

Minnesota Conservation Professional Training Coordination Plan

June 2009



Developed by the UM Water Resources Center
in collaboration with the Interagency Conservation Training Group

As part of the
Conservation Technical Service Provider Training & Certification Project
(<http://tsp.umn.edu>), with funding appropriated to the Minnesota Department
of Agriculture and the Board of Water and Soil Resources from Minnesota
Clean Water Legacy fiscal year 2007 one-time appropriations

Minnesota Conservation Professional Training Coordination Plan

June 2009

Authors

This plan was developed by the UM Water Resources Center (WRC) in collaboration with the Interagency Conservation Training Group (ICTG) representing the major providers and users of conservation training in Minnesota.

The Interagency Conservation Training Group

Organization	ICTG participants
Private Agriculture	
Ag Resource Strategies	Tim Gieseke
Minnesota Crop Production Retailers	Bill Bond, Jessi Brunelle
Minnesota Ag Water Quality Coalition	Warren Formo
Local Government Employees and Conservationists	
Minnesota Association of Soil and Water Conservation Districts (MASWCD)	LeAnn Buck, Sheila Vanney
Minnesota Association of Conservation District Employees (MACDE)	Brian Watson, and other members
Minnesota Chapter Soil and Water Conservation Society (MN SWCS)	
State Agencies	
Board of Water and Soil Resources (BWSR)	Al Kean, Julie Klocker, Matt Drewitz, Jeff Hrubes
Department of Natural Resources (DNR)	Wayne Edgerton, Andrew Arends
Minnesota Department of Agriculture (MDA)	Barbara Weisman, Rob Sip, Peter Scheffert, Brian Williams, Terry McDill, Paul Burns, Bob Patton
Minnesota Pollution Control Agency (MPCA)	Wayne Anderson, Bruce Henningsgaard, Tim Larson, Courtney Ahlers, Dave Wall
Federal Agency	
Minnesota Natural Resources Conservation Service (NRCS)	Jeff St. Ores, Paul Flynn, Robin Martinek, John Brach, Tim Koehler
University	
University of Minnesota Extension	Melvin Baughman, Renee Pardello, David Nicolai
University of Minnesota Water Resources Center	Ann Lewandowski, Les Everett
University of Minnesota West Central Research and Outreach Center	Dennis Johnson
University of Wisconsin	Ingrid West, Kevin Erb

Purpose

The purpose of this plan is to enhance the delivery of conservation professional training in Minnesota by facilitating collaboration across agencies and training providers.

Ultimately, the goal of conservation training is to improve water quality, reduce soil degradation, and ensure the public has the information needed to protect natural resources.

Table of Contents

Introduction: The Need for Training Coordination.....	4
Training Needs	4
Why Coordinate Training?.....	6
A Plan for Conservation Training Coordination.....	7
Vision for Training.....	7
Outcomes of Coordination.....	7
Scope of Conservation Training Coordination	8
Scope of audiences	8
Scope of topics	8
Proposed Coordination Structure and Activities	12
Proposal 1: Networking committee.....	12
Proposal 2: Training coordinator	13
Annual Budget	15
Potential Sources of Funding	15
Models for Coordination	16

Introduction: The Need for Training Coordination

Training Needs

Large amounts of funding have been and continue to be spent in Minnesota to promote the installation and use of practices aimed at protecting water quality. In particular:

- About \$28 million is being spent through the federal Environmental Quality Incentives Program (EQIP) in fiscal year 2009, and that much or more is expected annually through at least 2012.
- In 2010-11, the Minnesota Clean Water Fund will provide an estimated \$129 million to plan and implement conservation practices that protect and restore water quality. Similar amounts of Clean Water Fund resources could be provided every biennium over the next 25 years.
- The Conservation Stewardship Program (CSP), a new federal program scheduled to start in August 2009, will be available continuously in all parts of the country to eligible farms. Participants must significantly enhance existing and/or implement new conservation practices, with partial emphasis on addressing watershed-scale natural resource priorities. Funding is authorized in amounts that could support the enrollment of more than 50 million acres nationwide by the end of 2012.
- The Conservation Reserve Program (CRP) and other federal, state, and local programs will continue to provide significant amounts of funding for conservation practices.

High quality technical assistance is essential to ensuring that dollars spent on conservation practices have an impact on water quality.

Conservation practices do not effectively protect water quality unless they are selected appropriately, designed correctly for the site, and located in the right place on the landscape. These decisions require advice from trained and experienced professionals. High quality technical assistance is essential to ensuring that dollars spent on conservation practices have an impact on water quality.

Side-boxes throughout this document describe conservation professional training needs identified by experts from Soil and Water Conservation Districts (SWCD) and other local government entities with considerable watershed planning experience. The next few paragraphs summarize those needs.

Existing training programs need ongoing support. No decline is anticipated in demand for nutrient, pest, and manure management planning skills, or for skills in erosion assessment and treatment practices. Federal EQIP incentive payments drive demand for nutrient management plans (NMP), comprehensive nutrient management plans (CNMP), and pest

management plans. In 2008, nearly 1,900 new or continuing NMPs were required for landowners receiving EQIP incentive payments for the purpose. About 40 CNMPs were needed. The amount of EQIP funding authorized under the current farm bill (through 2012) is higher than under the previous farm bill, which could increase the demand for these technical services.

Along with training in common practices, there is always a need for training in “big picture” skills – the ability to integrate multiple practices on a farm or in a watershed, and the ability to implement engineering and other plans. Shrinking training budgets and the lack of experience that comes with staff turnover appears to have led to a decline in the skills of conservationists who can integrate the expertise of specialists. A reliable and clear training track is needed to help ensure a high level of skills among generalists.

Other training topics are less well-developed or are emerging needs. In particular, conservationists increasingly need the ability to analyze and plan practices at a watershed scale in addition to the field and farm scale. They need to learn how to target practices to the most effective locations in a watershed by using LiDAR and other tools.

Large amounts of upcoming funding will be targeted at buffers, stream bank restoration and stabilization, and volume reduction techniques. Further development of training is needed in all these areas. There is also demand for training in social science topics, such as how to promote ongoing implementation of NMPs by farmers and commercial applicators after plans have been created.

Questions remain which impact the demand for and delivery of conservation training.

- Are professionals around the state ready for training in emerging topics?
- Will training programs be ready to respond as demand develops?
- How can private-sector agricultural professionals be further integrated into conservation work?
- How can local staff meet the needs for technical assistance and reporting that are required by conservation funding – especially in light of increased funding from farm bill conservation programs and the state’s Clean Water Fund?

A reliable and clear training track is needed to help ensure a high level of skills among generalists.

Why Coordinate Training?

Conservation professional training is currently provided by state and local agencies, primarily for their own staff. The result is some overlap in training topics that – with some coordination – could be delivered more efficiently and with more communication among the public and private sector professionals. Agencies could see savings in curriculum development by sharing materials. Professionals could spend more time learning new material instead of duplicating training to meet requirements of similar programs from different agencies. By combining efforts, agencies may have more opportunities to leverage federal and state dollars. Centralized communication would help professionals find training opportunities and would help trainers fill classes and be more responsive to training demands.

Training Needs: Interviews with the Planners

Buffers and Nutrient Management Plans

Turbidity and bacteria are the impairments addressed by the Rock River Watershed TMDL plans. The watershed advisory group decided to address bacteria by emphasizing nutrient management plans (NMPs) (especially for producers under 300 animal units), and calibrating manure spreaders and flow meters. They have easily been able to find trained technical assistance for writing NMPs. This will be an ongoing need and they expect continuation of existing training opportunities for the public and private sector.

A larger concern than getting the NMPs written is ensuring that producers follow through to implement them. The Rock River Watershed group is dedicating resources to learning how to increase implementation of plans by producers and commercial applicators.

According to Doug Bos (Rock County SWCD) the important training gaps relate to buffers and addressing stream bank erosion. Watershed planners need skills in locating and designing buffers for maximum effectiveness for a given budget, methods for effectively reducing stream bank erosion, and understanding the impacts of current drainage tile practices. To address a turbidity impairment, conservationists need to go beyond specific skills such as using the MN P Index and RUSLE2 and learn to apply these skills in the bigger picture of the whole watershed. Training related to buffers is especially important because of the amount of upcoming funding targeted at them.

A Plan for Conservation Training Coordination

Vision for Training

The Interagency Conservation Training Group envisions the following features of conservation professional training in Minnesota.

- Enough **well-trained professionals** in the public and private sectors are available at the right time and place to deliver the types of conservation technical assistance needed to implement government programs and meet the demands of land managers and community organizations.
- Conservation training is **cost-efficient and effective**. Efficiency and effectiveness are achieved through collaboration among training providers in Minnesota and other states, and maintaining a central point of coordination and information for conservation training.
- Conservation training is made **accessible** by making courses convenient and controlling costs to the participants.
- Training is of consistently **high-quality**, using research-based content and effective instructional methods.
- A **unified message** is presented to various audiences by – where applicable – combining and coordinating training for public and private sector professionals.

Outcomes of Coordination

Conservation professional training can be implemented either by agencies working independently or through the collaboration of major conservation agencies and organizations. The following list of outcomes of collaboration and coordination would be impossible or more difficult to achieve if organizations worked independently.

- Control of overall training costs and the costs charged to participants and agencies. Examples of ways to control costs are by sharing course development expenses, reducing duplication and allowing single agencies to specialize in training topics.
- Consistently high-quality conservation training.
- Effective evaluation of and response to changing training needs.
- Broad participation in continuing education by public and private technical assistance providers to assure that an appropriate number of professionals across the state have the needed conservation skills.
- Consistently available opportunities for basic and follow-up training to meet demand for priority topics and skills.

Training Needs: Interviews with Planners

Basic field skills and long-term staff with field experience

David Bucklin of the Cottonwood County SWCD does not have a problem finding trained engineers to design structures. Instead, the bottleneck for implementing conservation practices is skilled field employees to implement the engineering designs. Adequate training is generally available through the NRCS, but it takes time to work through the training and develop field experience. With tight funding and high turnover, not enough local field staff have the needed long-term field experience.

Another pressure on field staff is increasing reporting requirements. Upcoming funding sources such as the Legacy Amendment generally do not support the base staff needed to provide long-term consistency and reporting requirements – both are essential to getting effective conservation practices on the ground.

- Development of technology-enhanced learning options that may be impractical for individual agencies to develop alone.
- Continual identification and development of partnerships for conservation training.
- A unified voice to funders about training needs.
- Leverage resources that cannot be accessed by agencies or local units working independently.

Scope of Conservation Training Coordination

This section defines limits to the scope of the coordination plan.

Scope of audiences

- This plan focuses on training targeted at conservation professionals, including state and local agency employees, private sector agricultural and environmental consultants, and staff of non-profit organizations. These are people who advise landowners about conservation and conservation practices on private lands, or implement practices on public lands.

Scope of topics

An important task will be to clarify which organizations are responsible for delivering particular training topics, to help organizations become more specialized in parts of their training programs. Interagency coordination will focus on the following conservation topics.

- Agricultural and other landscapes with substantial ongoing and growing technical assistance and training needs. Forestry and certain other topics are lower priorities because training is already coordinated by the organizations listed in Table 1.
- Topics that cut across multiple organizations.
- Topics with a significant training need, but for which training opportunities are limited or weakly developed.
- Topics in response to the needs of shifting funding priorities, including impaired waters, invasive species, and others.
- Basic soil and water conservation skills.

The following are examples of topic areas where interagency coordination may yield substantial benefits.

- Feedlot and manure management – Demand for this content is established and similar material is presented by multiplier providers including CFO training (MPCA), CNMP training (TSP/NRCS), CAWT certification, and Manure Management Training (UM Extension).

Training Needs: Interviews with Planners

Targeting practices within a watershed

According to Dennis Fuchs, Administrator for the Stearns County SWCD, we do o.k. with field-scale tools such as RUSLE2, NMPs, and CNMPs. The need for these skills is not declining and training offerings need to be maintained.

The big training gap now relates to watershed-scale skills. Conservationists need to know how to use LiDAR and other tools to identify water-holding locations within a watershed, to understand well recharge areas, and to determine the optimal location for buffers and other practices.

- Basic courses for new conservation professionals – Coordination could help ensure consistent and high quality training content.
- Invasive species management – These skills are important across many agencies. Training could be made available by collaborating with MISAC, the Invasive Species Conference planners, and Wisconsin trainers.
- Pollinator management – Few people are trained in this, though it is mentioned in the current Farm Bill. A training program would be easy to develop by working with the Xerxes society.
- Comprehensive farm conservation planning, Resource assessment – These two topics are a lower priority because demand for the training is not well defined. However, the material is fundamental to soil and water conservation, and the content is well-suited to cross-agency collaboration. Conservation Planning (NRCS), Livestock Environmental Quality Assurance (LEQA) and Rapid Whole Farm Resource Assessment (Ag Resource Strategies), and CNMP (TSP/NRCS) all include field and farmstead assessments that have similar or related training needs that could be combined or coordinated.
- Core TSP training topics (RUSLE2, NMP-590) – Interagency coordination could help provide training opportunities for the private sector alongside the public sectors. This may be an opportunity to develop distance learning approaches.
- Watershed scale planning – Training is less well-developed for planning and targeting conservation practices at the watershed scale than for field scale applications.
- High-interest and broad-impact topics (e.g. biofuel production systems, ag drainage management, landscape analysis, LiDAR) – Some “hot” topics have broad interest among conservation professionals. A coordinated training program could respond quickly as needs arise.

Potential for technology enhanced learning

Most of these topics have potential for applications of technology enhanced learning. Distance learning methods can make training more accessible by reducing travel costs, but initial development can be costly and requires unique educational skills. Agencies may be able to meet these up-front requirements more easily through collaboration than individually. The six-state Regional Conservation Professional Training Initiative is working to define and develop distance learning programs for several conservation topics. A Minnesota interagency group will be positioned to cooperate with and leverage these regional efforts.

Table 1: Conservation professional training programs in Minnesota

Program and URL	Content
Sustainable Forests Education Cooperative <i>sfec.cfans.umn.edu/</i>	Training for loggers and forest resource managers.
Onsite Sewage Treatment Program <i>septic.umn.edu/</i>	Design, installation, inspection, operation, and maintenance of septic systems.
Erosion and Sediment Control Certification Program <i>www.erosion.umn.edu</i>	Comprehensive training for inspectors, project managers, contractors, and designers who work on NPDES projects
Pesticide Safety and Environmental Education <i>www.extension.umn.edu/pesticides/</i>	Pesticide handling training for pesticide applicators certification.
Wildland Fire Training <i>www.nationalfiretraining.net</i>	Burn control in woodlands and grasslands.
Certified Animal Waste Technician Licensing <i>www.mda.state.mn.us/licensing/pestfert/cawt.htm</i> <i>www.manure.umn.edu</i>	Training required for any commercial manure managers and applicators.
Minnesota Wetland Delineator Certification Program <i>www.mnwetlands.umn.edu/cert</i>	
Institute for Ag Professionals <i>iap.umn.edu</i>	Ag production and economics training for private ag professionals. Field School in July, Short Course in December, and Research Updates in January.
Manure Management and Air Quality <i>www.manure.umn.edu</i>	Extensive manure technical information plus occasional training workshops.

While the interagency coordination efforts should define a narrow scope of topics where the most benefit can be achieved, the Minnesota Conservation Training Database (<http://mnct.cfans.umn.edu>) includes a broader range of conservation topics. The wide coverage is necessary to make the database the primary portal for professional training opportunities and to reduce the number of calendars that need to be maintained by other organizations. Categories currently included in the database are listed in Table 2.

Table 2: Minnesota Conservation Training Database topics

	Training Category	Description
General	1. Programs and Policies	
	2. Technical Tools	<i>E.g., GIS, models, surveying</i>
Natural Resources	3. Soil and Soil Erosion	
	4. Water	<i>Water quality, hydrology, groundwater, irrigation.</i>
	5. Air quality and climate	
	6. Energy	<i>Conservation, energy production, biofuel production</i>
Planning	7. Conservation Assessment & Planning for Agriculture	
	8. Watershed Planning	
Managing Ag Lands	9. Manure and Biosolids	<i>Storage and application</i>
	10. Ag Nutrient Management	<i>Environmental impacts and planning, e.g. 590 training.</i>
	11. Ag Pest Management	<i>Environmental impacts, e.g. safe handling and IPM</i>
	12. Conservation Practices	<i>Specific practices, e.g., ag drainage, residue management, filter strips, grassed waterways, contour strips</i>
	13. Ag Production Systems	<i>Grazing, Cover crops, Organic ag, Agroforestry</i>
Managing Other Lands	14. Habitat	<i>Native vegetation, wildlife management, biodiversity</i>
	15. Wetlands	
	16. Lakes, Rivers, and Shorelines	
	17. Forestry	
	18. Urban Conservation	<i>Includes stormwater</i>
People	19. Communication and Leadership	
	20. Business and Culture	<i>Business Management, Cultural Resources</i>

Proposed Coordination Structure and Activities

Coordination relies on the commitment of time and resources from participating organizations. The goal of sharing training resources is to leverage greater returns than would be possible working alone. At a minimum, cooperating organizations will regularly participate in communication and networking with the group.

Two proposals for coordination are presented below. The preferred option will be determined by funding sources. The proposals are based on discussions in 2008 and 2009 of the interagency conservation training group. Models for training coordination are described on page 16.

Training Needs: Interviews with Planners

Maintain an ongoing commitment to continuing education.

Mike Skoglund is an Engineering Technician for the Southwest Prairie Joint Powers Organization (JPO). He provides the technical expertise for designing conservation practices across his region, but generally is not involved with watershed planning. Mike has been seeing more and more streambank stabilization projects and would like to see more training in this area. He'd also like better training for restoring vegetation after installing a practice.

In the bigger picture, Mike is concerned about the impact of tight budgets on training. The trend for the last several years has been a trend towards fewer low-cost training opportunities and less commitment to keeping up with continuing education.

Proposal 1: Networking committee

An Interagency Conservation Training Committee (ICTC) made up of representatives of conservation agencies and organizations will continue to meet two to four times each year to network and share information about training activities and needs, and opportunities for collaboration. The committee will be led by one member agency which is responsible for calling meetings and facilitating communication. One member, rotated annually, will be the Minnesota liaison to the Regional Conservation Professional Training Program.

The committee will meet regardless of the availability of funding. Maintaining this minimal level of communication is critical for bridging funding sources and being prepared to take advantage of opportunities. When funding is available, the committee will become an advisory group or steering committee for the activities described in Proposal 2.

ICTC First Steps

Initial tasks for the Interagency Conservation Training Committee might include:

- Recommend credentials and continuing education tracks for county and SWCD employees. (E.g. Brian Watson's presentation to MACDE, June 2007.)
- Identify and begin work to combine training across agencies on specific topics.

Proposal 2: Training coordinator

An interagency training coordinator will serve half- to full-time, funded by state money, grants, and agency contributions. The job of the coordinator is to facilitate collaboration among organizations to achieve greater cost-efficiency and training effectiveness than would be possible for independent agencies. Table 3 lists the coordinator's tasks in order of priority. How many of these are accomplished depends on the amount and source of funds. Activities will be overseen by the ICTC and by funders of specific projects.

Table 4 includes course coordination and development activities. Not all courses and topics currently offered by partners would be handled in the same way. Some training topics are more or less suited to coordination (Table 3).

Table 3: Types of courses

Type of content	Level of coordination	Example
Agency-specific content	No coordination, except to ensure that content is consistent with other training.	Feedlot inspections
Demand for training is primarily from one agency	An agency course is opened and advertised to others. Each agency training provider would decide how to charge outsiders. A central coordinator could help communicate opportunities.	Prescribed burning
Multiple agencies teach related content	Joint course development and delivery. Ad-hoc group formed for each course, led by one agency or an independent coordinator.	Manure storage and application

Table 4: Coordination task priorities

1. Convene and facilitate regular meetings of the ICTC. Maintain communication among the committee and identify new members as appropriate. For example, more participation from the counties and other local government units could be encouraged.
2. Maintain and promote the Minnesota Conservation Training Database (currently at mnct.cfans.umn.edu) as a complete list of conservation professional training activities from all trainers.
3. Promote training activities to multiple audiences. E.g. establish an e-newsletter sent to agency/organization leaders for distribution to their membership.
4. Along with ICTC members, serve as state liaison to regional conservation training collaborations (RCPTP of the CSREES; partners in NASCA North Central Region).
5. Regularly assess training needs, effectiveness, costs, efficiencies, and opportunities. This will done using results from existing internal surveys and, as needed, by developing new course evaluation and needs assessment systems.
6. Prepare regular reports of training activities and assessments that can be used by individual organizations to evaluate and modify their programs.
7. Develop central training resources for specific course topics. E.g., identify a pool of trainers from multiple agencies, and provide access to materials from previously presented sessions.
8. Facilitate interagency and regional partnerships for developing and delivering specific courses when needs are identified by the ICTC and targeted funds are available.
9. Lead development of technology-enhanced learning programs when needs are identified by the ICTC and targeted funds are available.
10. Develop a credentialing program for SWCD and other conservationists if the need is identified by the ICTC.
11. Disseminate information about funding opportunities, and help organizations pursue collaborative grants to meet specific needs.
12. Provide course delivery support to partners. Support may include registration services, fee handling, course promotion, course logistics, web space for instructors, and help acquiring funding.

Annual Budget

The budget for coordination will be a combination of ongoing base funding and short-term funding for special projects. A significant conservation training coordination program could be maintained for \$100,000 of annual base funding. Typical expenses are listed in Table 5.

Table 3: Representative annual expenses

Item	Costs
Staff to accomplish most of the tasks in Table 3.	1 FTE
Web technical support and server space	UM IDC or \$6,000
Programmer for distance learning development	\$5,000-\$50,000/course
Travel (out-of-state and in-state for meetings)	\$4,000
Office and support expenses	Depends on location
Course delivery expenses	Largely covered by fees

Potential Sources of Funding

For coordination and course development

- Designated state funds
- Agency in-kind and/or cash contributions
- Grants – state, regional, and federal

For course delivery

- In-kind trainer participation
- Agricultural banks (e.g. AgStar)
- Insurance providers
- Participant fees

Models for Coordination

Several existing structures provide examples for coordinating training.

The Sustainable Forestry Education Cooperative

SFEC member organizations pay dues based on the number of employees. SFEC courses are open to non-members, but members pay a lower fee. Instructors come from the University, member organizations, industry, and others. SFEC maintains a calendar of all forestry related training, even those not sponsored by SFEC. The coordinator is a UM employee funded by program income. Member dues and course fees do not cover coordination and course delivery costs; grants and University support are essential to sustaining the program.

The SFEC, along with two other forestry training organizations, recently completed an assessment of forestry training capacity (available at <http://sfec.cfans.umn.edu/audit.html>). Rather than create a new organization, the final report recommended retaining the three separate organizations but coordinating activities more tightly.

The TSP Training Initiative

The TSP Training Initiative (<http://tsp.umn.edu>) administered by the UM Water Resources Center, worked primarily with NRCS to coordinate delivery of 25 training sessions between January 2007 and June 2009. The primary target audience was private crop consultants interested in becoming NRCS Technical Service Providers. Agency people also attended courses. Cost of delivery was about \$100/trainee-day, not including the organizer's time. Instructors usually came from NRCS or other sources that did not charge fees. The organizer spent about three weeks on tasks specific to a single course, such as planning the agenda and speakers, site arrangements, promotions, developing student materials, evaluations, and follow-up.

The program coordinators also maintained contact with regional conservation training activities.

Funding came from the MDA in the form of a 2 ½ year grant of Clean Water Legacy money. Courses were heavily subsidized and participants paid only small fees.

Wisconsin has a similar ongoing program (<http://conservation-training.wisc.edu/states/homepage?state=WI>) funded by Wisconsin NRCS, UW Extension, grants, and participant fees.

Coordinating Committees

The Interagency Conservation Training Group met three times in 2008. The meetings were focused on discussing and developing long term coordination

plans, but also provided an opportunity for communication among agencies about training needs and delivery. Meetings have been facilitated by the TSP Training Initiative. In addition, the group collaborated with the Great Lakes Regional Conservation Professional Training Program (RCPTP) to help facilitate sharing of training materials and ideas across the six-state region.

Wisconsin and Michigan have similar committees. Michigan's is more narrowly focused on planning two annual training events for conservation district staff. They hope to address training more broadly in the future. Wisconsin's committee (SITCOM) gets some financial support from NRCS and is led by the Department of Agriculture, Trade and Consumer Protection and the Wisconsin Land & Water Conservation Association. Some of the immediate functions they aim to provide are to jointly identify short and long term training needs, create a centralized system for announcing training opportunities, perhaps provide simplified access to training materials, and jointly identify and develop mechanisms for training.

Course Developer

The Xerces Society (<http://www.xerces.org>) has developed a training workshop about pollinator management that they present around the Midwest through the sponsorship of local hosts. Other private companies deliver conservation training through contracts with NRCS and other traditional training providers.

Training Needs: Interviews with Planners

Easements

Paul Moline knows TMDLs. As the Planning & Water Manager for Carver County, he has been instrumental in the approval and implementation of three TMDL plans, and a dozen and a half more that are in planning or draft stages.

The approved plans are in their first or second year of 10-year implementation plans. They focus on septic systems, rain gardens, manure management, rock tile inlets, buffers, and volume reductions (wetlands, basins). The technical assistance needed to implement these practices has come from county Environmental Services staff, SWCD staff, consultants, and contractors.

The technical assistance skill that needs ramping up is knowledge of implementing the entire spectrum of easement activities, such as proper incentives with land owners, restoration requirements, financing, linking land owners with the right people, and meshing easement management with existing land uses and drainage needs.

And, like Doug Bos, Paul would appreciate help in enforcing or incentivizing nutrient management plans. Writing an NMP is much easier than ensuring its implementation.