

Minnesota Department of Agriculture

Agricultural Best Management Practices Loan Program

State Revolving Fund Status Report

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Executive Summary

The Minnesota Legislature enacted initiatives to provide funding for nonpoint source water quality problems in 1994. One portion of this initiative was the Agricultural Best Management Practices (AgBMP) Loan Program, created to assist local governments implement agricultural and rural components of their Comprehensive Local Water Plan including recent efforts related to Total Maximum Daily Load Implementation Plans. This program provides funds through local governments and lending institutions, which in turn provide low interest loans (typically 3%) to farmers, agriculture supply businesses, and rural landowners. These loans are for practices that implement agricultural and rural water quality priority in the area's local water plans. The program uses a revolving loan account structure, such that new appropriations are loaned as "1st generation loans", while repayments from those initial and any subsequent loans continue to revolve through the system and finance even more, additional loans.

Individual counties or Soil and Water Conservation Districts and joint power organizations representing multiple counties may apply yearly for AgBMP Loan Program funds. In their application they describe:

- Water quality problems and causes,
- Solutions to these problems,
- Priorities for working toward these solutions, and
- The anticipated water quality benefits they hope to achieve.

The program has been appropriated \$51.0 million since 1995. These funds have been awarded or are currently allocated to 85 of the state's 87 counties. Including 1st generation and subsequent revolving loans, these funds have financed 6,604 projects, with total loans of \$82.0 million. The total value for all completed projects is estimated to be \$120.1 million. The figure below shows a summary of the amount of loans issued by practice category.

- 1,347 Agricultural Waste Management practices have been implemented throughout the state. These systems included replacement or upgrading of manure holding basins, pits or tanks; manure handling, spreading or incorporation equipment; and feedlot improvements such as clean water diversions around feedlots or berms and chutes to contain and direct contaminated runoff into the holding basins.
- 196 Structural Erosion Control practices have been funded, including projects such as sediment control basins, waterways, terraces, diversions, buffer and filter strips, shoreline and stream bank rip-rapping, cattle exclusions, windbreaks, and gully repair.
- 2,134 Conservation Tillage practices have been implemented, funding various types of cultivation or seeding implements that leave crop residues on the soil surface.
- 2,897 On-site Sewage Treatment Systems on farms and rural properties have been repaired or replaced through this program.
- 30 Other Projects, including well sealing, chemical and petroleum storage containment structures, and chemical spray equipment, have been funded through the program.

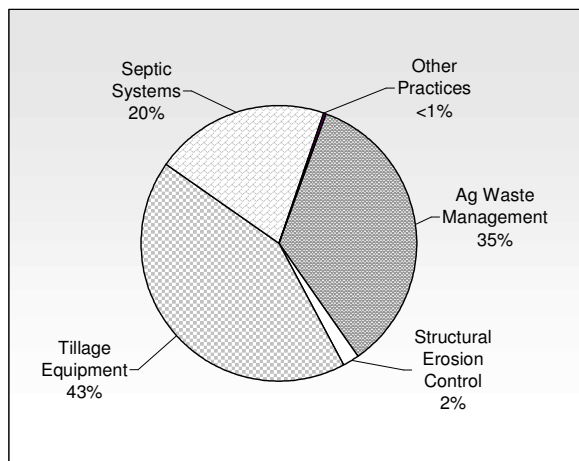


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I. INTRODUCTION

A. Purpose

The purpose of the Agricultural Best Management Practices (AgBMP) Loan Program is to improve water quality and address other local environmental concerns by assisting local government units (LGU) to implement agricultural and rural components of their Comprehensive Local Water Plans (CLWP), Total Maximum Daily Load (TMDL) Implementation Plans, and other environmental planning documents. The AgBMP Loan Program provides funds through local governments or local lending institutions (banks, credit unions, Agribank, Regional Development Commissions) that will approve projects, oversee completion, issue, and service low interest loans to farmers, agriculture supply businesses, and rural landowners that implement best management practices (BMP) identified as priorities 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 also encompass non-agricultural rural pollution issues, such as on-site and decentralized sewage treatment systems, and shoreline and riparian stabilization practices.

B. History

1. 1994 “Governor’s Environment 2000 Initiative”

The 1994 Legislature enacted a multi-faceted initiative to fund projects targeting nonpoint source water quality problems. This initiative coordinated the efforts of the Minnesota Department of Agriculture (MDA) with other agencies including the Minnesota Pollution Control Agency (MPCA), Board of Water and Soil Resources (BWSR), and Department of Trade and Economic Development (DTED) to address nonpoint source pollution problems by encouraging private citizens to implement remedial actions. The initiative also amended Minnesota Statutes §446A.07 Subd. 8(4) to allow for the use of the State Revolving Fund (SRF) for nonpoint source purposes. Approximately \$75.2 million from the State’s SRF – Water Pollution Control Account has been appropriated to implement these programs to date, Table 1. These funds can address a broad range of nonpoint source pollution issues such as:

- Agricultural Waste Systems
- Structural Erosion Control Practices
- Equipment (Minimum tillage cultivators and seeders, manure handling, etc.)
- Storm Water Management
- Abandoned Well Sealing
- Contaminated Run Off Control Systems
- Individual Sewage Treatment Systems
- Commercial Septic Systems

Table 1. Summary of SRF appropriations to nonpoint source programs in Minnesota, as of 6/30/2005.

Agency	Amount Appropriated
MDA	\$46,000,000
MPCA	\$27,295,697
DTED Small Cities Loan Program	\$750,000
DTED Tourism Loan Program	\$1,129,656
Total	\$75,175,353

2. Operating Plans and Agreements

The federal Clean Water Act - State Revolving Fund is implemented by the state through a series of agreements and plans involving the federal, state, and local governments.

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

Operating Agreement: The relationship between the US Environmental Protection Agency (EPA) and Minnesota is defined in the Operating Agreement. The Operating Agreement is an on-going agreement that is reviewed and amended periodically. It outlines the basic requirements for the program, procedures for overall operation such as fund transfers, and reporting.

Interagency Agreement: The relationship between the Minnesota Public Facilities Authority (PFA) and each organization using funds from the SRF account is defined by an interagency agreement. A new agreement authorizing the use and transfer of funds from the PFA to an agency or department receiving funds is prepared each time funds are appropriated. It defines the amount of funds available, how they may be used and requires appropriate accounting and reporting.

Intended Use Plan (IUP): Each year the MPCA and PFA prepares the Intended Use Plan describing how all the funds in the SRF accounts will be used. It describes the proposed use and distribution of the Capitalization Grant from the EPA as well as any funds that are anticipated to become available within the next year through repayments, rescissions, and interest income. The IUP is opened for public review and comment. Typically the IUP identifies municipalities that will receive funds for waste treatment works, anticipated amount of bond sales, any additional funds that will be made available to the agencies and departments implementing nonpoint pollution programs, and a general description of all programs and eligible projects.

Comprehensive Local Water Plan (CLWP): All counties in Minnesota are required to prepare a CLWP, including water resource inventories, public meetings, and comment periods. The plan identifies specific local water resources, problems and impacts affecting the water resources, and action plans to reduce water pollution. Implementation of this CLWP is a critical feature of the AgBMP Loan Program. The CLWP is the local master plan that provides targeting and prioritization for proposed AgBMP projects.

3. Legislative History

The Agricultural Best Management Practices Loan Program was first authorized in 1994 with a spending limit of \$20 million from the SRF. This legislation (Minn. Stat. § 17.117) defined the overall purpose and procedures of the loan program and established a subcommittee of the state's 319 Project Coordination Team, (Minn. Stat. § 103F.761 Subd. 2(b)), to review and rank applications.

An amendment to the legislation was passed in 1995 to simplify the loan process and allow counties to act as lenders for themselves.

In 1996, the spending authority for the AgBMP Loan Program was increased to \$40 million, and in 1999 the spending authority was increased to the present \$140 million.

In 2001 legislative amendments allowed the expansion of the lending network, permitting more than one designated lender to serve an area. There have been 74 local governments implementing this new system. It is expected that all remaining participating local government units will adopt this multiple lender system by the end of 2006. Over 78 lenders have signed up under the multiple lender system. There are 56 lenders with contracts issued under the authority

of the original, single designated lender legislation. These contracts will continue to be honored; however, there will be no additional funds disbursed under those contracts after 2005, so these contracts will be retired as loan obligations are repaid. This process will slowly convert participation by all lenders to the multiple lender system. With easier access to more banks and a simpler loan approval process, we expect more landowners to participate thereby increasing the number and rate that pollution prevention practices can be installed or adopted.

A second feature of the 2001 legislative changes simplified administration of the program. The number of contracts to implement this program has been reduced from over 400 to about 83 contracts with the local governments and one contract for every participating bank, currently about 125 lenders.

In 2005, the loan limit for multi-connection septic systems was raised to \$100,000 and the maximum length of all loans was increased to 10 years, except for conservation tillage equipment loans which remain at 5 years.

II. ALLOCATION PROCESS TO COUNTIES

A. Annual Allocation

(For the purpose of this report, the term "allocation" refers to the award of funds by the Department to the county or other local government unit, while the term "appropriation" refers to the award of funds by the state legislature or the Public Facilities Authority to the Department. Through the remainder of this report, the term "county" will refer to the local government unit implementing the AgBMP Loan Program, whether county government, the county Soil and Water Conservation District or a joint powers organization consisting of a group of either county government or Soil and Water Conservation Districts.)

The AgBMP application process was simplified by the 2001 amendments to the authorizing legislation. Each participating county may apply for an "annual allocation" that is available to them for one year.

The annual allocation includes:

- New funds allocated under the annual application process.
- Any funds from the previous year's allocation that have been committed to projects.
- The amount of funds that have been repaid to the state from previously completed projects in that county.

New Funds: New funds include any newly appropriated funds to the loan program such as from the legislature or the PFA.

Committed Funds: The local government must either use or commit the funds in the current allocation within one year or it is rescinded and is available for redistribution the next year. If funds are committed to specific projects that have not been completed by the end of one year, the funds may be carried over and added to the next year's allocation.

Repaid Funds: As a revolving loan program, all repayments that the Department receives are automatically re-awarded to the same county from which the repayment was received.

B. Interim Allocations

Counties may also request an "interim allocation" of additional funds at times other than the established application period (typically November to February). These additional funds may be awarded when:

- a) A county used all available funds or the borrower is unable to obtain a loan through a lender holding a local revolving account,
- b) A county has a project ready to proceed, and

- c) The Department has unallocated funds available.

C. Cash Flow Process

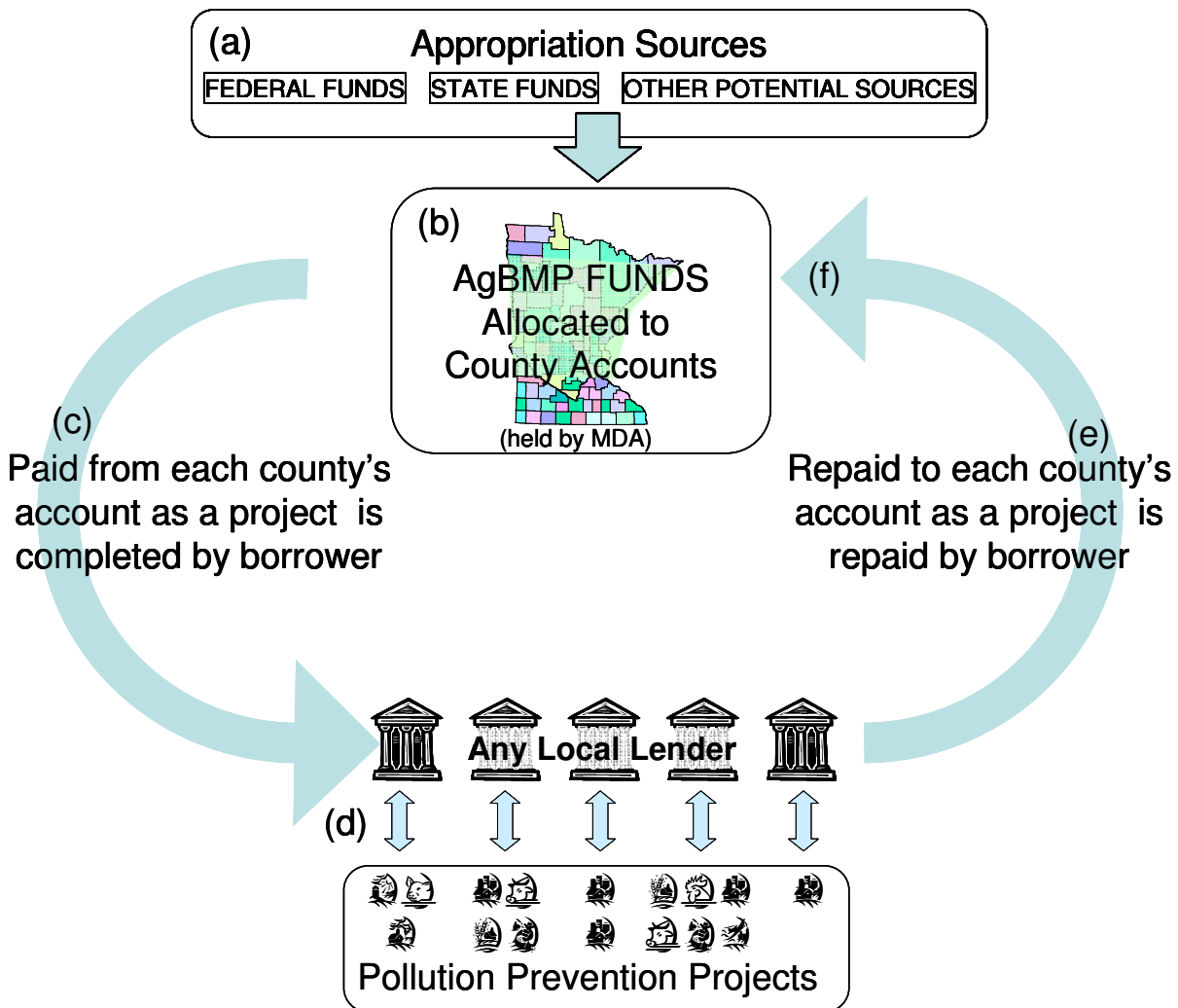
Figure 1 shows a flow chart of the funds through the AgBMP Loan Program.

- (a) The Department may receive funds from multiple state and federal sources.
- (b) Through a competitive application process, these funds are allocated by counties. The allocations are not sent to the counties, instead the funds are held by the Department (MDA) in accounts designated for the use of 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 funds to the Department as the borrowers repay them.
- (f) The funds repaid are deposited into the allocation account for the county from which the repayment was made.

Under this system, as repayments are received, they will be reallocated back to the same county the following year. This procedure creates a revolving account that is held by the Department for each participating county. Because the Department will hold the idle county funds, the lending network can be expanded beyond the current one designated lender per county, allowing any willing lender to participate in the program. In addition, if funds in a county's account are not used, it can be easily rescinded or released by the county 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 spends more, the funding account increases (since more loans are being repaid), if a county spends less the allocation account decreases (since funds are not used within one year and the remaining allocation is rescinded). This results in a stable, reliable funding source, commensurate with the county's capacity to implement projects.

Figure 1. AgBMP Loan Program Funding Flow Chart.



In the past, once funds were sent from the state 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 state begins. However, this system was ended in 2005 and is now represented simply by the repayment by lenders to the state held county account (e and f). Additional details on the original cash flow system can be found in prior AgBMP Biennial Reports.

D. Competitive Application Process

Beginning in October of each year, the MDA announces the application period for the program, affording the counties several months to prepare and submit applications. The MDA holds several (usually 5) workshops each year to assist counties in completing their applications. The application allows local governments to describe their local funding needs in relation to their Comprehensive Local Water Plan, legislative criteria, and the program's purpose. The primary questions asked in the application process are: What are the local water quality problems and their causes? What are the solutions? What are the county's priorities? What are the benefits of proposed solutions? The applications require the local governments to summarize their proposed scope of work into five major categories:

1. Agricultural Waste Management, including projects such as manure storage basins and tanks, manure handling, loading and application equipment, physical improvements to feedlots that prevent runoff or groundwater contamination, and odor control practices.

2. Structural Erosion Control Practices, including projects such as sediment control basins, waterways, terraces, diversions, buffer and filter strips, shoreline and stream bank rip-rapping, cattle exclusions, windbreaks, and gully repair.
3. Conservation Tillage Equipment, including both cultivation and seeding equipment designed to maintain crop residues to slow or prevent field runoff. Various types of cultivators, chisel plows, rippers, air seeders, and planting drills are typically financed.
4. On-site Sewage Treatment Systems, including repair or upgrade of existing, non-conforming Individual Sewage Treatment System (ISTS) on farms or rural properties. These systems may be for single or multiple structures (cluster systems).
5. Other, including practices such as well sealing, chemical and petroleum storage, chemical spray equipment, and other practices to prevent pollution.

Applications are reviewed, evaluated, and ranked by the Review Committee established under Minn. Stat. § 17.117 Subd. 9 and 103F.761 Subd. 2(B). This committee is composed of representatives from the Departments of Agriculture, Health, and Natural Resources; the Pollution Control Agency; the Board of Water and Soil Resources; the Association of Minnesota Soil and Water Conservation Districts; Association of Minnesota Counties; the US Natural Resource Conservation Service; and the Farm Services Agency. Their evaluation is based on nine statutory requirements and other criteria established by the committee. This committee submits to the Commissioner of Agriculture their recommendations for the allocation to each applicant. The committee strives to provide significant funding to the very best of the applications, yet has made a commitment to provide a reasonable minimum funding level to all applicant counties.

The county may submit either of two types of applications:

1. Competitive applications requesting up to \$300,000: These applications must address each of the statutory criteria in detail. This type of application must be specific in terms of practices, water resources, and high priority water quality problems.
2. Basic applications requesting less than \$100,000: These applications propose a number of practices that address local water quality problems and local water priorities but do not provide the level of details required for the competitive applications.

This two-tier application process has allowed those counties with aggressive water quality protection programs to receive significant funding, while reducing the administrative requirements for counties seeking only a base level of funding.

E. Targeting and Prioritization

The AgBMP Loan Program uses two levels of prioritization and targeting of funds for implementing best management practices. At the statewide level, Minnesota's 319 Nonpoint Source Management Plan prioritizes and establishes broad objectives. At the local or county level, a local water planning process develops the Comprehensive Local Water Plan (CLWP) which identifies water resources, prioritizes problems and establishes local goals and solutions. Total Maximum Daily Load Implementation Plans provide additional guidance in targeting.

Under the application process, a county proposes projects that it will implement during the next year using revolving funds or additional new allocations. The priorities for these projects are related to implementation of the CLWP or other environmental planning documents. In the application, the priority water resources are identified, potential projects are outlined, and the number and estimated budget for the practices is summarized. In some cases, specific projects with committed landowners are identified; however, commitment of a landowner to implement a specific project is not required at the time of the county's application. If a project has been previously identified and approved, but has not been completed, the county can carry over the funds committed to the project funds from one year to the next year.

At the local government level, each county establishes a targeting and prioritization system for selecting and implementing the specific practices that carry out agricultural and rural components of the CLWP. In most situations, the counties actively seek the participation of farmers and landowners who will:

1. Implement specific types of practices to address priority water quality problems anywhere within their jurisdiction.
2. Implement any eligible practices within targeted, priority water resource areas.

Farmers and landowners proposing projects in lesser-priority areas will also be considered for loans if funds are available.

Counties typically have a review panel for high cost projects to evaluate eligibility, technical feasibility, project priority, and the amount of funds to be made available to proposed projects. For low cost projects, such as on-site sewer systems, a staff member is usually authorized to approve projects without board action.

III. REQUESTED FUNDING AND PROPOSED SCOPE OF WORK

A. Past Requests

Each year, funding requests from counties have exceeded available funds. The Department has implemented steps to insure that counties utilize their available resources first and that the amount requested is reasonable. These procedures have, over time, reduced the difference between the amount requested and the amount available for allocation. These requirements include:

1. All revolving funds must be incorporated into the proposed work plan.
2. Applications for new funds are limited to unmet needs of their proposed work plan beyond the available revolving funds.
3. Funds allocated previously may be committed and carried over into the next allocation for approved projects. Uncommitted funds are rescinded.
4. Applications are limited to either \$100,000 or \$300,000.

In the 2005 applications, counties proposed workplans totaling \$26.1 million. Revolving funds would provide \$17.1 million toward meeting their needs, while their unmet need was \$9.0 million. Most counties submit applications that emphasize agricultural impacts. Upgrading agricultural waste management systems was the largest budget item.

B. Appropriations to the AgBMP Loan Program

Although the Legislature sets the spending limits for the AgBMP Loan Program, the amount of new funding from the state's SRF account appropriated to AgBMP Loan Program is determined by the PFA. Before making its appropriation to the Department, the PFA reviews the status of the SRF Capitalization Grant to the State, requests from other programs using SRF funds (including municipal waste treatment plants), interest rates, bond ratings, and other factors. Based on these factors, an appropriation, if any, is made to the AgBMP Loan Program.

The AgBMP Loan Program has also received two direct appropriations from the Legislature. Despite receiving appropriations totaling \$51.0 million to its principal account in the past, there is no assurance of future appropriations from any source.

Table 2 shows the amount appropriated to the AgBMP Loan Program from state and federal sources.

Table 2. Appropriation to the AgBMP Loan Program.

Fiscal Year of Appropriation	Amount Appropriated	Appropriation Citation
• AgBMP Appropriations		
1995 Federal SRF	10,000,000	Public Facilities Authority
1996 Federal SRF	10,000,000	Public Facilities Authority
1997 Federal SRF	7,159,494	Public Facilities Authority
1998 State General Fund SRF Match	9,000,000	1998 Session Law Chap. 404 Sec. 9(8)
1999 Federal SRF	3,840,506	Public Facilities Authority
2000 State General Fund to MDA	1,000,000	2000 Session Law Chap. 492 Sec. 10(3)
2000 Federal SRF	1,000,000	Public Facilities Authority
2001 Federal SRF	1,000,000	Public Facilities Authority
2002 Federal SRF	1,000,000	Public Facilities Authority
2003 Federal SRF	1,000,000	Public Facilities Authority
2004 Federal SRF	2,000,000	Public Facilities Authority
AgBMP Total	\$47,000,000	
• ISTS Appropriations		
1997 State — to MDA	4,000,000	1997 Session Law Chap. 246 Sec. 6
Total of All Appropriations	\$51,000,000	

C. Allocations, Time Limits and Funding Rescission

Each year, allocations to counties are made from a pool of all available funds. This funding pool may include newly appropriated funds and old funds from prior appropriations such as:

- New appropriations from the state legislature or the PFA.
- Rescissions of past allocations in which the local government did not use the funds within the required time schedule.
- Funds that were previously allocated but were declined by the local government unit.

This loan program has stringent requirements for timely and expeditious use of funds, requiring that recipient counties expend or commit funds within one year. If funds remain unused or uncommitted after one year, the Department reduces the allocated amount and the unused funds are then added to the available pool and awarded again during the next application period. This process of contract monitoring, rescissions, and recycling unused funds assures that the recipients are using all available money in a timely manner, yet recognizes that construction delays do occur.

D. Allocated Funding and Revised Scope of Work

When allocations are made by the MDA, the local governments are notified of their award amount. If the award is less than they requested, they are asked to adjust the scope of work that was requested in their application to match the funds allocated. Each applicant is allowed latitude in revising the scope of work, and may choose to fund the top priority categories of projects or pro-rate the funding based on the proportions in the original application.

Table 3 summarizes the current proposed number of projects and budget for each of the funding categories, based on all executed allocation awards at the time of this report. Agricultural Waste Management has been budgeted the most funds while upgrading ISTS projects are the most numerous.

Table 3. Summary of the number and the cost of proposed projects for the 2005 allocation for the AgBMP Loan Program, 6/30/2005.

Category	Proposed Number of Loans	Proposed Budget for each Category ¹	% of Funds Allocated
Ag Waste Management	57	1,908,121	43%
Structural Erosion Control	20	145,848	3%
Conservation Tillage Equipment	68	1,669,837	37%
Septic Systems	127	735,738	16%
Other Practices	10	11,200	<1%
Total	282	\$4,470,744²	

¹ Does not include proposed use of local revolving funds.

² \$9.0 million was the total requested through the application process.

E. Impaired Waters Activities

Counties were asked to predict their activities to address impaired waters issues for the first time in the 2005 application. There were 43 respondents to this new question. Of those that did respond, they estimated that an average of 32% of all their funds are used for projects in impaired waters watersheds. This suggests that the AgBMP Loan Program implemented projects totaling approximately \$4.1 million to benefit impaired waters during the last fiscal year. (Because this was a new question to the annual report survey, there was confusion about what should be included as “impaired waters”, and other similar problems. This estimate is considered small and will be refined as counties become more familiar with impaired waters issues and as TMDL Implementation Plans are approved.)

IV. BORROWER AND COST SHARE COORDINATION

The loan program will finance the total amount of a project, up to \$50,000 for all practices except multi-connections ISTS, which has a limit of \$100,000. Table 4 shows a summary of the average reported total project cost, average AgBMP loan amount, and the percentage that AgBMP loans contribute toward the total cost of projects funded through the AgBMP Loan Program based on the invoices submitted to the MDA for disbursement. The AgBMP Loan Program provides on average, financing for 66% of the total cost of projects, while the borrowers generally establish significant equity (34%) at the project's outset from personal resources, cost share programs, equipment trades or other financial resources. (The reported total project cost may underestimate the true amount because some loan requests provide bills and invoices for only the portion of the project financed by the loan. For example, invoices for excavation of a manure pit may be received; however, other costs incurred but not reported as a part of the loan might include concrete work, fencing, tiling, and lining of the pit. Nevertheless, the total cost always equals or exceeds the amount reported.)

Table 4. Summary of average loan amount, total project cost, and percentage of project paid from non-AgBMP funds.

Category	Average Total Project Cost	Average AgBMP Loan Amount	Contribution of AgBMP Funds to Total Practice Cost
Agricultural Waste Management	\$37,000	\$20,700	56%
Structural Erosion Control	\$16,900	\$7,900	47%
Conservation Tillage Equipment	\$23,000	\$16,000	70%
Septic Systems ¹	\$6,000	\$5,500	92%
Other Practices	\$13,600	\$11,000	81%
Overall Average	\$18,200	\$12,100	66%

¹ Only loans for individual systems were used to calculate average costs.

State and federal cost share programs provide grant assistance to farmers and landowners for implementing specific types of practices that benefit the environment. State cost share funds are typically passed through the BWSR. The NRCS oversees federal cost share funds. Like the AgBMP Loan Program, local county Soil and Water Conservation Districts usually coordinate both cost share programs. In addition, the State has also provided technical engineering assistance through the BWSR's Nonpoint Engineering Assistance Program for funding design of best management practices. Because these programs are locally administered in the same local government office, these funding sources and technical assistance are closely coordinated.

State and federal cost share programs have changed in recent years and have established differing limitations. State cost share is permitted to finance up to 75% of the total cost of constructed practices with a maximum of \$50,000 per project, while federal cost share is now up to 50% of the project cost and they have removed the maximum assistance level. State cost share grants to feedlots operations are also limited to facilities with less than 500 animal units. AgBMP loans are limited to facilities with less than 1,000 animal units. Federal cost share grants are not limited by the size of the operation.

Historically when state and federal cost share grants were given for constructed practices, typically, only 50% of the costs were provided because of maximum grant amount limits, availability of funds, and local funding policies. (Constructed practices include projects such as manure basins, diversions, filter strips, waterways, terraces, and sedimentation basins.) In many cases, the farmers who receive cost share will also request an AgBMP loan for the balance of the project's cost. In addition, farmers can request loan assistance for manure handling and application equipment that is not cost share eligible, yet equally as important for the effective

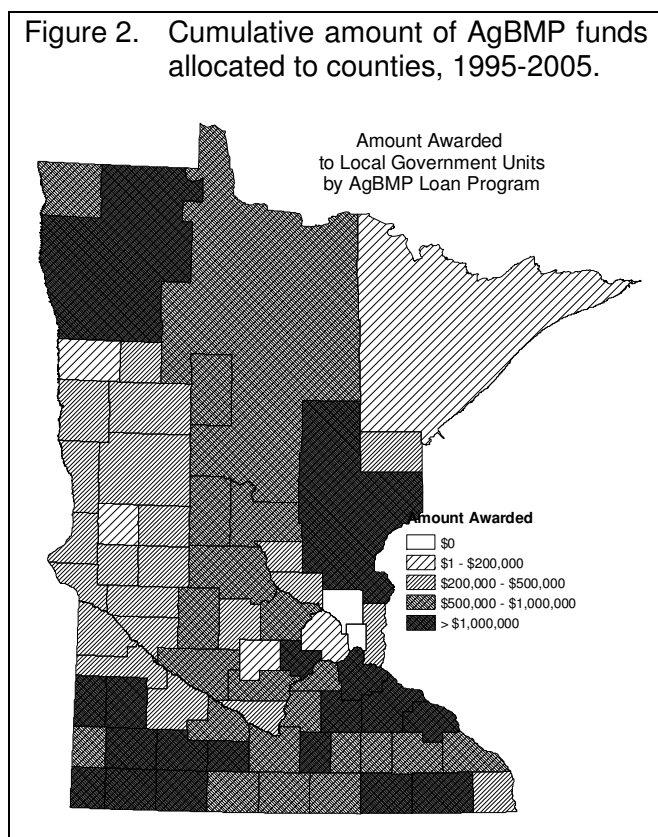
operation of a complete agricultural waste system. AgBMP low interest loans and cost share funds provide a strong incentive to farmers to implement practices that prevent water pollution.

Local county governments coordinate AgBMP loans and cost share funds. These organizations provide the strategic service of evaluating projects, determining eligibility for potential funding sources, establishing priorities and submitting the appropriate applications, proposals and plans to assist the farmer obtain financial assistance while achieving environmental objectives of the Comprehensive Local Water Plan. Despite having several funding sources for various water quality practices, farmers or rural landowners typically need only to contact or apply with the local Soil and Water Conservation District 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.

V. CURRENT STATUS

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 6/30/2005. This includes the federal SRF funding, state ISTS appropriations and other state funds.

A. All Years Combined



The 2005 allocation was \$4.5 million (Table 3, page 10). The MDA has disbursed \$51.6 million to local governments under past allocations.

To date, 6,604 practices totaling \$82.0 million in loans have been completed through this program. The program currently issues an average of \$400,000 in loans each month. Appendix A shows a summary of the amount disbursed by county through this program. During the last five years the average number completed per year was 748. The number completed during the last fiscal year was 786.

Loans are issued through two processes. First time loans (1st generation loans) with new money from the Department have financed 4,381 projects to date. The local revolving loan accounts are funding an increasing number of projects each year. There have been 2,374 projects totaling \$30.4 million that were financed as subsequent loans with funds from local revolving accounts, Table 5 and Table 6. (Although the funds are revolved many times

creating several generations of loans, all loans, except the 1st generation loans issued from a new allocation, will be identified or categorized as "2nd generation loans".)

Table 5 shows the total number and amount of loans, including 1st and 2nd generation issued by fiscal year. The average number of projects completed annually is 748 and the average annual amount is \$9.9 million per typical year.

Table 5. Summary of the number and amount of loans issued by fiscal year for 1st and 2nd generation loans, as of 6/30/2005.

Fiscal Year	1st Generation Revolving Loans ¹	2nd Generation Loans ¹	Total Number of Loans ¹	Total Loan Amount
1996	\$3,645,461	\$0	280	\$3,645,461
1997	\$6,843,700	\$62,714	613	\$6,906,414
1998	\$6,808,328	\$237,285	614	\$7,045,613
1999	\$5,912,347	\$439,517	590	\$6,351,863
2000	\$5,429,542	\$3,212,644	768	\$8,642,186
2001	\$4,265,779	\$3,225,198	755	\$7,490,977
2002	\$6,350,019	\$2,396,425	621	\$8,746,444
2003	\$4,107,773	\$7,708,333	927	\$11,816,107
2004	\$3,417,133	\$5,216,641	650	\$8,633,773
2005	\$4,818,240	\$7,917,184	786	\$12,735,424
TOTAL	\$ 51,598,322	\$ 30,415,941	6,604	\$ 82,014,262

¹ Some projects received loans spanning fiscal years; therefore the sum of the "Total Number of Loans" column by fiscal year is slightly different from total number of loans shown elsewhere in this report.

Table 6 separates the various loans between the new and revolving fund sources by category of practice; however, the remainder of the information provided in this report combines the information from both the 1st generation and 2nd generation revolving account loans to provide an overall perspective of program accomplishments.

Table 6. Summary of number and costs of completed practices by category, as of 6/30/2005.

Category	1st Generation Loans from New Allocation		2nd Generation Loans from Revolving Accounts		Total Loans from Either Fund		Total Project Costs
	No.	Amount	No.	Amount	No.	Amount	
Ag Waste Management	1,018	\$20,742,314	373	\$7,156,077	1,347	\$27,898,391	\$50,018,347
Structural Erosion Control	149	\$1,095,652	52	\$461,302	196	\$1,556,954	\$3,306,744
Cons. Tillage Equipment	1,162	\$16,913,466	1,036	\$17,200,108	2,134	\$34,113,573	\$49,110,261
Septic Systems	2,030	\$12,618,992	905	\$5,497,118	2,897	\$18,116,111	\$17,279,448
Other Practices	22	\$227,899	8	\$101,334	30	\$329,233	\$407,067
Total	4,381¹	\$51,598,322	2,374¹	\$30,415,939	6,604¹	\$82,014,262	\$120,121,867

¹ Some projects received both 1st and 2nd generation funds so the total number of loans shown in the "Total Loans from Either Fund" column is less than the sum of 1st and 2nd generation loans issued.

Over 6,600 projects have been completed, located in nearly all counties since the start of the program, Figure 3. There were 786 completed during 2005. Although there are practices implemented throughout the state, most are in traditional farm areas.

The program permits loans to farmers, agriculture supply businesses and rural landowners. From the data collected we cannot distinguish between farmers who provide contracted services to other farmers as well as their own operation and farm service businesses that do not engage in farming. However, the number of loans issued to farms and non-farms can be identified. Although the majority of the loans are issued to farmers and farm suppliers, almost half the septic system loans are issued to non-farm landowners. Table 7 summarizes participation in the program by these categories.

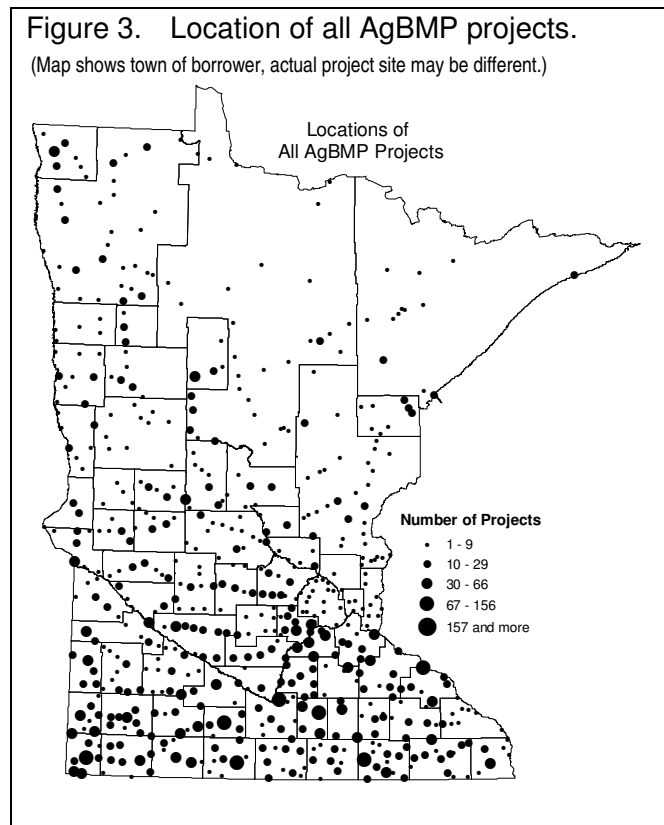


Table 8 shows the percentage of all loans by category, based on number and total amount of loans issued.

Table 7. Summary of farm/non-farm participants in the AgBMP Loan Program.

Category	Farm	Non-Farm	Not Reported
Ag Waste Management	1,347	0	0
Structural Erosion Control	170	19	7
Cons. Tillage Equipment	2,134	0	0
Septic Systems	1,217	1,107	573
Other Practices	20	2	8
Total	4,888	1,128	588

Table 8. Percentage of loans issued by number and total dollar amount.

Category	Percent of Loans Issued	
	% by Number of Loans	% by Amount of Loans
Ag Waste Management	20%	34%
Structural Erosion Control	3%	2%
Cons. Tillage Equipment	32%	42%
Septic Systems	44%	20%
Other Practices	<1%	<1%

B. Completed Projects by Category

1. Animal Waste Management Systems

During the last fiscal year there were 161 ag waste loans completed. The five year average is 141 per year. Since 1995, there have been 1,347 ag waste loans issued to complete approximately 1,710 agricultural waste management projects throughout the state, Figure 4. These loans implemented one or more practices including the replacement or upgrading of manure holding basins, pits, or tanks (490); manure handling, spreading, or incorporation equipment (1,000); and feedlot improvements such as clean water diversions around feedlots or berms and chutes to contain and direct contaminated runoff into the holding basins (220).

Table 9. Percentage of loans issued to various types of animal production operations.

Type of Operation	Percentage
Pork	22%
Dairy	17%
Cattle	2%
Other or Not Reported	31%

Figure 4. Location of Agricultural Waste Projects, as of 6/30/2005.

(Map shows town of borrower, actual project site may be different.)

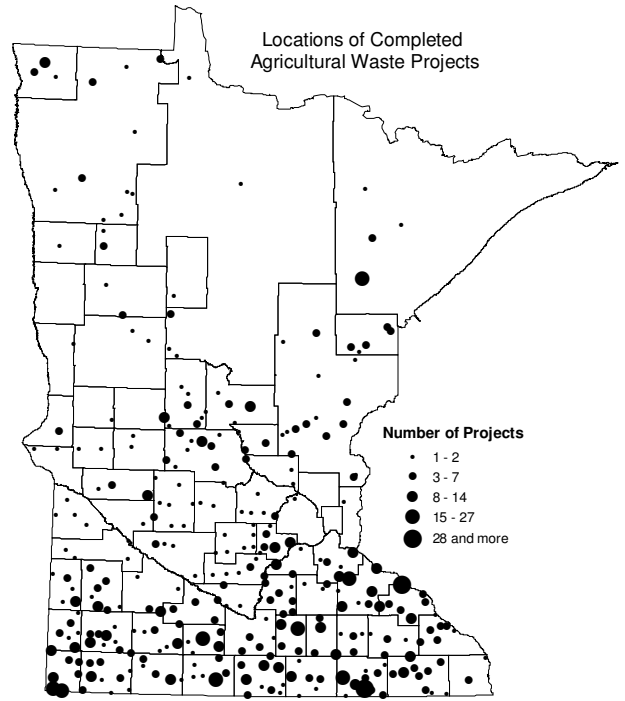
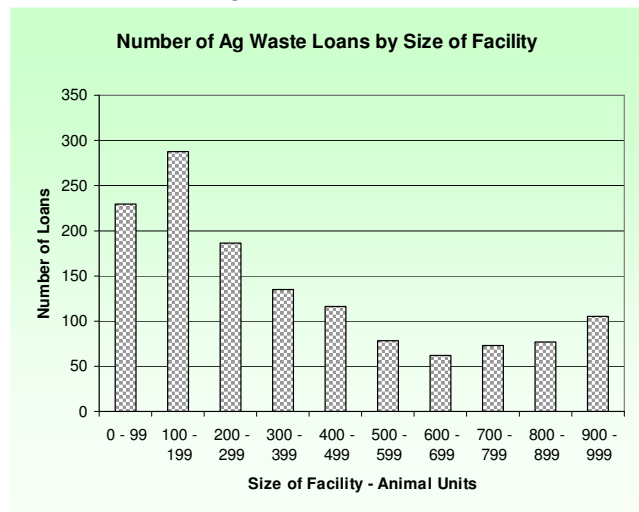


Figure 5. Number and size of farms receiving AgBMP Loans for agricultural waste management.



The average size of livestock operations receiving loans is 395 animal units. The size of farms using this program for agricultural waste projects is summarized in Figure 5. Legislation limits loans to facilities with less than 1,000 animal units. Most loans are issued to pork and dairy operations, Table 9. The average total cost of these projects has been \$37,000, though this is considered a minimum estimate because of project reporting requirements.

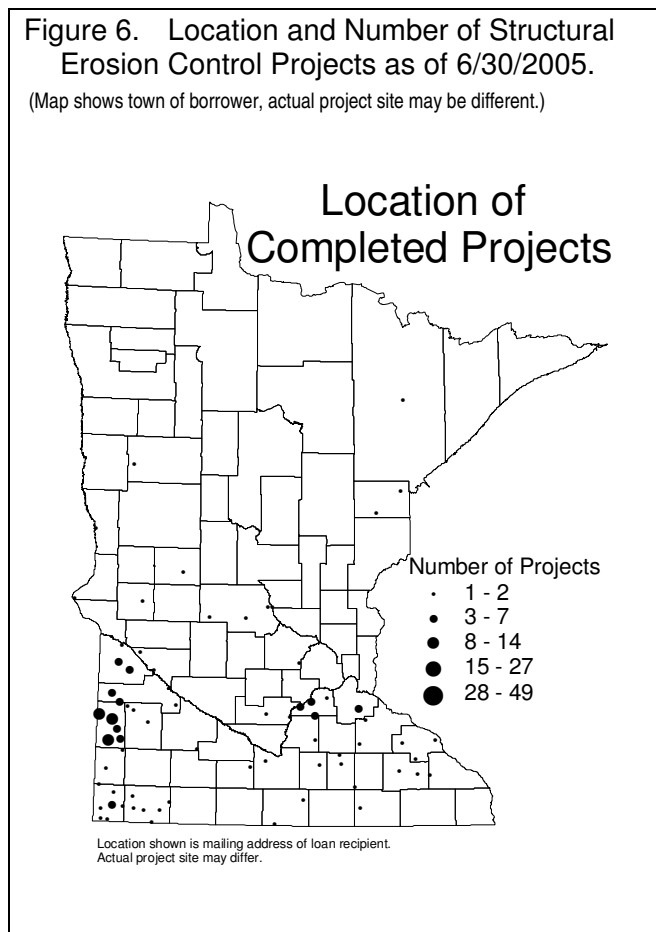
The counties reported 251 feedlots were brought into full compliance last year and that they are still actively working with 1,499 feedlot operators to resolve potential problems. They also reported 179 of these feedlot operators received loans or cost share assistance.

The counties estimated about 5,800 operators had adequate manure management plans.

2. Structural Erosion Control Practices

Figure 6. Location and Number of Structural Erosion Control Projects as of 6/30/2005.

(Map shows town of borrower, actual project site may be different.)



During the last fiscal year there were 11 structural erosion control practices completed. Typically, 14 projects have been completed per year over the past 5 years. Since 1995, the number of structural erosion control practices that have been funded is 196 (see Figure 6). The average total cost for this category of projects was \$16,900, with \$7,900 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.

Counties have estimated that there are more than 19,900 potential structural erosion control projects.

3. Conservation Tillage Practices

The category of conservation tillage practices has been one of the program's most common practices, with 2,134 practices implemented since 1995, Figure 7. During the last fiscal year there were 305 loans issued. The five year average for this type of loan is 237 per year. Farmers are provided a low interest loan as an incentive to initiate or improve their current tillage practices. The average size farm using an AgBMP loan to purchase conservation tillage equipment is 984 acres. The size of farms using this program for conservation tillage equipment is summarized in Figure 8. The equipment funded is generally specialized tillage or planting implements that leave crop residues covering at least 15% to 30% of the ground after planting. The average total cost for this equipment is \$23,000, though the average loan for tillage equipment is \$16,000. The equipment funded through this program is being used on approximately 2.1 million acres; however, counties reported that 7.6 million acres still need to implement conservation tillage practices.

In many areas of the state, sedimentation to rivers and lakes is a primary, high priority water quality problem. In these areas, counties report that conservation tillage is the most cost effective means of reducing sediment and nutrient loading to 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 also reported that this low interest loan program has been the incentive that has

encouraged many farmers to implement these practices.

Figure 7. Location and number of Tillage Equipment practices, as of 6/30/2005.

(Map shows town of borrower, actual project site may be different.)

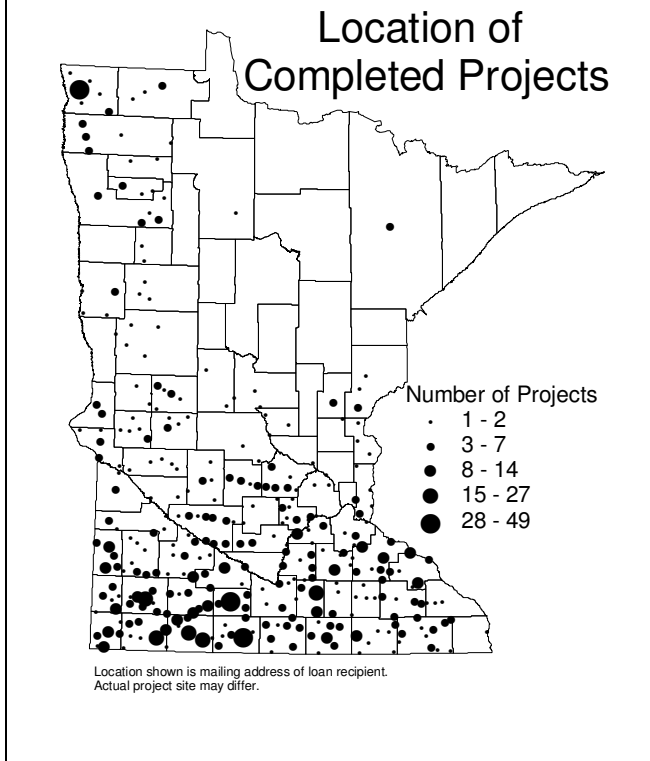
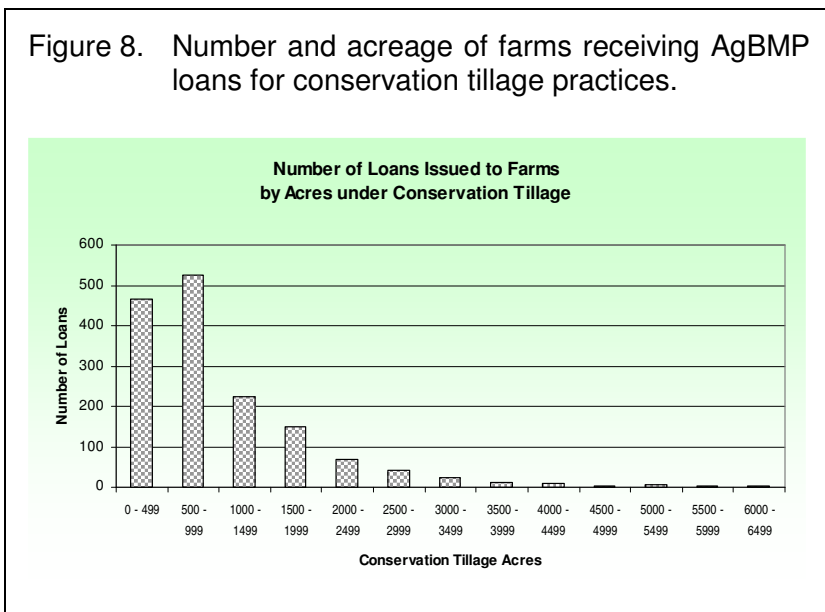


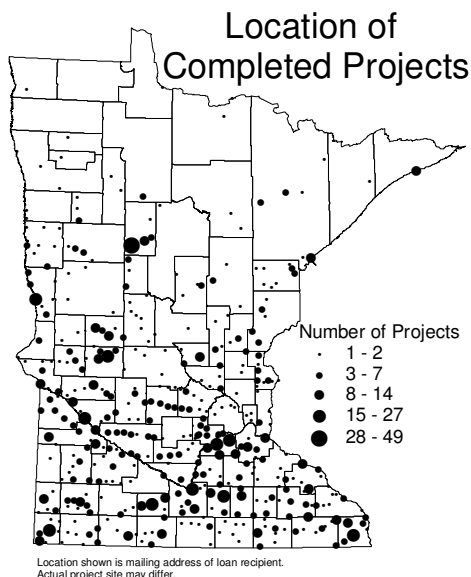
Figure 8. Number and acreage of farms receiving AgBMP loans for conservation tillage practices.



4. Individual Sewage Treatment Systems

Figure 9. Location of repaired ISTS systems financed with AgBMP funds, as of 6/30/2005.

(Map shows town of borrower, actual project site may be different.)



To date over 2,897 ISTS projects have been funded through this program, Figure 9. The average total cost of these projects has been \$6,000. The number of septic systems repaired last year through this program was 308. The five year average is 353 projects per year. Repair of farm and rural septic systems is the most numerous, single category of projects, contributing 44% of all the projects by number. Replacing failing septic systems constitutes 20% of the funds disbursed by the program. Although repairing septic systems is not a traditional agricultural best management practice, ground and surface water contamination from non-functioning septic systems has caused significant problems throughout the state. (The counties estimated that 230,000 septic systems that do not comply with current regulations.) Since the AgBMP Loan Program addresses nonpoint source issues in nearly all counties of the state, this program already has the cooperation and coordination of local water managers and local governments throughout the state, and it has

large, expanding lending network; the program has proven itself to be an effective mechanism to provide much needed assistance to address this troublesome issue.

The average cost for septic systems reported since 1995 through the AgBMP Loan Program has been \$4,679¹ for the conventional at-grade trench systems, while the more expensive pressurized mound systems have averaged \$6,850². Approximately 42% of the on-site sewage systems that are installed are on farm sites while the remaining sites (58% of all septic loans) are either non-farm landowners or not reported, Table 7.

ISTS loans has been the one area where some county governments have taken on the role of lender, providing a low interest loan to its constituents and providing the convenience of including ISTS loan repayment as a special assessment on the landowners tax statement. When this option is in place, the landowner typically makes a single "house" payment to the mortgage holder, and it is the mortgage holder, while servicing their own loan, who collects and forwards to the county the ISTS loan repayment. In this way, the repayment is virtually transparent to the landowner and the risk for delinquent payment or default on the ISTS loan is significantly reduced. The disadvantage is that the county government, and ultimately the local taxpayer, is at risk if the borrower defaults. However, since the borrower in this system cannot choose not to pay the ISTS portion of their tax payment (as is the case when it is a stand alone conventional loan), the risk is considerably reduced. Since 1995, there have been only two ISTS defaults, none with a county as lender. Nine counties currently act as lenders, two are technically the lender though they have since chosen local banks to act as their fiscal agent, and another two counties were lenders but withdrew in favor of using local banks to service the program. Counties have complete discretion in deciding to act as lenders or not.

¹ Only systems that were identified with conventional at-grade construction were included in calculation. Systems that did not describe their construction were excluded.

² Only systems that were identified with mound construction were included in calculation. Systems that did not describe their construction were excluded.

VI. STATUS OF LOCAL REVOLVING ACCOUNTS

A requirement of the AgBMP Loan Program prior to the 2001 legislation was the capitalization of local revolving accounts. Once the money had been transferred to the designated Local Lender, the county could continue to reuse the funds for additional practices as loans are repaid throughout the first 10 years of the term of the loan from the MDA to the county. After year 10, the county had another 10 years to complete repayment of the loan back to the state. Since the start of the program, 2,374 projects costing \$30.4 million have been funded as 2nd generation loans out of local revolving accounts, Table 6. Counties with existing contracts can still use this local revolving loan feature, though no new funds will be added after 2005. New contracts will establish a revolving account held by the Department for the participating county.

In 2005, the counties anticipated using approximately \$17.1 million for 2nd generation loans from all local revolving accounts throughout the state. Their 2005 spending plan is shown in Table 10. The spending plan includes both the funds on hand as well as some anticipated payments to be received in the next year. Based on the mixture of past loans, MDA staff estimates that approximately 15% of the total amount of loans outstanding from the MDA to the counties will continue to be available each year for 2nd generation loans through the revolving accounts. Counties are required to manage their revolving funds in coordination with their requests for new allocations provided by the Department. Despite this ambitious spending plan, counties are not able to complete all the projects proposed. Landowners may change their minds before construction begins, economic and agricultural conditions might change, start dates might be delayed, or anticipated projects just may not materialize. However, as shown in Table 5, actual loans issued from all revolving accounts now totals nearly \$8 million per year.

Table 10. Proposed use of local revolving funds for 2005.

Category	Proposed Number of Loans with Revolving Funds	Proposed Total Amount of Loans to be made with Revolving Funds
Ag Waste Management	211	\$6,778,433
Structural Erosion Control	88	\$616,228
Conservation Tillage	221	\$5,537,685
ISTS	804	\$4,024,250
Other	29	\$148,353
Total Proposed Usage	1,353	\$17,104,949

VII. ADMINISTRATIVE CAPACITY FOR IMPLEMENTATION

This program uses a revolving loan system model. It assumes that total appropriations to the program will grow until it has reached a principal balance such that the outstanding loan repayments will equal the annual cost of pollution prevention projects implemented. Counties estimated in a 1998 survey that they could implement an average of \$250,000 in projects per year per county or about \$22 million worth of projects statewide per year, if they were not limited by staffing, contractors, and other required resources. Historically, the existing loans have generated about 15% of the outstanding balance as annual repayments. Therefore, to generate revenues to meet the estimated \$250,000 per county per year activity level, the total capitalization of the program would need to be about \$140 million. In 1998, the legislature raised the authorized spending limit of the program to this amount; however total cumulative appropriations to date is \$51.0 million.

Though \$22 million in new projects per year was identified by counties as their maximum capacity, the program has recognized that counties could not meet this long-term goal due to limitations on staffing, lending options, engineering, contractors, and actual appropriation levels. When the counties were completing about \$6 million in loans per year during the initial years of the program, a short term objective of funding \$10 million dollars per year was established (this would require \$65 million capitalization of the principal account). Between the effects of increased activity level (from 600 projects per year to about 800 projects per year) and the escalating cost of projects (the average loan has increased 24% since 1996), counties have since achieved this objective, averaging \$9.9 million annually for the last 5 years, \$13 million in FY 2005. (The limitations include constraints such as insufficient number of qualified contractors with time available to implement practices, limited number of skilled engineers familiar with agricultural issues, reduced number of county administrative and technical staff, limited number of lenders participating in the program, insufficient funds allocated to an area to meet demands, or unexpected weather conditions.)

Recently there have been several significant changes that have impacted the demand for AgBMP Loans in recent years:

1. The legislature changed the AgBMP Loan Program, simplifying the loan approval process and expanding the lending network, allowing more lenders to offer more loans to a more diverse clientele.
2. The state and local agencies have taken a more aggressive approach to require compliance of feedlot by 2010 as required under Minnesota Rules 7020.
3. Many counties are establishing ISTS inventories, inspection programs, or adopting point of sale ISTS compliance requirements. In addition, the state is modifying Minnesota Rules 7080 regarding ISTS regulation.
3. Public waters are being assessed, designated as impaired when appropriate, and Total Maximum Daily Load Implementation Plans are being developed to resolve these impairments.

The Department expects the annual spending rate to continue to increase as counties and lenders become more familiar and accustomed to the administrative processes and the environmental protection and remediation efforts are intensified. While we remain unsure of the absolute maximum capacity of local governments to implement projects (in 2005, \$13 million in loans were issued, \$12 million in 2003), annual appropriations of about \$3 million per year for 10 years plus the revolving repayments would increase the annual loan fund capacity to about \$15 million. This appropriation schedule would increase the principal balance of the program to \$85 million.

VIII. RESERVED FUNDS

Under the original system it was thought that each county would build an appropriately sized 10 year revolving account that would generate repayments sufficient to meet demand. However, it became apparent that the 10 year time frame did not provide a satisfactory mechanism to shift funds from one area to another as demands changed locally over time across the state. The 2001 amendments modified the structure, reducing the time frame to one year and establishing a one year "use it or lose it" policy. This change to one year with the option to carry over commit funds into the next year for pending projects, has proven itself an appropriate period for planning, solicitation, and commitment of funds.

The original 10 year revolving accounts are now being retired. However, until 2009 when repayments from the 10 revolving accounts will be significantly larger and more funds will be released under the one year "use it or lose it" policy, several counties have found that they are fully utilizing all its available resources yet have more projects than funds, while other counties have found that their demand has fallen, resulting in more funds available than projects. Several counties have voluntarily repaid or released funds to the general pool early, allowing reallocation

to those counties in need. Approximately \$1.2 million has been transferred in this way. Despite these voluntary efforts, because funds are based on a county by county allocation and the specific requirements of the original program, the 10 year revolving accounts cannot be easily shifted among counties. As a result all revolving funds cannot be used at all times.

The Department continues to encourage counties to repay and release of unused funds early when practical. In addition, the Department can reserve up to 2% of the funds for interim allocations as allowed under the 2001 amendments; assigning funds for specific projects that are ready to proceed. In 2004, \$300,000 was set aside, of which all but \$24,000 was allocated, in 2005, \$1,000,000 was set aside, of which all but \$7,000 was allocated during the year. A portion of new appropriations to the program would be included in this reserved pool to provide flexibility in meeting county and project specific funding needs.

IX. MEASURED WATER QUALITY CHANGES

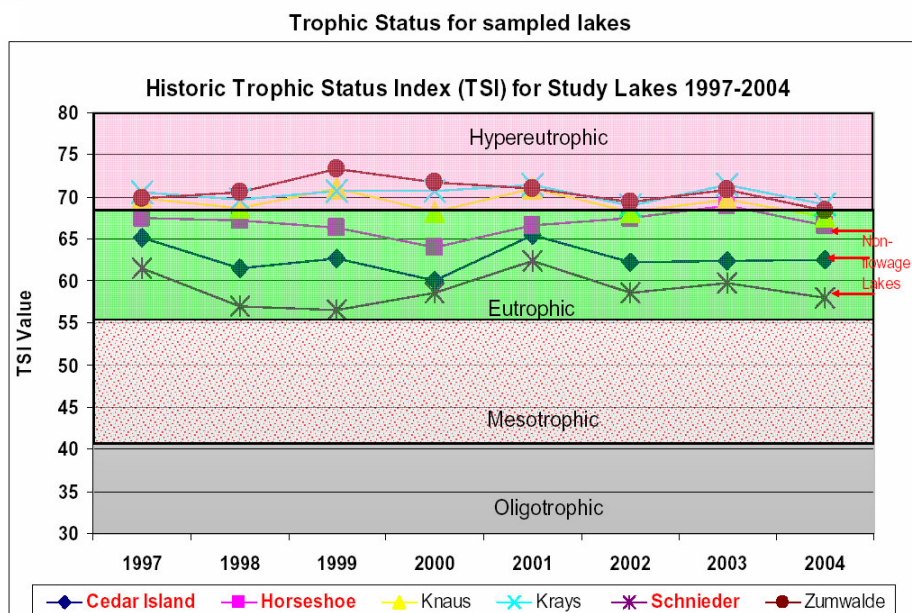
Local government units were asked to provide examples of how implementation of best management practices in their areas might have led to improved water quality. Although it is difficult to demonstrate a direct cause and effect relationship between specific practices and specific waters quality parameters in light of the many other variables that affect water quality, the following local summaries imply that the implemented practices appear to provide improved water quality benefits over time.

The AgBMP Loan Program did not provide loans for all practices that were implemented in these watersheds; however, it was one of the coordinated financial assistance programs available to landowners and used by many.

1. Sauk River Chain of Lakes (Stearns, Todd)

This project has been underway since 1997 with the cooperation of 13 sponsors, being led by the Sauk River Watershed District. Other sponsors included Stearns and Todd County's Soil and Water Conservation Districts, and lake association. Funding came from the many partners including state and federal sources. The AgBMP Loan Program provided loans for some of the projects completed. Over the course of time, there have been 12 feedlot upgrades, two feedlot abandonments, more than 100 manure management plans prepared and implemented, more than 1,000 acres of filter strips and buffers, two shoreline stabilization projects, three water and sediment control basins installed, two waterways completed, implementation of conservation tillage throughout the basin, and many on-site septic system replacements. As the practices have been implemented, there has been overall improvement in the Trophic Status Index of the Chain of Lakes, Figure 10.

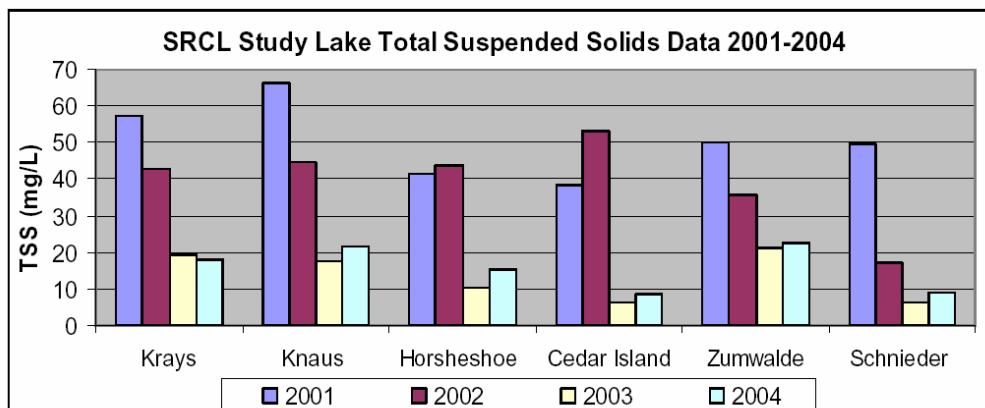
Figure 10. Changes in Trophic Status Index in Sauk River Chain of Lakes, 1997 to 2004.



Total Suspended Solids (Figure 11) and other parameters have also shown improvement. The final report for this project: “**Sauk River Chain of Lakes Basin Restoration 319 Project Final Report, September 2005**”, can be found at:

<http://www.srwdmn.org/pdf/SRCOL%20BASIN%20RESTORATION%20APPROVED%20%20FINAL%20REPORT%20%202011-14-05.pdf>

Figure 11. Changes in Total Suspended Solids, 2001-2004.



2. Big Birch Lake (Stearns, Todd Counties)

The Big Birch Lake assessment was funded through the MPCA Clean Waters Partnership program in cooperation with the Sauk River Watershed District, Stearns and Todd County’s Soil and Water Conservation Districts, their County Environmental Offices, Board of Soil and Water Resources, Dept. of Natural Resources, and the Big Birch Lake Association. Projects implemented were funded from many sources including the AgBMP Loan Program. They included two buffer strips, one cattle exclusion, 400 feet of riparian stabilization, three shoreline stabilization projects, replacement of two ISTS, four agricultural waste management projects and one improved conservation tillage practice. Figure 10 shows the changes in secchi disc. Figure 11 shows the improvement in trophic status index. The full report “**Big Birch Lake Watershed Management 319 Project**” can be found at:

<http://www.srwdmn.org/pdf/FINAL%20BBL%20319%20FINAL%20REPORT%20for%20SUBMITTAL%20%206-15-05.pdf>

Figure 10. Summer Average Secchi Disc Transparency in Big Birch Lake, 1973 to 2004.

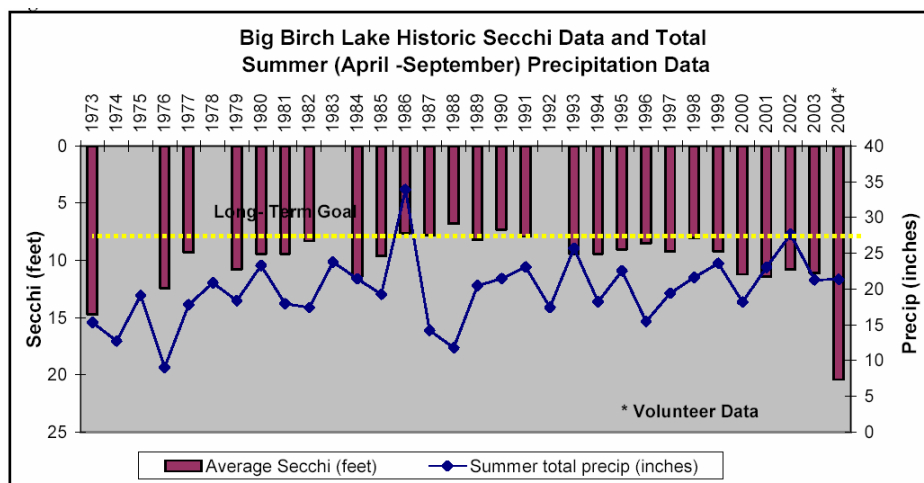
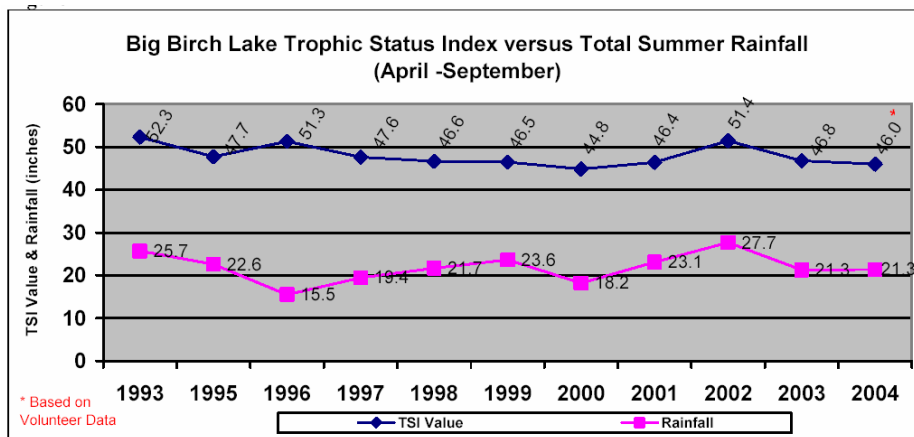


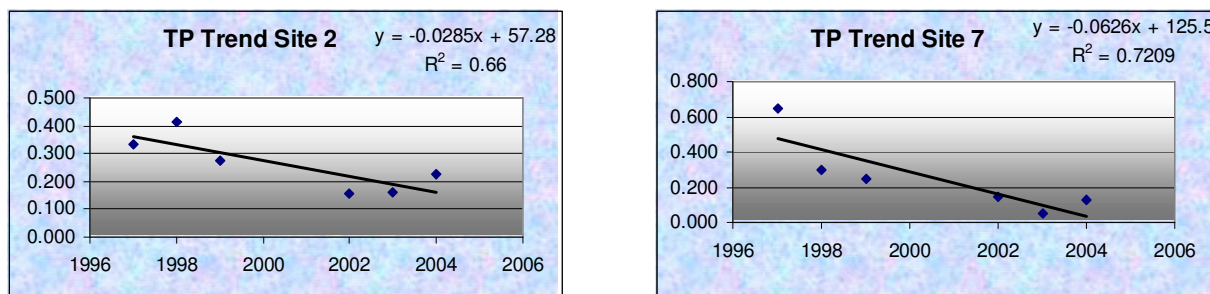
Figure 11. Trophic Status Index for Big Birch Lake, 1993-2004.



3. Yellow Medicine River (Yellow Medicine)

Greater Yellow Medicine River assessment was funded through the MPCA under their Clean Waters Partnership program in Yellow Medicine, Lyon, and Lincoln Counties. Two sections of the river showed significant decline in total phosphorus (Figure 12). Projects completed, with loans from the AgBMP Loan Program and other state, federal, and private funds, included 20 feedlot nutrient management sites, 57 acres of buffer strips, 160 water sedimentation and control basins, and 1,528 acres enrolled into CREP, CRP, and RIM. The full report “**Greater Yellow Medicine River Phase II CWP, 2001-2005 Final Report**” is available through the Yellow Medicine River Watershed District.

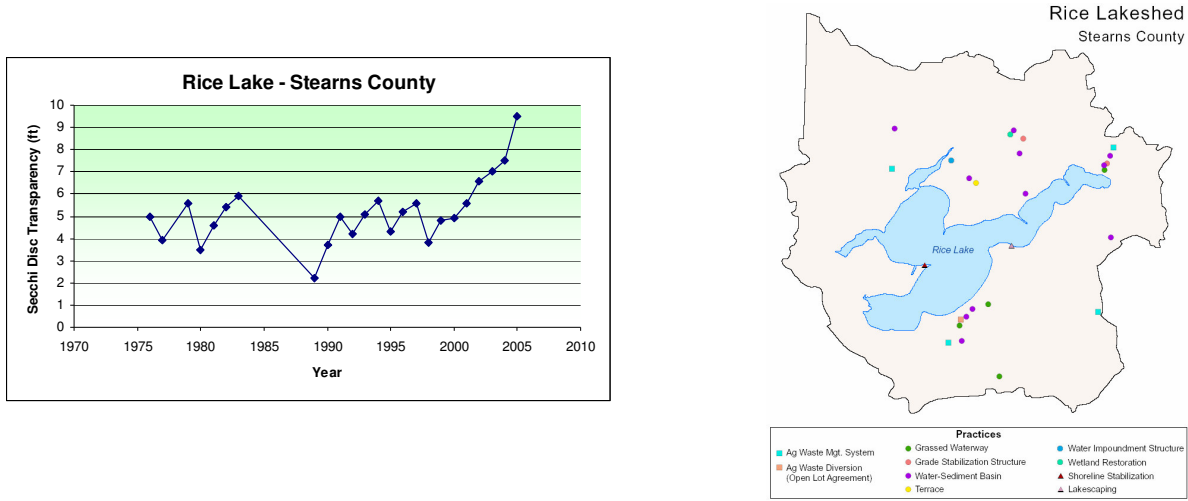
Figure 12. Total Phosphorus in two subwatersheds of the Yellow Medicine River, 1996-2004.



4. Rice Lake (Stearns)

Beginning in the 1990's Stearns county began implementing numerous projects throughout the Rice Lakeshed (Figure 13) including five ag waste management practices, four grassed waterways, four stabilization projects, 11 sediment and water control basins, one terrace system, and one water impoundment. The AgBMP Loan Program provided loans for some of the projects implemented. Since that time, Rice Lake mean summer secchi disc transparency has increased to more than nine feet.

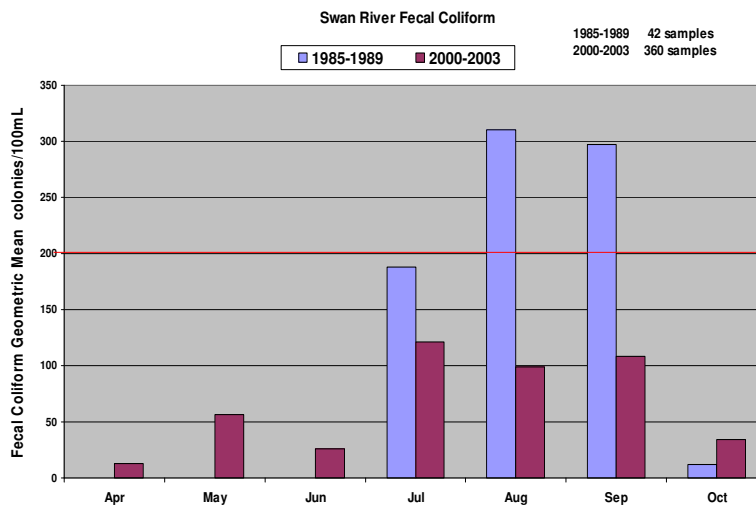
Figure 1. Changes in Secchi Disc Transparency and project locations, Rice Lake, 1970-2005.



5. Swan River (Morrison)

During the 1980's, the Swan River had regular violations of the fecal coliform standard such that it was listed as impaired for this parameter. In the mid 1990's the Swan River Watershed and the local counties began an intensive effort to reduce potential pollution sources. There were 14 feedlots upgraded, eight cattle exclusion projects, 8,900 acres of land put under conservation tillage practices, and a numbers ISTS upgrades. Concurrent with these nonpoint source pollution remediation projects, the fecal coliform concentrations have declined below violation standards (Figure 14) and the river has been removed from the impaired list. The AgBMP provided funding for some of the projects completed.

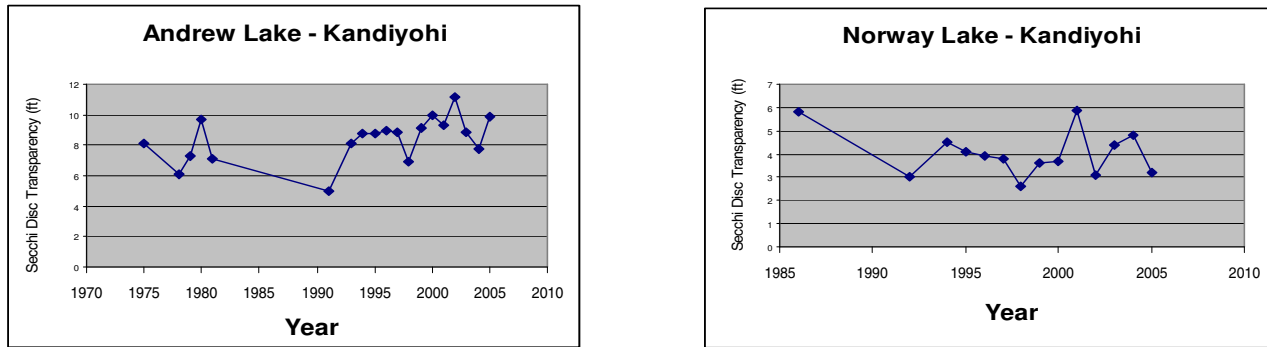
Figure 14. Mean monthly fecal coliform concentrations in Swan River, 1985-2003.



6. Andrew and Norway Lakes (Kandiyohi)

During the past five years the local governments, landowners, and lakeshore associations for these lakes have implemented several practices in the Chippewa River Watershed, which includes Andrew and Norway lakes. Remedial practices included two agricultural waste storage facilities, conservation tillage and nutrient management on 380 acres, and 33 ISTS upgrades. Secchi disc transparency for these two lakes is shown in Figure 15. The AgBMP Loan Program participated in funding a portion of these projects.

Figure 15. Secchi disc transparency for Andrew and Norway Lakes, 1970-2005.



X. EXAMPLES OF PROJECT BENEFITS

The following narrative summaries of successful example projects have been provided by participating counties:

1. Fillmore County

This family farm includes a 272 AU beef and hog operation and 1,200 acres of corn, beans, alfalfa, and hay. Five adult brothers of the family participate in the operation.

The feedlot operation had to be relocated to solve erosion and runoff problems to an intermittent tributary of the Root River watershed. The feedlot was relocated and designed as a total confinement structure. The total expense was \$309,000, of which the Federal EQIP paid \$30,000, State cost share paid \$18,500, the AgBMP Loan Program provided \$50,000, and private funding the balance.

The relocation resolved two environmental problems being faced by the operation, runoff from the feedlot and reduction of erosion from the former feedlot site.

This project will help efforts to reduce coliform bacteria and turbidity in streams. The AgBMP loan was necessary for the project to properly cash flow. This alteration brought the farm into compliance with state feedlot regulations as well as improved the environment.

2. Jackson County

Project #1:

This project was to replace a failing septic system that had been installed too deeply into the soils so that it was leaching nitrates into the water table. A new system was installed using infiltrator technology to comply with groundwater separation requirements.

The total cost of the project was \$6,800 with the AgBMP Loan Program providing a loan of \$6,500.

Project #2:

This project was to replace a septic system that was connected to field drain tiles leading directly to the Little Sioux River. A new above ground mound system was installed, eliminating nitrate, phosphorus, fecal coliform, and BOD loading.

The AgBMP Loan Program, through AgriBank provided a low interest loan for the full cost of the compliance upgrade, totaling \$5,275.

3. Kandiyohi County

A dairy operation was improved and brought into environmental compliance by construction of a manure pit and relocation of an adjacent drainage ditch. This feedlot operation milks 75 head and farms 600 acres under corn - bean rotation along with alfalfa. The farmer was the primary worker with the help of his children. The drainage ditch was relocated over 400 feet from livestock feedlot and manure storage pit. This project was completed with the oversight and cooperation of the NRCS and SWCD staff and was funded by EQIP, State cost share, and AgBMP Loan programs. The farmer would not have been able to do this project without the combined cost share and low interest loan monies available. This project was part of the county's local water plan and had a high priority because of its proximity and drainage to Lake Calhoun. The watershed's work plan also included coordinating with the Lake Calhoun's landowner association to upgrade shoreland septic systems utilizing the low interest AgBMP Loan Program. Five septic systems were upgraded during the '04 construction season on this lake.

The dairy project received a \$37,000 AgBMP Loan and \$50,000 federal cost share grant.

4. Mower County

Project #1

In July, 2003, a farmer complained that sewage from a nearby housing development was plugging a field tile, causing a portion of his field to flood. It was found that three homes in the subdivision were draining wastewater directly onto the field. The homeowners were issued orders to fix the systems and were also informed that low interest ISTS loan money was available through the County.

One homeowner wanted to install a new system as soon as possible, but had their savings tied up in securities they could not liquidate. When they learned of the loan funds, they decided to go ahead with constructing a system consisting of a septic tank and shallow in-ground drainfield.

The second couple realized that they had to correct their system, but did not have the funds available due to family health problems. With the availability of the loan program with repayment through the County's tax assessment system, they decided to participate in the program and install a new system immediately. The at-grade system was started in late 2003 and was finished in the spring of 2004.

The third couple initially applied for an AgBMP ISTS low-interest loan, but after the system was installed decided not to use the available financing.

The two systems utilizing the low-interest loans were installed in advance of the ten month deadline ordered by the county. All three systems are now in compliance.

Project #2

A 78-year old widow was attempting to sell her home. However, Mower County requires a certificate of compliance for all systems at the time of property transfer. Therefore she had to install a new sewage treatment system. Since she had only limited income and the sale of the home was required to pay for the ISTS system, the widow was placed in a dilemma of being unable to sell the house without a septic system and could not install the septic system without selling the house. With the low-interest AgBMP Program ISTS loan through the tax assessment system she was able to install a mound system with a combination septic tank-pumping tank.

5. Olmsted

A family operated cow-calf operation with 100 animal units received coordinated funding from federal cost share and the AgBMP Loan Program to relocate the feedlot. This family farm employed three people and farms 380 acres in a corn/bean rotation. The facility was within 200 feet of Mill Creek, a nearby stream. The project involved relocation of the feedlot operation out of the riparian corridor and construction of various runoff and erosion control structures. This project brought the operation into compliance with state rules as well as improved the efficiency of the operation, insuring its survival in the face of changing agricultural economy. The \$135,000 project received a \$50,000 AgBMP loan and a \$45,000 cost share grant.

6. Watonwan

This dairy and hog operation project was to install a compliant ag waste storage tank to provide 180 days of additional manure storage. This operation also farmed 320 acres and raised corn, soybeans and alfalfa, in addition to the livestock. They used minimum tillage on all their cropland with the exception of plowing old hay ground. The livestock operation had 100 head and employed two people. The site is located approximately 1/2 mile to surface water and the farmland was intensively tiled with several surface intakes. The completed project cost a total of \$100,000. It included \$24,000 from federal EQIP, \$20,000 from a 319 grant, the Soil and Water District provided \$20,000, \$10,000 through a Clean Water Partnership, and a \$26,000 AgBMP Loan to the landowner. This project provides sufficient storage to eliminate winter spreading of manure on frozen ground. They will meet U of M nutrient recommendations as outlined in their nutrient management plan that was prepared with the help of the NRCS.

7. Marshall County

An AgBMP loan was issued to a fixed income, senior resident for installation of a compliant ISTS system. This original homestead includes 80 acres of farmland east of Grygla and has the Mud River running through it. Originally, the landowner lived in an old, existing dwelling, but replaced it with a double-wide trailer home. In an attempt to stay within their means and keep costs low, the home's septic wastes were discharged into a hole filled with loose rock and gravel. A \$2,500 AgBMP loan enabled the landowner to install a septic system that complies with rules and they were able to afford the repayment schedule.

8. Pine County

In 2005, four failed single resident septic systems were replaced as well as one multi-connection system for \$55,000 serving nine homes. Two additional projects have been approved and are scheduled for completion this fall (2005). There have been 27 applications for additional projects under consideration.

Pine County's Comprehensive Local Water Plan has two major priority areas. The AgBMP Loan Program is one of the financial tools used to implement the action steps of their water plan:

1. Reduce surface water contamination from ISTS.
2. Initiate agricultural and watershed Best Management Practices.

The following are examples of projects implemented to accomplish those goals.

- Water quality monitoring in the Snake River Watershed to assess effectiveness of remedial practices.
- The Pokegama Creek Watershed was designated as a Conservation Priority Area (50-75% EQIP cost share, local donations from the area lake association and landowner AgBMP loans).
- Best management practices are being encouraged for the sinkhole area near Askov.

- A cooperative ISTS inspection on all the shorelands in Pine Lake Township in Pine County and the adjacent Aitkin County landowners was completed with failing systems identified for upgrade requirements.
- Pine County adopted the state 7080 septic standards in 2003.
- Pine County is expected to receive a TMDL study for the Grindstone River in 2007. The AgBMP Loan Program will provide financial assistance to landowners to fix failing septic systems and implement conservation practices to improve water quality.

9. Renville County

The AgBMP Loan Program has been integral in Renville County for funding projects and improving water quality. Tillage and manure handling equipment have always been in high demand. These types of projects are very cost effective where the relatively low cost of buying equipment significantly reduces sediment and nutrient loading from hundreds of acres of farmlands. Now that the Renville SWCD is taking a more active role in feedlot inspections here in the County, the demand for assistance to implement Ag Waste projects is becoming huge. These projects are typically \$50,000 to \$100,000 at 50% to 75% cost share. This leaves a sizeable amount for the landowner to try to finance. This money is and will be a good option for the landowner to implement his or her projects. The AgBMP Loan Program is a vital part of our Conservation Program tool box and is much needed.

XI. OTHER FINANCIAL NEEDS INFORMATION

The AgBMP Loan Program has been collecting voluntary information about overall environmental needs of the participating counties through its application process. In the annual application, the counties are asked a few questions about on-site septic systems, structural erosion problems, conservation tillage acres, and other characteristics of their jurisdiction, Appendix D. Though this data was not collected using statistical sampling methods, it does represent reasonable information from local organizations, prepared by local experts familiar with local needs (typically District Managers of Soil and Water Conservation Districts or Environmental Office Directors of county government) and includes nearly all counties. We believe these estimates to be at least reasonable approximations.

The data was compiled from the many applications received by the MDA since 1997. The primary source of the data was the 2005 AgBMP application. If a county did not apply at that time or did not respond to the question, the most recent information from prior applications was substituted. If no data was available from a county for a particular question, the county's response was excluded from the calculations for the specific question.

A. Ag Waste Management

The AgBMP Loan Program was responsible for preparation of the Feedlot Financial Needs Assessment Report submitted to the 2001 Legislature and revised in 2003. The complete report is available through the MDA or from its Internet website at: <http://www.mda.state.mn.us/feedlots/assessmentrevised.pdf> . In this report it is estimated that about 7,800 of the livestock enterprises would require constructed upgrades under the rules. In addition to these constructed practices, other costs would be incurred including engineering, application and handling equipment, and preparation of manure management plans. These ag waste management practices is estimated to cost \$654 million.

B. Structural Erosion Control Practices

The applying counties were asked to estimate the total number of structural practices needed within their jurisdictions. The reported values totaled 19,873 structures statewide. Because of the very objective nature of determining the need for these practices, this estimate cannot be verified. Nevertheless, using the counties' estimates, approximately \$340 million would be needed to implement the anticipated structural practices.

C. Conservation Tillage Equipment

The counties reported that about 12.1 million acres of farmland is currently under some form of conservation tillage, and estimated an additional 7.6 million acres should have conservation tillage practices implemented. Assuming the estimated acreage is correct, the average size farm employing conservation tillage is about 984 acres (the average acreage under conservation tillage reported when applying for an AgBMP loan) and the average cost of conservation tillage equipment is \$23,000; the total cost for implementing some form of conservation tillage on these targeted lands would be \$180 million. However, this assumes only one piece of conservation tillage equipment is purchased, when in fact, to fully convert to conservation tillage practices, a farmer must acquire several pieces of specialized equipment for planting, cultivating, and soil preparation.

D. On-site Sewer Systems - ISTS

There are approximately 540,000 homes with on-site septic systems in Minnesota, based on the data provided in the AgBMP annual applications. The counties reported that over 230,000

systems do not comply with the state's ISTS rules (Minn. Rules 7080), approximately a 43% non-compliance rate of existing systems. The average cost disbursed by the AgBMP Loan Program to upgrade septic systems was \$6,000.

The counties also reported issuing 8,166 permits for repair or upgrade of existing systems and 715 permits for installation of new systems in the last year.

Based on the number of non-conforming septic systems and the overall average cost of repairing septic systems, it is estimated that the total cost to homeowners to bring all existing septic system into compliance would be \$1.4 billion.

E. Total Cost for Rural Nonpoint Source Pollution Remediation

Based on the assumptions listed above the total cost for remediation of nonpoint source pollution problems in rural Minnesota is about \$2.54 billion, Table 11.

Table 11. Estimated total costs to remediate agricultural nonpoint source pollution.

Category	Estimated Costs
Ag Waste Management	\$640,000,000
Structural Erosion Control	\$340,000,000
Conservation Tillage Equipment	\$180,000,000
ISTS – Septic Systems	\$1,380,000,000
TOTAL COST Nonpoint Source Pollution	\$2,540,000,000

Appendix A. Total allocations to Counties by AgBMP Loan Program

Table 12. Summary of allocations to local government units in the AgBMP Loan Program.

Local Government Unit	Previous Award	Current Award	Total Award
Aitkin County	\$ 246,950.00	\$ 32,000.00	\$ 278,950.00
Anoka SWCD	\$ 0.00	\$ 0.00	\$ 0.00
Becker SWCD	\$ 311,550.44	\$ 174,000.00	\$ 485,550.44
Benton SWCD	\$ 355,210.00	\$ 0.00	\$ 355,210.00
Big Stone County	\$ 354,657.22	\$ 8,758.00	\$ 363,415.22
Blue Earth SWCD	\$ 597,119.15	\$ 77,000.00	\$ 674,119.15
Brown County	\$ 659,743.32	\$ 40,000.00	\$ 699,743.32
Carlton SWCD	\$ 372,472.98	\$ 0.00	\$ 372,472.98
Carver SWCD	\$ 1,620,133.70	\$ 41,000.00	\$ 1,661,133.70
CcIns Joint Powers Board #3	\$ 167,441.75	\$ 7,000.00	\$ 174,441.75
Chippewa County	\$ 492,161.59	\$ 0.00	\$ 492,161.59
Clay SWCD	\$ 319,629.12	\$ 94,000.00	\$ 413,629.12
Cook County	\$ 146,508.70	\$ 30,000.00	\$ 176,508.70
Cottonwood SWCD	\$ 1,143,537.53	\$ 86,792.50	\$ 1,230,330.03
Dakota SWCD	\$ 904,882.84	\$ 100,000.00	\$ 1,004,882.84
Dodge County	\$ 761,732.68	\$ 70,000.00	\$ 831,732.68
Douglas SWCD	\$ 359,332.04	\$ 95,000.00	\$ 454,332.04
Faribault County	\$ 771,426.84	\$ 33,000.00	\$ 804,426.84
Fillmore SWCD	\$ 1,140,628.10	\$ 235,000.00	\$ 1,375,628.10
Freeborn County	\$ 825,035.85	\$ 108,000.00	\$ 933,035.85
Goodhue County	\$ 1,602,345.06	\$ 69,000.00	\$ 1,671,345.06
Grant SWCD	\$ 0.00	\$ 12,000.00	\$ 12,000.00
Hennepin County	\$ 159,300.00	\$ 0.00	\$ 159,300.00
Houston County	\$ 298,710.41	\$ 50,000.00	\$ 348,710.41
Hubbard County	\$ 541,799.11	\$ 19,735.00	\$ 561,534.11
IMPACK-6 Joint Powers Board	\$ 1,423,492.22	\$ 96,791.59	\$ 1,520,283.81
Itasca County	\$ 176,909.76	\$ 0.00	\$ 176,909.76
Jackson County	\$ 1,349,308.15	\$ 168,000.00	\$ 1,517,308.15
Kandiyohi SWCD	\$ 545,248.50	\$ 84,000.00	\$ 629,248.50
Kittson County	\$ 740,871.13	\$ 100,111.25	\$ 840,982.38
Lac Qui Parle SWCD	\$ 387,878.38	\$ 68,000.00	\$ 455,878.38
Le Sueur SWCD	\$ 657,072.18	\$ 0.00	\$ 657,072.18
Lincoln County	\$ 925,629.51	\$ 78,000.00	\$ 1,003,629.51
Lyon SWCD	\$ 995,295.50	\$ 318,000.00	\$ 1,313,295.50
Mahnomen SWCD	\$ 163,209.72	\$ 57,000.00	\$ 220,209.72
Martin County	\$ 954,265.46	\$ 10,000.00	\$ 964,265.46
Mcleod SWCD	\$ 190,729.00	\$ 0.00	\$ 190,729.00
Meeker SWCD	\$ 357,603.79	\$ 0.00	\$ 357,603.79
Morrison SWCD	\$ 417,301.00	\$ 107,000.00	\$ 524,301.00
Mower SWCD	\$ 1,547,286.40	\$ 269,000.00	\$ 1,816,286.40
Murray County	\$ 1,386,725.30	\$ 150,000.00	\$ 1,536,725.30
Nicollet County	\$ 272,646.11	\$ 161,000.00	\$ 433,646.11
Nobles County	\$ 1,506,319.89	\$ 100,000.00	\$ 1,606,319.89
Norman SWCD	\$ 0.00	\$ 100,000.00	\$ 100,000.00
North Central Minnesota Joint Powers Board	\$ 523,551.02	\$ 65,000.00	\$ 588,551.02
Northwestern Minnesota Joint Powers Board	\$ 2,521,012.05	\$ 503,000.00	\$ 3,024,012.05
Olmsted SWCD	\$ 877,849.19	\$ 0.00	\$ 877,849.19
Ottertail SWCD	\$ 134,497.00	\$ 129,000.00	\$ 263,497.00
Pennington County	\$ 99,763.75	\$ 0.00	\$ 99,763.75
Pipestone County	\$ 750,876.58	\$ 81,072.44	\$ 831,949.02
Pope County	\$ 335,401.51	\$ 79,000.00	\$ 414,401.51

Ramsey SWCD	\$ 0.00	\$ 0.00	\$ 0.00
Red Lake SWCD	\$ 82,680.00	\$ 0.00	\$ 82,680.00
Redwood SWCD	\$ 427,948.10	\$ 0.00	\$ 427,948.10
Renville County	\$ 666,626.63	\$ 15,000.00	\$ 681,626.63
Rice SWCD	\$ 872,606.37	\$ 247,040.00	\$ 1,119,646.37
Rock SWCD	\$ 1,661,899.50	\$ 0.00	\$ 1,661,899.50
Saint Louis County	\$ 503,900.00	\$ 0.00	\$ 503,900.00
Scott County	\$ 870,475.75	\$ 0.00	\$ 870,475.75
Sherburne County	\$ 231,771.33	\$ 16,000.00	\$ 247,771.33
Sibley County	\$ 530,189.70	\$ 0.00	\$ 530,189.70
Stearns SWCD	\$ 601,926.48	\$ 42,000.00	\$ 643,926.48
Steele County	\$ 826,363.06	\$ 66,700.00	\$ 893,063.06
Stevens County	\$ 156,678.84	\$ 108,500.00	\$ 265,178.84
Swift SWCD	\$ 433,768.56	\$ 38,000.00	\$ 471,768.56
Todd County	\$ 412,663.95	\$ 438,000.00	\$ 850,663.95
Traverse SWCD	\$ 424,381.38	\$ 39,000.00	\$ 463,381.38
Wabasha SWCD	\$ 1,339,438.05	\$ 70,000.00	\$ 1,409,438.05
Wadena County	\$ 0.00	\$ 0.00	\$ 0.00
Waseca County	\$ 1,897,406.58	\$ 132,000.00	\$ 2,029,406.58
Washington SWCD	\$ 225,694.00	\$ 50,000.00	\$ 275,694.00
Watsonwan County	\$ 1,371,331.62	\$ 48,500.00	\$ 1,419,831.62
West Central Minnesota Joint Powers Board	\$ 1,113,471.41	\$ 0.00	\$ 1,113,471.41
Wilkin County	\$ 217,422.66	\$ 97,250.00	\$ 314,672.66
Winona SWCD	\$ 621,161.73	\$ 41,000.00	\$ 662,161.73
Wright SWCD	\$ 602,805.03	\$ 72,000.00	\$ 674,805.03
Yellow Medicine County	\$ 389,911.66	\$ 0.00	\$ 389,911.66

Appendix B. Partial list of example practices funded by the AgBMP Loan Program

ABANDON MANURE PIT
AG WASTE COLLECTION SYSTEM
AG WASTE COMPOSTING
BALZER 2600 SPREADER
BALZER 3750 SPREADER
BALZER 8500 SPREADER
CLOSED END MANURE SPREADER
CONCRETE FLOOR AND ROOF STRUCTURE
CONCRETE PIT UNDER BUILDING
EARTHWORK, SCRAPE APRONS, SLABS
FEEDLOT RUNOFF CONTROL SYSTEM AND STORAGE BASIN
GEHL SCAVENGER SPREADER
HAZELTON 412 HYDRO SPREADER
HOOP BARN MANURE SYSTEM
HOULE 5350 MANURE TANK
HOULE 7300 MANURE INJECTOR TANK
HOULE EL-84-5000 MANURE SPREADER
KNIGHT 8032 MANURE SPREADER
KNIGHT 8180 MANURE SPREADER
MANURE BASIN - CONCRETE
MANURE BASIN - EARTHEN
MANURE BASIN - SLURRYSTORE
MANURE PUMP, LOADING STAND AND TANK
MEYER 2425 SPREADER
MEYER 2550 SPREADER
N-TECH PISTON MANURE PUMP
REPAIR WASTE RETENTION STRUCTURE
ROOF STRUCTURE, DIVERSIONS, RUNOFF CONTROL
SEPARATION TANKS
SKIDSTEER
TERRAGATOR
VAN DALE MANURE TANK WITH INJECTORS DIVERSION
GRASSED WATERWAY
RIVER BANK STABILIZATION
ROCK RIP-RAP
TERRACES AND WATERWAY
TILED WATERWAY
WATER AND SEDIMENT CONTROL BASINS
B&H HIGH RESIDUE CULTIVATOR
BLUE JET DISC RIPPER
BOUGAULT CHISEL PLOW
BRILLION SEEDER
BRILLION SOIL SAVER
BRILLION ZONE COMMANDER
BRUSHHOG 26151
CAT TL3-930 RIPPER
CIH 4300 NO-TILL FIELD CULTIVATOR
CIH 5400 NO TILL DRILL
CIH 6500 CHISEL PLOW

CONCORD 4010 AIR DRILL
DMI 527B DISC RIPPER
DMI 530B ECOLO-TIGER
DMI 730B DISC RIPPER
FLEX-COIL 5000 AIR SEEDER
GLENCOE 119 COULTER CHISEL PLOW
GREAT PLAINS NO TILL DRILL
HAYBUSTER 107 NO TILL DRILL
HINIKER RIDGE TILL CULTIVATOR
HOWARD ROTO-VATOR
JD 1560 NO TILL DRILL
JD 1910 NO TILL DRILL
JD 2700 MULCH RIPPER
JD 510 DISC RIPPER
JD 714 MULCH TILLER
JD 730 NO TILL DRILL
KINZE 3600 NO TILL PLANTER
KRAUSE NO TILL DRILL
LANDALL 2320 RIPPER
LANDSTAR X7270
M&E EARTHMASTER
MARLESS PLANTER DRILL
PHEONIX ROTARY HARROW
PHILLIPS ROTARY HARROW
RAWSON ZONE BUILDER
RIDGE AND ZONE TILL EQUIPMENT
SUMMERS 8T9326 CHISEL PLOW
SUNFLOWER 4411 RIPPER
TEKKEN RIDGE RIPPER
TRUAX NO TILL DRILL
WHITE 445 CHISEL PLOW
WHITE 8222 PLANTER
WILRICH 6600 SOIL SAVER
WILRICH AIR SEEDER
YETTER STRIP TILL
ISTS - CAPITALIZE 115.57 ACCOUNT
ISTS - CLUSTER SYSTEMS
ISTS - CONVENTIONAL SYSTEM
ISTS - MOUND
CHEMICAL SPRAY EQUIPMENT
FERTILIZER BANDER AND CART
STORMWATER DIVERSION
WELL SEALING

Appendix C. Glossary of terms and acronyms

AgBMP: Agricultural Best Management Practices. Practices traditionally associated with farm operations, such as proper use and storage of manure, contour farming, conservation tillage methods, terraces, grassways, 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 or the PFA to the MDA.

BMP: Best Management Practices. Practices, techniques, and measures, that prevents or reduces pollution from agricultural sources by using the most effective and practicable means of achieving air quality goals. Best management practices include, but are not limited to, official controls, structural and nonstructural controls, and operation and maintenance procedures.

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

BWSR: Board of Water and Soil Resources. The primary state agency that assists local governments to implement water and soil related environmental program. It provides oversight to state cost share programs to farmers.

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

CWA: Clean Waters Act. The federal legislation protecting water resources authorizing the SRF accounts.

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

DTED: Department of Trade and Economic Development. The state department that includes the Public Facilities Authority.

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

ISTS: Individual Sewage Treatment System. On-site sewage systems that treat less than 5,000 gallons per day.

JPO: Joint Powers 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.

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.

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

SRF: State Revolving Fund. The primary source of AgBMP funds from the federal government.

SWCD: Soil and Water Conservation District. The primary local unit of government that provides technical assistance and coordinates financial aid to farmers and landowners for projects that prevent or protect water and soil resources.

Appendix D. Example AgBMP application form survey completed by LGU

The following table shows the survey form and the total amount reported for each question. The data shown is the sum of the raw data provided by the local county contacts. There has been **NO** attempt to adjust for non-response, reconciliation to any other data source, guesses by the respondents, or other potential survey errors. Therefore, the use of this data without further analysis and interpretation is not recommended.

Table 1. Needs Survey about your jurisdiction		Last Year's Report Amt.	Other Sources	2005 Amounts					
1.	Estimated total number of all types of on-site septic systems (ISTS) in your jurisdiction?			540,000					
2.	Estimated number of ISTS systems that are <u>failing or an imminent threat to public health</u> ?			230,000					
3.	Number of ISTS permits issued in the last 12 months for <u>FIXING</u> failing systems?			8,166					
4. Number of feedlot ENTERPRISES by SIZE and SPECIES in your jurisdiction by animal units?									
	*Less than 10 AU	*10 – 49 AU Non-Sensitive Areas	10-49 AU Sensitive Areas	50-99 AU	100-299 AU	300-499 AU	500-999 AU	>1000 AU:	TOTAL
Cattle	800	1980	2805	2639	2547	394	211	33	8770
Dairy	348	568	683	1868	2315	176	119	32	4241
Hogs	439	518	534	1159	2039	675	893	312	5410
Other	2014	497	636	146	77	11	6	3	3244
Poultry	460	22	34	31	157	76	108	65	922
TOTAL	4,061	3,585	4,692	5,843	7,135	1,332	1,337	445	22,587
5. How many ENTERPRISES, by SIZE and SPECIES, DO NOT now comply with storage or runoff control requirements of the Feedlot Rules? (Do not include those that need upgraded application equipment. Last year amount is shown.)									
	Less than 10 AU	10 – 49 AU Non-Sensitive Areas	10-49 AU Sensitive Areas	50-99 AU	100-299 AU	300-499 AU	500-999 AU	>1000 AU:	TOTAL
Cattle	123	415	534	820	837	164	141	3	2217
Dairy	49	188	166	562	924	75	63	3	1468
Hogs	51	83	89	187	388	153	159	7	930
Other	462	79	104	47	36	5	2	0	688
Poultry	28	10	13	20	20	16	16	3	106
TOTAL	713	775	906	1,636	2,205	413	381	16	5,409
							Last Year Report	2005 Amounts	
6.	How many feedlots in your jurisdiction were <u>actively working last year to develop, design, or implement a constructed upgrade for storage or control runoff</u> for compliance with the Feedlot Rules?							1,499	
7.	In the last year, <u>how many constructed feedlot upgrades were COMPLETED</u> so that the feedlot is now in <u>full compliance</u> with the storage and runoff control provisions of the Feedlot Rules?							251	
8.	Of those reported in #7, how many <u>RECEIVED state or federal cost-share, loans, or public engineering last year?</u>							179	
9.	As of the end of last year, how many of the feedlots have manure & nutrient management plans that <u>WOULD MEET</u> accepted agricultural standards?							5,756	
10.	As of the end of last year, how many feedlots have manure handling and application equipment that <u>SHOULD BE UPGRADED?</u>							2,756	
Total Reported Farm Acres:					Last Year	Other Sources		2005 Amounts	
11.	Number of acres of tilled farm land that used any form of reduced or conservation tillage last year?							12,115,523	
12.	As of last year, how many acres of tilled farm land <u>should use</u> conservation tillage <u>but does not?</u>							7,644,039	
13.	Number of Structural Erosion Control projects that you know of that should be done?							19,873	
14.	Number of open or surface tile intakes in your jurisdiction?								
15.	How many surface tile intakes were improved with rock inlets, French drains, pattern tile, controlled discharges, etc. last year in your area?								
16.	List a few of your more important, specific objectives for 2006 :								
(for example: fixing Olson's feedlot on Crooked Creek, upgrading 3 septs on Round Lake, fixing washout on the Smith farm, implement 500 acres of additional con-till in Long Lake basin, etc.)									