informational
paper #70

private onsite wastewater treatment system grant program

legislative fiscal bureau
state of wisconsin
january 2021

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Private Onsite Wastewater Treatment System Grant Program

Introduction

The private onsite wastewater treatment system (POWTS) replacement or rehabilitation grant program, also referred to as the Wisconsin Fund, provides financial assistance to owners of a principal residence or small commercial establishment, and 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. Many areas of Wisconsin are not served by centralized sewage systems, including 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 POWTS replacement or rehabilitation grant program was created in 1978 to provide funding to address the problem of POWTS failures. The program is administered by the Department of Safety and Professional Services (DSPS). From 1978 to 2020 (2020-21 grant cycle), the state has awarded $110.4 million in grants to assist 43,700 residences and businesses to replace or rehabilitate private onsite wastewater treatment systems. The program is appropriated $1,025,000 in 2019-20 and $840,000 in 2020-21 from program revenue transferred from the DSPS Division of Industry Services (safety and buildings) operations appropriation. The program revenue is received from sanitary permits and private onsite wastewater treatment system plan review fees, and other building permit, plan review, inspection, and credentialing activities.

Under 2017 Wisconsin Act 59, the grant program is repealed on June 30, 2021. The last year of funding for the program is 2020-21, with final applications having been due February 1, 2020, Final awards were made in the fall of 2020. Administrative code for the grant program (Chapter SPS 387) would also be repealed on June 30, 2021.

This paper describes the requirements of the program as provided by s. 145.245 of the statutes and as administered by DSPS under applicable rules of the Wisconsin Administrative Code. Several appendices provide additional information about the distribution of grants in each county (Appendix I), and how a typical private onsite wastewater treatment system functions (Appendix II). Additional detail about the legislative history of the program can be found in earlier versions of this informational paper on the Legislative Fiscal Bureau website.

POWTS Prevalence and Impacts

DSPS estimates that there are 756,000 POWTS in the state. Approximately 10,900 permits were issued statewide for POWTS during calendar year 2019 and 11,700 in 2018. DSPS indicates that about 45% of these permits were for newly-constructed systems and 55% were for replacement systems. The proportion of new and replacement systems may vary substantially by county from year to year. 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 estimates of the number of POWTS have become more precise as counties

complete inventories of such systems. Administrative rules for the installation and maintenance of all POWTS are found in Chapter SPS 383 of the Wisconsin Administrative Code.

Failing POWTS tend to produce health hazards by 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 POWTS 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.

County Participation

Wisconsin counties and Indian tribes 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. Four counties (Ashland, Douglas, Florence and Milwaukee) did not participate in the final years of the program. Appendix I details certain changes in participation by counties over time.

Milwaukee County does not perform POWTS regulatory 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 also apply to the City of Franklin in Milwaukee County and the Oneida Tribe.

County Responsibilities. Counties in the program must:

1. Adopt a resolution stating 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 POWTS maintenance program, whether or not a county has chosen to participate in the grant program. A county was required to conduct, complete, and maintain an inventory of all POWTS located within the jurisdiction, and complete the initial inventory before October 1, 2017. In October, 2018, all 71 counties, plus the City of Franklin and Oneida Tribe, had completed their initial inventory. Milwaukee County is not subject to this requirement.

Counties were required to develop and begin to implement a POWTS maintenance program before October 1, 2019, which included the inventory, and a process for recording each inspection, evaluation, maintenance and servicing report for a POWTS. In October, 2018, all 71 counties subject to the requirement had a full or partial POWTS maintenance program (excluding Milwaukee County). Counties were required to meet the two

deadlines for inventory and maintenance program in order to be eligible for funding under the POWTS grant program.

The owner of a failing private onsite wastewater treatment system, either of a principal residence or a small commercial establishment, could obtain grant application forms from the county after a determination of a failure of the POWTS has been made. Some participating counties charge a fee to eligible applicants to offset county administrative and maintenance costs. DSPS has not tracked which counties charge a fee, and the fee amount, since 2014.

All applications would be initially reviewed at the county level. The county would submit eligible applications to DSPS. DSPS would make the final determination of eligibility and distribute grants to counties. The county would then disburse grant funds to eligible individuals. Appendix I shows the date each county entered the program, the distribution of grants made in each county in 2020-21, and the cumulative distribution amount.

Eligible Projects

Replacement or rehabilitation of a private onsite wastewater treatment system serving a home or small commercial establishment would 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 is occupied at least 51% of the year by the owner;

4. The small commercial establishment has a maximum daily wastewater flow rate of less than 5,000 gallons per day;

5. The owner of the principal residence or small commercial establishment meets certain income criteria, as discussed in the next section;

6. The system is a category one or two failing POWTS, as described in a subsequent section; and

7. 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 by DSPS to inspect private sewage systems; or (b) the owner has been issued a written enforcement order by the appropriate local governmental unit, DSPS, or the Department of Natural Resources (DNR) to correct a violation of the POWTS statutes and rules.

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 would receive the maximum eligible grant. The grant for homeowners with income between $32,000 and $45,000 would be reduced by 30% of the amount by which the homeowner's income exceeds $32,000. This means that for each $1 in income above $32,000, the grant would decrease 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 by the applicant when the determination of POWTS failure was made; (b) the commercial establishment must not be located in an area served by a sewer; and (c) 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. DSPS has prorated grants for commercial establishments 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 one and two are eligible for grant assistance. The types of systems are:

1. Category one systems are those 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 two systems are those 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 one systems.

3. Category three systems are those causing the backup of sewage into the structure served. This type of failing system is not eligible for grant assistance.

Grant Determination

Costs allowable in determining grant funding cannot 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. 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 onsite wastewater treatment system rehabilitation or replacement exceeds the amount in the tables by more than 10%. The tables were revised effective July 1, 2018, for applications received for funding in 2019-20 and 2020-21.

Seven categories of costs, called "work components," are eligible for reimbursement at grant amounts established in the grant funding tables in administrative code Chapter SPS 387. Prior to administrative rule changes in July, 2018 (through grant year 2018-19), the grant award for most components varied depending on the number of bedrooms, tank size, or percolation rate. As of July, 2018 (beginning with grant year 2019-20), the grant award generally varies depending on the design flow of the system in gallons per day. Table 2 shows work components and the maximum award for each for grant years 2009-10 through 2020-21.

DSPS is required to withhold grant awards for applicants that the Department of Children and Families determines are delinquent in their child

Table 2: Calculation of Private Onsite Wastewater Treatment System Grant Amount

Component	Grant Awards 2009-10 thru 2018-19	Grant Awards Effective 2019-20 and 2020-21
Site evaluation and soil testing	Flat $250	Flat $250
Installation of replacement or additional POWTS anaerobic treatment component	$500 to $950, depending on tank size	$2,280 to $4,200, depending on design flow in gallons per day
Installation of a POWTS dosing component and lift pump or siphon	$1,100 to $1,250, depending on number of bedrooms	$2,400 to $3,600, depending on design flow in gallons per day
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	$3,300 to $7,000, depending on design loading rate in gallons per square foot per day and design flow in gallons per day
Installation of an at-grade or mound POWTS treatment or dispersal component	$2,550 to $4,775, depending on number of bedrooms	$5,400 to $7,000, depending on type of design and design flow in gallons per day
Installation of POWTS holding tank tank component	$2,800 to $4,775, depending on number of bedrooms	$3,900 to $4,500, depending on estimated flow of gallons per day
Installation of replacement exterior grease interceptor	$550 to $900, depending on capacity in gallons	$3,000 to $4,500, depending on capacity in gallons

support or maintenance payments until the applicant either submits a certification of full payment from the Clerk of Courts in the county of delinquency or has a payment agreement on file at the county child support agency. Since the 1997-98 grant cycle, 11 delinquent grant applicants did not provide the required certification by December 31 of the calendar year of the grant cycle or enter into payment plans, so their grants expired. DSPS has not identified any applicants delinquent in child support since 2009-10.

Experimental POWTS Grants

Effective with the 2000-01 grant cycle, up to 10% of POWTS grant funding could be allocated for experimental private sewage systems. DSPS is authorized to exempt grants for experimental systems from several requirements related to the grant maximum amount, calculation and proration. Administrative rule Chapter SPS 387 specifies DSPS procedures for experimental POWTS grants.

In 2000-01 and 2001-02, $182,657 was provided for two experimental constructed wetland systems, which received wastewater from septic tanks and dispersed it into soil for final treatment. No experimental system grants have been awarded since 2001-02.

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 would submit an application to the county within three years after the county notifies the owner that the POWTS has failed. The county would review the application and make an initial

determination as to whether the system and owner are eligible. For the 2020-21 funding cycle, county applications were due to DSPS before February 1, 2020, as required by statute. The county application would include a list of property owners approved by the county as eligible and the maximum state grant share for each property owner. DSPS would review each county application, and if any property owner listed in the county application did not meet the eligibility requirements, the grant award to the county would be reduced accordingly. DSPS awarded 2020-21 grants to counties in October, 2020, for distribution to eligible property owners.

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 approved 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 2020-21 grant funds must be completed by December 31, 2021.

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 POWTS failures. The Department has paid category one grants (discharge to waters) in full before category two grants (discharge to the surface of the ground) are eligible for any funding. If there are insufficient funds to provide payment for all category one grants, then these grants would be prorated, and no funds are provided for category two systems. If funds are adequate to fully fund category one grants, then remaining funds would be used for category two grants. If these cannot be fully funded from remaining funds, these grants would be 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.

DSPS Administration. 2015 Wisconsin Act 55 deleted the position and funding specifically authorized for administration of the POWTS grant program. DSPS administers the program with other existing POWTS regulatory and finance program staff.

Funding

Table 3 shows program appropriations and expenditures by fiscal year during the 15 years from 2006-07 through 2020-21.

Prior to 2015-16, the program was funded from the state general fund. Under 2015 Act 55, beginning in 2015-16, the source of funding for the program was converted from the general fund to program revenue. The source of the program revenue is a transfer from the Division of Industry Services (safety and buildings) general operations appropriation, which receives revenue from sanitary permit and private sewage system plan review fees, and fees received from several other building permit, inspection, plan review, and credentialing activities. In addition, the appropriation for the grant program was reduced to $1,645,000 in 2015-16 and $840,000 in 2016-17. Under 2017 Act 59, funding of $840,000 was provided in each of 2017-18 and 2018-19. In 2019-20, funding of $1,025,000 was provided, followed by $840,000 in 2020-21.

The $1,645,000 appropriated in 2015-16 was intended to approximately equal the amount needed to fund applications received by February 1, 2015. However, after 2015 Act 55 was enacted, DSPS found additional eligible applications, and the appropriation was not sufficient to fully fund

Table 3: Private Onsite Wastewater Treatment System Grant Program, Appropriations and Expenditures

Fiscal Year	Appropriations	Expenditures*
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	2,314,200
2013-14	2,338,600	2,322,600
2014-15	2,338,600	2,137,400
2015-16	1,645,000	1,550,200
2016-17	840,000	813,000
2017-18	840,000	676,000
2018-19	840,000	938,700
2019-20	1,025,000	1,045,000
2020-21	840,000	839,900**

*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 preliminary awards made in October, 2020, and include available unexpended funds from 2019-20. Grants will be paid after work is completed, but no later than December 31, 2021.

all applications. The $840,000 appropriated in 2016-17 was intended to approximately equal the anticipated amount of revenue from sanitary permits and private sewage plan review fees, less budgeted expenditures for DSPS positions that administer POWTS regulations.

Grants awarded in 2015-16 through 2020-21 are summarized in Table 4. The grant award amounts in Table 4 differ from the actual expenditures shown in Table 3 because funds are sometimes expended in a fiscal year following the year the grant is awarded. Also, beginning in 2015-16, DSPS changed its method of proration and calculated separate proration percentages for residential and small commercial establishment awards.

In 2019-20, 190 category one and seven category two grants received awards. Principal residences and small commercial establishments received nearly 100% of the eligible grant amount. In 2020-21, 290 category one grants received awards. Principal residences received 48%, and small commercial establishments received 38%. Four category two applications were not awarded grants due to the amount of funding available, but were eligible for $23,800.

Table 5 shows the total grant award amount for 2020-21 grants before and after the effect of proration to award grants within available funding. (Maximum grant amounts shown have had income factoring applied.) Table 5 shows the 290 category one and four category two grants. Applicants with income equal to or less than $32,000 were generally eligible for the maximum grant amount, unless they were small commercial establishments that were prorated to remain within available funding. Applicants with income equal to or less than $32,000 accounted for 84% of total funding awards, applicants with income between $32,000 and $45,000 accounted for 12%, and small commercial establishments with income over $45,000 accounted for 4%. After proration for small commercial establishments, the applicants were eligible for $839,850 in grants.

The distribution of grants in 2020-21 by final grant amount (after proration) for the 290 category one grant applications is shown in Table 6. In 2020-21, the average grant award was $2,896. Grants equal to or less than $3,000 constituted 37% of grants and accounted for 27% of the total award dollars. (This group included five grants where the eligible grant amount was reduced to $0 after the reduction for income factoring, proration or other eligibility reasons.) A total of 63% of grants were between $3,001 and $5,000, with 73% of awarded dollars. Finally, no grants were awarded between $5,001 and $7,000; thus, they received 0% of awarded dollars.

In 2020-21, seven types of private onsite wastewater treatment systems received funding, as listed in Table 7. (See Appendix II for a description of how these systems function.) Conventional

Table 4: Distribution of Private Onsite Wastewater Treatment System Grant Applications and Awards

	Applicants	Application Amount	Prorated Grant Amount	Grant as Percent of Application: Principal Residences	Grant as Percent of Application: Small Commercial Establishments*
2015-16 Final					
Category 1	469	$2,063,106	$1,859,210	94%	64%
Category 2	17	53,900	0	0	0
Total	486	$2,117,006	$1,859,210	NA	NA
2016-17 Final					
Category 1	361	$1,611,868	$840,000	51%	68%
Category 2	11	35,500	0	0	0
Total	372	$1,647,368	$840,000	NA	NA
2017-18 Final					
Category 1	141	$653,027	$653,027	100%	100%
Category 2	5	13,496	13,496	100	100
Total	146	$666,523	$666,523	NA	NA
2018-19 Final					
Category 1	208	$978,787	$955,036	99%	84%
Category 2	4	16,020	16,020	100	84
Total	212	$994,807	$971,056	NA	NA
2019-20 Final					
Category 1	190	$1,193,329	$1,193,317	100%	100%
Category 2	7	39,190	39,190	100	0
Total	197	$1,232,519	$1,232,507	NA	NA
2020-21 Award					
Category 1	290	$1,807,780	$839,850	48%	38%
Category 2	4	23,800	0	0	0
Total	294	$1,831,580	$839,850	NA	NA

*The statutes limit grants for small commercial establishments (SCE) to 10% of the total funds available in any fiscal year. The proration percentages shown were applied to eligible grants to remain within the 10% limit.

Table 5: Distribution of Grants by Applicant's Income -- 2020-21

Applicant's Income	Number of Applicants	Max. Grant After Income Factoring	Prorated Grant Amount**	Average Prorated Grant
$0-$32,000	236	$1,529,190	$705,278	$2,988
$32,001-$38,000	25	152, 617	71,357	2,854
$38,001-$45,000	18	65,773	31,331	1,741
$45,001-$362,500*	15	84,000	31,884	2,126
Total	294	$1,831,580	$839,850	$2,857

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

**Includes applicable income factoring and proration for 255 principal residences and proration for 35 small commercial establishments applying for category one grants. Principal residences were prorated at 48% funding and small commercial establishments were prorated at 38% to receive 10% of grant funds. Four category two applications received no funding.

and mound systems each accounted for 34% of grant awards. They accounted for 35% and 36% 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.

Loan Program

In 1999 Wisconsin Act 9, a private sewage system replacement and rehabilitation loan program was created. The program authorized counties to apply to DSPS for a loan in a year in which DSPS prorated funds under the POWTS replacement and rehabilitation grant program. Counties could use the loan to increase the grant amount to eligible persons to the amount that the persons would have been eligible to receive without proration. Counties would have been required to repay the no-interest loan over a term up to 20 years.

The loan program was provided $1,500,000 segregated revenue (SEG) from the environmental improvement fund, which primarily provides loans to municipalities to upgrade or replace wastewater treatment plants to meet state and federal requirements. No counties applied for a loan under the program. Under 2017 Wisconsin Act 59, the loan program was repealed, and unused funding reverted to the environmental improvement fund.

Table 6: Distribution of Category One Grants by Amount of Grant -- 2020-21

Amount of Grant	Number of Grants	Amount	Average
$0	5	$0	$0
$1-$1,000	3	2,050	683
$1,001-$2,000	22	38,325	1,742
$2,001-$3,000	76	189,951	2,499
$3,001-$4,000	184	609,524	3,313
$4,001-$5,000	0	0	NA
$5,001-$6,000	0	0	NA
$6,001-$7,000	0	0	NA
Total	290	$839,850	$2,896

Table 7: Distribution of Category One Grants by Type of Replacement or Rehabilitated Private Onsite Wastewater Treatment System -- 2020-21

Type of System	Number of Grants	Amount	Average
Mound	99	$305,812	$3,089
Conventional	99	297,247	3,002
At Grade	57	169,810	2,979
Holding Tank	32	58,334	1,823
In-Ground Pressure	1	3,335	3,335
Drain Field Only	1	1,977	1,977
Sand Blanket	1	3,335	3,335
Total	290	$839,850	$2,896

APPENDIX I

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

County	Year Entered Program	2020-21 # of Systems	2020-21 Amount	Cumulative Total* # of Systems	Cumulative Total* Amount
Adams	1992	0	$0	330	$936,755
Barron	1980	2	6,456	865	1,587,322
Bayfield**	1990	0	0	65	187,140
Brown	1990	5	12,662	557	2,082,104
Buffalo	1990	2	4,777	301	820,171
Burnett	1983	3	10,005	520	1,309,725
Calumet	1980	10	32,326	852	2,660,256
Chippewa	1990	2	3,954	615	1,501,417
Clark	1980	6	13,611	576	1,293,738
Columbia	1986	0	0	804	1,724,806
Crawford**	1979	57	179,430	325	697,934
Dane	1980	0	0	1,857	4,571,142
Dodge	1986	1	2,733	824	2,289,580
Door	1980	1	1,143	1,016	3,130,605
Dunn	1990	0	0	358	1,029,764
Eau Claire	1991	1	3,335	564	1,584,370
Florence**	1990	0	0	36	73,163
Fond du Lac	1979	2	5,725	895	2,712,692
Forest	1991	1	1,858	153	333,256
Franklin City	1991	0	0	6	24,966
Grant	1981	16	42,276	1,416	3,103,570
Green	2003	1	3,335	281	960,189
Green Lake	1984	2	6,266	294	644,807
Iowa	1980	6	11,869	964	2,317,432
Iron	1980	5	12,724	175	381,062
Jackson	1980	5	15,217	822	1,743,645
Jefferson	1990	1	3,335	177	597,450
Juneau	1984	10	30,402	824	2,559,169
Kenosha	1981	1	3,335	593	1,433,677
Kewaunee	1985	12	34,854	966	3,253,316
La Crosse	1983	2	5,992	256	683,993
Lafayette	1986	0	0	313	749,215
Langlade	1980	0	0	413	687,594
Lincoln	1991	3	9,305	397	1,034,251
Manitowoc	1985	11	30,922	1,203	4,163,015
Marathon	1979	8	$19,891	1,367	$3,218,451
Marinette	1994	2	6,670	146	460,099
Marquette	1998	0	0	90	295,342
Menominee	1993	0	0	6	17,802
Monroe	1980	18	52,737	813	2,123,333
Oconto	1989	7	23,125	677	1,873,766
Oneida	1980	1	3,335	1,620	2,657,804
Oneida Tribe	1991	0	0	3	10,856
Outagamie	1989	5	12,916	683	2,279,727
Ozaukee	1982	0	0	420	1,268,238
Pepin	1980	4	13,340	248	527,957
Pierce	1980	2	6,670	675	1,639,760
Polk	1987	4	10,872	437	1,039,722
Portage	1980	4	12,435	1,104	2,305,083
Price	1986	0	0	208	552,994
Racine	1981	6	15,605	547	1,660,760
Richland	1980	6	18,989	956	2,445,784
Rock	1985	3	10,005	319	906,240
Rusk	1988	2	6,670	526	1,166,316
St. Croix	1983	1	3,335	722	1,611,198
Sauk	1980	4	12,652	1,390	3,597,104
Sawyer	1980	2	4,668	969	1,766,764
Shawano	1991	1	3,335	918	2,425,558
Sheboygan	1984	0	0	463	1,404,696
Taylor	2002	15	36,422	159	454,810
Trempealeau	1982	5	12,412	740	1,751,072
Vernon	1980	16	48,006	620	1,547,977
Vilas	1979	0	0	571	1,019,396
Walworth	1984	0	0	468	998,002
Washburn	1980	0	0	422	820,448
Washington	1979	1	2,594	1,261	3,233,855
Waukesha	1979	1	3,335	1,584	3,507,068
Waupaca	1990	0	0	411	1,204,857
Waushara	1999	0	0	56	204,467
Winnebago	1980	0	0	176	459,069
Wood	1985	4	11,984	1,309	3,126,953
TOTAL		290	$839,850	43,697	$110,446,616

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

**Florence County withdrew from participation in the 1999-00 grant cycle. Bayfield County withdrew in 1997-98 and rejoined the program effective with the 2007-08 grant cycle. Crawford County withdrew in 2000-01 and rejoined in 2018-19.

APPENDIX II

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 onsite 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 pre-calculated 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 code Chapter SPS 383 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.