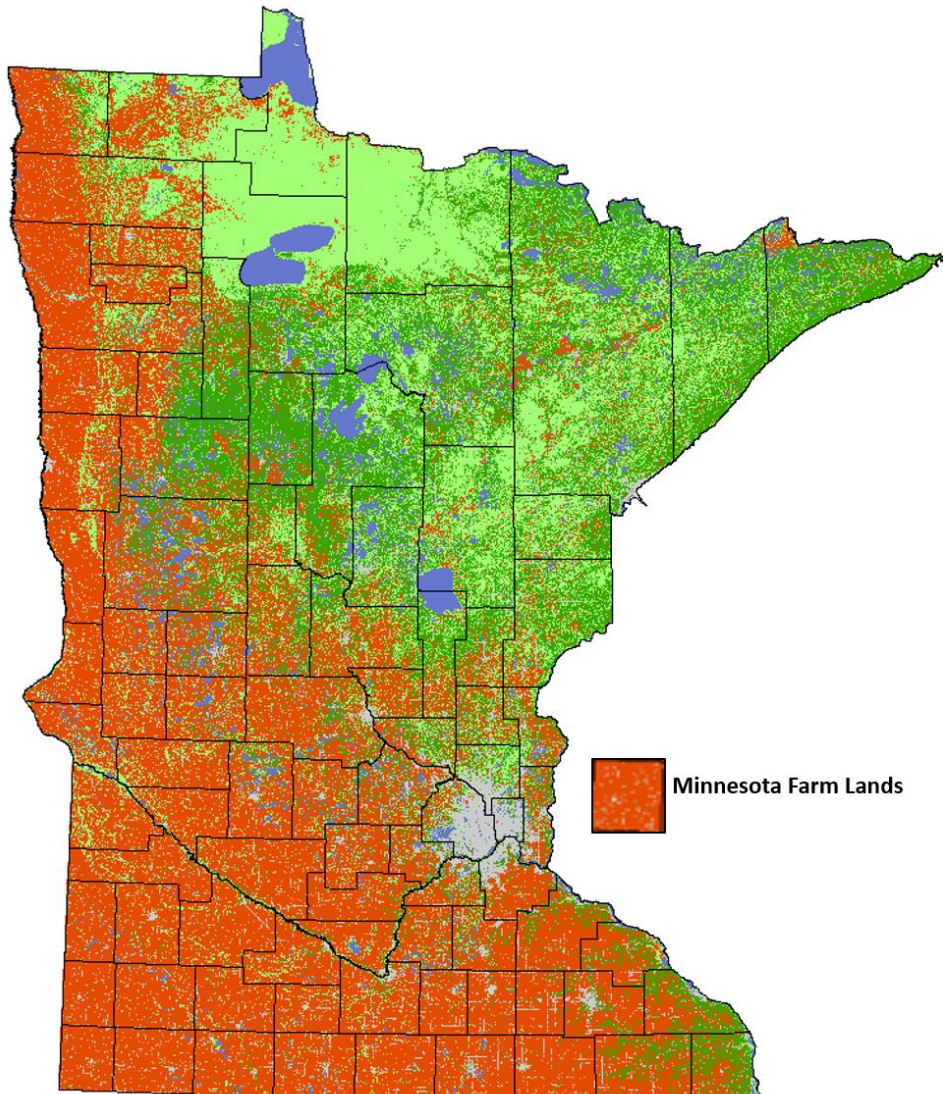




AGRICULTURAL BEST MANAGEMENT PRACTICES LOAN PROGRAM

BIENNIAL STATUS REPORT



Prepared by

Dwight Wilcox

625 Robert Street North, Saint Paul, Minnesota

October 15, 2017

Representing activity through June 30, 2017

<http://www.mda.state.mn.us/agbmploans>

Front Cover:

This map shows all crop lands in Minnesota based on the 2014 Cropland Data Layer of the United States Department of Agriculture, National Agricultural Statistics Service.

Table 1. Estimated cost of preparing report.

Estimated Cost of Preparing Report	Cost
Estimated Labor Cost	\$3,000
Printing and Incidental Costs	\$200
Total Costs	\$3,200

Electronic Copy Available at:

<http://www.mda.state.mn.us/~media/Files/news/govrelations/agbmpstatusrpt.pdf>

For additional information please contact:

Dwight Wilcox

AgBMP Loan Program

Minnesota Department of Agriculture

625 Robert Street North

St. Paul, Minnesota 55155-2538

Phone: (651) 201-6618

Fax: (651) 201-6109

Email: AgBMP.Loans@state.mn.us

In accordance with the Americans with Disabilities Act, this information is available in alternative forms of communication upon request by calling 651-201-6000. TTY users can call the Minnesota Relay Service at 711. The MDA is an equal opportunity employer and provider.

EXECUTIVE SUMMARY

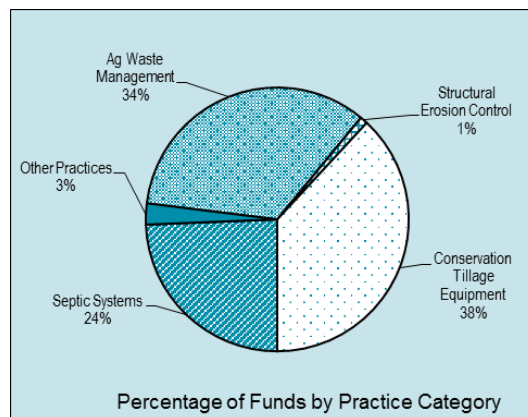
In 1994 the Minnesota Legislature enacted initiatives to provide long term, sustained funding to resolve nonpoint source water pollution problems. One section of these initiatives was the Agricultural Best Management Practices (AgBMP) Loan Program which was created to assist local governments implement agricultural and rural components of their Comprehensive Local Water Plan, Total Maximum Daily Load Implementation Plans and other environmental plans. This program provides low interest loans (typically 3%) through local governments and financial institutions to farmers, agriculture supply businesses, rural landowners, and water quality cooperatives. These loans are for pollution prevention practices that are recommended in an area's water and environmental plans. The program uses a perpetual revolving loan account structure where repayments from prior loans are continually reused to fund new loans.

Individual counties, Soil and Water Conservation Districts, and joint power organizations representing multiple counties and districts may participate in the AgBMP Loan Program as local administrators. Any financial institutions capable of servicing loans, providing adequate security, and guaranteeing repayment may participate as lenders under the program.

The AgBMP Loan Program is available throughout Minnesota and to all landowners and farmers. It prevents water pollution and restore clean water by implementing proven water quality practices; it encourages environmental compliance for farmers and landowners by providing financial assistance at a reduced cost; make farm operations more effective and efficient by allowing upgrades that reflects available technology and practices; stimulates and supports many different facets the rural Minnesota economy by the diversity of its eligible practices.

This report summarizes activities of the AgBMP Loan Program through June 30, 2017.

The program has received \$75.8 million since 1995, primarily from Minnesota's Clean Water State Revolving Fund. These funds have been awarded or used in all of the state's counties. Because of the revolving loan structure, the appropriations have been reused 2.97 times to financed 13,324 projects with total loans of \$225.1 million. The total cost for all completed projects that include AgBMP Loan Program financing is estimated to be \$353.5 million. In fiscal year (FY) 2017, 443 projects were completed totaling \$11.4 million in loans. The adjacent figure shows a summary of loans in dollars by category issued since 1995.



- 2,557 Agricultural Waste Management practices (34% of all practices) have been implemented throughout the state (66 in FY 2017). These systems include replacement or upgrading of manure holding basins; manure handling and incorporation equipment; and feedlot improvements such as diversions or berms to control feedlot runoff.
- 242 Structural Erosion Control practices (1%) have been funded (2 in FY 2017) including projects such as sediment control basins, waterways, terraces, diversions, buffer and filter strips, windbreaks, and gully repair.
- 3,792 Conservation Tillage practices (38%) (31 in FY 2017) have been implemented, including various types of seed bed preparation, planting, cultivation, and harvest implements that leave crop residues on the soil surface.
- 6,475 Sewage Treatment Systems (24%) (291 in FY 2017) have been repaired or replaced.
- 258 Other practices (3%) (53 in FY 2017), including well sealing, chemical and petroleum storage containment structures, and chemical spray equipment have also been funded.

TABLE OF CONTENTS

Executive Summary	1
Table of Contents	3
Table of Figures	4
Table of Tables	4
Table of Appendixes	5
Purpose	6
Statutory Authority, Operating Plans, and Agreements	6
Allocation Process to Counties	8
Cash Flow Process	9
Project Approval Process.....	10
Targeting and Prioritization.....	12
Requested Funding and Scope of Work	13
Clean Water Fund Activity.....	15
Current Status – All Funds Combined	18
Estimated Environmental Benefits.....	21
Completed Projects by Category	23
Status of Revolving Accounts	34
County Capacity for Implementation	35
Fiscal Monitoring of the AgBMP Loan Program	36
Loan Defaults.....	37
Cost of Program Administration.....	38
Participating Lenders.....	39
Appendix A. Total allocations to counties by AgBMP Loan Program	40
Appendix B. Example Practices Eligible for Funding by Program	43
Appendix C. Glossary of terms, initials, and acronyms	44

TABLE OF FIGURES

Figure 1.	AgBMP Loan Program Revolving Cash Flow Chart.....	10
Figure 2.	Steps of the borrower loan application process.....	11
Figure 3.	Allocations to Counties from Clean Water Funds.....	16
Figure 4.	AgBMP CWF project locations, 1995-2017.....	17
Figure 5.	Cumulative amount of AgBMP funds allocated to counties, 1995-2017.....	18
Figure 6.	Total Amount and number of all loans issued by county 1995-2017.....	18
Figure 7.	Location of all AgBMP projects, 1995 - 2017.....	20
Figure 8.	Location of FY 2017 AgBMP projects.....	20
Figure 9.	Location of agricultural waste management projects, as of 6/30/2017.....	23
Figure 10.	Numbers and sizes of farms receiving AgBMP loans for agricultural waste management.....	24
Figure 11.	Typical manure storage pit under construction in Olmsted County.....	25
Figure 12.	Manure treatment system in Stearns County.....	25
Figure 13.	Installation of manure storage structure in Olmsted County.....	25
Figure 14.	Location of structural erosion control projects as of 6/30/2017.....	26
Figure 15.	Location of conservation tillage practices, as of 6/30/2017.....	27
Figure 16.	Numbers and acreage of farms receiving AgBMP loans for conservation tillage practices.....	27
Figure 17.	Typical conservation tillage ripper with discs.....	28
Figure 18.	Field under conservation tillage practices.....	28
Figure 19.	Typical conservation tillage planter.....	28
Figure 20.	Typical conservation tillage disc.....	28
Figure 21.	Location sewage systems financed with AgBMP funds, as of 6/30/2017.....	29
Figure 22.	Installation of a typical septic tank and mound drain field, Watonwan County.....	30
Figure 23.	Connecting private lateral lines to municipal system, Wadena County.....	31
Figure 24.	Location of private lateral relocation projects in Wadena, Minnesota.....	31
Figure 25.	Location of Other practices financed with AgBMP funds, as of 6/30/2017.....	32
Figure 26.	Nitrogen application tool bar, Rock County.....	33
Figure 27.	Typical well drilling installation.....	33
Figure 28.	Location of participating AgBMP lenders.....	39
Figure 29.	Counties acting as lenders in the AgBMP Loan Program.....	39

TABLE OF TABLES

Table 1.	Estimated cost of preparing report.....	Inside cover
Table 2.	Appropriation to the AgBMP Loan Program.....	13
Table 3.	Summary of average total cost of a project by practice category, average individual loan amount, average annual total of loans by category, and percentage of project paid from AgBMP funds for the last five years.....	14
Table 4.	List of Clean Water Fund Appropriations.....	16
Table 5.	CWF loans by category as of 6/30/2017.....	17
Table 6.	Summary of the numbers and amounts of loans issued by fiscal year for the last ten years ending 6/30/2017.....	19
Table 7.	The top five local governments financing projects through the AgBMP Loan Program during the last 5 years.....	19
Table 8.	Summary of farm/non-farm participants in the AgBMP Loan Program by practice category.....	20
Table 9.	Loans issued by numbers and total dollar amounts, 1995 - 2017.....	21
Table 10.	Estimated nutrients managed following installation of AgBMP funded feedlot and manure handling equipment improvements.....	21
Table 11.	Estimated sediment load reductions following implementation of conservation tillage practices funded by the AgBMP Loan Program.....	22
Table 12.	Estimated phosphorus and TSS load reductions following installation of AgBMP funded septic systems.....	22
Table 13.	Summary of agricultural waste practices completed during last five years.....	23
Table 14.	Percentage of loans issued to various types of animal production operations.....	24
Table 15.	Summary of practices funded under the Other Practices category 1995 - 6/30/2017.....	32
Table 16.	AgBMP fund account characteristics as of 6/30/2017.....	34

Table 17.	Proposed use of current funds under contract.	35
Table 18.	Loans issued by fiscal year for the last ten year period.....	36
Table 19.	Costs for administration of the AgBMP Loan Program by the MDA.....	38

TABLE OF APPENDIXES

Appendix A.	Total allocations to counties by AgBMP Loan Program.....	40
Appendix B.	Example Practices Eligible for Funding by Program.....	43
Appendix C.	Glossary of terms, initials, and acronyms.....	44

PURPOSE

The purpose of the Agricultural Best Management Practices (AgBMP) Loan Program is to prevent pollution, improve water quality, and address other local environmental concerns by assisting local government units (LGU) with the implementation of their agricultural and rural components of their Comprehensive Local Water Plans (CLWP), Total Maximum Daily Load (TMDL) Implementation Plans, Wellhead and Sole Source Aquifer Protection Plans and other environmental planning documents.

The AgBMP Loan Program provides loans for projects:

- that prevent or reduce water pollution,
- that are approved by local governments (Soil and Water Conservation Districts, county government, or joint power organizations), and
- for which a local lending institution (such as banks, credit unions, cooperatives, regional development commissions, and counties acting as lenders) is willing to guarantee repayment to the MDA and service the borrower's loan.

These local organizations will approve projects, oversee completion, issue and service low interest loans to farmers, agriculture supply businesses, rural landowners, and water quality cooperatives that implement best management practices (BMP) recommended in local water or other environmental plans. Although the primary purpose of the program is focused on agricultural issues, the program has been intentionally designed to encompass non-agricultural pollution issues in rural Minnesota, such as on-site and decentralized sewage treatment systems, and riparian stabilization practices and has an adaptable framework to distribute loans for any eligible project from any funding source appropriated to the program.

STATUTORY AUTHORITY, OPERATING PLANS, AND AGREEMENTS

The AgBMP Loan Program is implemented by statute, planning documents, and agreements.

Minnesota Statutes 17.117: The authorizing legislation for the AgBMP Loan Program is under Minnesota Statutes 17.117. In some cases specific subsequent session laws have established priorities or expanded eligibilities for some appropriations to the program, such as targeting septic system replacement by 1997 Session Law Chapter 246 Section 6 and authorizing odor control financing in the 2000 Session Law Chapter 492 Section 10(3).

The program was first authorized in 1994 with minor procedural amendments in 1995 and 1996. In 2001, there were significant legislative amendments:

- Authorized expansion of the lending network, permitting more than one lender to serve an area,
- Recognized other environmental and management plans as guidance documents, and
- Authorized provisions of appropriation legislation to take precedence over limitations or requirements of this statute.

In 2006, 2007, and 2015 the loan limits were progressively increased, raising it to the current limit of \$200,000. In 2016 eligibility was expanded to include projects to treat or replace wells that do not comply with drinking water standards.

Minnesota 319 Nonpoint Source Management Plan: This plan describes how the state and local governments will address nonpoint source pollution problems such as those financed by the AgBMP Loan Program. It identifies the nonpoint source problems throughout the state, establishes priorities, and recommends potential actions to mitigate their impact. The Comprehensive Local Water Plans, prepared by the counties, provide the basis for much of the statewide water plan.

Barataria-Terrebonne National Estuary (B-T NEP) 320 Comprehensive Conservation Management

Plan: This plan provides guidance for SRF funded practices implemented throughout the Mississippi River Watershed, including Minnesota, which will mitigate water quality problems in the downstream Barataria-Terrebonne Estuary and the Gulf of Mexico.

SRF Operating Agreement: The AgBMP Loan Program has received funds from Minnesota's Clean Water State Revolving Fund (SRF) which is established as a permanent revolving fund under the federal Clean Water Act. The assets of the SRF, which include federal funds, state matching funds, loan repayments and interest earnings, must be maintained in perpetuity and managed according to the terms of an Operating Agreement between the US Environmental Protection Agency (EPA) and the State of Minnesota. The Operating Agreement is an on-going agreement that is reviewed and amended periodically. It outlines the basic requirements for the SRF program, procedures for overall operation, fund transfers, and reporting.

Interagency Agreement: The Minnesota Public Facilities Authority (PFA) is responsible under state law for managing the SRF. The PFA is governed by a board of six state agency commissioners, including the commissioner of the Minnesota Department of Agriculture (MDA). The PFA annually provides SRF funds to the MDA to administer as part of the AgBMP Loan Program. These funds and all subsequent loan repayments retain their identity as SRF funds and must be administered according to state and federal law governing the SRF. The relationship between the PFA and the MDA is defined by an Interagency Agreement. A new agreement authorizing the transfer and use of funds from the PFA to the MDA is prepared each time funds from the SRF are appropriated. This agreement defines the amount of funds available, how they may be used, and requires appropriate accounting and reporting.

Intended Use Plan (IUP): Each year the PFA prepares an Intended Use Plan describing how all the funds in the SRF accounts will be used. The IUP is opened for public review and comment. Typically the IUP identifies municipalities that are eligible to receive funds for wastewater treatment projects and any additional funds that will be made available to the agencies and departments implementing nonpoint pollution programs (such as the AgBMP Loan Program).

Comprehensive Local Water Plan (CLWP): All counties in Minnesota are required to prepare a CLWP that includes water resource inventories, public meetings, and comment periods. These plans identify specific local water resources, describe problems affecting the water resources, and recommend action plans to reduce water pollution. The AgBMP Loan Program provides funds to implement the recommended activities of these plans.

Total Maximum Daily Load Implementation Plan (TMDL): The US EPA and the MPCA have created a process to identify waters that are adversely impaired and prepare a plan to restore those waters to their intended use. A TMDL Implementation Plan proposes limits to the factors that cause the impairment, recommends specific remedial practices, and identifies areas where the suggested practices would be most effective, thus reversing the impacts.

Contracts with Participating Local Government Units: Each Local Government Unit has entered into a contractual agreement with the State of Minnesota to oversee and administer the AgBMP Loan Program within their jurisdiction.

Contracts with Participating Local Lenders: The AgBMP Loan Program has a network of over 250 lending institutions and local branch offices. Typically one contract is issued to each participating institution which allows all local branches to participate as well. The contract formalizes the lender's responsibility to underwrite, service, and guarantee repayment of the loan back to the AgBMP Loan Program.

Procedure and Policies of the AgBMP Loan Program: This is an informal, internal guide that explains the workings and procedures of the AgBMP Loan Program. It has been developed primarily by compiling prior responses to email and other inquiries, thereby offering guidance for consistent responses to future inquiries.

ALLOCATION PROCESS TO COUNTIES

(For the purpose of this report, the term “allocation” refers to the award of funds by the AgBMP Loan Program to a local government unit, while the term “appropriation” refers to the award of funds by the state legislature or the Public Facilities Authority to the MDA.

Through the remainder of this report, the term “county” will refer to the local government unit implementing the AgBMP Loan Program; whether it is county government, the county Soil and Water Conservation District or a joint powers organization consisting of a group of either county government or county Soil and Water Conservation Districts.

There may be slight differences between various reported totals when the calculations require additional information but the information was not provided by the borrower or county. For example, if a farmer did not report acres under conservation tillage, it was not included in the calculations of total acres under conservation tillage, while it was included in total loans issued.)

After twenty-two years of awarding funds to counties, most counties have built up their assigned accounts such that repayment revenue from past loans have met the demands for the past few years. Achieving this maturity, the importance of the annual allocation process has been significantly reduced such that most counties simply use past allocations for future projects and request additional funds only when needed.

To facilitate the perpetual revolving nature of this program, all contracts with the counties were modified in 2015 such that their contract has an award amount equal to all funds under the oversight of the respective county, whether being held by the MDA (available for use) or by a participating lender (as an active loan with an outstanding loan balance). In this way, as monies are disbursed by the state or repaid by participating lenders, the total amount under the county’s contract does not change, so the frequent amendments required to re-award lender repayments to the county has been eliminated. This change in contract format has greatly simplified the program’s accounting system.

The program retains the framework for competitive and non-competitive applications; however, during the last biennium, the automatic reassignment of repayments from participating lenders provided the majority of funds to counties. For practical purposes, there has not been a need for a competitive application process. Instead, depending on the number of requests from counties and the idle funds available for use, AgBMP staff will contact selected counties with unused funds to voluntarily release a portion of their allocation back to the Statewide Interim Allocation Pool authorized under Minnesota Statutes 17.117 6b(c), where it is then awarded to those counties that anticipate an increase in activity. This cooperation among counties have provided statewide constituent access to financial assistance without the necessity of additional appropriations or a competitive application process.

For details on the competitive application system, prior AgBMP biennium reports may be reviewed. If funds become limited, the competitive application system will be reinstated.

Counties are required to submit annual reports that summarize their past activities and propose a tentative budget for anticipated activities in the upcoming year. The counties may request additional funds in their annual report and these requests are reviewed as provided in statute. In the 2017 reporting period, only eight counties requested additional funds, eleven counties released funds. All remaining counties had sufficient funds in their existing revolving account to meet their anticipated needs.

CASH FLOW PROCESS

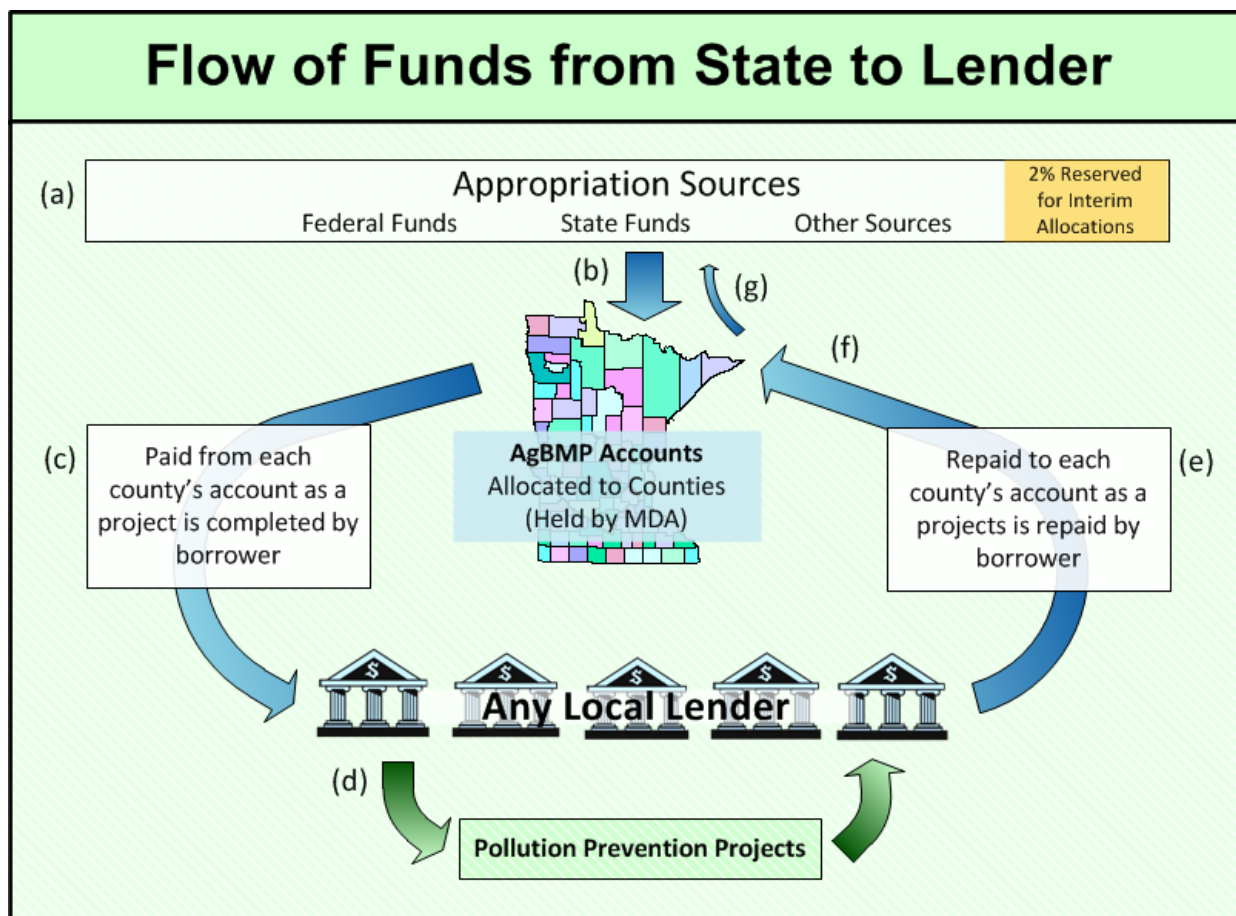
Figure 1 shows a flow chart of the funds through the AgBMP Loan Program. The process to finance a project follows these steps (letters correspond to items on Figure 1):

- a. The MDA account may receive appropriations from state, federal, other sources, or from returns of past allocations (g). The last time new appropriations were added to the loan pool was in 2013. Since then, counties have voluntarily adjusted their allocation to make funds available to other areas with increased activities.
- b. Depending on the amount of new funds and the demand for the funds, the annual application process or interim allocations are used to formally award these funds to the counties. The money is not sent directly to the counties, instead the funds are held by the AgBMP Loan Program in accounts designated for use by each participating county.
- c. Lenders may request funds for projects that have been approved by counties.
- d. Lenders then issue loans to the borrowers and the borrowers repay the loans to the lenders.
- e. Lenders repay the loan principal back to the AgBMP Loan Program as the borrowers repay them. They retain interest earned as a fee for servicing and guaranteeing the loans.
- f. The repaid funds are deposited into the AgBMP account for the county from which the repayment was received. The process then will perpetually repeat itself from (c) to (f) for as long as the county uses the funds.
- g. If funds are not used, they may be voluntarily released or rescinded and made available to all counties.

Under this system, as repayments are received, the money is reallocated back to the same county. This procedure creates a county revolving account that is held by the AgBMP Loan Program to which all participating lenders have access. In addition, if funds in a county's account are not used, it can be rescinded or released in accordance with the contract.

Another feature of this system is that over time, the amount of repayments received and reallocated back to the county will approximate the average annual spending level of the county. If a county receives additional allocations through the annual application process or interim allocations (a), the corpus of their account increases (b); thus the account's revenue (e) increases since more loans are being repaid. However, if a county's activity level decreases, the repayment revenue (f) from prior loans would not be fully used. If those repaid funds are not used within one year, they could be rescinded (g), thus reducing future repayment revenue to match the new activity level. This results in a stable, reliable funding source, commensurate with the county's capacity to implement projects. The program has found that this annual adjustment of the allocations is frequent enough to assure reasonable use of the funds yet gives the counties adequate time to solicit, design, and implement practices.

Figure 1. AgBMP Loan Program Revolving Cash Flow Chart.



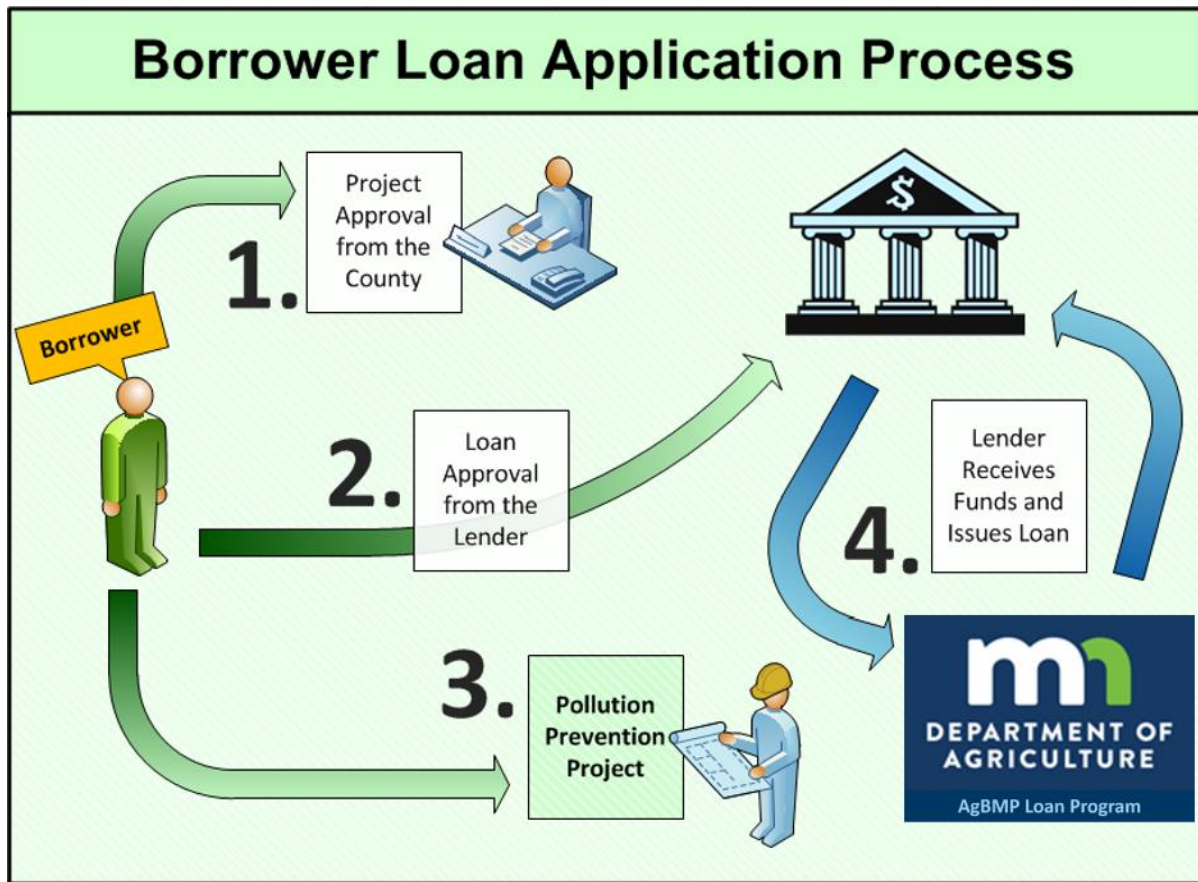
Under the original 1995 legislation, once funds were sent from the MDA to the county, repayments from the original projects were retained by the county in local banks and could be re-loaned for additional projects for up to ten years before repayment to the MDA began. However, this system was ended in 2005 and is now represented in Figure 1 by the repayment by lenders (e and f) to the County AgBMP Accounts held by the MDA (b). Additional details on the original cash flow system can be found in prior AgBMP biennial reports.

PROJECT APPROVAL PROCESS

To the borrower, the approval process for an AgBMP Loan is relatively simple (see Figure 2).

1. The borrower obtains approval for the project by the local county based on the environmental benefits and the availability of funds.
2. Once approved by the county, the application is forwarded to the local lender selected by the borrower for credit review. The lender will interact with the borrower just as with any other loan product offered by the lender.
3. With the approval of a local lender willing to issue a loan, the borrower may negotiate with the contractor or supplier for the project, within the maximum amount approved by the county and the lender.
4. As project costs are incurred, the lender and the AgBMP Loan Program will transfer the funds behind the scenes without the borrower's involvement. The lender will deal with the borrower using their internal procedures as if it was a conventional loan.

Figure 2. Steps of the borrower loan application process.



TARGETING AND PRIORITIZATION

The AgBMP Loan Program uses four levels of prioritization and targeting for funds implementing best management practices:

- At the statewide level, Minnesota's 319 Nonpoint Source Management Plan and the B-T NEP 320 Plans prioritizes and establishes broad water quality objectives, priorities, and goals. The Minnesota 319 plan is prepared by multiple Minnesota state and local agencies with oversight by the MPCA and is open for public comment. The B-T NEP 320 plan is prepared by the Barataria-Terrebonne National Estuary with the advice of a Management Conference. Its membership includes representatives from industry and business, fisheries, agriculture, oil and gas, government agencies, individual citizens, landowners, civic organizations, hunters, scientists, engineers, environmentalists, economists, and urban planners and is open for public comment.
- At the local or county level, a local water planning process develops the CLWP, which identifies water resources, prioritizes problems, and establishes local goals and solutions. This plan incorporates public involvement and in depth review by many state agencies.
- At the local and state level, counties or state agencies prepare TMDL Implementation Plans and Watershed Restoration and Protection Strategy (WRAPS) which address specific water quality impairments. These plans are professionally prepared, reviewed by local, state, and federal agencies, and open for public comment.
- The AgBMP Loan Program can also be used to implement other environmental plans, such as protection of wellhead areas and sole source aquifers.

All projects funded by the AgBMP Loan Program must be approved by a county confirming that the project will implement a component of a recognized environmental plan or is otherwise eligible by statute or appropriation source.

Each participating county establishes its own internal procedures to target, select, and implement the specific practices that carry out eligible components of local environmental plans. Eligibility is not restricted to farmers alone, nor are there programmatic borrower income, net worth, or income ratios limitations. If a project addresses a recommendation in a local environmental plan, it generally will be eligible for a loan through this program. However, lenders may establish their own underwriting criteria which may include income, net worth, or other financial limits.

In most situations, the counties actively seek the participation of landowners who will:

- Implement specific types of practices to address priority water quality problems anywhere within their jurisdiction, for example, any feedlot upgrade in the county.
- Implement any eligible practices within targeted, priority water resource areas, for example, conservation tillage practices within ½ mile of sediment impaired waters.
- Repair septic problems on target lakes.

The project approval process by counties varies greatly; however most counties have chosen to delegate the approval to local expert staff to approve without any board action. A few counties have a review panel to evaluate and rank eligibility.

This program accepts the established water planning process and framework already in place and does not create other priorities or targeting methods for the counties. This program has successfully implemented thousands of practices because it is the local government's responsibility to identify their local priorities, develop effective local solutions, and solicit willing landowners to implement those solutions. Documents such as the Minnesota 319 Nonpoint Management Plan, Local Comprehensive Water Plans, Total Maximum Daily Load Implementation Plans, WRAPS, and other environmental planning documents provide background and guidance to the local counties, but it is ultimately the

county and a landowner that must transform those recommendations into real projects that are both effective to address water quality issues, economical, and of benefit to the landowner.

When trying to create specific priorities or requirements for the projects financed through this program, it is important to recognize that this program provides only low interest loans, not grants. The funds must always be repaid by the borrower and if the borrower is unable to, the loan is guaranteed to the program by the lender issuing the loan. Therefore non-environmental considerations significantly impact the landowner’s decision to take on additional debt, such as state of the economy, agricultural prices, existing debt, and long-term personal goals. The lender also evaluates these parameters to assess the loan’s risk. This program attempts to balance finding ideal environmental projects in the most sensitive areas with the practical and economic feasibility of finding ready and willing borrowers with the financial wherewithal to take on debt.

REQUESTED FUNDING AND SCOPE OF WORK

PAST REQUESTS FOR FUNDING FROM COUNTIES

When the program first started, funding requests from counties exceeded available funds. However, as the program has matured, counties have built up principal accounts with repayment revenue typically sufficient to meet local needs. In the 2017 reporting period, only 8 counties requested a total of \$1.4 million in new funds.

During the next biennium, we expect the demand for replacement of contaminated wells, septic systems, and projects that implement recent changes in Minnesota buffer requirements will increase. As of this writing, the AgBMP Loan Program has a strong balance in the principal account built up over the past years during the economic decline. Assuming counties continue to cooperate and release idle funds to areas where funds are needed, we expect to meet all requests in FY 2018 from cash reserves and repayment revenue, however the program may require additional appropriations in FY 2019 as implementation of buffer law expand.

APPROPRIATIONS TO THE AGBMP LOAN PROGRAM

The AgBMP Loan Program has received \$53.8 million in SRF funds through the PFA and direct appropriations totaling \$22.0 million from the State Legislature; \$75.8 million in total. These revolving funds have resulted in \$225.1 million in total loans.

Current statute authorizes the program to manage up to \$140.0 million in total appropriations. The program is currently funded at 54% of this spending authority. Table 2 shows the amount appropriated to the AgBMP Loan Program from all sources.

Table 2. Appropriation to the AgBMP Loan Program.

NAME	Amount Appropriated
Countywide Septic & Well Loan Fund	\$4,000,000.17
Federal State Revolving Fund	\$53,809,195.00
State Air & Water Quality	\$1,000,000.00
State Legacy Act	\$3,301,357.05
State Clean Water Fund	\$13,744,816.00
Total	\$75,855,368.22

SUSTAINABLE CAPACITY FOR LOANS

The ability of the program to provide a reliable and sustainable source of funds to capitalize more loans depends on the repayment revenue of past loans. The repayment rate will vary depend on the mix of

outstanding loans in the portfolio and their individual amortization schedules. The shorter the amortization schedule, the faster the rate of return and the more capacity for subsequent loans. The long term average annual rate of repayment has been about 15.0% of the outstanding loans. Therefore, at maximum use of the current appropriations, the program can annually provide about \$11.5 million with no additional appropriations. If repayments exceed the demand from new projects, as what happened during the recent recession, the cash balance in the account grows and the short term loan capacity grows until the cash balance can be drawn down. The account currently could finance about \$25 million in new projects and retain sufficient capital for seasonal cash flow demands.

BORROWER AND COST-SHARE COORDINATION

The AgBMP Loan Program can finance the total project cost up to \$200,000 including expenses such as fees, permits, engineering, construction, implements, materials, supplies, land, landscaping, and site restoration. (This limit was increased from \$100,000 to \$200,000 in the 2015 legislative session.) Individual borrowers are also limited to owing the program no more than \$200,000 at any time, though they might have multiple loans outstanding. Table 3 shows a summary of the average reported total project cost, average AgBMP loan amount, and the percentage that AgBMP loans contributes toward the total cost of the projects based on the invoices submitted to the AgBMP Loan Program for disbursement for the last five years. The AgBMP Loan Program provides, on average, financing for 65.9% of the total cost of projects, while the borrowers contribute the balance from personal resources, cost-share programs, equipment trades, or other financial resources.

Table 3. Summary of average total cost of a project by practice category, average individual loan amount, average annual total of loans by category, and percentage of project paid from AgBMP funds for the last five years.

Practice Category	Average Total Project Cost	Average Ag BMP Loan Amount	Average Annual Ag BMP Loans per Year	Average Number per Year	Contribution of Ag BMP Funds to Total Project Cost
Ag Waste Management	\$115,748.21	\$61,185.87	\$4,111,690.63	68	77.0%
Structural Erosion Control	\$97,753.50	\$19,242.33	\$11,545.40	1	37.0%
Conservation Tillage Equipment	\$71,524.34	\$47,347.36	\$1,732,913.51	37	74.0%
Septic Systems	\$13,324.83	\$12,063.16	\$3,083,343.54	256	91.0%
Other Practices	\$32,935.88	\$25,559.20	\$751,440.42	30	92.0%

State and federal cost-share programs provide grant assistance (cost-share grants are not repaid; AgBMP loans must be repaid) to farmers and landowners for implementing specific types of practices that benefit the environment. AgBMP loans are intended to coordinate with any state or federal cost-share grants, providing a low-interest loan option to finance landowner match requirements.

State cost-share for conservation on agricultural lands and associated water quality improvement are typically administered through the BWSR to various local government units, including Soil and Water Conservation Districts, Watershed Districts and Counties. The NRCS administers substantial federal cost-share funds for agricultural BMPs and frequently provides technical and engineering assistance. County SWCDs often serve as integrators of the AgBMP Loan Program with state and federal cost-share programs. In addition, the State provides technical engineering assistance funding through the BWSR Nonpoint Engineering Assistance Program to joint powers of SWCDs for shared engineering of best management practices. Because all of these programs are locally administered and offices are often collocated, there is substantial cooperation and coordination between the state and federal programs, multiple funding sources, and technical assistance to effectively and efficiently implement practices.

State and federal cost-share programs have differing limitations on the amount of cost-share provided; however; for the purposes of cost-share match requirements, the AgBMP loans are considered a cash contribution provided by the borrower.

State cost-share grants to feedlot operators are usually limited to facilities with less than 500 animal units. Federal cost-share grants do not have a limit on the size of a feedlot operation, but include differing approval processes based on grant amount.

The AgBMP Loan Program has no limitation on the percentage of the total project cost financed or matching requirement (see Table 3), though many borrowers contribute significantly to the start-up cost or equity of the project. The program is currently limited to feedlot facilities with less than 1,000 animal units; however funding projects under Section 320 of the Clean Waters Act with federal SRF funds may allow facilities larger than 1000 animal units to obtain loans for pollution prevention projects. In addition, the AgBMP Loan Program funds many things not eligible under certain state and federal cost-share programs, such as conservation tillage equipment and upgrading of septic systems.

The participating local government units coordinate AgBMP loans with state and federal cost-share funds. These local government units provide the strategic service of evaluating projects, coordinating eligibility for potential funding sources, evaluating priorities, and submitting the appropriate applications, proposals and plans to assist the farmer to obtain financial assistance while achieving the environmental objectives of the programs and approved local water plans. Despite having several funding sources for various water quality practices, farmers or rural landowners typically need only to contact the local Soil and Water Conservation District, USDA - Natural Resources Conservation Service field office and/or county environmental office to access most of the available funding sources. In addition, local governments review the submitted project costs to prevent multiple financing of the same expenses through multiple funding sources.

CLEAN WATER FUND ACTIVITY

OVERVIEW OF CLEAN WATER FUND

In 2008, Minnesota's voters passed the Clean Water, Land and Legacy Amendment (Legacy Amendment) to the Minnesota Constitution to: protect drinking water sources; to protect, enhance, and restore wetlands, prairies, forests, and fish, game, and wildlife habitat; to preserve arts and cultural heritage; to support parks and trails; and to protect, enhance, and restore lakes, rivers, streams, and groundwater.

The AgBMP Loan Program has received appropriations from the CWF to increase the program's loan capacity to meet ongoing demand for loans. Because all appropriations to the program are made in perpetuity and with the revolving nature of these loans, the program will have continuing, environmental benefit far beyond their initial use.



ALLOCATIONS FROM CLEAN WATER FUND

The AgBMP Loan program has received with \$14.05 million from the CWF. More than \$13.40 has been budgeted to implement best management practices recommended in local environmental plans. The balance was used for MDA administrative expenses, including the development of a new recordkeeping system. A total of \$16.34 million in loans have been issued from these funds.

These funds are allocated to counties using the same procedures as all other funds appropriated to the AgBMP Loan Program and may be awarded for projects anywhere in the state.

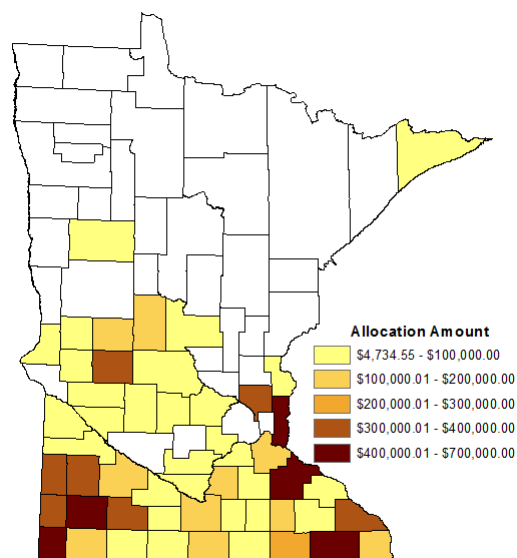
Table 4. List of Clean Water Fund Appropriations.

Appropriation Citation	Amount Appropriated
2015 Session Law Chapter 2 Article 2 Sec 3(c)	\$150,000.00
2013 Session Law Chapter 137 Article 2 Sec 3(c)	\$400,000.00
2011 1st Special Session Law Chapter 6 Article 2 Sec 3(c)	\$9,000,000.00
2009 Session Law Chapter 172 Article 2 Sec 2(e)	\$4,500,000.00
Total	\$14,050,000.00

PRIORITIZATION

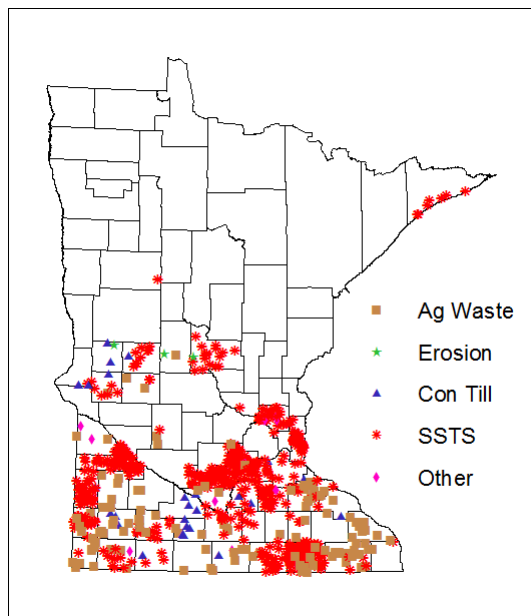
CWF dollars are currently one of five funding sources managed by the AgBMP Loan Program that contribute to a county's total available funds. Figure 3 shows the counties receiving Clean Water Funds. All loans supported by the CWF implement recommended best practices identified in local environmental planning documents such as a MPCA approved TMDL Implementation Plan, Local Comprehensive Water Plans, Wellhead Protection Plans, and the state's 319 Nonpoint Source Plan. CWF are used exclusively to address surface and groundwater quality issues.

Figure 3. Allocations to Counties from Clean Water Funds.



CLEAN WATER FUND LOAN ACTIVITY

Figure 4. AgBMP CWF project locations, 1995-2017.



Through 6/30/2017, the program has financed 803 loans (Figure 4) providing \$16.34 million dollars in financing (Table 5). CWF dollars made available through the AgBMP Loan Program frequently leverages additional spending on clean water activities beyond the loan amount itself. All expenses that are reported by the borrower that are not paid by the AgBMP loan are considered leveraged funds. Leveraged funds can include fund sources such as out of pocket expenses, trade in value, other sources of state and federal funds, or traditional financing. This program has leveraged \$10.57 million in additional funds (Table 5).

Table 5. CWF loans by category as of 6/30/2017.

Category	Number	Loan Amount	Amount Leveraged
Ag Waste Management	137	\$7,549,411.44	\$8,639,873.77
Structural Erosion Control	1	\$22,476.99	\$51,695.70
Conservation Tillage Equipment	28	\$1,265,755.53	\$1,151,327.47
Septic Systems	623	\$7,261,019.46	\$713,769.96
Other Practices	14	\$245,663.46	\$17,268.15
Total	803	\$16,344,326.88	\$10,573,935.05

CURRENT STATUS – ALL FUNDS COMBINED

The values presented in the following descriptions are based on combined disbursement requests paid by the MDA for all funds administered by the AgBMP Loan Program prior to 6/30/2017. This includes federal SRF funding, Clean Water Funds, and other state funds.

ALL YEARS COMBINED

Through June 30, 2017, 13,324 practices totaling \$225.13 million in loans have been completed through this program. Because of the revolving nature of the program, total disbursements exceed the total appropriations of \$75.86 million. The program currently issues an average of \$0.81 million in loans each month.

Figure 5 shows the total available funds to counties throughout the state. (Appendix A is a list of the amounts by county.) During the last five years the average number of projects completed per year was 389 with an average annual total loan amount issued at \$9.8 million. There were 443 loans valued at \$11.41 million completed during the last fiscal year.

Figure 5. Cumulative amount of AgBMP funds allocated to counties, 1995-2017

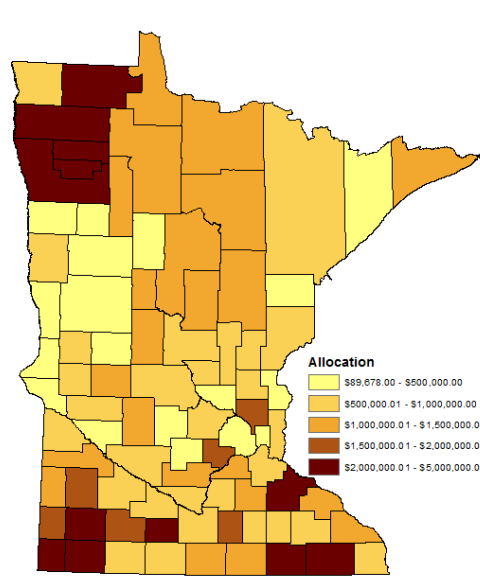


Figure 6. Total Amount and number of all loans issued by county 1995-2017.

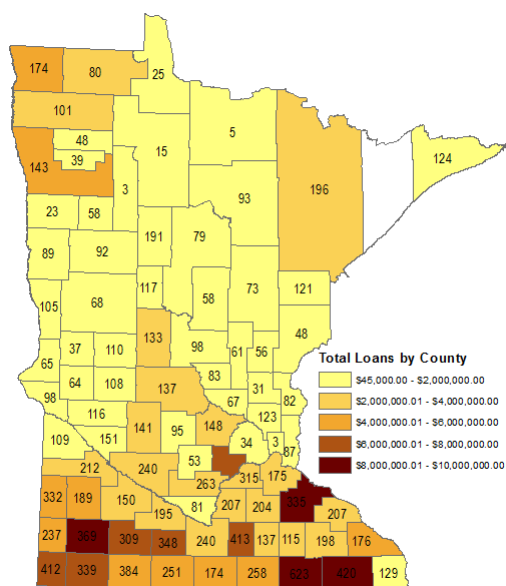


Figure 6 shows the total amount of loans each county has issued for the life of the program. The counties issuing the most loans by amount is shown in Table 7.

Table 6 shows the total number and amount of loans issued by fiscal year for the last 10 years of the program.

Table 6. Summary of the numbers and amounts of loans issued by fiscal year for the last ten years ending 6/30/2017.

Fiscal Year	Number of Loans	Total Loan Amount	Total Project Cost
2008	730	\$13,819,725.64	\$21,420,374.43
2009	698	\$14,017,124.91	\$23,672,505.38
2010	596	\$13,006,104.47	\$23,524,959.61
2011	507	\$11,527,878.42	\$18,077,894.16
2012	500	\$11,317,147.94	\$18,859,298.89
2013	398	\$10,038,798.06	\$19,213,119.46
2014	336	\$8,829,611.06	\$12,439,223.31
2015	394	\$9,545,258.98	\$16,255,257.74
2016	409	\$10,483,126.42	\$15,177,998.40
2017	454	\$11,805,870.00	\$15,239,923.48

Table 7. The top five local governments financing projects through the AgBMP Loan Program during the last 5 years.

LGU	Loan Amount	Number of Loans
Rock SWCD	\$2,787,919.13	47
Northwestern JPO	\$2,564,522.59	53
Fillmore SWCD	\$2,256,526.66	51
Goodhue County	\$2,116,424.42	42
Nobles County	\$2,009,883.19	73

The impact of the overall economy in recent years is also reflected in program activity. There was a decline in the number and amount of loans issued from 2008 to 2014. In 2015, the loan activity increased reflecting the improvement in the agricultural economy; though it has not returned to pre-2008 levels.

Some factors that may be affecting the program activity include:

- General insecurity of the United States and global economic conditions such that people are unwilling to take on additional debt.
- Lenders encourage borrowers to use in-house conventional loan products at current competitive rates for financing.
- Manufacturers and dealers are providing in-house financing at lower interest rates (for example: 0% for five years) to stimulate sales.
- Reduction in administrative capacity by counties due to budget and staffing cuts.
- Amount of cost-share available.
- Increased production costs or reduced revenues in some sectors of the agriculture economy.

Figure 7 shows the location of all completed projects financed through the program (13,324). There were 443 projects completed during 2017 (see Figure 8). Although there are practices implemented throughout the state, most are in traditional farm areas.

The program permits loans to farmers, agriculture supply businesses, rural landowners, and water quality cooperatives. The majority of the loans are issued to farmers and farm suppliers; though almost half the septic system loans are issued to non-farm landowners.

Figure 7. Location of all AgBMP projects, 1995 - 2017.

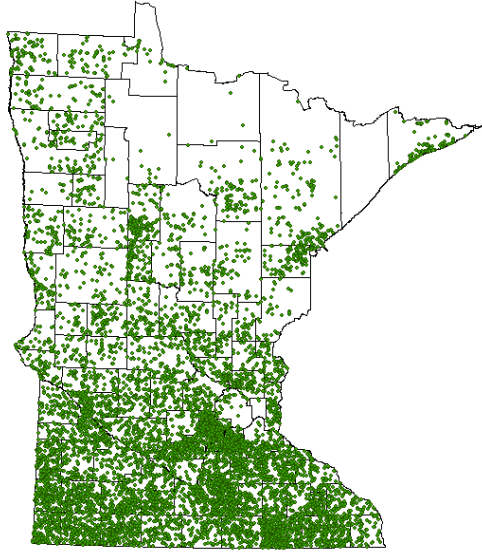


Figure 8. Location of FY 2017 AgBMP projects.

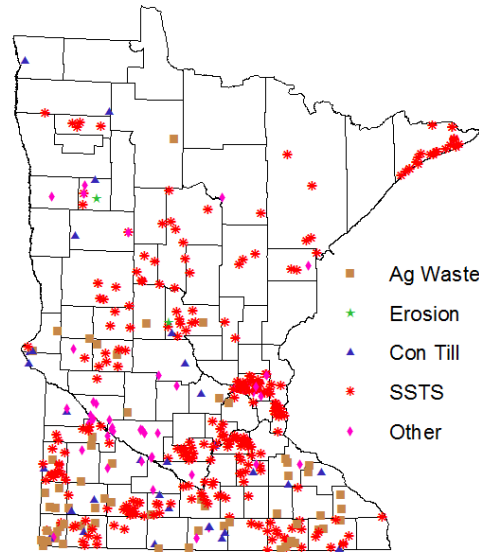


Table 8 summarizes farm and non-farm participation in the program by practice categories as reported by the county. Table 9 shows the percentage of all loans by category, based on number and total amount of loans issued.

Table 8. Summary of farm/non-farm participants in the AgBMP Loan Program by practice category.

NAME	Farm	Non-Farm	Not Identified
Ag Waste Management	2,550	4	0
Structural Erosion Control	208	26	8
Conservation Tillage Equipment	3,790	0	0
Septic Systems	2,308	2,812	1,345
Other Practices	150	82	24
Total	9,006	2,924	1,377

(Not Identified: Counties did not indicate if the projects was on a farm or not.)

Table 9. Loans issued by numbers and total dollar amounts, 1995 - 2017.

Category	Number	Loan Amount	Amount Leveraged	Total Cost
Ag Waste Management	2,557	\$76,619,567.74	\$71,405,258.46	\$148,024,826.20
Structural Erosion Control	242	\$2,103,505.61	\$2,585,179.09	\$4,688,684.70
Conservation Tillage Equipment	3,792	\$85,759,175.69	\$48,031,796.61	\$133,790,972.30
Septic Systems	6,475	\$54,857,259.10	\$4,543,795.18	\$59,401,054.28
Other Practices	258	\$5,792,925.57	\$1,834,894.75	\$7,627,820.32
Total	13,324	\$225,132,433.71	\$128,400,924.09	\$353,533,357.80

ESTIMATED ENVIRONMENTAL BENEFITS

The AgBMP Loan Program is very efficient and effective because it does not require extensive prior environmental review of proposed projects. Instead, the program uses the findings of research institutions such as universities and state and federal agencies to determine the best management practices to reduce environmental impacts. The program will finance those proven recommended practices, subject to local county review of site specific conditions.

The disadvantage of this is that before and after water quality measurements and net change calculations are not made. Instead, the program uses the findings of the research institutions and the specific size (such as acres or animal units) of the project to estimate theoretical net benefits. Other agencies, such as the MPCA and the DNR, have established regular water quality monitoring of representative waters to estimate overall effectiveness of best management practices implementation by all water resource managers. In addition, local government will often provide an estimate of the benefit provided by the BMP i.e. tons of soil saved, P reduction, though this is not required to be submitted as a part of the AgBMP loans.

The following tables show the estimated nutrients under management and/or the associated pollutant load reductions on an annual basis for those projects completed during the most recent biennium and cumulative reductions for all projects financed by the AgBMP Loan Program. (Only those projects that had the requisite descriptive information were included in the calculations, in addition custom manure applicators and operators managing multiple sites do not necessarily report all animal units on all sites where the project (such as application equipment) is used; therefore the calculated values underestimate true benefits.)

Table 10. Estimated nutrients managed following installation of AgBMP funded feedlot and manure handling equipment improvements.

Period	Number of Projects Funded	Total AU on Sites	Total N tons/yr
Estimated Benefits of Biennium Projects	64	25,000	2000
Estimated Benefits of All Projects	2,173	928,000	79000

For the purposes of calculations, this table shows the accumulated number of projects completed during the biennium and life of the program. Because prior years' projects continue to operate in the subsequent years, their benefit accumulates. For example the current biennium projects manage 1000 tons of manure per year while all projects completed to date will assist in the management of 41,000 tons of manure per year.

Source: University of Missouri Extension - MWPS-18, Manure Management Systems Series, Section 1, Manure Characteristics.
<http://extension.missouri.edu/explorepdf/envqual/eq0351table01.pdf>

In Table 11 the reduction in sediment loading is calculated for the biennium; however, because the life of tillage equipment is less than the expected usable life of a feedlot, cumulative benefits are based on projects completed within the base 10 years.

Table 11. Estimated sediment load reductions following implementation of conservation tillage practices funded by the AgBMP Loan Program.

Biennium Projects	Biennium Acres	Biennium Sediment Reduction tons/year	Projects (10yrs)	Acres (10yrs)	Sediment Reduction tons/year (10yrs)
58	58,000	223,000	1,046	1,115,000	4,293,000

(For the purposes of calculations, the life of tillage equipment is assumed to be 10 years. Projects funded more than 10 years ago are not considered in this estimate.)

Source: NRCS, 1997 Natural Resources Inventory
http://www.mn.nrcs.usda.gov/technical/nri/findings/erosion_rates.htm

The estimated benefits from repair or replacement of septic systems is shown in Table 12. The table shows the benefits from those completed during this biennium and calculated benefit per year from all septic projects completed since 1995.

Table 12. Estimated phosphorus and TSS load reductions following installation of AgBMP funded septic systems.

Septics Completed During Biennium	Biennium P-Reduction lbs/year	Biennium N-Reduction lbs/year	Biennium TSS-Reduction lbs/year	Septics Completed to Date	Cumulative P-Reduction lbs/year	Cumulative P-Reduction lbs/year	Cumulative TSS-Reduction lbs/year
575	3,400	10,800	46,000	6,328	37,000	118,300	506,400

Source: BWSR, Septic System Improvement Estimator
<http://www.bwsr.state.mn.us/outreach/eLINK/>

COMPLETED PROJECTS BY CATEGORY

AGRICULTURAL WASTE MANAGEMENT SYSTEMS

During the last fiscal year there were 66 agricultural waste management loans completed using AgBMP loan funds. The five year average is 68 agricultural waste loans per year with an average of \$61,185.87 per loan. Since 1995, there have been 2,557 agricultural waste loans completed. A summary of the types of projects completed in the last five years is show in Table 13.

Figure 9. Location of agricultural waste management projects, as of 6/30/2017.

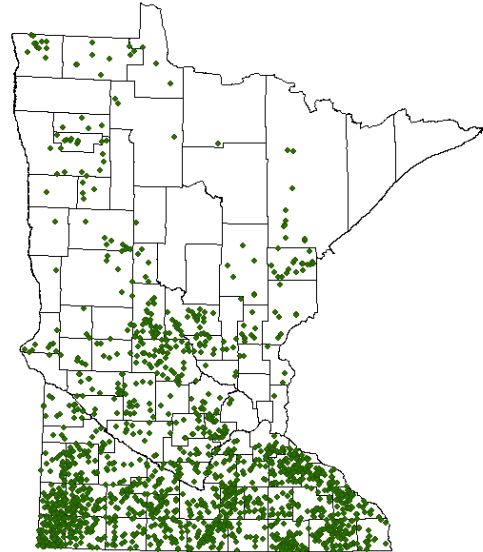


Table 13. Summary of agricultural waste practices completed during last five years.

General Practice Description	Number Issued	Total Loan Amount	Total Cost
Manure Management and Application	265	\$15,541,440.90	\$23,560,947.60
Manure Storage	83	\$7,739,810.61	\$25,456,734.77
Feedlot Improvements	90	\$6,656,002.02	\$15,012,556.39
Milkhouse Practices	1	\$65,500.00	\$202,747.57
Total	439	\$30,002,753.53	\$64,232,986.33

Table 14. Percentage of loans issued to various types of animal production operations.

Type of Operation	Percentage
Cattle - Beef	26.0%
Cattle - Dairy	29.0%
Cattle - Other	0.0%
Cattle - Unspecified	2.0%
Hogs - Finish	24.0%
Hogs - Nursery	0.0%
Hogs - Unspecified	1.0%
Horses	0.0%
Poultry - Layers	0.0%
Poultry - Other	0.0%
Poultry - Turkey	0.0%
Sheep and goats	0.0%

The average size of livestock operations receiving loans for the last five years is 364 animal units. The size of farms using this program for agricultural waste projects is summarized in Figure 10. Legislation currently limits loans to facilities with less than 1,000 animal units or as otherwise provided for under the appropriation legislation. Table 14 shows a summary of the types of facilities utilizing the program, primarily beef, dairy, and pork producers. The five year average reported total cost of these projects has been \$115,748.21.

Figure 10. Numbers and sizes of farms receiving AgBMP loans for agricultural waste management.

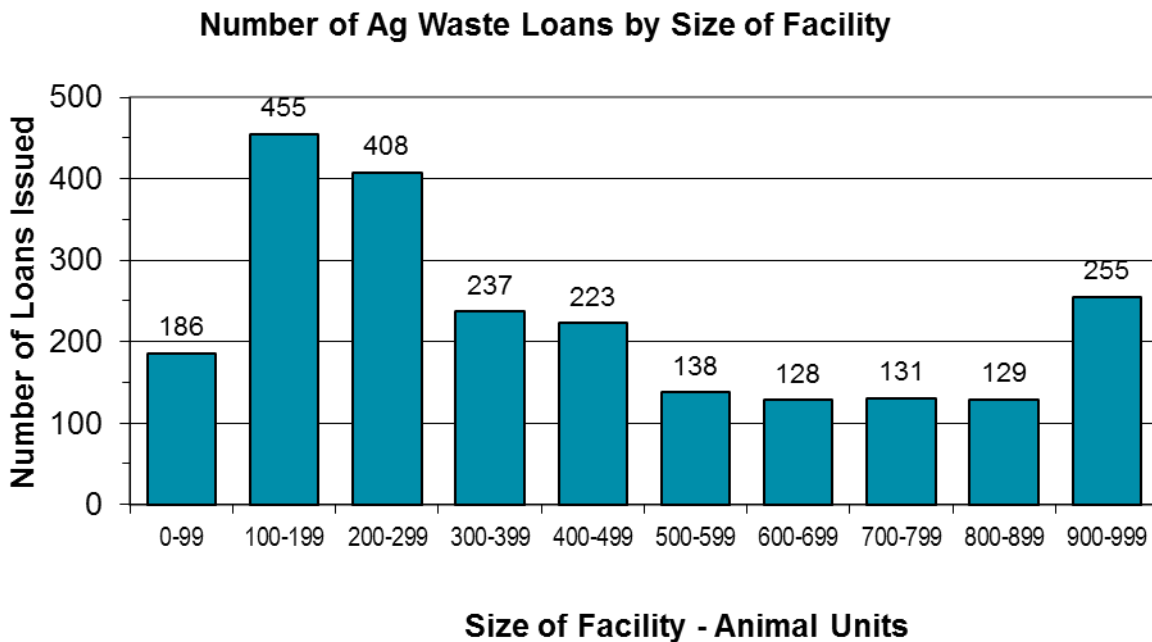


Figure 11. Typical manure storage pit under construction in Olmsted County.



Figure 12. Manure treatment system in Stearns County.



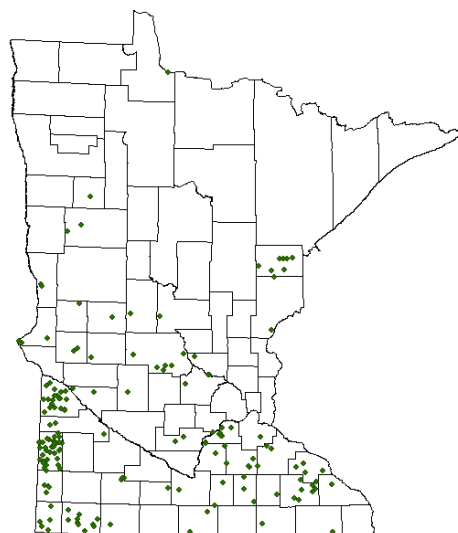
Figure 13. Installation of manure storage structure in Olmsted County.



STRUCTURAL EROSION CONTROL PRACTICES

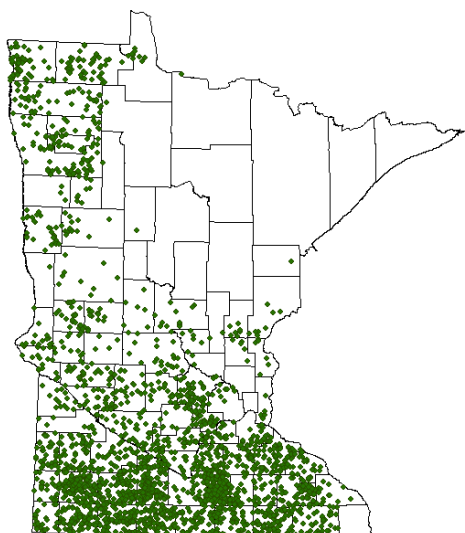
During the last fiscal year there were 2 structural erosion control practices funded. Since 1995, the number of structural erosion control practices that have been funded is 235 (see Figure 14). The 5 year average total cost for this category of projects was \$97,753.50, with \$19,242.33 as the loan portion. It is more difficult to find landowners willing to implement these practices because they are not usually required by regulations, provide little financial return to the landowner, and can reduce crop production acreage. For example, making a 32-foot wide grassed waterway has direct costs for construction, removes that land from production, and will require periodic maintenance. For the most part, structural erosion control practices are implemented only when cost-share funds are a major component of the project.

Figure 14. Location of structural erosion control projects as of 6/30/2017



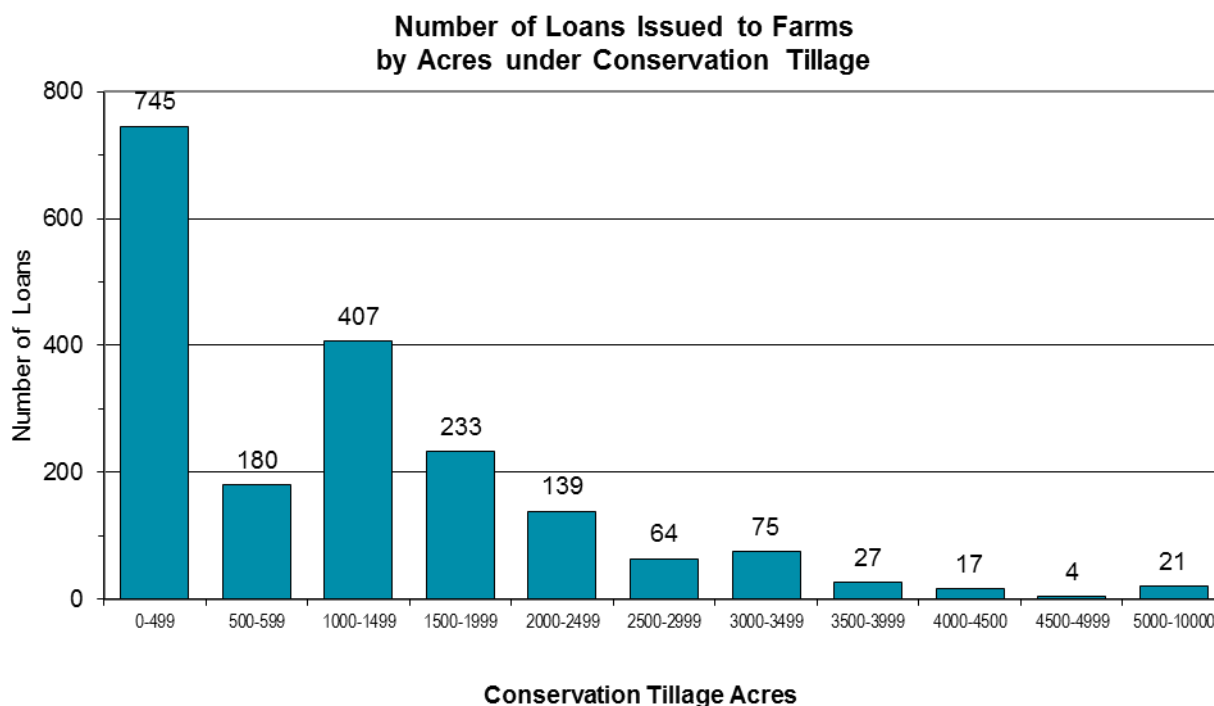
CONSERVATION TILLAGE PRACTICES

Figure 15. Location of conservation tillage practices, as of 6/30/2017



The category of conservation tillage practices has been one of the program’s most frequently used with 3,792 practices implemented since 1995, (see Figure 15). During the last fiscal year there were 31 loans issued. The five year average for this type of loan is 37 per year. The average size farm using an AgBMP loan to purchase conservation tillage equipment is 1,014 acres. The size of farms using this program for conservation tillage equipment is summarized in Figure 16. The equipment funded is generally specialized field tillage, planting, cultivation, or harvest implements that result in crop residues covering at least 15% after soybeans and 30% after corn of the ground when measured after planting. The average loan for tillage equipment is \$47,347.36, while the average total cost for this equipment is \$71,524.34.

Figure 16. Numbers and acreage of farms receiving AgBMP loans for conservation tillage practices



In many areas of the state, sedimentation to rivers and lakes is the highest priority water quality problem. In these areas, counties report that conservation tillage is the most cost effective means of reducing sediment, nutrient loading, and oxygen depletion in surface waters. Implementing conservation tillage practices on a single farm can effectively reduce runoff, erosion, and nutrient loss from hundreds of acres. The counties have reported that this low interest loan program has often been the decisive factor that has encouraged many farmers to implement or intensify these practices.

Figure 17. Typical conservation tillage ripper with discs.



Figure 18. Field under conservation tillage practices.



Figure 19. Typical conservation tillage planter.

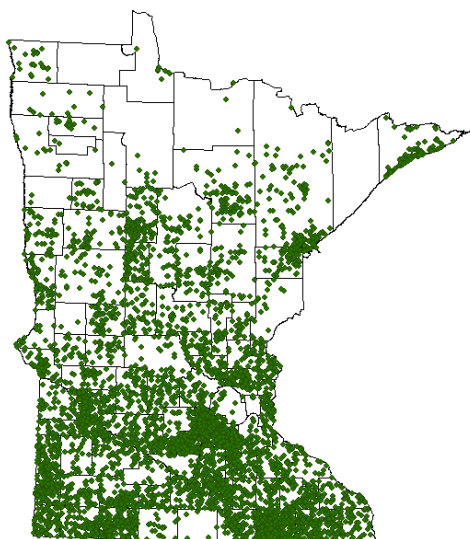


Figure 20. Typical conservation tillage disc.



SEPTIC SYSTEMS

Figure 21. Location sewage systems financed with AgBMP funds, as of 6/30/2017.



To date over 6,300 on-site sewage treatment system projects have been funded through this program, (see Figure 21). The number of septic systems repaired last year through this program was 291. The five year average is 256 projects per year. Repair of septic systems is the most numerous, single category of projects, contributing 48.0% of all the projects by number. Repairing or replacing non-compliant septic systems constitutes 24.0% of the funds disbursed by the program. Corrections can include fixes to on-site systems or abandonment of the septic system in favor of a connection to central sewers.

In 2014, the federal government expanded eligibility of federal SRF funds to “new” construction (sites with no current septic system).

Although repairing septic systems is not a traditional agricultural best management practice, the AgBMP Loan Program can provide loans to correct these problems because of its flexible framework and adaptable structure:

- The AgBMP Loan Program has the cooperation of local water managers and local governments throughout the state, including those responsible for septic systems regulation.
- It has a large, expanding lending network of banks and other financial institutions willing to offer and service loans to finance septic systems.
- It has a substantially capitalized revolving pool that has the capacity to offer these loans, including \$4 million specifically appropriated for septic systems upgrades.

In the city of Wadena, the municipality was upgrading the community sewage collection system. In some cases, the main collection line was moved from alley locations behind the residences to the street in front of the residences. This required relocation of the privately owned lateral lines from the rear of the house to the front. The AgBMP Loan program provided assistance to 12 landowners to reconnect to municipal services for proper treatment of sewage.

Figure 22. Installation of a typical septic tank and mound drain field, Watonwan County.



Figure 23. Connecting private lateral lines to municipal system, Wadena County.



Wadena Reconnection Project:

In the city of Wadena, the municipality upgraded the community sewage collection system. In some cases, the main trunk line was moved from alley locations behind residences to the street in front of the residences. This required relocation of the privately owned lateral lines from the rear of the house to the front. While the Public Facilities Authority was able to provide financing for the city owned sewer lines, the AgBMP Loan program provided assistance to 12 private landowners to reconnect to municipal services for proper treatment of sewage.

Figure 24. Location of private lateral relocation projects in Wadena, Minnesota.



OTHER PROJECTS

The “Other” category includes all practices that are not included in the first four practice categories. A partial list of these practices includes:

- well replacement and sealing,
- irrigation efficiency controls,
- variable rate technologies for application of
- seed,
- fertilizers, and
- chemicals,
- chemical sprayers,
- secondary containment for chemicals, and
- permanent ground cover conversion.

Figure 25. Location of Other practices financed with AgBMP funds, as of 6/30/2017

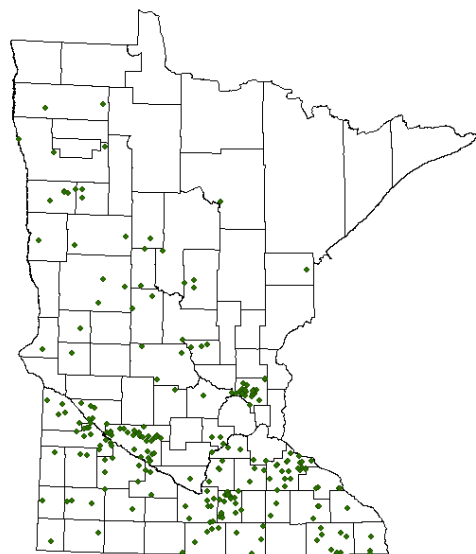


Table 15 shows a summary of all loans funded under this category for the life of the program. There were 53 “Other” category projects completed this fiscal year. The five year average is 29. The large increase in activity during this biennium is primarily due to expanded eligibility for wells in 2017.

As of August 1, 2017, repair, replacement, or treatment of wells used for drinking became an eligible expense. Prior to that time, replacement of wells was only eligible when the project address a potential pollution pathway to the groundwater aquifer. The AgBMP Program has funded a total of 56 well related project, issuing \$785,621.51 in loans during the life of the program.

Table 15. Summary of practices funded under the Other Practices category 1995 - 6/30/2017.

General Practice Description	Number Issued	Total Loan Amount	Total Cost
Wells	56	\$785,621.51	\$705,452.24
Chemical Storage and Use	9	\$678,560.00	\$1,068,232.31
Irrigation	3	\$31,000.00	\$31,000.00
Variable Rate - GPS Technologies	1	\$25,200.00	\$25,200.00
Total	69	\$1,520,381.51	\$1,829,884.55

Figure 26. Nitrogen application tool bar, Rock County.



Figure 27. Typical well drilling installation.



STATUS OF REVOLVING ACCOUNTS

Under the original 1995 legislation, a locally held revolving account was created with a single participating lender to finance local projects. The system was changed in 2001 and these locally held accounts are now being repaid in accordance with their amortization schedules and will be fully closed by 2026.

New contracts executed under the 2001 legislation establish a revolving account held at the state level by the AgBMP Loan Program (under the MDA) for the participating county. The county does not receive the funds held in their respective account. Instead the funds are disbursed to participating lender as costs are incurred by the landowner. Repayments under these contracts begin one year after the loans are issued. These new contracts will remain valid for as long as counties or lenders choose to participate in the program and until the funds have been fully repaid.

The overall status, capacity, and characteristics of the revolving accounts are summarized in Table 16. As of June 30, 2017, approximately 58% of appropriations were in use at the time of this report as measured by the total outstanding loan balances. The pace of loans issued as a percentage of the program’s total appropriation, the “turn-over” rate, for the biennium was 24%.

Table 16. AgBMP fund account characteristics as of 6/30/2017.

Fund Capacity Characteristic	Amount	%
Total Appropriations	\$75,855,368.22	
Total Loans Issued	\$225,132,433.71	
Total Outstanding Loan Balance	\$44,190,840.12	58%
Total Project Costs	\$353,533,357.80	157%
Total Cash on Hand	\$31,664,528.10	42%
Repayment Revenue During Biennium	\$18,435,055.21	
Pace of Loans Issued During Biennium	\$18,336,481.91	24%
Revolving Rate $\left(\frac{\text{Total Loans}}{\text{Total Appropriations}}\right)$		2.97 times
Leveraged Funds from Other Sources $\left(\frac{\text{Non-AgBMP Loan funds}}{\text{Total Loans}}\right)$	\$128,400,924.09	57%%

The aggregate of all counties’ 2017 proposed work plan for all funds under contract is shown in Table 17. Counties are required to manage their revolving account; however, despite their proposed spending plans, some counties are not able to complete all the projects proposed. Landowners may change their minds before construction begins, economic and agricultural conditions change, start dates may be delayed, or anticipated projects just may not materialize. The AgBMP Loan Program has remained flexible, working with all counties to move funds to where they are needed; yet allowing counties to maintain their revolving accounts at such a size to meet anticipated funding needs and in categories to meet ever changing demands.

Table 17. Proposed use of current funds under contract.

Category	Estimated Number of Projects	Budget
Ag Waste Management	147	\$10,193,519.46
Structural Erosion Control	45	\$862,157.91
Conservation Tillage Equipment	201	\$10,038,302.70
Septic Systems	785	\$8,428,653.18
Other Practices	56	\$1,824,865.05
Total	1,234	\$31,347,498.30

COUNTY CAPACITY FOR IMPLEMENTATION

This program uses a revolving loan fund model. It assumes that appropriations to the program will continue until it has reached a principal balance such that the repayments from outstanding loans will equal the annual cost of pollution prevention projects implemented.

Counties have averaged \$9.7 million in loans annually for the last five years, and \$11.4 million in FY 2017. Improve national economy and rising conventional interest rates have fueled this increase as well as regulatory pressures for environmental compliance. The counties oversee this program with no administrative appropriations from the state. To support the counties, the AgBMP Loan Program has streamlined the application process and is responsible for much of the program’s accounting and reporting so that the counties can use their resources to identify water quality problem, work with landowners, and develop solutions. Typically, local administrators of this program (County Environmental Offices, Zoning and Planning, Soil and Water Conservation Districts) are supported by funding from the county government and with the program’s simplified approach, they incorporate the program into their day to day operations with only minimal expense. It is reported by some local administrators that it costs about one hour to review and oversee a loan at an average cost of about \$100 each.

Other efforts that impact demand for AgBMP loans include:

- Enforcement of Minnesota Feedlot Rules 7020.
- Enforcement of Minnesota Septic Rules 7080 (and others)
- County sewage treatment system inventories, inspection programs, or adopting point of sale compliance requirements.
- Public waters are being assessments and planning efforts.

Although these factors drive increased demand, national and global economic conditions also can significantly affect demand by effecting the borrower’s ability to repay. Table 18 is a summary of loan activity for the last 10 years.

Table 18. Loans issued by fiscal year for the last ten year period.

Fiscal Year	Number of Loans	Total Loan Amount	Total Project Cost
2008	730	\$13,819,725.64	\$21,420,374.43
2009	698	\$14,017,124.91	\$23,672,505.38
2010	596	\$13,006,104.47	\$23,524,959.61
2011	507	\$11,527,878.42	\$18,077,894.16
2012	500	\$11,317,147.94	\$18,859,298.89
2013	398	\$10,038,798.06	\$19,213,119.46
2014	336	\$8,829,611.06	\$12,439,223.31
2015	394	\$9,545,258.98	\$16,255,257.74
2016	409	\$10,483,126.42	\$15,177,998.40
2017	454	\$11,805,870.00	\$15,239,923.48

The AgBMP Loan Program expects the annual activity level to continue to increase as the national economy rebounds and conventional interest rates increase.

Our short term goals for the next five years include:

- Continuing to draw down the cash balance of the program that grew during the post 2008 recession years. The goal is to have a cash balance of no less than \$10 million at the start of the May each year.
- Achieving a five year average annual activity level of \$15 million per year.

These short-term goals will be reevaluated annually and modified as appropriate.

The program’s long term goal is to grow the corpus of the account as needed to meet the annual activity level. When funded at the maximum spending authorization level of \$140 million, repayments will generate about \$20 million annually for revolving loan activity.

FISCAL MONITORING OF THE AGBMP LOAN PROGRAM

In 2014, a new web-based database was developed to replace a desktop based system and incorporate recent advances in technologies. The data design of the system has proven itself reliable and adaptable to meet new needs and requirements.

The AgBMP Loan Program has a continual process of monitoring obligations to the program:

- Each fiscal year the AgBMP Loan Program requires each local lender to complete an Annual Verification of Account Balance which reconciles the AgBMP Program’s and local lenders’ financial records of their obligations to the program. Each lender receives a standardized form shortly after July 1 of each year. The form summarizes all lender activity for the year including disbursements, repayments, and borrower loan terms as previously reported by the lender. The lender is notified of any discrepancy; however, the amount must exceed \$100 before additional review of accounting records is undertaken.
- The semi-annual invoices sent out each April and October, included:
 - a summary of the local lender’s total obligation to the program,
 - all transactions for the past calendar year, and
 - a repayment schedule for all future payments.
- Repayments are monitored to insure collection in a timely manner. Lenders are reminded at 30 day intervals until payment is made. All lenders are current on their obligations to the AgBMP Loan Program as of 6/30/2017.

- All disbursements issued by the program require written approval by the local county administrator or their designee.
- Requests for disbursements must be signed by a local lender representative and show the amount requested and loan terms.
- All disbursements require independent documentation of incurred cost, such as a bill, invoice, or purchase agreement from the contractor, dealer, or supplier.
- Each disbursement request is reviewed by AgBMP staff and evaluated for :
 - its appropriateness and relation to the approved practice,
 - eligibility and appropriate funding,
 - availability of funding to the county, and
 - executed contracts with the county and the local lender.
- Whenever a transaction is made, the county and the local lender are immediately notified. In the notification they also receive:
 - an update to their existing current budget,
 - a summary of all transactions for the calendar year,
 - a summary of their total obligation to the program, and
 - any remaining budget available.
- Approximately the first of each month, each county receives a newsletter highlighting timely program issues, an update of the overall budget, the total amount disbursed, the total amount remaining, and the total amount recently repaid. (Functional in new system.)
- Each county is required in its annual report to:
 - verify any remaining balance to the current allocation and its intended use,
 - verify the use of all funds during the past calendar year,
 - report any previously unreported loan activity,
 - report the anticipated use of all anticipated repayments and revenues, and
 - estimated unmet needs for next calendar year.
- The program as a whole is typically reviewed annually by the US EPA.

LOAN DEFAULTS

The AgBMP Loan Program does not issue loans directly to borrowers, rather the obligation is held by the participating lender. Because of this, the status of the underlying loans has no impact on the program, therefore the program does not require reporting of the borrower's status.

The AgBMP Loan Program requires participating lenders to provide security for their obligation to the program. Conventional lenders, such as banks and credit unions, guarantee repayment of all funds they receive from the program and pledge their liquid assets as security toward repayments. This pledge requires banks to maintain the Federal Deposit Insurance Corporation Rules § 325 - 4% Tier 1 leverage ratio to assure availability of liquid assets; credit unions are required to maintain the National Credit Union Administration's (NCAU) requirement of a minimum 7% Net Worth to Total Assets ratio as calculated under NCUA Rules & Regulations Part 702 Prompt Corrective Action; and AgriBank is required to maintain 7% Net Worth to Total Assets ratio.

County and other organizations with taxing authority may provide a General Obligation Note for an *ad valorem* tax for the full amount of the funds obtained from the program, a special assessment lien against the property receiving the benefit, or can provide an assigned cash account or security equal to 20% of the balance due, up to \$25,000.

The lender may require collateral of the borrower as they deem appropriate.

COST OF PROGRAM ADMINISTRATION

Federal regulations limits the administrative fees that can be charged for SRF related programs; therefore the cost of the AgBMP Loan Program’s administration has been paid from legislative appropriations to the MDA. Administrative costs are funded by both the General Fund and the Clean Water Fund. During the current biennium, the MDA’s total administrative cost for the program \$378,255.75.

The administrative costs are pro-rated based on the number of loans issued from each the Clean Water Fund as compared to all other funding source and the ratio is adjusted annually. The actual ratio observed in the prior fiscal year is used to assigned administrative costs in the current fiscal year. The program does not attempt to adjust the prior year’s assigned ratio after the close of the current fiscal year. This ratio is approximately 24% Clean Water Fund with the balance from General Fund appropriations.

The program provides no administrative funds to local government units or lenders. In addition, local governments cannot charge an “administration fee” for the program, though they can collect fees for services, such as site evaluation, mapping, technical assistance, and other fees authorized by statute. Local lenders can collect usual and customary fees that they charge for similar conventional loan products as well as up to the statutory maximum of 3% interest for this program.

The cost of administration by the MDA over the entire life of the loan can be evaluated by the cost per loan issued and by cost per \$1,000 in loans issued as shown in Table 19. These measures include booking and servicing each loan request, such as disbursement to lenders, semi-annual billing to lenders, annual account verification, monthly status reports, and all other direct program accounting. The average administrative cost for the program during the last biennium declined to \$438.30 (the previous biennium was \$521.22) per new loan issued or \$16.97 per \$1,000 of new loan issued. These pro-rated costs have declined from the prior biennium because of increased loan volume during this biennium.

Table 19. Costs for administration of the AgBMP Loan Program by the MDA.

FY Year	Administrative Costs	Loans Issued	Total \$ Issued	Cost Per Loan	Costs Per \$1000
2016	\$171,703.61	409	\$10,483,126.42	\$419.81	\$16.38
2017	\$206,552.14	454	\$11,805,870.00	\$454.96	\$17.50
Total	\$378,255.75	863	\$22,288,996.42	\$438.30	\$16.97

PARTICIPATING LENDERS

The AgBMP Loan Program has over 250 participating lenders, plus local branch office located in nearly all counties of the state. However, regardless of the location of a lender, any lender may provide services in any county, at their discretion, Figure 28.

In recent years, more local governments, usually counties, have been joining the lending network. All rural landowners need a functional septic system but obtaining financing for them is often difficult because they are expensive to install (typically ranging from \$12,000 to \$30,000) and typically add little value to a home.

Conventional lenders have been hesitant to finance septic projects because it is difficult to secure collateral since there is nothing to repossess or they hold a second position mortgage. However, the AgBMP Loan Program includes the option for local governments with taxing authority to act as lenders. Currently 28 counties are acting as lenders, Figure 29. Some counties have established procedures to encourage borrowers to approach the local lending institutions first, but ultimately, these counties have stepped up to fulfill the lender role when dealing with septic systems as a service to their constituents, a public health issue, and protection of the environment.

Figure 29. Counties acting as lenders in the AgBMP Loan Program.

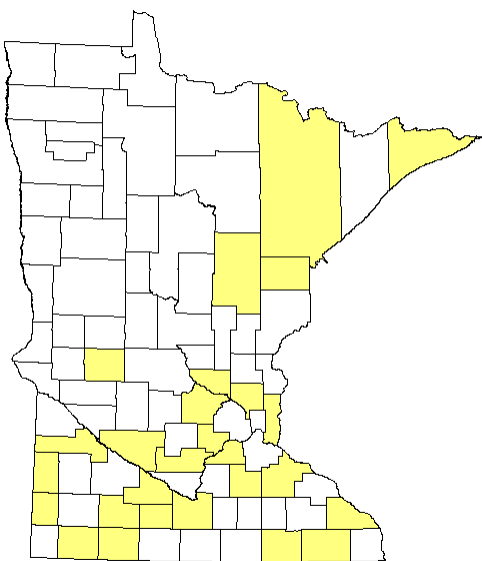
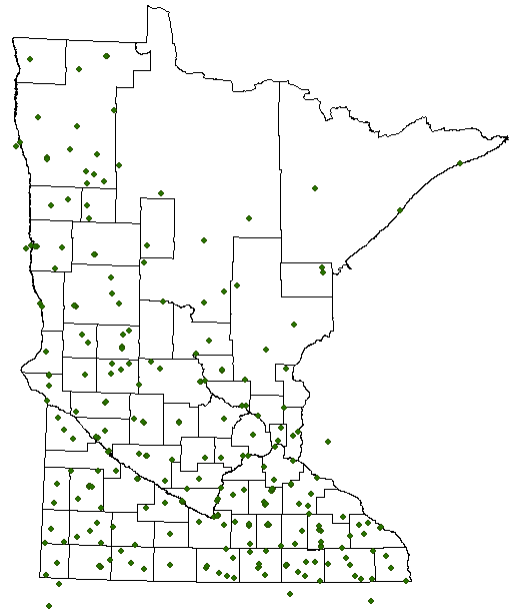


Figure 28. Location of participating AgBMP lenders.



Counties will issue a loan for a septic system and take a second position security for the loan itself. In addition they will also create a special assessment onto the benefiting property, such that if there is default, the special assessment is eventually paid by the subsequent landowner, and thus repayment of the principal is guaranteed. Some counties will offer an assumable option to the subsequent landowner.

Depending on their internal procedures, the county may either independently bill the landowner for the loan payment or incorporate it into their tax system. Nevertheless, defaults have been few because borrowers are less likely to let property taxes go into arrears.

APPENDIX A. TOTAL ALLOCATIONS TO COUNTIES BY AGBMP LOAN PROGRAM

LGU Name	Current Allocation	Total Loan Amount since Start	Loans During Biennium	Outstanding Loan Balance	Repayments during Biennium	Times Revolved	Percent Funded by Ag BMP	Cash Flow Ratio - Loans/Repayments
Aitkin County	\$348,752.00	\$366,142.00	\$49,135.00	\$191,234.00	\$65,409.00	105.0%	96.0%	75.0%
Anoka County	\$1,602,500.00	\$1,383,635.53	\$1,118,852.78	\$1,201,557.16	\$151,268.37	86.0%	98.0%	740.0%
Becker SWCD	\$479,017.02	\$1,306,168.08	\$79,326.52	\$192,257.18	\$80,858.52	273.0%	56.0%	98.0%
Benton SWCD	\$668,766.79	\$1,457,201.22	\$86,322.17	\$535,519.17	\$164,015.02	218.0%	41.0%	53.0%
Big Stone County	\$318,565.63	\$527,432.77	\$40,236.66	\$157,308.56	\$67,740.72	166.0%	77.0%	59.0%
Blue Earth SWCD	\$854,847.93	\$1,867,831.69	\$555,381.32	\$645,083.54	\$233,753.09	218.0%	80.0%	238.0%
Brown County	\$625,464.23	\$1,894,062.09	\$9,180.00	\$350,405.00	\$191,471.00	303.0%	68.0%	5.0%
Carlton SWCD	\$304,656.98	\$413,847.21	\$0.00	\$146,979.21	\$64,512.00	136.0%	67.0%	
Carver Env Off	\$1,232,244.45	\$2,178,103.19	\$121,698.00	\$692,094.00	\$381,399.70	177.0%	91.0%	32.0%
Carver SWCD	\$706,864.19	\$1,612,875.26	\$39,200.00	\$190,423.47	\$40,952.00	228.0%	59.0%	96.0%
Chippewa County	\$452,637.59	\$521,864.62	\$29,703.03	\$164,192.21	\$92,303.41	115.0%	70.0%	32.0%
Chisago SWCD	\$150,663.00	\$7,145.00	\$0.00	\$0.00	\$0.00	5.0%	100.0%	
Clay SWCD	\$702,712.12	\$865,574.12	\$50,250.00	\$146,545.00	\$305,583.12	123.0%	42.0%	16.0%
Cook County	\$1,128,545.49	\$1,867,597.49	\$650,965.70	\$880,123.12	\$156,482.93	165.0%	79.0%	416.0%
Cottonwood SWCD	\$1,725,597.12	\$3,499,735.06	\$534,430.94	\$1,045,655.73	\$322,574.43	203.0%	58.0%	166.0%
Dakota SWCD	\$833,865.69	\$1,390,989.66	\$58,067.04	\$116,663.62	\$141,395.21	167.0%	68.0%	41.0%
Dodge County	\$529,638.65	\$1,669,884.57	\$199,685.00	\$260,850.55	\$147,844.82	315.0%	69.0%	135.0%
Douglas SWCD	\$288,146.01	\$872,556.77	\$23,910.00	\$73,323.51	\$167,990.10	303.0%	78.0%	14.0%
Eastcentral JPO	\$826,236.07	\$2,269,342.19	\$67,750.00	\$283,691.51	\$129,130.54	275.0%	63.0%	52.0%
Faribault County	\$1,352,258.56	\$2,769,837.23	\$562,222.64	\$728,995.54	\$382,699.49	205.0%	59.0%	147.0%
Fillmore SWCD	\$2,897,107.94	\$6,324,112.84	\$905,263.97	\$1,820,600.99	\$772,457.61	218.0%	48.0%	117.0%
Freeborn County	\$1,163,268.88	\$3,127,851.17	\$205,934.56	\$453,402.34	\$313,910.27	269.0%	75.0%	66.0%
Goodhue County	\$2,341,362.70	\$5,079,482.01	\$561,127.08	\$1,257,108.96	\$682,681.20	217.0%	51.0%	82.0%
Grant SWCD	\$691,770.00	\$1,308,009.00	\$200,000.00	\$391,231.00	\$113,495.00	189.0%	71.0%	176.0%
Hennepin County	\$126,000.00	\$227,400.00	\$68,100.00	\$68,100.00	\$0.00	180.0%	94.0%	
Houston County	\$736,876.80	\$1,181,559.32	\$311,638.92	\$358,096.10	\$181,781.07	160.0%	52.0%	171.0%
Hubbard County	\$432,357.64	\$734,266.02	\$70,335.00	\$176,477.54	\$98,781.95	170.0%	88.0%	71.0%
Jackson County	\$979,440.95	\$2,070,460.14	\$30,382.63	\$253,801.82	\$217,454.87	211.0%	58.0%	14.0%
Kandiyohi SWCD	\$1,231,184.50	\$1,366,602.30	\$209,107.00	\$557,452.00	\$190,824.50	111.0%	39.0%	110.0%
Kittson County	\$973,933.31	\$2,030,465.81	\$100,200.00	\$239,113.75	\$250,997.43	208.0%	61.0%	40.0%
Lac qui Parle SWCD	\$759,339.90	\$1,248,439.04	\$221,530.86	\$388,839.56	\$173,318.10	164.0%	66.0%	128.0%
Le Sueur SWCD	\$701,275.85	\$1,583,281.41	\$91,263.94	\$295,961.02	\$249,183.09	226.0%	66.0%	37.0%
Lincoln County	\$1,321,597.70	\$3,045,792.12	\$483,397.62	\$912,274.60	\$337,492.32	230.0%	76.0%	143.0%
Lyon SWCD	\$1,675,529.96	\$3,762,536.93	\$886,445.86	\$1,047,343.62	\$551,208.82	225.0%	68.0%	161.0%
Mahnomen SWCD	\$290,050.72	\$321,024.72	\$125,000.00	\$201,153.72	\$32,555.00	111.0%	91.0%	384.0%
Martin County	\$964,716.46	\$1,408,422.46	\$102,500.00	\$245,367.11	\$156,678.35	146.0%	73.0%	65.0%
McLeod SWCD	\$202,067.45	\$250,684.00	\$18,750.00	\$31,737.00	\$43,395.00	124.0%	79.0%	43.0%
Meeker SWCD	\$311,303.21	\$364,702.79	\$7,099.00	\$74,546.21	\$48,428.00	117.0%	56.0%	15.0%
Morrison SWCD	\$784,851.37	\$1,215,494.62	\$192,928.57	\$373,050.27	\$121,839.04	155.0%	45.0%	158.0%
Mower County PZ	\$1,788,558.24	\$1,958,017.24	\$294,000.00	\$1,206,211.30	\$349,323.00	109.0%	80.0%	84.0%
Mower SWCD	\$1,614,104.72	\$5,018,666.29	\$589,717.09	\$1,095,962.85	\$716,692.21	311.0%	65.0%	82.0%
Murray County	\$2,257,136.85	\$4,361,989.80	\$770,542.96	\$1,671,640.57	\$824,073.83	193.0%	51.0%	94.0%

LGU Name	Current Allocation	Total Loan Amount since Start	Loans During Biennium	Outstanding Balance	Loan	Repayments during Biennium	Times Revolved	Percent Funded by Ag BMP	Cash Flow Ratio Loans/Repayments
NEMN JPO	\$162,745.75	\$292,155.25	\$15,310.00	\$48,306.25		\$40,704.00	180.0%	91.0%	38.0%
Nicollet County	\$615,349.79	\$1,172,191.91	\$41,786.00	\$189,863.29		\$137,583.38	190.0%	54.0%	30.0%
Nobles County	\$2,315,701.41	\$4,164,696.13	\$826,660.94	\$1,771,765.74		\$594,250.83	180.0%	61.0%	139.0%
Norman SWCD	\$419,722.00	\$511,068.00	\$166,757.50	\$329,497.00		\$99,412.00	122.0%	67.0%	168.0%
North Central JPO	\$1,133,875.53	\$1,888,296.43	\$243,500.84	\$566,433.63		\$294,872.26	167.0%	75.0%	83.0%
Northwestern JPO	\$4,681,409.87	\$9,069,192.70	\$736,085.59	\$1,468,165.16		\$1,434,756.24	194.0%	55.0%	51.0%
Olmsted SWCD	\$922,303.74	\$1,613,365.62	\$101,175.80	\$239,276.28		\$245,025.19	175.0%	59.0%	41.0%
Ottertail SWCD	\$494,987.46	\$626,119.90	\$142,918.94	\$154,808.64		\$49,479.83	126.0%	56.0%	289.0%
Pipestone County	\$1,746,960.58	\$3,285,039.16	\$1,001,928.86	\$1,248,656.58		\$394,701.88	188.0%	59.0%	254.0%
Pope County	\$1,207,231.52	\$1,608,635.98	\$359,577.35	\$760,072.47		\$189,085.40	133.0%	76.0%	190.0%
Redwood SWCD	\$754,058.47	\$1,405,116.85	\$458,280.00	\$595,971.48		\$267,579.37	186.0%	70.0%	171.0%
Renville County	\$825,321.24	\$1,405,138.80	\$255,768.20	\$620,585.67		\$175,466.13	170.0%	82.0%	146.0%
Rice County	\$766,668.11	\$802,830.74	\$204,861.63	\$519,137.74		\$138,608.00	105.0%	95.0%	148.0%
Rice SWCD	\$517,394.56	\$1,402,925.55	\$33,060.00	\$74,530.00		\$37,663.00	271.0%	50.0%	88.0%
Rock SWCD	\$2,827,833.58	\$4,322,852.90	\$1,679,538.40	\$2,261,877.93		\$573,012.10	153.0%	71.0%	293.0%
Saint Louis County	\$496,240.00	\$718,547.00	\$214,647.00	\$395,081.00		\$105,121.00	145.0%	99.0%	204.0%
Scott County	\$1,201,983.18	\$1,915,531.56	\$486,509.38	\$727,841.01		\$272,672.48	159.0%	68.0%	178.0%
Sherburne County	\$367,264.06	\$257,132.33	\$0.00	\$53,826.33		\$4,752.73	70.0%	66.0%	
Sibley County	\$1,246,524.02	\$2,017,956.71	\$424,888.26	\$1,000,780.24		\$308,494.71	162.0%	95.0%	138.0%
Steams SWCD	\$872,742.40	\$1,752,942.96	\$280,150.00	\$532,226.72		\$202,840.93	201.0%	44.0%	138.0%
Steele County	\$642,752.67	\$1,344,681.06	\$22,000.00	\$178,746.06		\$185,516.13	209.0%	59.0%	12.0%
Stevens County	\$602,752.67	\$963,085.94	\$58,669.63	\$195,808.37		\$221,822.80	160.0%	71.0%	26.0%
Swift SWCD	\$524,082.56	\$872,188.56	\$0.00	\$152,716.65		\$116,669.91	166.0%	33.0%	
Todd County	\$1,147,853.64	\$1,976,959.35	\$331,281.99	\$639,085.13		\$280,876.97	172.0%	47.0%	118.0%
Traverse SWCD	\$309,864.48	\$1,102,304.61	\$211,017.13	\$243,864.61		\$40,915.00	356.0%	76.0%	516.0%
Wabasha SWCD	\$1,318,438.45	\$2,782,559.13	\$478,326.20	\$775,202.57		\$190,308.80	211.0%	59.0%	251.0%
Waseca County	\$1,726,432.48	\$3,187,023.49	\$30,975.00	\$694,106.85		\$437,621.42	185.0%	65.0%	7.0%
Washington SWCD	\$940,308.00	\$1,064,277.69	\$570,230.09	\$636,982.98		\$161,655.71	113.0%	83.0%	353.0%
Watowan County	\$2,089,891.84	\$3,043,301.54	\$279,682.40	\$745,501.13		\$557,357.87	146.0%	58.0%	50.0%
WCM JPB	\$0.00	\$1,235,413.41	\$0.00	\$0.00		\$0.00	0.0%	65.0%	
Wilkin County	\$125,859.11	\$628,163.49	\$0.00	\$17,070.00		\$34,923.00	499.0%	89.0%	
Winona SWCD	\$1,478,552.10	\$3,509,827.59	\$927,944.85	\$1,460,355.71		\$402,749.83	237.0%	43.0%	230.0%
Wright SWCD	\$579,254.93	\$1,088,955.44	\$79,788.51	\$206,873.97		\$122,278.48	188.0%	44.0%	65.0%
Yellow Medicine County	\$1,023,190.40	\$1,770,547.60	\$280,684.84	\$729,438.76		\$315,474.58	173.0%	55.0%	89.0%

Current Allocation: Current total of all AgBMP Loan Program funds available to county including cash on hand and outstanding loan balances.

Loan Amount: Sum of all loans issued by the county since program start.

Outstanding Loan Balance: This is the remaining balance owed on active loans.

Average Annual Repayments: This is the annual average total repayments a county has received from participating lenders during the biennium. This value can be used as a short term estimate of future anticipated repayments.

Revolving Ratio: A measure of how many times the funds have been used as calculated by $\left(\frac{\text{Total Loan Amount}}{\text{Current Allocation}}\right)$. The greater the number the more times the funds have been used or revolved, for example 100% means all funds have been used once, 200% means the funds have been used twice.

Leverage Ratio: The percentage of funds for a project that comes from sources other than the AgBMP Loan Program, for example a value near 0% means the AgBMP Loan Program provided financing for most of the project cost. A value near 50% means the AgBMP Loan Program provided half of the funding.

Cash Flow Ratio: The ratio of the loans for the biennium to the repayments for the biennium. When this number is large, loans issued far exceeded repayments received and these counties may be prioritized for increased allocations. When this value is small, repayments exceeded loans issued and these counties may be asked to release funds back to the statewide pool. Values near 100% represent a balance between loans issued and repayments received:

$$\left(\frac{\text{Biennium Loan Amount}}{\text{Biennium Repayments}}\right)$$

..

APPENDIX B. EXAMPLE PRACTICES ELIGIBLE FOR FUNDING BY PROGRAM

Ag Waste Management

BEDDING MANAGEMENT
BUFFER STRIP - FEEDLOTS
CLEAN WATER DIVERSIONS - FEEDLOTS
COMPOSTING
DIET MANAGEMENT AND CONTROL
FEEDLOT IMPROVEMENTS
LIVESTOCK PADDOCKS AND EXCLUSIONS
MANURE AGITATION, PUMPING EQUIPMENT
MANURE HANDLING and LOADING EQUIPMENT
MANURE SPREADING EQUIPMENT
MANURE IRRIGATION EQUIPMENT
MILKHOUSE WASTE
NUTRIENT MANAGEMENT PLANS
ODOR CONTROL - AG WASTE
STORAGE - HOOP BARNs
STORAGE - SLURRYSTORE
STORAGE - STACKING PAD
STORAGE BASIN - CONCRETE
STORAGE BASIN - EARTHEN
STORAGE BASIN - GEOTEXTILE LINER
STORAGE BASIN - TYPE NOT IDENTIFIED
STORAGE BASIN ABANDONMENT
WATER CONSERVATION OR REUSE
SOIL TESTING

Structural Erosion Control

BUFFER STRIP - NON-FEEDLOTS
CLEAN WATER DIVERSIONS - NON-FEEDLOTS
EROSION CONTROL - GENERAL
IN-CHANNEL PRACTICES
SEDIMENT and WATER CONTROL BASINS
SEEDING CRITICAL AREAS
STABILIZATION - GENERAL
STABILIZATION - RIVER BANK
STABILIZATION - SHORELINE
TERRACE
TILE INLET PRACTICES
TILE OUTLET PRACTICES
WATERWAY - GENERAL
WATERWAY - GRASS
WATERWAY - TILED
WINDBREAK

Conservation Tillage Equipment

CONSERVATION TILLAGE EQUIPMENT
CON-TILL - CONSERVATION CHOPPER HEAD
CON-TILL - PLANTER

Septic Systems

PRIVY AND TANKS
SEPTIC SYSTEM - SINGLE CONNECTION
SSTS - CLUSTER
CONNECTION OR REPAIR TO CENTRAL SEWER
PUMPING AND APPLICATION EQUIPMENT

Other Practices

ALTERNATIVE CROPS and GROUND COVER
ALTERNATIVE ENERGY - 25%
BROWNFIELD RESTORATION
CHEMICAL APPLICATION SYSTEM
CHEMICAL CONTAINMENT
CHEMICAL IRRIGATION CONTROL
CONNECTION TO CENTRAL WATER
FLOODPLAIN PROTECTION & CONNECTIONS
IRRIGATION MANAGEMENT BMP
MARINA NONPOINT CONTROL PRACTICE
MINING AND EXTRACTION
RING DIKE
SILVICULTURAL PRACTICE
STORMWATER DIVERSION
TIMBERSTAND IMPROVEMENT
URBAN NONPOINT CONTROL PRACTICE
VARIABLE RATE TECHNOLOGIES AND GPS
WELL
WELL FILTRATION EQUIPMENT
WELL SEALING
WETLAND RESTORATION & PROTECTION
WINDBREAKS TO PREVENT EROSION

APPENDIX C. GLOSSARY OF TERMS, INITIALS, AND ACRONYMS

Ag BMP: Agricultural Best Management Practices. Practices traditionally associated with farm operations, such as proper use and storage of manure, contour farming, conservation tillage methods, terraces, grass ways, filter strips, and buffer strips.

Allocation: Funds awarded to counties or local governments for projects.

Applicant: The local government unit that applies for AgBMP funds and will be responsible for administration of the program locally.

Appropriation: Funds provided by the legislature, the PFA, or any other source to the MDA.

BMP: Best Management Practices. Practices, techniques, and measures, that prevents or reduces pollution by using the most effective and practicable means of achieving water and air quality goals. These practices include official controls, structural and nonstructural controls, and operation and maintenance procedures.

Borrower: A farmer, rural landowner, farm supply business, or water quality cooperative that implements a project.

BWSR: Board of Water and Soil Resources. One of several state agencies that assist local governments to implement water and soil related environmental programs. It provides oversight to several state cost-share programs.

CLWP: Comprehensive Local Water Plan. The planning document prepared by local units of government to identify water resource issues, establish priorities and develop action plans to address issues.

Disbursement: Funds sent to a designated Local Lender to finance an approved project.

EPA: United States Environmental Protection Agency. The federal agency responsible for administration of the Clean Water Act and oversight of the SRF accounts.

JPB or JPO: Joint Powers Board or Organization. A formal group of Soil and Water Districts or counties formed to provide mutual benefits to the membership. JPOs may apply for AgBMP funds.

LGU: Local Government Unit. In this report, this refers to a county, a Soil and Water District, or a joint powers organization of these two government units that is responsible to locally implement the AgBMP Loan Program.

Local Lender: Any eligible financial institution that services the loan and provides a guarantee of repayment to the MDA for any loans provided.

MDA: Minnesota Department of Agriculture. The state department responsible for oversight of the local government units' implementation of the AgBMP Loan Program and their accounting of funds from the SRF and other appropriations.

MPCA: Minnesota Pollution Control Agency. The primary environmental protection agency in Minnesota.

NRCS: Natural Resource Conservation Service: This is an agency of the U.S. Department of Agriculture that offers help to individuals, groups, towns and other units of government to protect, develop and wisely use soil, water and other natural resources.

PFA: Public Facilities Authority. The state agency responsible for accounting and management of the SRF.

SRF: State Revolving Fund, a permanent revolving fund established under the federal Clean Water Act.

SSTS or ISTS: Subsurface Sewage Treatment System. On-site sewage systems that treat less than 10,000 gallons per day.

TMDL: Total Maximum Daily Load. This is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards.