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Agricultural Best Management Practices Loan Program

State Revolving Fund Status Report

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This report is available on the Internet at:

<http://www.mda.state.mn.us/agbmp/statusreport.pdf>

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 Local Comprehensive Water Plan. The program provides zero interest loans to local governments, who in turn provide low interest loans to farmers, agriculture supply businesses and rural landowners for the implementation of agricultural and other best management practices that are a priority in the area's adopted water plan.

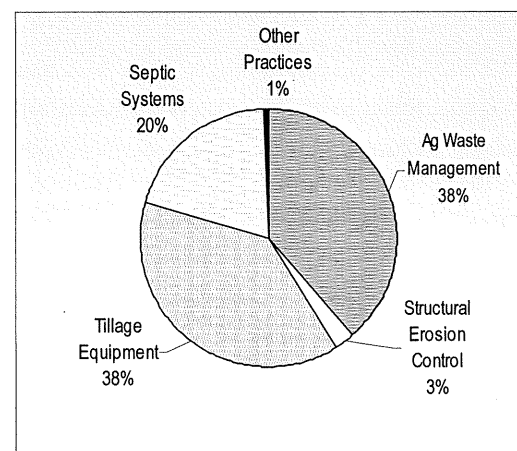
Individual counties or Soil and Water Conservation Districts and Joint Power Organizations (JPOs) representing multiple counties may apply yearly for AgBMP loan funds. In their application they describe:

- 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 AgBMP program has received requests from local governments for \$137.5 million since 1995. The program has been appropriated \$47.0 million. These funds have been allocated to 82 of the state's 87 counties. The AgBMP Program has disbursed over \$33.5 million dollars to date (funds are not disbursed until expenses are actually incurred). Including 1st and 2nd generation loans, these funds have financed 3,663 projects to date, with total loans of \$40.8 million. The total value for all completed projects is estimated to be \$58.3 million. The figure below shows a summary of the amount of loans by practice category.

- **782 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.
- **142 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.
- **1167 Conservation Tillage** practices have been implemented to date, funding various types of cultivation or seeding implements that leave crop residues covering 15% - 30% of the ground after seeding.
- **1552 On-site Sewage Treatment Systems** on farms and rural properties have been repaired or replaced through this program.
- **20 Other Projects**, including well sealing, chemical and petroleum storage containment structures, and chemical spray equipment, have been funded through the program.

Percent by practice category of the loan amount of projects completed with AgBMP loans.



The 2001 Legislature enacted several changes to the structure of this program, simplifying the landowner application process, permitting expansion of the lender network, and reducing administrative requirements.

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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. This assistance is in the form of zero interest loans to local governments or similar zero interest funding instruments to financial institutions. These local government units or lenders then approve or provide 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 non-point 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 non-point source purposes. Approximately \$65.3 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 non-point 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 06/30/2001.

Agency	Amount Appropriated
MDA	42,000,000
MPCA	21,295,697
DTED Small Cities Loan Program	1,250,000
DTED Tourism Loan Program	750,000
Total	\$65,295,697

2. Operating Plans and Agreements

The federal Clean Water State Revolving Fund is implemented by states 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. The original plan was prepared in 1994. State and federal authorities are now approving the 2001-2005 plan. It identifies the nonpoint source problems throughout the state, establishes priorities and potential actions to mitigate impacts. The Local Comprehensive Water Plans (CLWP), 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: Each year the PFA prepares the Intended Use Plan (IUP) 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 through a series of water resource inventories and public meetings and comments. 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

Initial Legislation

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.

2001 Legislative Revisions

A major revision to the program was passed by the 2001 Legislature. The primary objectives of this revision were:

1. To make the program more "Farmer Friendly", increase the local availability of funds and expanding the lending network.
2. To simplify the loan application process and procedure for disbursement of funds.
3. To clarify the repayment schedules and allowed consolidation of multiple past contracts into a single ongoing contract.
4. To expand eligibility of projects to include odor control, air quality problems and other rural environmental quality issues and to place their related funding sources under the AgBMP Loan Program.

The most promising feature of the 2001 legislative amendments was the provision to expand the lending network, permitting more than one designated lender to serve an area. This will allow the landowner to use their usual bank to obtain a loan, simplifying the credit evaluation and collateralization for the loan since the lending institution should be familiar with landowner's financial status. In addition, some areas of the state have had only limited success implementing practices since the location of the designated leader was distant from the actual project site. 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 legislative changes simplified administration of the program. Since 1995, a total of \$42 million have been appropriated from the state's SRF account and \$5 million from the state's general fund to the AgBMP Loan Program. The state funding included \$4 million that could only be used for on-site sewer systems and \$1 million eligible for all water related BMPs as well as odor control and air quality related practices. Under the original legislation, separate contracts would have been required to award funds from different funding sources or with different purposes. However, under the new legislation the priorities and purposes established with the appropriations remain effective, yet the funds are distributed through a single contract with uniform procedures under Minnesota Statutes § 17.117.

The Department expects that the new legislative provisions will be fully implemented by January 2002.

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, all funds were awarded to counties based on a competitive application process. Under the 2001 legislation, the application and allocation process was simplified for counties. Each participating county will receive a one-year allocation, thus eliminating overlapping, multiple allocations. The amount of the annual allocation will be 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 awarded under the competitive application process.

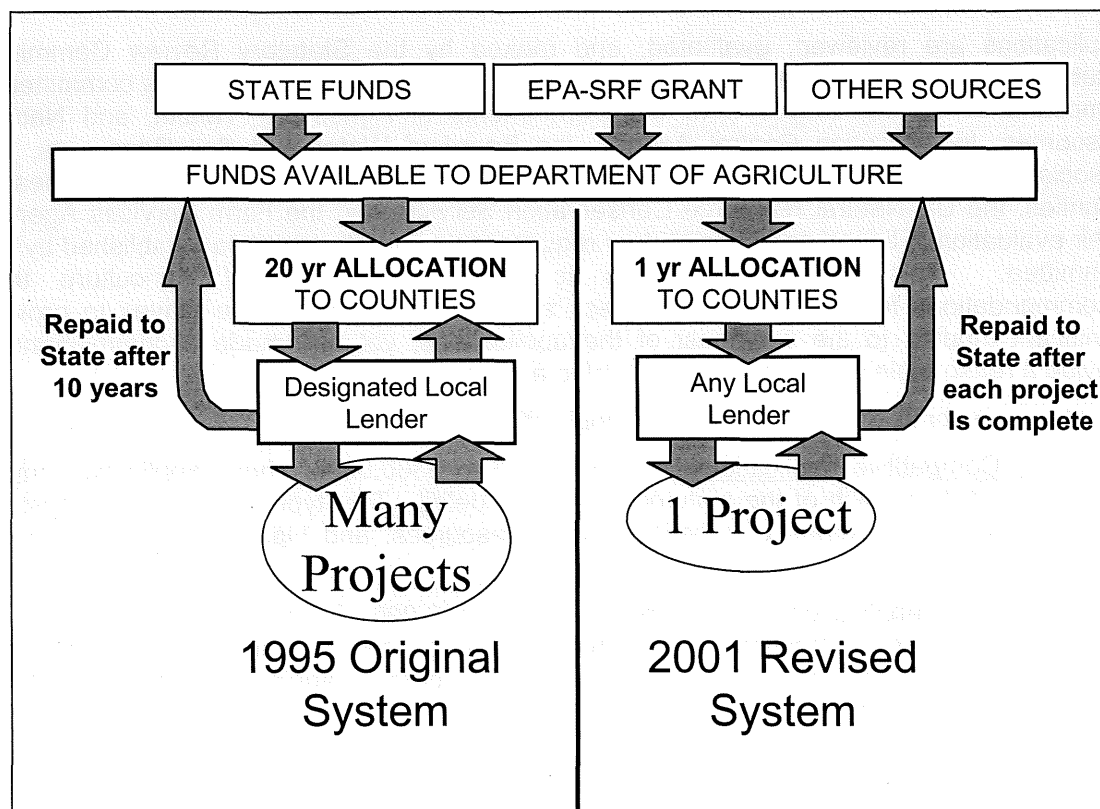
Counties may also request supplemental funds at times other than the application period. These additional funds may be awarded only when a county has used all available funds, has a project ready to proceed and the Department has unallocated funds available.

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 Ag BMP 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 competitively 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 award), the state would continually reallocate the funds through the competitive application process. This system remains in place for existing contracts with counties. However, under new contracts, the repayment to the state must begin within one year of each individual project's completion. 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. Ag BMP 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 a minimum of 30% crop residue cover after seeding. 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.

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 Statutory 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 applications.

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 proposed 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 that develops Local Comprehensive Water Plans (CLWP) 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 priority for these projects would be 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, but has not been completed, the county can carry over the committed funds from one year to the next year.

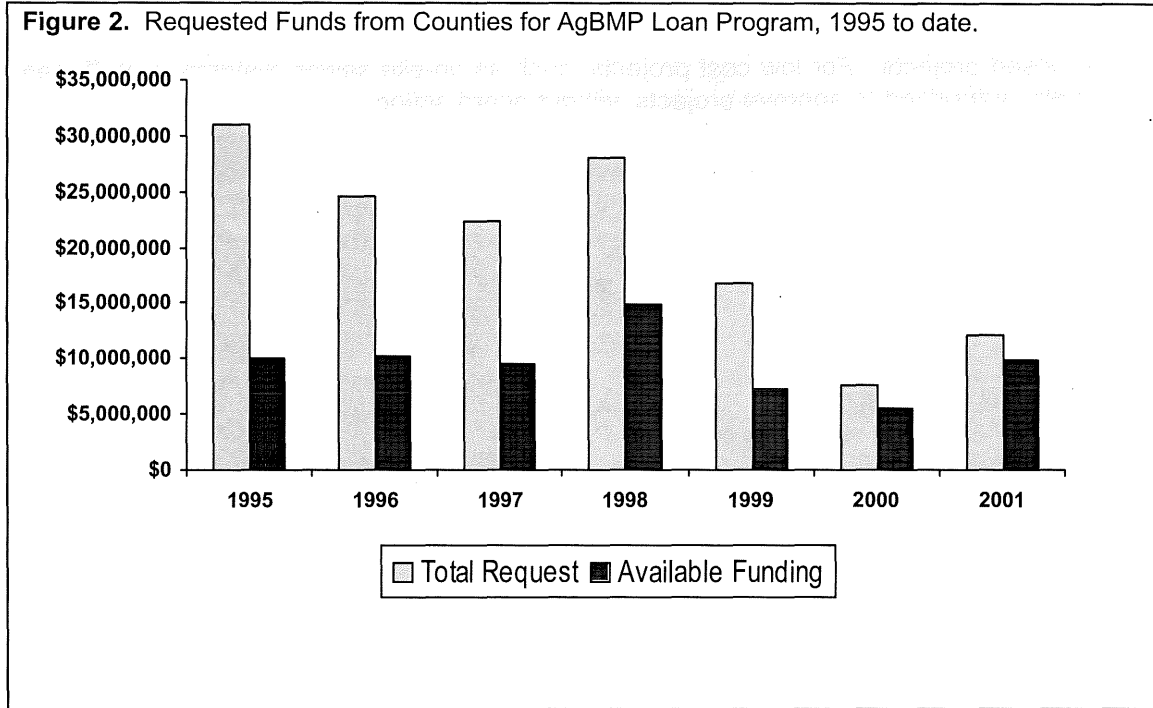
At the local government level, each county establishes a targeting and prioritization system for selecting and implementing the specific practices that carry out agricultural components of the CLWP. In most situations, the counties actively seek the participation of farmers and landowners who will:

- a) Implement specific types of practices to address priority water quality problems anywhere within their jurisdiction.

b) 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, **Figure 2**. MDA has received applications since 1995 totaling over \$137.5 million, though only \$47.0 million has been appropriated. Counties requested \$9.9 million during the most recent application period. The observed decline in the annual request for additional funds is not caused by a reduction in local needs, but rather a better awareness of the available funding, time limits of the program, limitations in local staffing, availability of contractors and engineers, permitting requirements and other factors such as construction weather.

Most counties are submitting applications that emphasize agricultural impacts. Upgrading agricultural waste management systems is usually the largest budget item.

B. Available Funding for Allocation to Counties

Although the legislature sets the spending limits for the AgBMP program, the amount of new funding from the state's SRF account available for distribution each year by AgBMP Loan Programs is determined by the Public Facilities Authority (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.

Table 2 shows the amount appropriated to the AgBMP and Countywide ISTS Loan programs from state and federal sources.

Table 2. Appropriation to the AgBMP Loan Programs

Fiscal Year of Appropriation	Amount Appropriated	Appropriation Citation
• Ag BMP 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
Ag BMP Total	\$43,000,000	
• ISTS Appropriations		
1997 State — to MDA	4,000,000	1997 Session Law Chap. 246 Sec. 6
Total of All Appropriations	\$47,000,000	

C. Allocations, Time Limits and Funding Rescission

Each year awards 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 awards in which the local government did not use the funds within the required time schedule.
- Funds that were previously awarded 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 only the top priority

categories of projects or pro-rate the funding based on the proportions in the original application.

Table 3 summarizes the proposed number and budget for each of the funding categories, based on all allocations and contracts 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 projects proposed or under contract for the AgBMP Loan Program, 06/30/2001.

Category	Proposed Number of Loans	Proposed Budget for each Category	% of Funds Allocated
Ag Waste Management	995	\$20,363,872	43%
Structural Erosion Control	223	\$1,475,386	3%
Conservation Tillage Equipment	1,035	\$13,373,662	28%
Septic Systems	2,266	\$11,409,794	24%
Other Practices	102	\$377,286	1%
Total	4,621	\$47,000,000	

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 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 amount shown as average total cost should be considered a minimum estimate of the total cost because landowners are only required to provide sufficient bills and invoices to document the amount of the loan. For example, 200 agricultural waste systems funded through this program were reviewed during the past year (2000) and was found that their average, verified total cost was approximately \$40,000, substantially more than the estimated \$32,286 amount based on data submitted.) 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.

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	\$32,286	\$19,958	62%
Structural Erosion Control	\$15,293	\$7,296	48%
Conservation Tillage Equipment	\$18,477	\$13,248	72%
Septic Systems ¹	\$5,347	\$4,960	93%
Other Practices	\$6,724	\$5,348	80%
Overall Average	\$15,716	\$10,919	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 Board of Water and Soil Resources (BWSR). The United States Department of Agriculture Natural Resource Conservation Service (USDA NRCS) oversees Federal Cost Share funds. Like the AgBMP Loan Program, local county

Soil and Water Conservation Districts usually administer them. In addition, the State has also provided technical engineering assistance through 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.

Cost-share programs are permitted to finance up to 75% of the total cost of constructed practices with a maximum of \$50,000 per project. (State cost-share grants to feedlots operations are also limited to facilities with less than 500 animal units. AgBMP loans and federal cost-grants are limited to facilities with less than 1000 animal units.) Constructed practices include projects such as manure basins, diversions, filter strips, waterways, terraces, and sedimentation basins. However, when a cost-share grant is awarded, typically, only 50% of the costs are 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 operations 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.

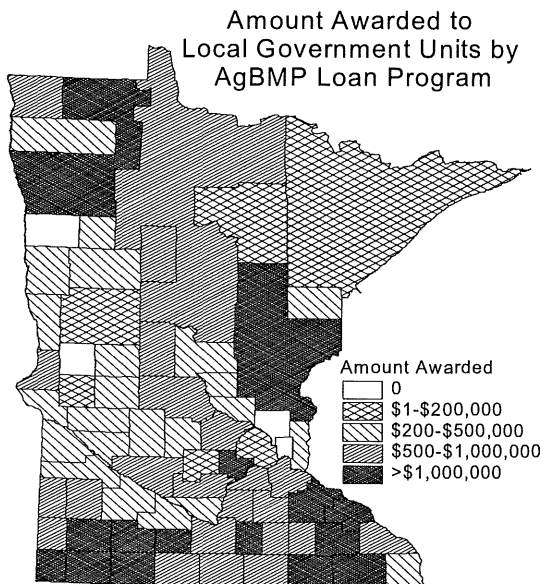
Local county governments coordinate AgBMP loans and cost share funds. These organizations provide the strategic service of evaluating projects, determining eligibility for potential funding sources, establishing priorities and submitting the appropriate applications, proposals and plans to assist the farmer obtain financial assistance while achieving environmental objectives of the Comprehensive Local Water Plan (CLWP). 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 sources.

V. CURRENT STATUS

The values presented in the following descriptions are based on combined disbursement requests received by the MDA Development Section for all funds administered by the AgBMP Loan Program prior to 06/30/2001. This includes the federal SRF funding, state ISTS appropriations and other state funds.

A. All Years Combined

Figure 3. Cumulative amount of AgBMP funds allocated to counties, 1995-2001.



Currently, \$47.0 million (**Table 3**, page 16) is under contract or has been awarded to local governments

To date, 3,663 practices totaling \$40.8 million have been completed through these programs. The program currently disburses an average of \$500,000 monthly. Appendix B shows a summary of the amount disbursed by county through these programs.

Loans are issued through two processes. First time loans (1st generation loans) with new money from the Department financed 3,033 projects to date. The local revolving loan accounts are funding an increasing number of projects each year. There have been 709 projects totaling \$7.3 million that were financed as 2nd generation loans with funds from local revolving accounts, **Table 5** and **Table 6**.

Table 5 shows the total number and amount of loans, including 1st and 2nd generation loans that have been issued by

fiscal year. The number of loans issued in 1996 was low because it was the first year of the program and not all loans that have been issued during 2001 have been reported as of the date of this report. Excluding these two years, the average number of projects complete annually is 712 and the average annual amount is \$7.9 million per typical year.

Table 5. Summary of the number and amount of loans issued by fiscal year for 1st and 2nd generation loans.

Fiscal Year	1 st Generation Revolving Loans ¹	2 nd Generation Loans ¹	Total Number of Loans ¹	Total Loan Amount
1996	280	0	280	\$3,621,631
1997	625	15	638	\$7,177,994
1998	611	99	688	\$8,127,047
1999	624	185	787	\$8,366,180
2000	507	249	736	\$7,979,174
2001	386	161	534	\$5,515,983
TOTAL	3,033	709	3,663	\$40,788,009

¹ Some projects received both 1st and 2nd generation funds so "Total Number of Loans" column is less than the sum of 1st and 2nd Generation loans issued.

Table 6 separates the various loans between the new and local revolving fund sources; 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 06/30/2001.

Category	1 st Generation Loans from New Allocation		2 nd Generation Loans from Revolving Accounts		Total Loans from Either Fund		Total Project Costs
	No.	Amount	No.	Amount	No.	Amount	
Ag Waste Management	711	\$14,128,262	92	\$1,478,940	782	\$15,607,202	\$25,247,747
Structural Erosion Control	119	\$835,494	26	\$200,598	142	\$1,036,092	\$2,171,629
Cons. Tillage Equipment	867	\$11,174,161	338	\$4,285,778	1167	\$15,459,939	\$21,562,819
Septic Systems	1317	\$7,181,737	252	\$1,295,119	1552	\$8,476,855	\$9,072,862
Other Practices	19	\$199,920	1	\$8,000	20	\$207,920	\$269,310
Total	3,033¹	\$33,519,573	709¹	\$7,268,436	3,663¹	\$40,788,009	\$58,324,366

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 3,660 projects have been completed, located in nearly all counties, **Figure 4**. Although there are practices implemented throughout the state, most are in traditional farm areas. The program provided loans to complete 71% of the proposed projects currently under contract, Table 7.

The program permits loans to farmers, agriculture supply business and to rural landowners. From the data collect 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 8** summarizes participation in the program by these categories. Table 9 shows the percentage of all loans by category, based on number and total amount of loans issued.

Figure 4. Location of all AgBMP projects.

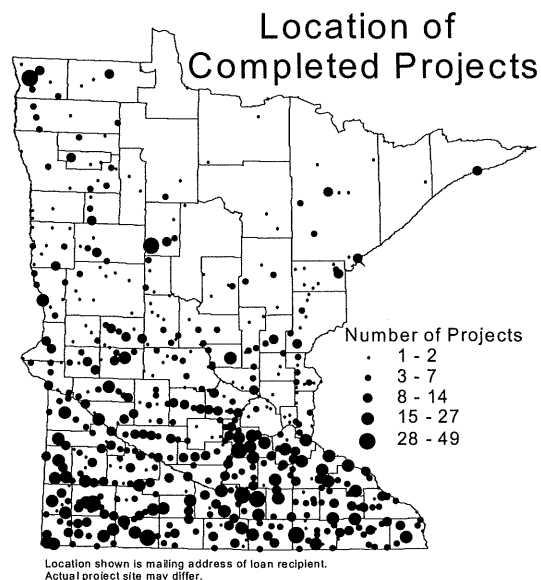


Table 7. Summary of the proposed use of the funds by counties and the amount of disbursement for completed 1st generation projects through 06/30/2001.

Category	Proposed Budget for each Practice Category	Disbursements for Completed 1 st Generation Projects	% Completed
Ag Waste Management	\$20,363,872	\$14,128,262	69%
Structural Erosion Control	\$1,475,386	\$835,494	57%
Cons. Tillage Equipment	\$13,373,662	\$11,174,161	84%
Septic Systems	\$11,409,794	\$7,181,737	63%
Other Practices	\$377,286	\$199,920	53%
Total	\$47,000,000	\$33,519,573	71%

Table 8. Summary of participants the AgBMP Loan Program by farm and non-farm status.

Category	Farm	Non-Farm	Not Reported
Ag Waste Management	782	0	0
Structural Erosion Control	126	12	4
Cons. Tillage Equipment	1167	0	0
Septic Systems	666	651	235
Other Practices	11	2	7
Total	2,752	665	246

Table 9. 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%	38%
Structural Erosion Control	4%	3%
Cons. Tillage Equipment	32%	38%
Septic Systems	42%	20%
Other Practices	1%	1%

B. Completed Projects by Category

1. Animal Waste Management Systems

There were 782 loans issued to complete approximately 1020 agricultural waste management projects throughout the state, **Figure 5**. These loans implemented one or more practices including the replacement or upgrading of manure holding basins, pits, or tanks (320); manure handling, spreading, or incorporation equipment (550); and feedlot improvements such as clean water diversions around feedlots or berms and chutes to contain and direct contaminated runoff into the holding basins (150).

The average size of livestock operations receiving loans is 426 animal units*. The size of farms using this program for agricultural waste projects is summarized in **Figure 6**. Legislation limits loans to facilities with less than 1000 animal units. Most loans are issued to pork and dairy operations, **Table 10**. The average total cost of these projects has been \$32,286.

Figure 5. Location of Agricultural Waste Projects, as of 06/30/2001.

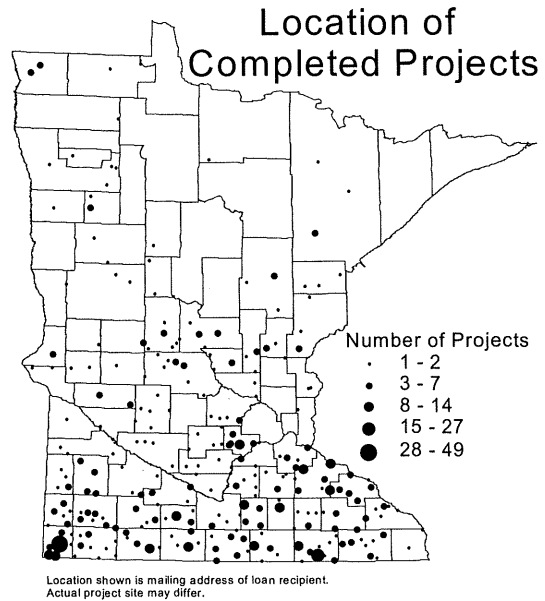


Figure 6. Number and size of farms receiving AgBMP Loans for agricultural waste management.

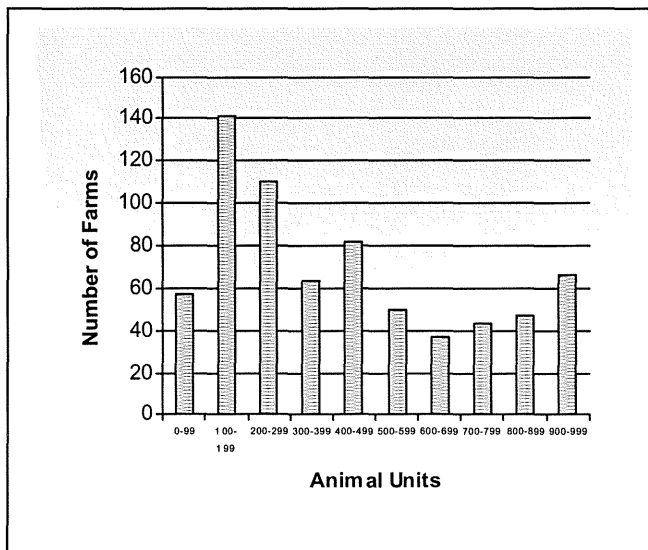


Table 10. Percentage of loans issued to various types of animal production operations.

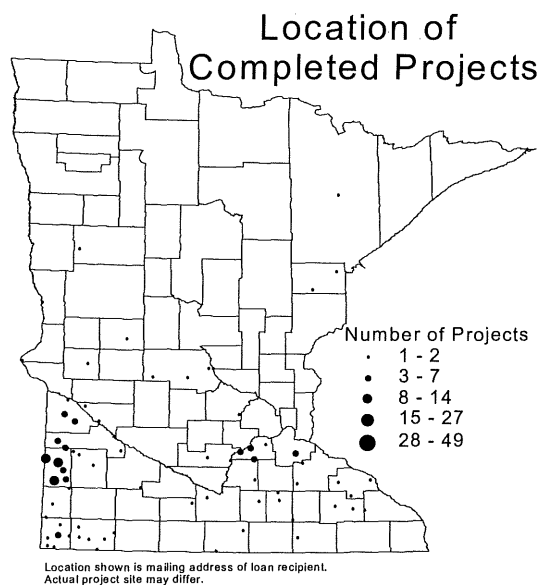
Type of Operation	Percentage
Pork	39%
Dairy	37%
Cattle	20%
Other Production	4%

***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 1000 pound animal.

2. Structural Erosion Control Practices

Figure 7. Location and Number of Structural Erosion Control Projects as of 06/30/2001.

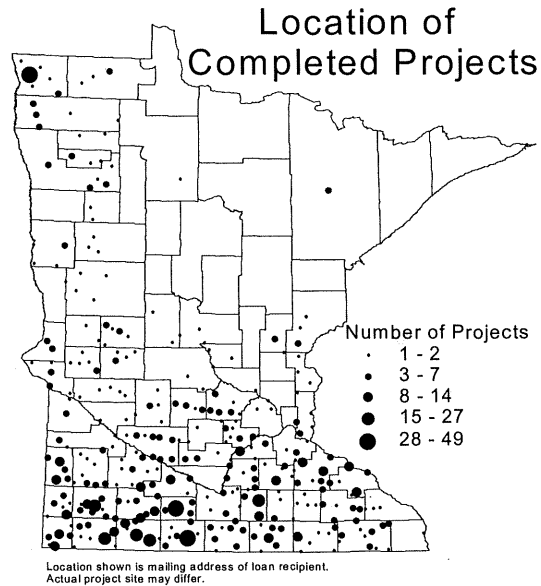


The number of Structural Erosion Control practices that have been funded is 142, **Figure 7.** The actual demand is less than originally requested in the applications due to the limited availability of state and federal cost share dollars. These cost sharing programs can provide up to 75% of the proposed project's total cost; however, the average amount of the total cost not included in the AgBMP loan is 52%. The average total cost for this category of projects was \$15,293 with only \$7,296 as a loan. Without cost share dollars to subsidize the cost of these practices, farmers have been reluctant to implement them. These practices provide little financial return to the farmer and sometimes take land out of production. For example, making a 32-foot wide grassed waterway has direct costs for construction and takes that land out of production. In addition, these structures often require periodic maintenance. Despite these problems, some counties, most notably Lincoln County, have implemented numerous structural practices.

3. Conservation Tillage Practices

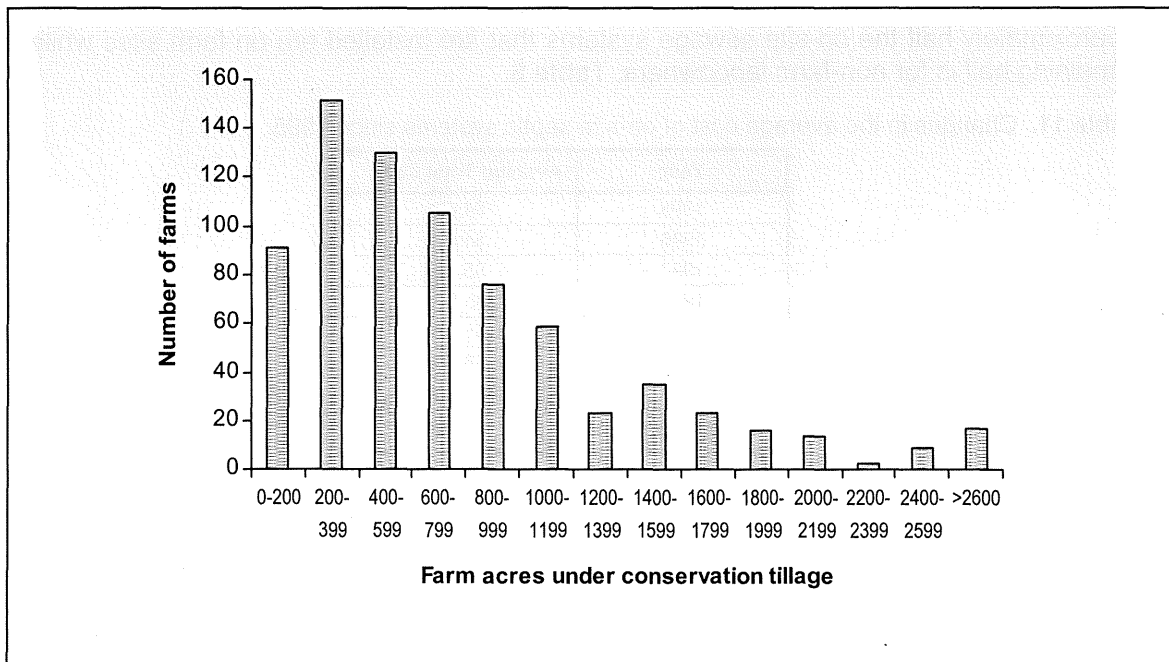
The category of conservation tillage practices has been one of the program's most effective, with 1167 practices implemented, **Figure 8**. Farmers are provided a low interest loan as an incentive to initiate or improve their current tillage practices. The average size farm utilizing an AgBMP loan to purchase conservation tillage equipment is 781 acres. The size of farms utilizing this program for conservation tillage equipment is summarized in **Figure 9**. The equipment funded is generally specialized tillage or planting implements that leaves crop residues covering at least 15% to 30% of the ground after planting. The average total cost for this equipment is \$18,477, though the average loan for tillage equipment is \$13,248. The equipment funded through this program is being used on approximately 910,000 acres.

Figure 8. Location and number of Conservation Tillage Equipment practices, as of 06/30/2001.



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

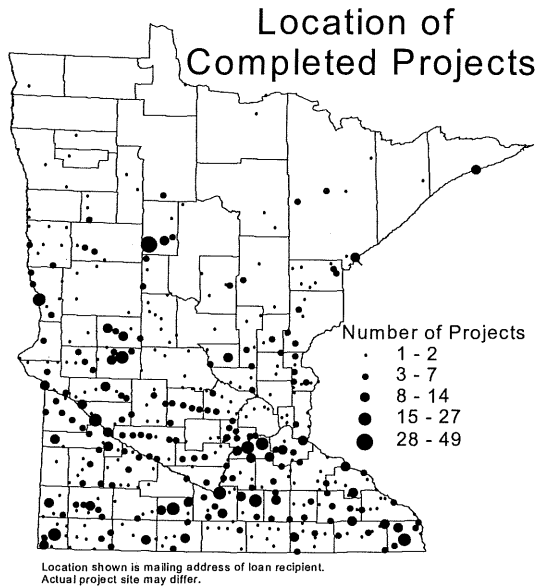
Figure 9. Number and acreage of farms receiving Ag BMP loans for conservation tillage practices.



implement these practices.

4. Individual Sewage Treatment Systems

Figure 10. Location of repaired ISTS systems financed with AgBMP funds, as of 06/30/2001.



To date over 1552 ISTS projects have been funded throughout this program, **Figure 10**. The average total cost of these projects has been \$5,347. The original primary purpose of the AgBMP 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 \$4,780 ¹ for the conventional at-grade trench systems, while the more expensive pressurized mound

systems have averaged \$6,850 ².

The average cost of ISTS has been increasing, rising from \$4,800 in 1995 to \$6,866 in 2001. **Table 11** shows the average total cost for installation of a system by year, regardless of the type installed. (From the available data, we are unable to evaluate changes in system costs by type installed.)

Approximately half the on-site sewage systems that are installed are on farm sites while the remaining half is for non-farm landowners, **Table 8**.

Table 11. Changes in the average cost of on-site septic systems since 1995.

Year	Average Total Cost
1995	\$4,800
1996	\$4,416
1997	\$5,048
1998	\$5,311
1999	\$5,684
2000	\$5,564
2001	\$6,866
Overall Average	\$5,359

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, 709 projects costing \$7.3 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 06/30/2001, there was a combined total of approximately \$5.0 million available for 2nd generation loans in all local revolving accounts throughout the state. Counties proposed the \$ 6.1 million spending plan shown in **Table 12** to use these revolving funds during 2001. 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 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 12. Proposed use of local revolving funds for 2001.

Category	Proposed Number of Loans with Revolving Funds	Proposed Total Amount of Loans to be made with Revolving Funds
Ag Waste Management	95	\$2,271,789
Structural Erosion Control	27	\$135,600
Conservation Tillage	116	\$2,102,750
ISTS	296	\$1,587,474
Other	1	\$5,000
Total Proposed Usage	535	\$6,102,613

A primary assumption of this program is that the total appropriations available will continue to grow until it has reached a balance such that the outstanding loan repayments will sustain the annual cost of pollution prevention efforts 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 program balance of \$145 million dollars would be required. 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 need, the counties with limitations on staffing, engineering, contractors, and current funding have been able to sustain only \$8 million annually. With the legislative changes that will simplify 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 \$10 million in funds each year, based on the current repayment rate, a total program balance of \$67 million is required. To meet this expected growth, the program would require additional appropriations totaling \$20 million over the next several years. However, once available, the program could finance approximately \$10 million in pollution prevention measures annually.

VII. 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>.

Utilizing cost data available from the loan information through this program, farm population data from the Minnesota Agricultural Statistic Service and the USDA 1997 Census of Agriculture, and the knowledge and advice of the BWSR, MPCA, other agencies, and local government units, the financial impact to livestock operations of complying with the Minnesota Rules 7020 (Feedlot Rules) was evaluated.

Based on the available information, the following data characterized the current situation:

- 38,500 farm operations with livestock in Minnesota in 1997 (Table 13)
- 24,300 would be required to register under the 7020 rules
- 18,000 are projected to remain in business in 2010
- 7,100 of the remaining feedlots would require upgrades (Table 14)
- 3,200 feedlots would come into compliance with minor corrections costing less than \$3,000 on average
- 3,900 feedlots would come into compliance with major upgrades costing about \$40,000 on average

Table 13. Total number of operations by size and species produced in Minnesota, including operations with \$1,000 farm related income and at least one animal of the listed species as reported in the 1997 US Census of Agriculture.

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	1,466	1,395	1,198	2,148	592	425	288	7,512
Dairy	444	4,005	3,595	1,478	55	24	2	9,603
Cattle	5,122	8,379	1,638	567	25	12	2	15,745
Poultry	2,560	41	47	152	72	51	58	2,981
Sheep	2,155	430	28	11	3	n/a	n/a	2,627
TOTAL	11,747	14,250	6,506	4,356	747	512	350	38,468

1. Data from special tabulation of 1997 US Census of Agriculture.

Table 14. Number of feedlots 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	40	531	608	281	99	7	1,566
Dairy	150	539	1,178	91	15	7	1,980
Cattle	833	1,178	805	365	205	31	3,417
Poultry	3	15	50	24	17	19	128
Sheep	19	4	2	0	0	0	25
TOTAL	1,045	2,267	2,643	761	336	64	7,116

2. Data calculated from prior tables.

Table 15. Cost for construction of basins and runoff control practices for compliance with state rule 7020 by size of operation.

Size of Operation	10-49 AU	50-99 AU	100-299 AU	300-499 AU	500-999 AU	>1000 AU	TOTAL
Percentage of total cost by size of operation	9%	33%	41%	11%	5%	1%	
Cost	\$15,920,000	\$54,910,000	\$67,210,000	\$17,730,000	\$7,760,000	\$1,470,000	\$165,000,000

The total cost for physical construction of structural practices required to meet the 7020 rule was estimated at approximately \$165 million, **Table 15**. About \$163 million would be cost-share and loan eligible.

- The cost of designing and engineering the practices has averaged about 15% of the construction costs, or about \$25 million.
- The development of manure management plans will cost about \$3 million dollars. An additional \$700,000 per year for the 10-year period will be required to keep these plans up to date, for a total of \$10 million.
- The estimated cost for manure hauling and application equipment is \$38 million. These costs are eligible through loan programs such as the Agricultural Best Management Practices or Clean Water Partnership Loan Programs.

The estimated total cost to the farmer for implementing the 7020 rule is about \$238 million, **Table 16**. The AgBMP Loan Program anticipates that it will provide a significant portion of the livestock producer's financial assistance as low interest loans for eligible practices.

Table 16. Summary of costs estimated by this study for implementation of 7020 rule over the next 10 years.

	Estimated Costs
Construction of Structural Upgrades	\$165,000,000
Engineering Assistance (15% construction costs)	\$25,000,000
Manure Management Planning and Updates	\$10,000,000
Manure Handling and Application Equipment Costs	\$38,000,000
TOTAL COST FOR 7020 RULE IMPLEMENTATION	\$238,000,000

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. Though this data was not collected using valid 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 2000 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 22,000 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 \$336 million would be required to implement the anticipated structural practices.

B. Conservation Tillage Equipment

Counties were asked to estimate the total number of tilled acres in their area. Their estimate, 23.3 million acres is smaller than the 28 million acres of all farmland reported by the Minnesota Agricultural Statistics Service, though it is reasonable since it does not include the untilled acreages in the state. The counties also reported that about 9.3 million acres is currently under some form of conservation tillage, and estimated an additional 9.1 million acres that should have conservation tillage practices implemented. Assuming the estimated acreage is correct, the average size farm employing conservation tillage is about 780 acres and the average cost of conservation tillage equipment is \$18,500; the total cost for implementing some form of conservation tillage on these targeted lands would be \$210 million.

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 over 230,000 do not comply with the state's ISTS rules (Minn. Rules 7080), approximately a 50% non-compliance rate of existing systems.

The counties also reported issuing 8,500 permits for repair or upgrade of existing systems and 7,500 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 \$1.2 billion.

APPENDIX A. TOTAL ALLOCATIONS TO COUNTIES THROUGH AGBMP AND COUNTYWIDE ISTS LOAN PROGRAMS.

Local Government Unit	Total of All Allocations	Total Number of Projects Proposed	Budget by Practice				
			Ag Waste Systems	Structural Erosion Control	Conservation Tillage Equipment	ISTS	Other
Aitkin	\$197,550	4	\$0	\$0	\$0	\$197,550	\$0
Becker	\$334,669	5	\$163,890	\$10,000	\$50,750	\$110,029	\$0
Benton	\$362,705	5	\$277,040	\$0	\$0	\$85,665	\$0
Big Stone	\$387,926	6	\$35,000	\$0	\$190,020	\$162,906	\$0
Blue Earth	\$580,744	9	\$122,466	\$1,500	\$130,490	\$325,913	\$375
Brown	\$453,856	7	\$117,569	\$0	\$232,988	\$53,300	\$50,000
Carlton	\$351,455	6	\$105,992	\$39,081	\$0	\$206,382	\$0
Carver	\$1,282,800	10	\$500,406	\$27,000	\$356,551	\$398,843	\$0
CCLNS JPB# 3	\$200,000	3	\$200,000	\$0	\$0	\$0	\$0
Chippewa	\$459,092	10	\$167,238	\$1,676	\$62,050	\$227,784	\$345
Clay	\$233,478	4	\$31,257	\$8,630	\$125,840	\$67,751	\$0
Cook	\$150,000	3	\$0	\$0	\$0	\$150,000	\$0
Cottonwood	\$1,000,275	10	\$440,129	\$9,162	\$398,058	\$152,926	\$0
Crow Wing	\$79,000	2	\$0	\$0	\$0	\$79,000	\$0
Dakota	\$911,387	7	\$474,309	\$17,657	\$208,656	\$205,764	\$5,000
Dodge	\$748,343	8	\$418,263	\$0	\$217,062	\$103,019	\$10,000
Douglas	\$379,322	7	\$53,592	\$0	\$130,129	\$195,601	\$0
Faribault	\$604,383	7	\$351,311	\$5,000	\$230,725	\$17,347	\$0
Fillmore	\$1,095,119	8	\$711,106	\$10,000	\$277,405	\$96,609	\$0
Freeborn	\$801,806	7	\$411,510	\$5,000	\$280,212	\$95,084	\$10,000
Goodhue	\$1,453,371	9	\$845,490	\$9,441	\$388,848	\$163,992	\$45,601
Hennepin	\$175,300	7	\$0	\$0	\$126,625	\$48,675	\$0
Houston	\$273,388	7	\$103,000	\$5,000	\$25,000	\$140,388	\$0
Hubbard	\$691,518	8	\$200,000	\$5,000	\$25,000	\$389,518	\$72,000
IMPACK - 6	\$1,667,155	8	\$728,682	\$30,000	\$192,422	\$706,052	\$10,000
Itasca	\$179,000	3	\$0	\$0	\$0	\$179,000	\$0
Jackson	\$1,016,535	10	\$334,952	\$0	\$456,252	\$225,331	\$0
Kandiyohi	\$439,228	9	\$245,000	\$0	\$64,778	\$129,450	\$0
Kittson	\$657,471	7	\$231,722	\$0	\$391,249	\$25,500	\$9,000
Lac qui Parle	\$335,078	10	\$0	\$96,707	\$73,776	\$164,595	\$0
Le Sueur	\$512,072	6	\$203,764	\$27,546	\$176,704	\$104,058	\$0
Lincoln	\$934,861	8	\$220,629	\$392,921	\$318,226	\$3,085	\$0
Lyon	\$747,639	7	\$299,397	\$0	\$261,886	\$166,356	\$20,000
Mahnomen	\$206,496	5	\$57,050	\$5,000	\$24,000	\$120,446	\$0
Marshall	\$366,225	6	\$0	\$0	\$366,225	\$0	\$0
Martin	\$912,537	9	\$424,317	\$0	\$409,558	\$78,662	\$0
McLeod	\$185,100	4	\$72,000	\$0	\$32,950	\$80,150	\$0
Meeker	\$336,749	8	\$25,500	\$0	\$157,376	\$153,873	\$0
Morrison	\$444,150	7	\$401,500	\$0	\$16,650	\$26,000	\$0
Mower	\$1,294,579	10	\$783,990	\$2,500	\$337,412	\$170,677	\$0
Murray	\$1,231,426	8	\$738,276	\$0	\$295,458	\$197,693	\$0
Nicollet	\$223,769	3	\$125,473	\$0	\$0	\$98,296	\$0
Nobles	\$1,236,195	9	\$592,284	\$90,276	\$482,422	\$71,213	\$0
North Central JPB	\$636,665	6	\$405,000	\$30,000	\$71,606	\$130,059	\$0
Northwestern JPB	\$1,672,012	6	\$467,731	\$11,000	\$1,059,932	\$63,850	\$69,500
Olmsted	\$1,015,346	7	\$519,620	\$13,700	\$244,360	\$235,666	\$2,000
Otter Tail	\$99,713	2	\$60,713	\$5,000	\$10,000	\$20,000	\$4,000
Pennington	\$99,764	1	\$0	\$0	\$99,764	\$0	\$0
Pipestone	\$680,069	9	\$402,350	\$16,580	\$198,326	\$62,813	\$0
Pope	\$328,134	8	\$71,924	\$0	\$101,432	\$154,778	\$0
Red Lake	\$82,680	1	\$19,400	\$0	\$63,280	\$0	\$0
Redwood	\$429,723	5	\$44,086	\$0	\$228,033	\$157,604	\$0
Renville	\$615,181	10	\$114,674	\$0	\$255,804	\$244,703	\$0
Rice	\$851,768	10	\$367,050	\$1,800	\$298,100	\$174,818	\$10,000
Rock	\$1,642,000	8	\$1,248,707	\$53,803	\$195,990	\$143,500	\$0
St. Louis	\$424,900	4	\$0	\$0	\$0	\$424,900	\$0
Scott	\$884,522	10	\$134,175	\$57,058	\$158,025	\$535,264	\$0
Sherburne	\$244,952	7	\$117,952	\$0	\$0	\$127,000	\$0
Sibley	\$625,613	7	\$182,778	\$19,730	\$120,000	\$203,106	\$0
Stearns	\$670,213	5	\$500,157	\$82,879	\$24,866	\$62,310	\$0
Steele	\$835,570	6	\$415,082	\$42,958	\$141,025	\$236,505	\$0
Stevens	\$124,180	3	\$13,640	\$3,225	\$50,684	\$56,631	\$0
Swift	\$408,719	8	\$195,010	\$9,000	\$68,100	\$130,609	\$6,000
Todd	\$743,648	6	\$439,375	\$34,500	\$41,500	\$216,273	\$12,000
Traverse	\$609,043	5	\$159,208	\$166,050	\$153,000	\$130,785	\$0
Wabasha	\$1,398,008	7	\$928,779	\$35,000	\$242,349	\$179,879	\$12,000
Wadena	\$53,300	2	\$0	\$0	\$0	\$53,300	\$0
Waseca	\$1,560,800	9	\$643,882	\$16,375	\$572,732	\$240,315	\$87,496
Washington	\$319,137	10	\$133,000	\$0	\$126,277	\$59,860	\$0
Watsonwan	\$1,312,872	9	\$564,322	\$4,340	\$540,219	\$203,991	\$0
West Central JPB	\$628,291	3	\$223,479	\$26,506	\$241,257	\$137,049	\$0
Wilkin	\$287,193	5	\$65,000	\$7,447	\$20,000	\$194,746	\$0
Winona	\$676,715	7	\$519,546	\$0	\$25,825	\$131,343	\$0
Wright	\$572,994	7	\$153,517	\$0	\$286,084	\$125,242	\$8,150
Yellow Medicine	\$432,528	7	\$126,677	\$45,940	\$37,400	\$222,511	\$0

APPENDIX B. TOTAL DISBURSEMENTS TO ALL COUNTIES FOR AGBMP AND COUNTYWIDE ISTS LOAN PROGRAMS.

Local Government Unit	Total of All Loans	Total Number of Projects Completed	Ag Waste Systems	Structural Erosion Control	Conservation Tillage Equipment	ISTS	Other
Aitkin	\$94,550	8	\$0	\$0	\$0	\$94,550	\$0
Becker	\$67,401	6	\$48,000	\$0	\$5,750	\$13,651	\$0
Benton	\$313,931	24	\$227,040	\$0	\$14,185	\$72,706	\$0
Big Stone	\$236,524	29	\$0	\$0	\$158,252	\$78,273	\$0
Blue Earth	\$571,540	77	\$120,816	\$1,500	\$189,963	\$258,886	\$375
Brown	\$436,203	30	\$108,569	\$0	\$277,635	\$0	\$50,000
Carlton	\$286,824	32	\$75,992	\$12,455	\$0	\$198,377	\$0
Carver	\$1,030,594	83	\$347,693	\$7,000	\$304,801	\$371,100	\$0
CCLNS JPB# 3	\$71,752	5	\$71,752	\$0	\$0	\$0	\$0
Chippewa	\$389,618	59	\$142,238	\$3,534	\$67,050	\$176,451	\$345
Clay	\$87,653	10	\$0	\$0	\$74,040	\$13,613	\$0
Cook	\$128,917	16	\$0	\$0	\$0	\$128,917	\$0
Cottonwood	\$1,168,307	69	\$443,685	\$9,162	\$662,534	\$52,926	\$0
Dakota	\$971,246	81	\$557,025	\$11,032	\$208,656	\$194,532	\$0
Dodge	\$476,143	28	\$268,263	\$0	\$144,862	\$63,019	\$0
Douglas	\$346,555	46	\$20,607	\$0	\$170,629	\$155,320	\$0
Faribault	\$773,853	50	\$377,552	\$5,000	\$373,954	\$17,347	\$0
Fillmore	\$944,808	71	\$541,224	\$0	\$331,737	\$71,847	\$0
Freeborn	\$845,956	65	\$373,842	\$0	\$422,030	\$50,084	\$0
Goodhue	\$1,308,503	79	\$674,760	\$13,441	\$451,831	\$123,272	\$45,200
Hennepin	\$168,699	14	\$0	\$0	\$130,024	\$38,675	\$0
Houston	\$215,493	54	\$75,000	\$0	\$0	\$140,493	\$0
Hubbard	\$406,413	78	\$100,000	\$0	\$0	\$306,218	\$195
IMPACK - 6	\$1,123,166	116	\$594,024	\$0	\$150,622	\$378,521	\$0
Itasca	\$32,189	6	\$0	\$0	\$0	\$32,189	\$0
Jackson	\$955,037	100	\$345,179	\$0	\$454,527	\$155,331	\$0
Kandiyohi	\$257,328	28	\$132,500	\$0	\$64,178	\$60,650	\$0
Kittson	\$748,634	49	\$107,222	\$0	\$634,662	\$6,750	\$0
Lac qui Parle	\$250,019	39	\$16,000	\$71,707	\$66,275	\$96,037	\$0
Le Sueur	\$431,397	47	\$170,764	\$22,546	\$151,204	\$86,883	\$0
Lincoln	\$1,089,120	96	\$281,129	\$415,080	\$389,825	\$3,085	\$0
Lyon	\$480,212	41	\$194,457	\$0	\$176,643	\$109,112	\$0
Mahnomen	\$89,758	13	\$11,050	\$0	\$24,135	\$54,573	\$0
Marshall	\$474,608	25	\$0	\$0	\$474,608	\$0	\$0
Martin	\$1,130,277	87	\$418,371	\$0	\$621,134	\$90,772	\$0
McLeod	\$109,600	7	\$72,000	\$0	\$32,950	\$4,650	\$0
Meeker	\$276,499	41	\$0	\$0	\$176,776	\$99,724	\$0
Morrison	\$365,950	19	\$323,300	\$0	\$36,650	\$6,000	\$0
Mower	\$1,248,505	96	\$810,385	\$2,500	\$314,943	\$120,677	\$0
Murray	\$1,540,551	118	\$618,536	\$0	\$761,027	\$160,989	\$0
Nicollet	\$172,636	19	\$85,473	\$0	\$16,250	\$70,914	\$0
Nobles	\$1,287,922	106	\$500,809	\$70,176	\$620,487	\$96,450	\$0
North Central JPB	\$261,665	28	\$150,000	\$0	\$11,606	\$100,059	\$0
Northwestern JPB	\$1,137,264	46	\$201,231	\$0	\$918,025	\$11,850	\$6,159
Olmsted	\$874,871	86	\$312,910	\$11,386	\$313,238	\$235,338	\$2,000
Pennington	\$138,878	3	\$0	\$0	\$138,878	\$0	\$0
Pipestone	\$611,710	59	\$271,796	\$18,925	\$246,920	\$74,069	\$0
Pope	\$270,134	45	\$13,924	\$0	\$102,932	\$153,278	\$0
Red Lake	\$112,680	4	\$49,400	\$0	\$63,280	\$0	\$0
Redwood	\$618,369	57	\$44,086	\$0	\$418,454	\$155,829	\$0
Renville	\$704,252	86	\$80,474	\$0	\$360,180	\$263,598	\$0
Rice	\$670,337	59	\$257,190	\$1,800	\$271,430	\$121,918	\$18,000
Rock	\$1,898,535	169	\$1,205,207	\$86,853	\$430,925	\$175,550	\$0
St. Louis	\$325,210	20	\$0	\$0	\$0	\$325,210	\$0
Scott	\$702,446	110	\$84,176	\$25,136	\$152,475	\$440,659	\$0
Sherburne	\$96,952	16	\$39,952	\$0	\$0	\$57,000	\$0
Sibley	\$534,195	44	\$197,803	\$19,730	\$129,232	\$187,431	\$0
Stearns	\$426,065	30	\$349,074	\$37,213	\$8,200	\$31,577	\$0
Steele	\$428,828	46	\$158,374	\$27,958	\$78,890	\$163,606	\$0
Stevens	\$124,180	23	\$13,640	\$3,225	\$50,684	\$56,631	\$0
Swift	\$274,609	38	\$111,260	\$0	\$53,100	\$110,249	\$0
Todd	\$278,957	21	\$126,894	\$0	\$18,000	\$124,064	\$10,000
Traverse	\$232,854	16	\$73,158	\$20,000	\$107,450	\$32,246	\$0
Wabasha	\$943,971	88	\$538,318	\$11,600	\$254,824	\$139,228	\$0
Waseca	\$1,405,931	106	\$555,791	\$6,375	\$582,316	\$193,953	\$67,496
Washington	\$205,977	15	\$50,000	\$0	\$121,617	\$34,360	\$0
Watonwan	\$1,178,542	111	\$371,068	\$4,340	\$613,078	\$190,056	\$0
West Central JPB	\$1,141,533	85	\$408,008	\$48,030	\$437,161	\$248,335	\$0
Wilkin	\$208,001	31	\$40,000	\$7,447	\$0	\$160,554	\$0
Winona	\$565,681	42	\$422,968	\$15,000	\$36,335	\$91,377	\$0
Wright	\$576,712	50	\$131,517	\$0	\$296,584	\$140,461	\$8,150
Yellow Medicine	\$433,780	61	\$93,731	\$45,940	\$89,300	\$204,809	\$0

APPENDIX C. PARTIAL LIST OF EXAMPLE PRACTICES FUNDED BY THE AGBMP LOAN PROGRAM.

AG WASTE BASIN	HPDE LINED BASIN
AG WASTE PUMP AND AGITATOR	HS 2602 SPREADER
A-JACKS, RIPRAP, SHORELINE STABILIZATION	IH 5800 CHISEL PLOW
BALZER 4800 SPREADER - INJECTOR	ISTS – MOUND
BALZER 6350 SLURRY INJECTOR SYSTEM	ISTS – TRENCH
BALZER 7500, DODA PUMP, FILLER TUBE.	JD 1600 CHISEL PLOW
BALZER MAGNUM SLURRY 10,000	JD 1750 CONSERVATION PLANTER
BASIN LINER	JD 1900 AIR SEEDER
BH 9100 HIGH RESIDUE CULTIVATOR	JD 510 DISK RIPPER
BH RIDGE TILL CULTIVATOR	JD 787 AIR SEEDER
BLUE JET CONSERVATION DEEP TILL	KINZE 2600 PLANTER
BOBCAT 773 SKIDSTEER	KNIGHT 8018 HO SLINGER SPREADER
BRENT CPC 2000 RIPPER	LANDULT 2325 WEATHERPROOFER
CASE IH 1507 MANURE SPREADER	MANURE HAULING TANK WITH INJECTORS
CASE IH 4300 FIELD CULTIVATOR	MANURE INJECTION EQUIPMENT
CASE IH 5400 NO TILL DRILL	MANURE PIT AND PUMPING SYSTEM.
CONCRETE AND EXCAVATION FOR DIVERSIONS	MANURE PIT REPAIR
CONCRETE APRON	MANURE TANK AND MANURE PUMP
CONCRETE BASIN	MEYERS 3245 TANK SPREADER
CONCRETE FEEDLOT IMPROVEMENTS	MEYERS 3295 R SERIES SPREADER
CONCRETE RETAINING WALL	MW 1475 EARTHMASTER
CONCRETE STACKING SLAB AND WALLS	NH 195 SPREADER
CONCRETE TANK	NH 3110 SPREADER
CONCRETE, GEOTEXTILE LINER, EXCAVATION	NH 395 FOLDING CULTIVATOR
RETENTION DAMS	R&H HIGH RESIDUE CULTIVATOR
DMI 527 ECOLO-TIGER	RAWSON GRN TPH ZONE TILL CART
DMI 530 ECOLO-TIGER	RESEEDING AND LANDSCAPING
DMI 900 ECOLO CHAMP	RETAINING WALL.
DMI COULTER CHAMP II HD	RING DIKE
DMI TIGER MATE II CULTIVATOR	SCRAPE APRON, RETAINING WALL, FILTER STRIP.
DODA 1.5, PTO, HYDRAULIC LIFT	SEDIMENT CONTROL BASIN AND TILE OUTLET
DRESSOR 515B PAYLOADER	SLURRYSTORE, AGITATOR, PUMP
EARTHEN BASIN	STACKING SLAB, SCRAPE APRON
EARTHWORK AND CONCRETE	SUNFLOWER 4010 CHISEL PLOW
EL 84-6000 TANK, INJECTION EQUIPMENT	TAYLORWAY 20' CON-TILL DISK
EXCAVATION WORK	TERRACE AND TILING
FEEDLOT IMPROVEMENTS	TIGER MATE, CONCORD AIR SEEDER
FILTER STRIP	TREE PLANTING SUPPLIES
FLEXICOIL 1330 AIR CART	VANDALE 4700 HD SPREADER & SHALLOW TILL IN
GEHL 1322 SCAVENGER SPREADER	WEISER SLURRY STORE
GLENCOE DISK CHISEL PLOW	WHITE 6200 PLANTER
GRASS WATERWAY WITH TILE.	WILRICH 340 FIELD CULTIVATOR
HEIL 8750, HOULE 540 PUMP	WILRICH 660 DISK CHISEL
HINIKER 6000 CULTIVATOR	
HINIKER NO TILL DRILL	
HOSES, REELS, AND INJECTION EQUIPMENT	
HOULE 6000 AND FILL PUMP	
HOULE TRAILER WITH PUMP	

APPENDIX D. 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 the 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 unit that provides technical assistance and coordinates financial aid to farmers and landowners for projects that prevent or protect water and soil resources.