

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 components of their Comprehensive Local Water Plan. 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 the implementation of agricultural and other best management practices that are a priority in the area's local water plan. The program uses revolving loan accounts such that new appropriations are loaned as "1st generation loans", while repayments from those initial loans finance additional loans.

Individual counties or Soil and Water Conservation Districts and Joint Power Organizations representing multiple counties may apply yearly for AgBMP loan 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 \$49.0 million since 1995. These funds have been awarded or are currently allocated to 82 of the state's 87 counties. The AgBMP Loan Program has disbursed over \$43.3 million dollars to date. Including 1st generation and subsequent revolving loans, these funds have financed 5,185 projects, with total loans of \$61.1 million. The total value for all completed projects is estimated to be \$85.9 million. The figure below shows a summary of the amount of loans by practice category.

- 1,077 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.
- 176 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.
- 1,644 Conservation Tillage practices have been implemented, funding various types of cultivation or seeding implements that leave crop residues on the soil surface.
- 2,261 On-site Sewage Treatment Systems on farms and rural properties have been repaired or replaced through this program.
- 27 Other Projects, including well sealing, chemical and petroleum storage containment structures, and chemical spray equipment, have been funded through the program.

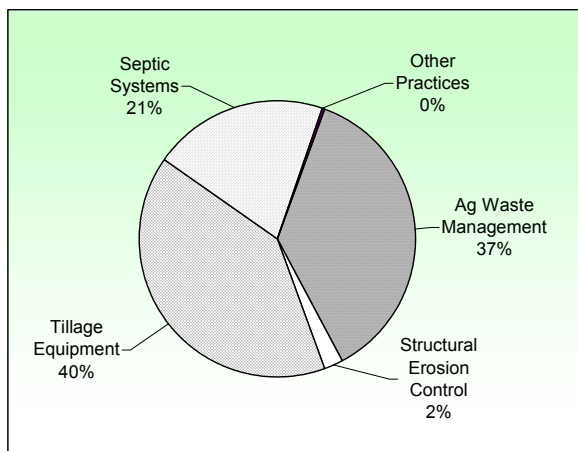


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I. INTRODUCTION

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 Plan (CLWP) 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 and issue 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 designed to also encompass non-agriculture issues, such as on-site 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 \$69.2 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 6/30/2003.

Agency	Amount Appropriated
MDA	\$43,000,000
MPCA	\$24,295,697
DTED Small Cities Loan Program	\$750,000
DTED Tourism Loan Program	\$1,129,656
Total	\$69,175,353

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 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 51 local governments implementing this new system and 33 lenders have signed up under the multiple lender system. With easy access to more banks and 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 70 contracts with the local governments and one contract for every participating bank, currently about 85 lenders.

II. ALLOCATION PROCESS TO COUNTIES

A. Background

(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.)

Under the 1995 legislation, funds were allocated to counties based on a competitive application process. The local government had one year to commit the funds and up to two years to complete the project. Each allocation would be valid for at least two years, with the potential of a third year extension. Therefore counties would have two or three active allocations at any one time. Under the 2001 legislation, the application and allocation process was simplified. Each participating county now receives a one-year allocation, thus eliminating overlapping, multiple allocations. The local government must still commit the funds within one year. However, once committed, the funds may be carried over and added to the next year’s allocation for completion of the proposed project. The amount of the annual allocation is calculated by totaling:

- The amount of funds that have been repaid to the state from previously completed projects.
- Any current funds that have been committed to projects that will be installed in the near future.
- New funds allocated under the competitive application process.

Counties may also request supplemental funds at times other than the application period. These additional funds may be awarded only when a county has used all available funds, has a project ready to proceed, and the Department has unallocated funds available.

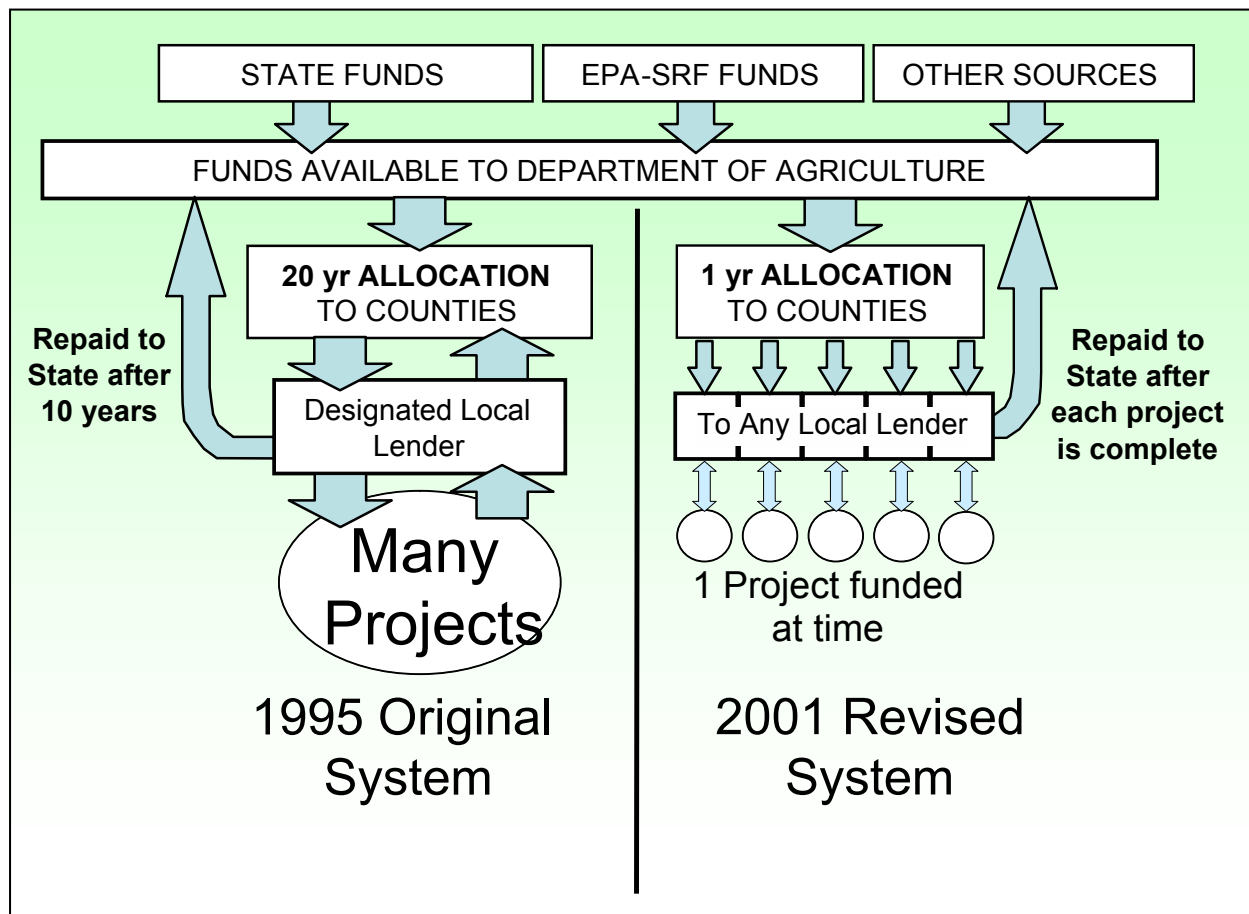
Figure 1 shows a flow chart of the funds through the AgBMP Loan Program. The Department may receive funds from multiple state and federal sources. Through a competitive application process, these funds are awarded to counties. (Through the remainder of this report, the term “county” will refer to the 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 2001 legislation requires that these funds must be either used or committed to projects within one year. Funds not used within this time limit are taken back or rescinded by the Department and reallocated during the next application period.

In the past, once funds were sent from the state to the county, repayments from the original projects were retained by the county and could be re-loaned for additional projects for up to ten years before repayment to the state begins. Once the repayments would begin, 11 years after the original allocation, the state would continually reallocate the funds through the competitive application process (left side Figure 1, “Original 1995 System”). This system remains in place for existing contracts with counties and they can add new allocations to these contracts until 2005. Thereafter, allocations will only be made under multiple lender contracts. Under the new multiple lender contracts, the repayment to the state must begin within one year of each individual project’s completion (right side Figure 1, “2001 Revised System”). Under this revised 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.

A feature of the revised allocation and repayment procedure used 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. This will result in a stable funding source commensurate with the county's historical capacity to implement projects.

Figure 1. AgBMP Loan Program Funding Flow Chart.



B. Competitive Application Process

In the fall of each year, the MDA announces the application period for the program, affording counties a two-month opportunity to prepare and submit applications. The MDA holds several workshops each year to assist counties in completing their applications. This application allows local governments to describe their local funding needs in relation to their CLWP, 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.

C. 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 which identifies water resources, prioritizes problems and establishes local goals and solutions.

Under the new legislation, 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 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 eligible practices within targeted, priority water resource areas.

If the emphasis of the county is to implement priority practices within targeted areas, farmers and landowners in other areas or with other eligible projects will also be considered 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 2003 applications, counties proposed workplans totaling \$19.1 million. Revolving funds will provide \$10.5 million to meet their needs, while their unmet need was \$8.6 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 EPA - 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. The AgBMP Loan Program has also received two direct appropriations from the Legislature. Despite receiving appropriations each year to its principal account in the past, there is no assurance of annual appropriations in the future.

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
AgBMP Total	\$45,000,000	
• ISTS Appropriations		
1997 State — to MDA	4,000,000	1997 Session Law Chap. 246 Sec. 6
Total of All Appropriations	\$49,000,000	

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 contracted 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 and recycling unused funds assures that the recipients are using all available money in a timely manner.

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 2003 allocation for the AgBMP Loan Program, 6/30/2003.

Category	Proposed Number of Loans	Proposed Budget for each Category ¹	% of Funds Allocated
Ag Waste Management	163	3,717,902	44%
Structural Erosion Control	61	348,840	4%
Conservation Tillage Equipment	112	1,807,131	21%
Septic Systems	475	2,472,276	29%
Other Practices	28	74,850	1%
Total	839	\$8,421,000	

¹ Does not include proposed use of local revolving funds.

IV. BORROWER AND COST SHARE COORDINATION

The loan program will finance the total amount of a project, up to \$50,000. 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 69% of the total cost of projects, while the borrowers generally establish significant equity (31%) 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 invoice 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 costs equal 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	\$34,500	\$20,200	59%
Structural Erosion Control	\$16,100	\$7,600	47%
Conservation Tillage Equipment	\$20,100	\$14,500	72%
Septic Systems ¹	\$5,600	\$5,300	95%
Other Practices	\$11,400	\$9,000	79%
Overall Average	\$16,700	\$11,500	69%

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 administer 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.

Constructed practices include projects such as manure basins, diversions, filter strips, waterways, terraces, and sedimentation basins. Historically when state and federal cost share grants were given, typically, only 50% of the costs were provided because of maximum grant amount limits, availability of funds, and local funding policies. 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

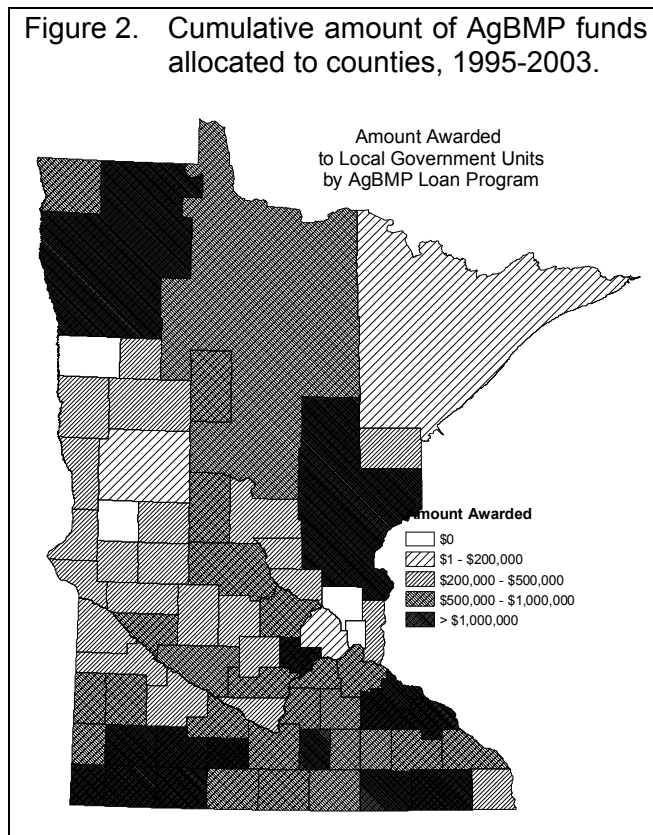
agricultural waste system. AgBMP low interest loans and cost share funds provide a strong incentive to farmers to implement practices that prevent water pollution.

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 6/30/2003. This includes the federal SRF funding, state ISTS appropriations and other state funds.

A. All Years Combined



The 2003 allocation was \$8.4 million (Table 3, page 15). The MDA has disbursed \$43.30 million to local governments under past allocations.

To date, 5,185 practices totaling \$61.1 million in loans have been completed through this program. The program currently disburses an average of \$400,000 monthly. Appendix A shows a summary of the amount disbursed by county through this program.

Loans are issued through two processes. First time loans (1st generation loans) with new money from the Department have financed 3,807 projects to date. The local revolving loan accounts are funding an increasing number of projects each year. There have been 1,496 projects totaling \$17.8 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 736 and the average annual amount is \$8.7 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 6/30/2003.

Fiscal Year	1st Generation Revolving Loans ¹	2nd Generation Loans ¹	Total Number of Loans ¹	Total Loan Amount
1996	\$ 3,645,461	\$ -	280	\$ 3,645,461
1997	\$ 6,843,700	\$ 62,414	613	\$ 6,906,114
1998	\$ 6,808,328	\$ 237,285	614	\$ 7,045,613
1999	\$ 5,912,347	\$ 458,820	591	\$ 6,371,166
2000	\$ 5,429,542	\$ 3,210,709	768	\$ 8,640,251
2001	\$ 4,246,180	\$ 3,233,963	755	\$ 7,480,143
2002	\$ 6,350,019	\$ 2,361,054	620	\$ 8,711,073
2003	\$ 4,107,773	\$ 8,209,559	944	\$ 12,317,333
TOTAL	\$ 43,343,350	\$ 17,773,804	5,185	\$ 61,117,154

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 local 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 6/30/2003.

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	883	\$17,692,277	226	\$4,066,603	1,077	\$21,758,880	\$37,174,476
Structural Erosion Control	143	\$1,022,801	38	\$315,010	176	\$1,337,811	\$2,838,219
Cons. Tillage Equipment	1017	\$13,763,336	681	\$10,149,815	1,644	\$23,913,152	\$32,991,041
Septic Systems	1742	\$10,656,636	546	\$3,207,374	2,261	\$13,864,010	\$12,604,958
Other Practices	22	\$208,299	5	\$35,000	27	\$243,299	\$308,189
Total	3,807¹	\$43,343,350	1,496¹	\$17,773,803	5,185¹	\$61,117,153	\$85,916,884

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 5,180 projects have been completed, located in nearly all counties, Figure 3. Although there are practices implemented throughout the state, most are in traditional farm areas.

The program permits loans to farmers, agriculture supply business and to 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.

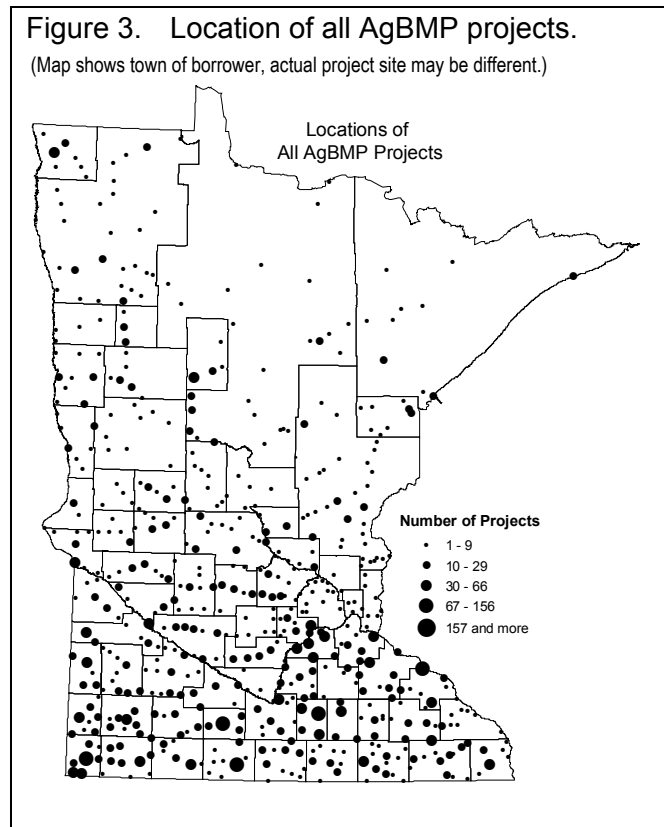


Table 7. Summary of farm/non-farm participants in the AgBMP Loan Program.

Category	Farm	Non-Farm	Not Reported
Ag Waste Management	1,077	0	0
Structural Erosion Control	155	14	7
Cons. Tillage Equipment	1,644	0	0
Septic Systems	1,009	879	373
Other Practices	17	2	8
Total	3,902	895	388

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	21%	36%
Structural Erosion Control	3%	2%
Cons. Tillage Equipment	32%	39%
Septic Systems	44%	20%
Other Practices	1%	0%

B. Completed Projects by Category

1. Animal Waste Management Systems

There were 1,077 loans issued to complete approximately 1,400 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 (400); manure handling, spreading, or incorporation equipment (780); 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).

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

Type of Operation	Percentage
Pork	35%
Dairy	34%
Cattle	20%
Other Production	10%

The average size of livestock operations receiving loans is 404 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 \$34,500.

Figure 4. Location of Agricultural Waste Projects, as of 6/30/2003.

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

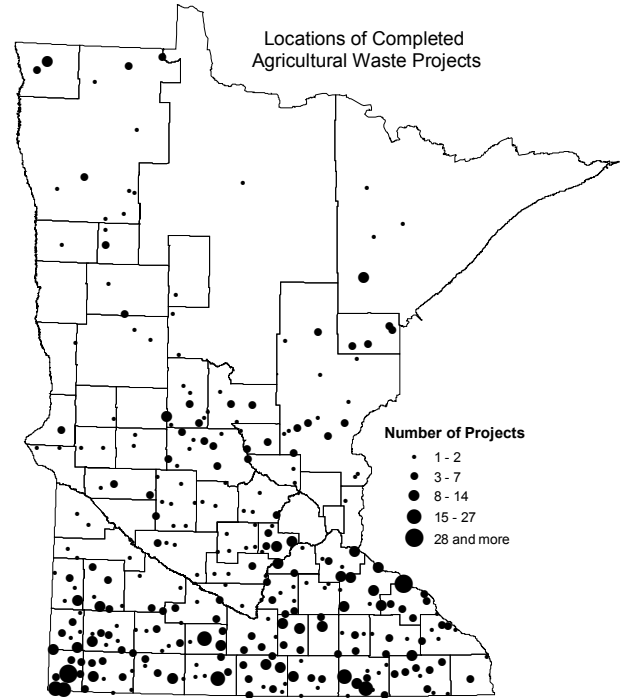
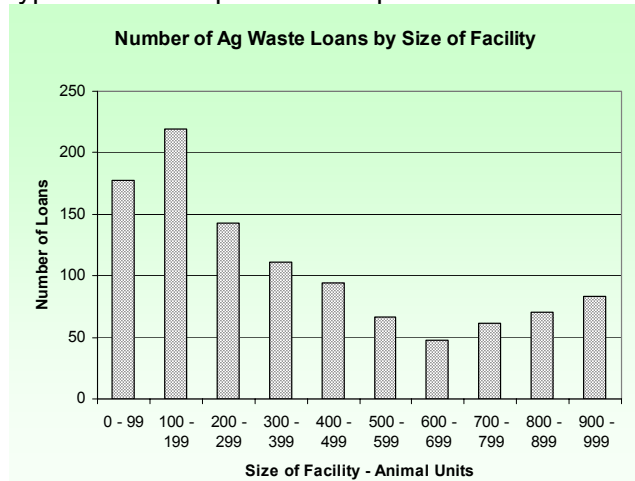


Table 9. Percentage of loans issued to various types of animal production operations.



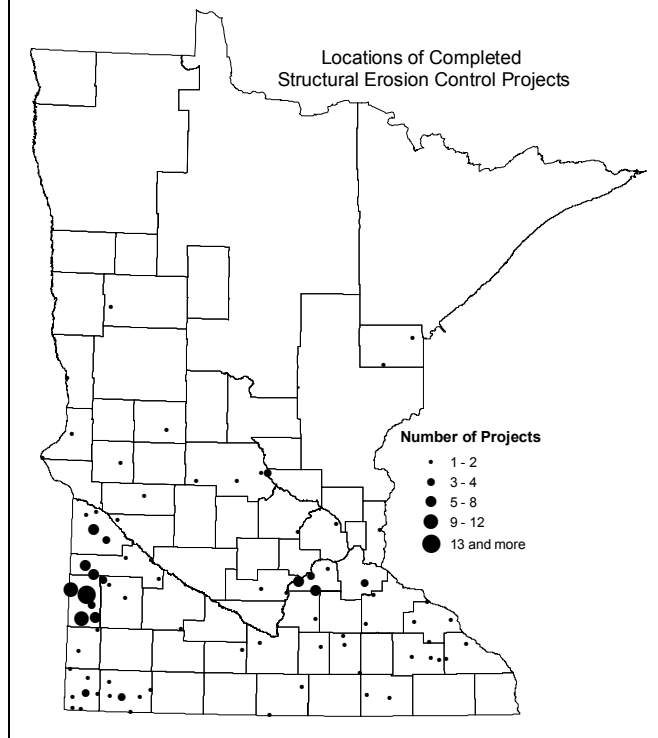
*Animal Unit (AU)

A standard of measurement of the quantity of manure produced, based on size and manure production, use in the permitting, registration, and environmental review process. One animal unit is generally equivalent to a 1,000

2. Structural Erosion Control Practices

Figure 6. Location and Number of Structural Erosion Control Projects as of 6/30/2003.

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



The number of Structural Erosion Control practices that have been funded is 176, Figure 6. The average total cost for this category of projects was \$16,100, with \$7,600 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.

3. Conservation Tillage Practices

The category of conservation tillage practices has been one of the program's most effective, with 1,274 practices implemented, Figure 7. 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 966 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 \$20,100, though the average loan for tillage equipment is \$14,500. The equipment funded through this program is being used on approximately 1,092,000 acres.

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 Conservation Tillage Equipment practices, as of 6/30/2003.

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

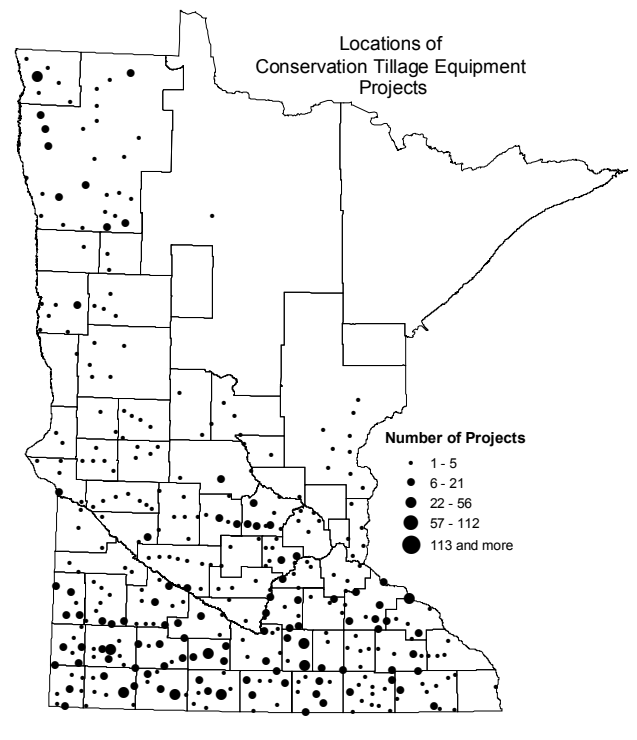
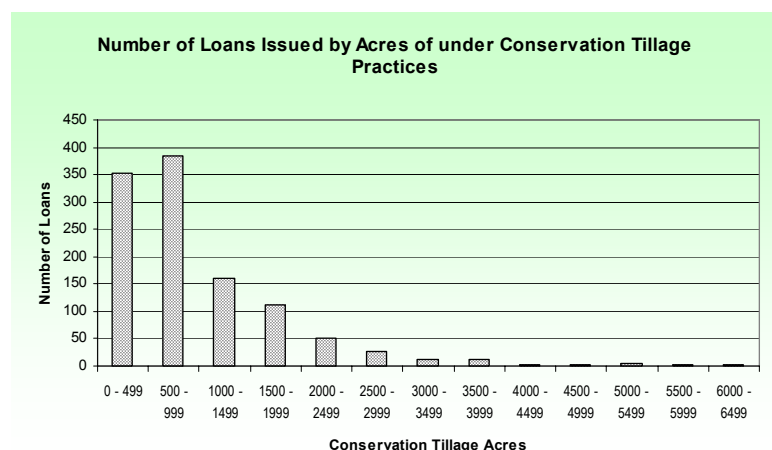


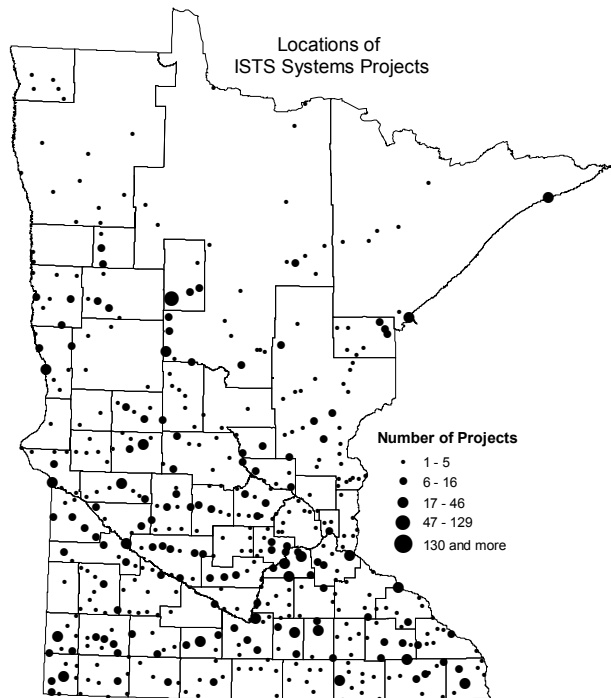
Figure 8. Number and acreage of farms receiving AgBMP loans for conservation tillage practices.



4. Individual Sewage Treatment Systems

Figure 9. Location of repaired ISTS systems financed with AgBMP funds, as of 6/30/2003.

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



To date over 2,231 ISTS projects have been funded throughout this program, Figure 9. The average total cost of these projects has been \$5,600. The original primary purpose of the AgBMP Loan Program was to encourage implementation of practices that mitigate agricultural impacts on water quality. However, replacing failing farm and rural septic systems constitutes 20% of the funds disbursed. Although not a traditional agricultural best management practice, ground and surface water contamination from non-functioning septic systems has caused significant problems throughout the state. Since the AgBMP Loan Program addresses nonpoint source issues in nearly all counties of the state, it has proven 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 \$4,529¹ for the conventional at-grade trench systems, while the more expensive pressurized mound systems have averaged \$6427².

Approximately 45% of the on-site sewage systems that are installed are on farm sites

while the remaining sites are either non-farm landowners or not reported, Table 7.

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, 1,496 projects costing \$17.8 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. New contracts will establish a revolving account for the participating county at the state level.

As of January 1 of this year, the counties anticipated use of approximately \$10.5 million for 2nd generation loans from all local revolving accounts throughout the state. Their 2003 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.

Table 10. Proposed use of local revolving funds for 2003.

Category	Proposed Number of Loans with Revolving Funds	Proposed Total Amount of Loans to be made with Revolving Funds
Ag Waste Management	116	\$3,713,553
Structural Erosion Control	99	\$693,294
Conservation Tillage	129	\$3,228,432
ISTS	544	\$2,722,010
Other	24	\$120,800
Total Proposed Usage	912	\$10,478,089

A primary assumption of this program is that the total appropriations available will continue to grow until it has reached a total balance such that the outstanding loan repayments will sustain the annual cost of pollution prevention projects of the participating counties. Historically, the existing loans have generated 15% of the outstanding balance as annual repayments. Counties estimated that they could implement an average of \$250,000 in projects per year per county or about \$22 million statewide per year, if they were not limited by staffing, contractors, and other required resources. To generate \$250,000 per county per year, a total capitalization of the full state program would need to be about \$140 million dollars. In 1998, the legislature raised the authorized spending limit of the program to this amount.

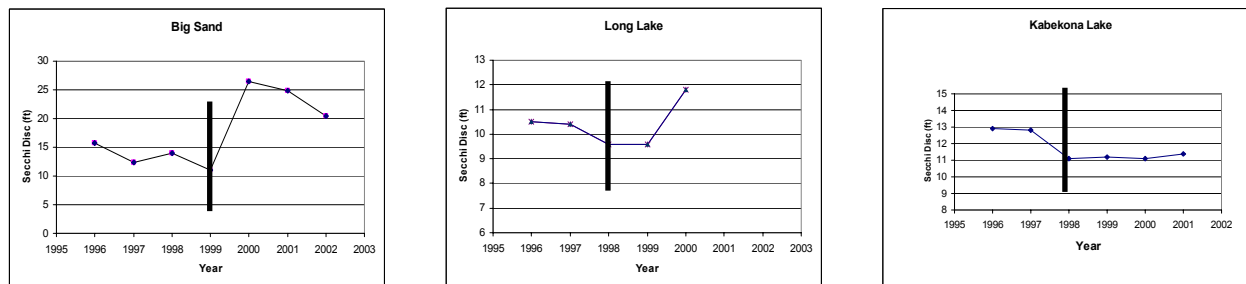
Though \$22 million in new projects per year was identified by counties as their maximum capacity, due to limitations on staffing, engineering, contractors, and current funding, counties have been able to average only \$8.7 million annually. With the legislative changes that simplified the loan approval process and the state's emphasis on bringing feedlots into compliance, the Department expects the annual spending rate to increase to more than \$10 million per year. To generate approximately \$10 million in funds each year, based on the current repayment rate, a total capitalization amount needed for the state program is \$65 million. To meet this expected growth, the program would require additional appropriations totaling \$16 million over the next several years. However, once appropriated, the program could finance approximately \$10 million in pollution prevention measures annually through the revolving loan accounts.

VII. EXAMPLE OF PROJECT BENEFITS

A. Hubbard County

Hubbard County has been coordinating the efforts of lakeshore ISTS inspections with financial assistance, including AgBMP loans, to assist landowners repair or replace non-complying septic systems. The county has completed more than 6,000 systems, with over 100 funded through this program. Three lakes that they have emphasized are Long Lake, Kabekona Lake, and Big Sand Lake. These lakes have had 445, 215, and 110 on-site septic systems replaced, respectively. As the systems have been installed, there has been a concurrent improvement in water quality as measured by secchi disc transparency.

Figure 10. Secchi Disc Transparency from Long Lake, Kabekona Lake and Big Sand Lake, Hubbard County.



¹Secchi disc transparency is a simple parameter of water quality that measures the depth that one can see into water.

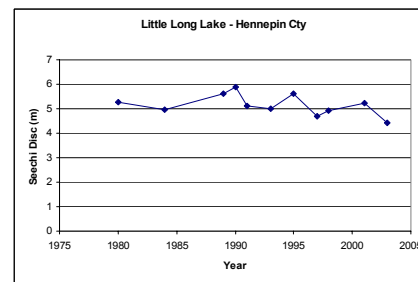
B. Hennepin County

Hennepin County made an AgBMP Loan (\$27,113) for septic system upgrade to Camp Kingwood United Methodist Church. This camp sits on the shores of Little Long Lake in the City of Minnetrista. Little Long Lake has the highest (best) water quality of any lake in Hennepin County. There have been many projects, in addition to the AgBMP loan project, attempting to maintain this unique urban resource:

- Metro Greenway - DNR easement (66 acres)
- Ditch stabilization – Hennepin County and city staff
- Purple Loosestrife biological control releases - Hennepin County and DNR
- Raingarden project - DNR, Hennepin County and SWCD Metro Assoc.
- Shoreland erosion control - State cost share thru BWSR, SWCD, Hennepin County, and landowner
- Included within the City of Minnetrista's "Green Plan"
- DNR Restoration Grant – Buckthorn & other invasive species control
- Metro Wildlife Corridor – Multiple agencies

The goal of all these projects is not so much to improve water quality but rather to protect the high water quality of this lake.

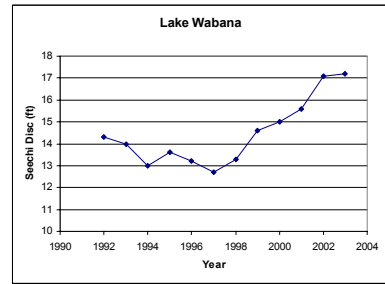
Figure 1. Secchi Disc Transparency of Little Long Lake, Hennepin County.



C. Itasca County

Lake Wabana, in Itasca County had been experiencing a long term decline in water quality, most noticeable to the lake users was changes in secchi disc. The lake association requested that the county survey all shoreline septic systems and take whatever steps might be necessary to bring failing septic systems into compliance. In recent years 20 systems have been replaced. Concurrent with those replacements, secchi disc transparency has been showing a reversal of the decline, improving to a summer time average of more than 17 feet.

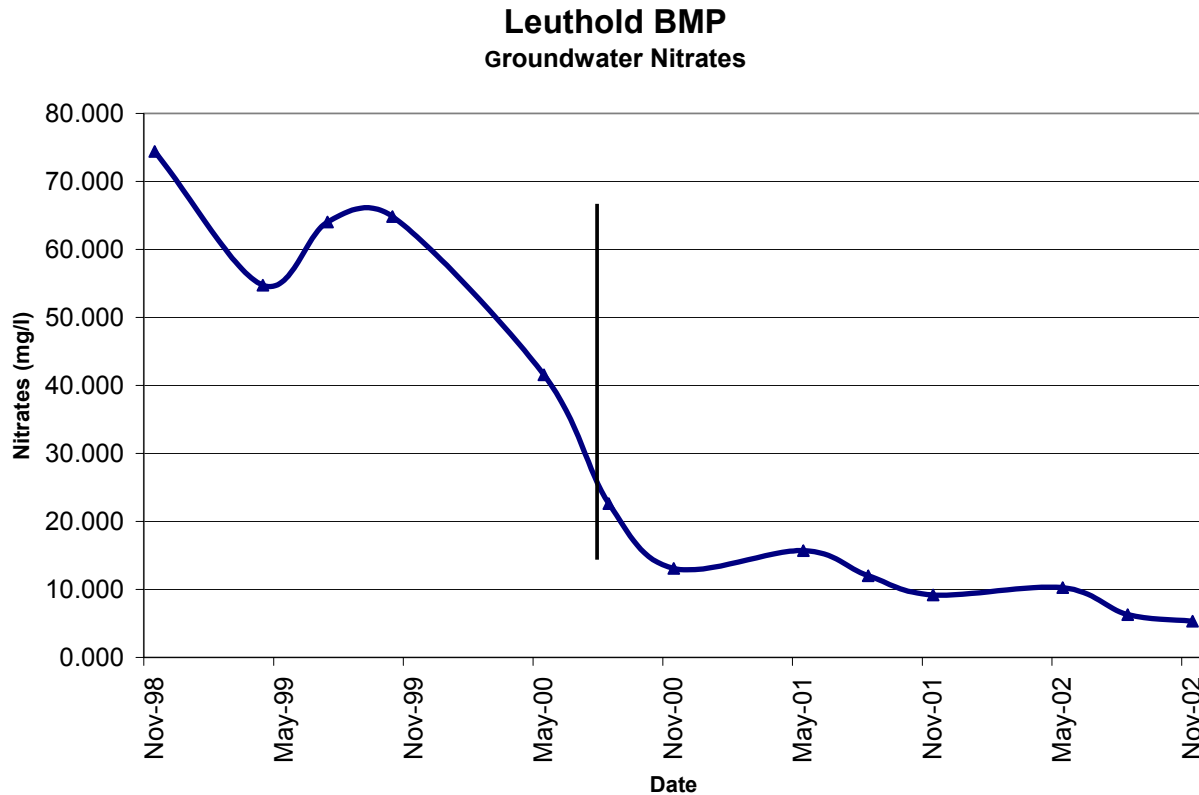
Figure 2. Secchi Disc Transparency on Lake Wabana, Itasca County.



D. Rock County

Rock SWCD assisted the Leuthold farm by providing an AgBMP Loan to upgrade their 500 animal unit beef production facility. Improvements include replacement of the storage basin and runoff control systems. During installation and after completion of these repairs there were marked reductions in nitrate concentrations in the farms potable water supply. The nitrate concentration in the water supply now complies with health standards.

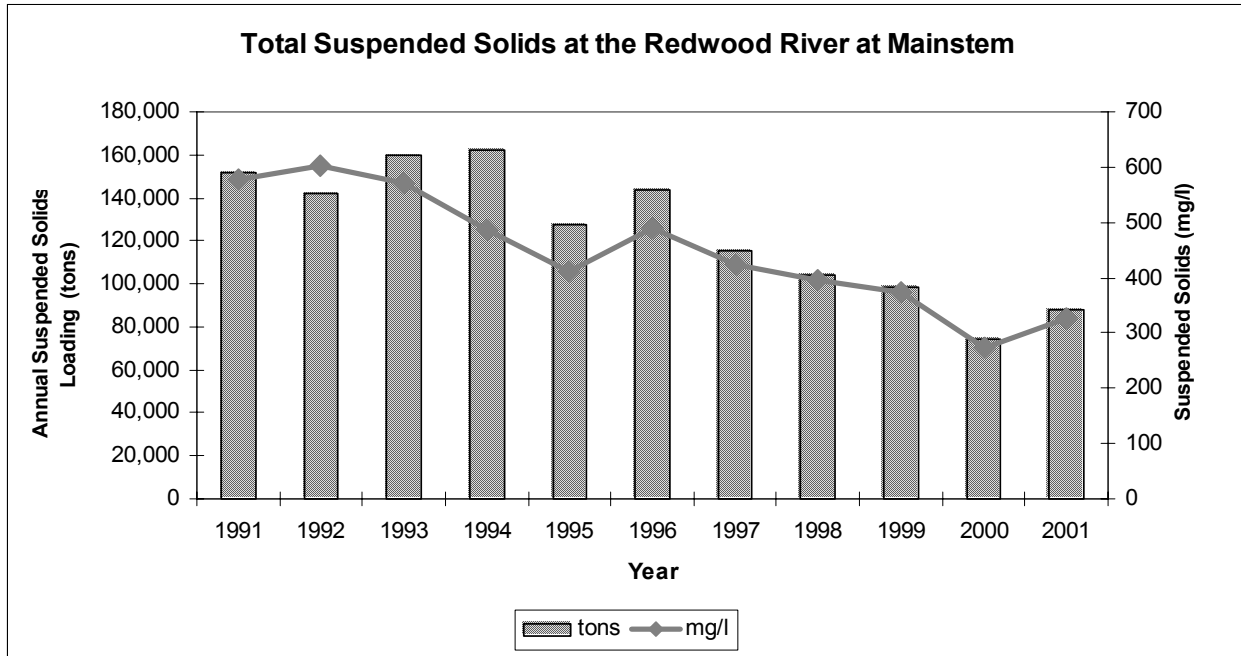
Figure 13. Changes in groundwater nitrates at Leuthold farm, Rock County.



E. Redwood River Watershed

There have been more than 400 projects, funded by multiple funding sources, including the AgBMP Loan Program, completed in the six county Redwood River Watershed area. Several key parameters have shown significant improvements, including annual solids loading and total suspended solids, Figure 14.

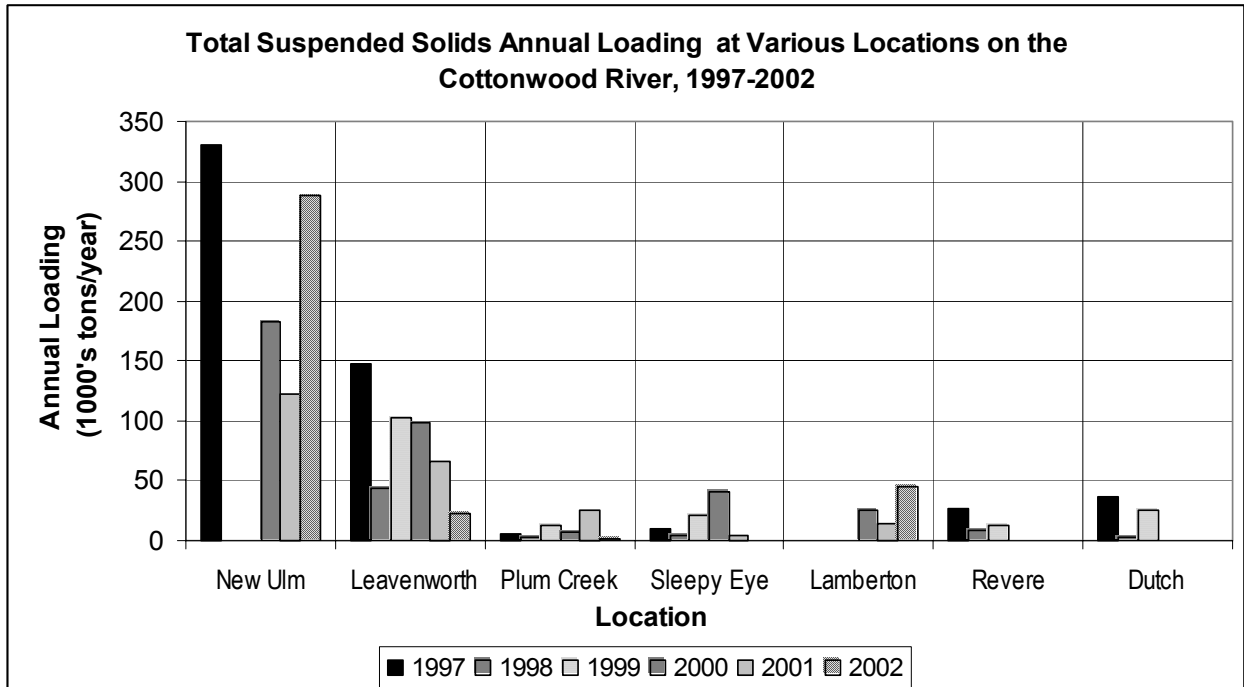
Figure 14. Total year tons and mg/l total suspended solids contribution to the Redwood River at the mainstem.



F. Cottonwood River Watershed

There have been over 365 projects implemented throughout the five county Cottonwood River Watershed from multiple funding sources since 1997. Though many other factors affect water quality, the river and its tributaries have shown significant improvements as measured by many parameters. A summary of the change in total suspended solids loading is shown in Figure 15.

Figure 15. Total Suspended Solids Annual Loading in the Cottonwood River Watershed 1997-2002.



VIII. FEEDLOT FINANCIAL NEEDS ASSESSMENT REPORT

The AgBMP Loan Program was responsible for preparation of the Feedlot Financial Needs Assessment Report submitted to the 2001 Legislature. The complete report is available through the MDA or from its Internet website at: <http://www.mda.state.mn.us/feedlots/assessment.pdf>.

Since that time, the MPCA has completed their statewide feedlot registration and the AgBMP Loan Program has collected additional information about feedlot upgrades. This assessment includes data available as of 5/19/03 from the MPCA and AgBMP records as of 6/30/03. However, the data remains subject to change as the reliability of the data improves.

Based on the 2002 registration data and the 2003 AgBMP funding application, the following data characterized the current situation:

- 29,000 facilities submitted registration forms, though not all were required to report
- 23,000 livestock operations have one or more species on site and must comply with feedlot rules
- 42,000 single species enterprises in Minnesota (Table 11)
- 7,800 of the livestock enterprises would require upgrades (Table 12) under the rules
- 6,500 enterprises would be eligible to use the open lot agreement provisions to come into full compliance by 2010.
- 1,400 livestock enterprises would require upgrades immediately

Table 11. Total number of enterprises by size and species produced in Minnesota, as reported in the 2002 MPCA Registration.

Species Produced	<10 AU	10-49 AU	50-99	100-299 AU	300-499 AU	500-999 AU	>1000 AU	TOTAL
	Number of Feedlot Operations by Size and Species							
Hogs	1,462	1,483	1,451	2,286	662	768	458	8,570
Dairy	1,016	1,812	2,697	3,781	374	268	187	10,135
Cattle	1,691	6,819	3,588	3,279	470	288	59	16,194
Poultry	1,338	59	34	147	107	144	194	2,023
Sheep	3,697	1,281	211	108	25	13	10	5,345
TOTAL	9,204	11,454	7,981	9,601	1,638	1,481	908	42,267

Table 12. Number of enterprises that will require improvements over the next 10 years.

Species Produced	10-49 AU	50-99 AU	100-299 AU	300-499 AU	500-999 AU	>1000 AU	TOTAL
	Number of Sites that would not comply with rules						
Hogs	107	574	656	304	107	8	1,756
Dairy	181	583	1,272	98	16	8	2,158
Cattle	1,000	997	870	394	221	33	3,515
Poultry	39	12	52	38	51	68	260
Sheep	59	37	19	4	2	2	123
TOTAL	1,386	2,203	2,869	838	397	119	7,812

- The total cost for physical construction of structural practices required to meet the 7020 rule is estimated at approximately \$273 million, based on the available information. About \$268 million would be eligible under the AgBMP Loan Program.
- The cost of designing and engineering the practices has averaged about 15% of the construction costs, or about \$41 million.
- The rules require manure management plans for enterprises under specific circumstances. The estimated cost to develop and maintain these plans through 2010 is \$ 59 million.
- The local government units estimated that 13,000 enterprises need to improve or update their manure application equipment. The total cost for improved manure application equipment would be \$282 million.

The estimated total cost to the farmer for implementing the 7020 rule is about \$654 million, Table 13.

Table 13. Summary of costs estimated by this study for implementation of 7020 rule over the next 10 years.

	Estimated Costs
Construction of Structural Upgrades	\$272,800,000
Engineering Assistance (15% construction costs)	\$41,000,000
Manure Management Planning and Updates	\$58,600,000
Manure Handling and Application Equipment Costs	\$281,500,000
TOTAL COST FOR 7020 RULE IMPLEMENTATION	\$654,000,000

IX. OTHER FINANCIAL NEEDS INFORMATION

The AgBMP Loan Program has been collecting voluntary information about overall environmental needs of the participation 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 2003 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. 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 14,114 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 \$230 million would be needed to implement the anticipated structural practices.

B. Conservation Tillage Equipment

The counties reported that about 7.3 million acres of farmland is currently under some form of conservation tillage, and estimated an additional 6.4 million acres should have conservation tillage practices implemented. Assuming the estimated acreage is correct, the average size farm employing conservation tillage is about 966 acres (the average acreage under conservation tillage reported when applying for an AgBMP loan) and the average cost of conservation tillage equipment is \$20,100; the total cost for implementing some form of conservation tillage on these targeted lands would be \$130 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.

C. On-site Sewer Systems - ISTS

There are approximately 470,000 homes with on-site septic systems in Minnesota, based on the data provided in the annual applications. The counties reported that over 200,000 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 \$5,600.

The counties also reported issuing 6,554 permits for repair or upgrade of existing systems and 11,323 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 \$1.1 billion.

D. 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 \$2.13 billion, Table 14.

Table 14. Estimated total costs to remediate agricultural nonpoint source pollution.

Category	Estimated Costs
Ag Waste Management	\$654,000,000
Structural Erosion Control	\$230,000,000
Conservation Tillage Equipment	\$130,000,000
ISTS – Septic Systems	\$1,120,000,000
TOTAL COST Nonpoint Source Pollution	\$2,134,000,000

APPENDIX A. TOTAL ALLOCATIONS TO COUNTIES THROUGH THE AGBMP LOAN PROGRAM

Table 15. Summary of allocations to local government units in the AgBMP Loan Program.

Local Government Unit	Previous Award	Current Award	Total Award
Aitkin County	\$ 196,950.00	\$ 50,000.00	\$ 246,950.00
Anoka SWCD	\$ 0.00	\$ 0.00	\$ 0.00
Becker SWCD	\$ 193,612.44	\$ 192,000.00	\$ 385,612.44
Benton SWCD	\$ 284,010.00	\$ 120,000.00	\$ 404,010.00
Big Stone County	\$ 338,566.41	\$ 79,000.00	\$ 417,566.41
Blue Earth SWCD	\$ 458,479.15	\$ 138,000.00	\$ 596,479.15
Brown County	\$ 473,856.32	\$ 60,000.00	\$ 533,856.32
Carlton SWCD	\$ 346,472.98	\$ 26,000.00	\$ 372,472.98
Carver SWCD	\$ 1,198,092.91	\$ 385,000.00	\$ 1,583,092.91
CCLNS Joint Powers Board #3	\$ 107,051.75	\$ 62,000.00	\$ 169,051.75
Chippewa County	\$ 435,002.04	\$ 75,000.00	\$ 510,002.04
Clay SWCD	\$ 196,030.12	\$ 99,000.00	\$ 295,030.12
Cook County	\$ 136,508.70	\$ 60,000.00	\$ 196,508.70
Cottonwood SWCD	\$ 972,812.45	\$ 106,000.00	\$ 1,078,812.45
Dakota SWCD	\$ 859,382.84	\$ 22,000.00	\$ 881,382.84
Dodge County	\$ 634,574.44	\$ 214,000.00	\$ 848,574.44
Douglas SWCD	\$ 291,525.61	\$ 159,000.00	\$ 450,525.61
Faribault County	\$ 624,382.84	\$ 60,000.00	\$ 684,382.84
Fillmore County	\$ 930,034.47	\$ 386,000.00	\$ 1,316,034.47
Freeborn County	\$ 784,035.85	\$ 11,000.00	\$ 795,035.85
Goodhue County	\$ 1,337,867.60	\$ 219,000.00	\$ 1,556,867.60
Grant SWCD	\$ 0.00	\$ 0.00	\$ 0.00
Hennepin County	\$ 159,300.00	\$ 0.00	\$ 159,300.00
Houston County	\$ 206,388.21	\$ 58,000.00	\$ 264,388.21
Hubbard County	\$ 506,898.73	\$ 75,000.00	\$ 581,898.73
Impack-6 Joint Powers Board	\$ 1,234,567.10	\$ 237,000.00	\$ 1,471,567.10
Itasca County	\$ 115,033.35	\$ 83,966.60	\$ 198,999.95
Jackson County	\$ 1,053,163.60	\$ 164,000.00	\$ 1,217,163.60
Kandiyohi SWCD	\$ 374,425.50	\$ 125,000.00	\$ 499,425.50
Kittson County	\$ 668,471.13	\$ 69,000.00	\$ 737,471.13
Lac Qui Parle SWCD	\$ 280,907.38	\$ 110,000.00	\$ 390,907.38
Le Sueur SWCD	\$ 508,072.18	\$ 70,000.00	\$ 578,072.18
Lincoln County	\$ 894,444.64	\$ 51,000.00	\$ 945,444.64
Local Government Unit	\$ 0.00	\$ 0.00	\$ 0.00
Lyon SWCD	\$ 577,749.42	\$ 197,000.00	\$ 774,749.42
Mahnomen SWCD	\$ 121,399.72	\$ 99,000.00	\$ 220,399.72
Martin County	\$ 838,827.46	\$ 143,000.00	\$ 981,827.46
McLeod SWCD	\$ 145,092.00	\$ 67,000.00	\$ 212,092.00
Meeker SWCD	\$ 313,436.54	\$ 55,000.00	\$ 368,436.54
Morrison SWCD	\$ 338,801.00	\$ 106,000.00	\$ 444,801.00
Mower SWCD	\$ 1,204,690.23	\$ 210,000.00	\$ 1,414,690.23
Murray County	\$ 1,119,848.85	\$ 187,000.00	\$ 1,306,848.85
Nicollet County	\$ 192,998.31	\$ 51,000.00	\$ 243,998.31
Nobles County	\$ 1,276,326.73	\$ 152,000.00	\$ 1,428,326.73
Norman SWCD	\$ 0.00	\$ 0.00	\$ 0.00
North Central Minnesota Joint Powers Board	\$ 339,420.09	\$ 420,000.00	\$ 759,420.09
Northwestern Minnesota Joint Powers Board	\$ 1,982,408.05	\$ 445,000.00	\$ 2,427,408.05
Olmsted SWCD	\$ 822,922.94	\$ 68,000.00	\$ 890,922.94
Otter Tail SWCD	\$ 0.00	\$ 186,000.00	\$ 186,000.00
Pennington County	\$ 99,763.75	\$ 0.00	\$ 99,763.75
Pipestone County	\$ 686,573.74	\$ 126,000.00	\$ 812,573.74
Pope County	\$ 316,133.50	\$ 68,000.00	\$ 384,133.50
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	\$ 630,681.63	\$ 48,000.00	\$ 678,681.63
Rice SWCD	\$ 643,106.37	\$ 134,000.00	\$ 777,106.37
Rock SWCD	\$ 1,653,899.50	\$ 9,000.00	\$ 1,662,899.50
Saint Louis County	\$ 424,900.00	\$ 0.00	\$ 424,900.00
Scott County	\$ 843,650.75	\$ 26,000.00	\$ 869,650.75
Sherburne County	\$ 154,615.81	\$ 73,000.00	\$ 227,615.81
Sibley County	\$ 519,189.70	\$ 11,000.00	\$ 530,189.70
Stearns SWCD	\$ 472,815.45	\$ 134,000.00	\$ 606,815.45
Steele County	\$ 708,251.37	\$ 244,000.00	\$ 952,251.37
Stevens County	\$ 124,179.65	\$ 83,000.00	\$ 207,179.65

Swift SWCD	\$ 375,968.56	\$ 33,000.00	\$ 408,968.56
Todd County	\$ 357,335.26	\$ 415,000.00	\$ 772,335.26
Traverse SWCD	\$ 308,931.38	\$ 130,000.00	\$ 438,931.38
Wabasha SWCD	\$ 1,031,253.72	\$ 427,000.00	\$ 1,458,253.72
Wadena County	\$ 0.00	\$ 0.00	\$ 0.00
Waseca County	\$ 1,514,772.87	\$ 231,000.00	\$ 1,745,772.87
Washington SWCD	\$ 205,869.00	\$ 23,000.00	\$ 228,869.00
Watonwan County	\$ 1,002,707.12	\$ 225,000.00	\$ 1,227,707.12
West Central Minnesota Joint Powers Board	\$ 1,113,471.41	\$ 0.00	\$ 1,113,471.41
Wilkin County	\$ 217,422.66	\$ 47,000.00	\$ 264,422.66
Winona SWCD	\$ 536,161.73	\$ 164,000.00	\$ 700,161.73
Wright SWCD	\$ 479,350.78	\$ 194,000.00	\$ 673,350.78
Yellow Medicine County	\$ 383,025.64	\$ 8,000.00	\$ 391,025.64

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, STACKING
 SLABS, RETAINIG
 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
 VANDALE 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 DISK 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 DISK 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 5000 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: The local bank that will repay the MDA the funds the MDA provided for eligible practices and will service loans approved by local government unit.

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.**

	Reported Last Year	Currently
1. Estimated number of households using ISTS in your jurisdiction	2,350	
2. Estimated number of failing ISTS systems in your jurisdiction	800	
3. Number of ISTS permits issued in the last 12 months for FIXING failing systems	38	
4. Number of ISTS permits issued in the last 12 months for NEW construction	22	
5. Total number of feedlots in your jurisdiction	447	
Number of Feedlots, by Size of Operation in Animal Units:		
10-49 AU: [32]	50-99 AU: [68]	100-300 AU: [198]
		300-499 AU: [72]
		500-999 AU: [63]
		>1000 AU: [14]
6. Total number of feedlots that should be UPGRADED in your area	136	
7. Number of feedlots that will fall under OPEN LOT agreement in your area		
8. Estimated average cost for the <u>Interim Measures</u> (2005 corrections) required under OPEN LOT agreement		
9. Estimated average total cost for <u>Final Measures</u> (2010 full compliance) of feedlots under OPEN LOT agreement including the Interim measures		
10. Number of feedlots where their manure application method should be UPGRADED	250	
11. Number of acres of tilled farm land in your jurisdiction	366,000	
12. Number of acres of tilled farm land that currently uses some form of conservation tillage	130,000	
13. Number of acres of tilled farm land that should use conservation tillage but does not	200,000	
14. Number of Structural Erosion Control projects that you know of that should be done	110	