soil to which the system would discharge. The grant funding tables were intended to simplify program administration by eliminating the need for the county and state to determine actual repair or replacement costs, and to create an incentive for the system owner to "shop" for system replacement or repair work based on costs, since paying reduced costs would not result in a reduced grant under the flat-rate system.

Act 545 set income limitations, for residential owners at the greater of \$27,000 adjusted gross income or 125% of the county median income, and for commercial businesses at the greater of \$27,000 net income or 125% of the county median income. It also redefined "small commercial establishment" to include business places with maximum daily waste flow of 2,100 gallons.

1985 Wisconsin Act 29: Income limitations for residential owners were increased to the greater of \$32,000 adjusted gross income or 125% of the county median income. The limit for commercial establishments was increased to the greater of \$32,000 net income or 125% of the county median income. The appropriation was also changed from a continuing to a biennial appropriation.

1987 Wisconsin Act 27: In 1987-88, the appropriation was changed from a biennial to an annual appropriation.

1989 Wisconsin Act 31: The state's maximum share of the replacement or rehabilitation costs was increased from \$3,000 to \$7,000. Income limits for residential owners were increased to the greater of \$45,000 adjusted gross income or 125% of the county median income. The income limit for commercial establishments was changed to \$362,500 annual gross revenues.

1989 Wisconsin Act 326: The appropriation was changed from an annual to a continuing appropriation, enabling approximately \$1,700,000 of 1989-90 funds to be retained by the program for future use. DNR was also required to update the grant funding tables and to revise them whenever it determined that 60% of current costs of private sewage system rehabilitation or replacement exceeds the amount in the tables by more than 10%, but not more often than once every two years.

Act 326 also modified the definition of a "small commercial establishment" to mean a commercial establishment, or place of business, with a maximum daily waste flow rate of less than 5,000 gallons (previously 2,100 gallons).

1991 Wisconsin Act 39: Administration of the program was transferred from DNR to the Department of Industry, Labor and Human Relations (DILHR) effective August 15, 1991. DILHR was already responsible for issuing sanitary permits for private sewage systems. DILHR adopted DNR's administrative rule to implement the program as ILHR 87, effective March 1, 1992.

Act 39 also modified the income limitations for residential owners so applicants with adjusted gross income below \$32,000 receive the maximum eligible grant. The grant for households

with income between \$32,000 and \$45,000 is reduced by 30% of the amount by which the household's income exceeds \$32,000, (which means that for each \$1 increase in income above \$32,000, the grant is decreased by 30 cents). No change was made to the income limitations for commercial establishments.

1993 Wisconsin Act 16: The date by which applications must be submitted by counties to DILHR was changed from June 1 to February 1. Funding was increased from \$3.0 million to \$3.5 million in each year to address anticipated program demand.

Act 16 also allocated up to 10% of private sewage system grant funding for experimental private sewage systems, effective with applications funded from the 1994-95 appropriation. Based on the amounts appropriated for 1993-95, this provided up to \$350,000 in 1994-95. Act 16 authorized DILHR to exempt grants for experimental systems from: (a) the statutory \$7,000 limit on private sewage system grants; (b) the requirement that the grant not exceed the costs of replacing or rehabilitating the system; (c) the requirement that the grant not exceed the least costly method of replacing or rehabilitating the system; (d) the formula that decreases the grant amount for applicants with income between \$32,000 and \$45,000; and (e) proration if the appropriation is insufficient to fund 100% of grants. DILHR was directed to promulgate rules specifying how it would select, monitor and allocate the state share for experimental private sewage systems.

1995 Wisconsin Act 27: The program, along with DILHR's Safety and Buildings Division, which administered the program, was transferred from DILHR to the Department of Commerce effective July 1, 1996.

1999 Wisconsin Act 9: Effective with the 2001-02 grant cycle, eligibility requirements

changed in two ways. First, the definition of annual family income was changed to include the federal adjusted gross income of the owner of the failing private sewage system and the owner's spouse. Second, a private sewage system is eligible for a grant if the system was installed before July 1, 1978, and the owner meets other eligibility requirements.

Act 9 also created a private sewage system replacement and rehabilitation loan program within the environmental improvement fund. The program is provided with \$1,500,000 SEG from the environmental improvement fund. In years in which Commerce must prorate funds under the grant program, counties could apply to Commerce for a no-interest loan for not more than the difference between the amount the county would have received if Commerce had not prorated grants and the amount that the county did receive.

2001 Wisconsin Act 109: As part of broad-based general fund budget reductions made in many state agencies, the private sewage system replacement or rehabilitation grant program appropriation was reduced from \$3,500,000 by \$330,900 to \$3,169,100 in 2001-02 and by \$501,000 to \$2,999,000 in 2002-03.

2003 Wisconsin Act 169: The act clarified that when calculating costs allowable in determining grant funding that may not exceed the costs of rehabilitating or replacing a private sewage system by the least costly method, a holding tank may not be used as the measure of the least costly method for rehabilitating or replacing a private sewage system other than a holding tank.

2005 Wisconsin Act 347: The act moved the county maintenance program out of the private sewage system replacement or rehabilitation grant program and into the general duties of Commerce. The act made all counties responsible for adoption and enforcement of the maintenance program. The act required Commerce to deter-

mine the private sewage systems to which the maintenance program applies. At a minimum, the program is applicable to all new or replacement private sewage systems constructed after the date on which the county adopts the program. The act authorized Commerce to promulgate an administrative rule to apply the maintenance program to private sewage systems constructed on or before the date on which the county adopts the maintenance program. Commerce promulgated a rule requiring counties to conduct and maintain an inventory of private sewage systems, to complete the inventory by October 1, 2011, and to implement the maintenance program by October 1, 2013.

Commerce is required to determine the private sewage systems to which the maintenance program applies in counties that do not meet the conditions for eligibility under the private sewage system replacement or rehabilitation grant program. The act specified that the maintenance program in these counties would commence on January 1, 2008. (2009 Act 392 deleted this date.)

2009 Wisconsin Act 28: As part of broad-based general fund budget reductions made in many state agencies, the private sewage system replacement or rehabilitation grant program appropriation was reduced from \$2,999,000 annually by \$184,000 to \$2,815,000 in each of 2009-10 and 2010-11.

2009 Wisconsin Act 392: The act moved the private sewage system inventory requirement from administrative rule to statute. It delayed by two years the deadlines for completing the inventory to October 1, 2013, and the deadline for implementing the maintenance program to October 1, 2015. The act also deleted the specific January 1, 2008, implementation date for maintenance programs in counties that do not meet the conditions for eligibility under the private sewage system replacement or rehabilitation grant program.

2011 Wisconsin Act 32: As part of broad-based general fund budget reductions made in many state agencies, the private onsite wastewater treatment system replacement or rehabilitation grant program appropriation was reduced from \$2,815,000 annually by \$476,400 to \$2,338,600 in each of 2011-12 and 2012-13.

2011 Wisconsin Act 134: The act delayed,

by an additional four years, the deadlines for counties to complete the inventory of private systems to October 1, 2017, and the deadline for counties to implement and enforce the maintenance program to October 1, 2019.

2011 Wisconsin Act 146: The act changed the statutory term "private sewage system" to "private onsite wastewater treatment system."