

Part V: Technical Information

A. GENERAL REQUIREMENTS

It is the responsibility of BWSR and conservation districts to administer the State Cost-Share Program to establish enduring conservation practices that effectively solve erosion and/or water quality problems during the effective life of the practice. To carry out this obligation, the conservation district must assign technical representatives who possess the expertise needed to effectively provide technical assistance for the applicable project phase(s), which typically include:

- 1) inventory and evaluation of the area where the problem is occurring (aka site investigation or conservation practice planning) to determine the resource management needs of the area, identify the practice(s) that will effectively address the natural resource problems and develop a preliminary cost estimate for designing and installing the practice(s);
- 2) design of the conservation practice(s), including preparation of construction / installation plans, specifications and bid documents, as appropriate, in accordance with approved design standards;
- 3) construction / installation inspection to ensure conformance with the project plans and specifications; and
- 4) periodic site inspection of operation and maintenance over the effective life of the practice(s).

A. 1 Conservation district technical representative

The Conservation District Technical Representative (CDTR) is a conservation district employee, or other designee, who has expertise for the conservation practice(s) and the applicable project phase(s) outlined above. The conservation district may designate a qualified and available district employee, NRCS employee, SWCD Technical Services Area (TSA) (aka Joint Powers Area, or Nonpoint Engineering Assistance) engineer or technician, or private consultant, to serve as the CDTR. Although it is preferable to have continuity of staffing throughout a project, the conservation district may designate different CDTRs for the different phases of a project. More than one CDTR may be needed for different engineering and/or ecological sciences practices that are part of a cost-shared project. The CDTR(s) must be identified in the project file.

For project phases 1) through 3) above, the CDTR must have applicable Technical Approval Authority (TAA), or be a Professional Engineer licensed in Minnesota, for engineering practices. Individuals without the necessary TAA may work under the direct supervision of the designated CDTR(s) for the applicable conservation practice and project phase. On-the-job training is an important method to help individuals qualify for TAA.

For project phase 4) above (i.e. periodic site inspection of operation and maintenance), the CDTR must be qualified to fulfill the following responsibilities:

- a) verify that all components of the conservation practice remain in place; and
- b) verify that the practice is in good repair; or determine that it needs repair in accordance with the operation and maintenance plan for the practice (as applicable); or identify that someone with appropriate TAA is needed to further assess the condition of the practice, the potential need for repair beyond the scope of the operation and maintenance plan and to provide associated recommendations, consistent with the contract noncompliance requirements in Part VI. D. of this manual.

As the front-line implementers of the State Cost-Share Program, conservation district boards and staff have the responsibility to ensure that the designated CDTR(s) for a project have the appropriate technical expertise for the role(s) assigned. The recognized procedures for assessing technical expertise and assigning TAA are explained in the SWCD Operational Handbook. Peer review of all technical work is also strongly encouraged. Conservation districts are responsible for ensuring that the CDTR for site inspection of a cost-shared practice is qualified to perform the project phase 4) responsibilities defined above.

A.2 Comprehensive resource management planning

Conservation planning is a natural resource problem solving and management process. Effective planning integrates economic, social, and ecological considerations to meet both private and public needs. The goal of the plan is comprehensive protection of all natural resources. Concepts such as whole farm/ranch planning, comprehensive farm planning, and SWAPA (soil, water, air, plants and animals) and holistic farm planning all strive to achieve this goal.

Conservation planning is dependent on the land occupier’s objectives and his or her ability to make conservation decisions. Not all land occupiers are ready or willing to commit to implementing a conservation plan. Use the planning processes to communicate the total resource needs — hopefully this will lead to increased practice application. When combinations of practices are planned and established, a resource system is developed that provides comprehensive resource protection.

Proper planning processes ensure that individual practices are not recommended or applied without first considering their impact on other resources. In most cases, if a specific practice will negatively impact a resource, the effects can be mitigated through the establishment of additional practices.

Additional information on the various planning processes can be found in NRCS publications such as the National Planning Procedures Handbook or the Field Office Technical Guide or by contacting your board conservationist.

B. TECHNICAL REQUIREMENTS –COST-SHARE CONTRACT

The technical requirements involved in executing the contract are:

- assessing the overall resource management needs of the area where the problem is occurring;
- identifying alternatives and helping the land occupier(s) choose the practice that best solves the problem and fits the intended land use;
- calculating the estimated cost of the solution;
- designing the practice plans according to approved standards;
- preparing construction plans and specifications;
- monitoring construction of the practice;
- certifying that the practice was installed according to the plans and specifications;
- developing an operation and maintenance plan for the practice; and
- following up with the land occupier.

B.1 Technical assessment and cost-estimate

The conservation district technical representative for the project must do an on-site investigation of the erosion or water quality problem. This investigation must include:

- Determining the nature of the problem and whether it meets the high priority erosion or water quality problem definitions in the glossary.
- Determining which conservation practice(s) or management practice(s)/system(s)^❶ are needed to effectively treat the problem.

❶ Management practices or systems (e.g., conservation tillage, rotational grazing) are not eligible for cost-share funds.

- Assessing whether the identified solution would have adverse impacts on the cultural resources, threatened and endangered species, wetlands, or flood plains of the area.
- Obtaining state board approval for practices not found on the approved practice list (section C of this part).
- Determining if the contributing watershed (including land not managed by the land occupier) is a sediment source that will reduce the practice’s planned effective life and prevent normal operation and maintenance during the planned life. (This also applies to practices requiring treatment of contributing watersheds - identified under the practice guidelines in section D of this part.)
- Gathering information needed to prepare a cost estimate.
- Determining whether or not the problem is related to non-compliance with existing regulations, such as a soil loss ordinance or zoning restriction.

This information is documented and retained in the project file. The checklist found on Page 51 of the Contract Implementation part of this manual can be used for this purpose. Before a district board approves the application, the district technical representative must estimate the cost of the practice based on the information gathered in the field, standards and specifications that will be used to design and construct the practice, and relevant experience in the area. The technician’s goal is to arrive at a reasonably accurate preliminary cost estimate.

If the erosion or water quality problem is a result of non-compliance with a regulation or ordinance, the district board must decide whether cost-share funds are needed or appropriate to treat the problem. Gathering this information up front and considering it when approving or denying the application is informed decision-making. With the exception of feedlots, the state board does not have a policy relating to whether problems resulting from non-compliance situations are eligible for state cost-share program funds. BWSR did adopt a resolution regarding non-compliant feedlots (in official violation status) in April 1993, indicating case-by-case evaluation of the circumstances. Districts are encouraged to consult with their board conservationist when making the decision.

B.2 Developing the conservation practice plan

Upon conservation district board approval of the cost-share contract, the district technical representative develops the conservation practice plan(s) and specifications for the approved practice.

IMPORTANT: Remember, the conservation district technical representative must have the technical approval authority necessary to sign off on the assigned project phase(s). In the case of practice of engineering, the technical representative must be a registered professional engineer competent in the design of the requested practice or an NRCS employee with appropriate technical approval authority working within the scope of his or her federal position. The rules of professional conduct for registered engineers require that they only engage in work for which they are competent and

qualified to perform. The technical approval authority system for conservation district staff incorporates a similar professional ethics requirement. Verifying the qualifications and expertise of a consulting engineer is good district policy.

Practice design and sign-off requirements do not preclude technicians and other resource professionals from participating in the planning, design, and construction of engineering practices or practices for which they do not have technical approval authority. It is often good on-the-job training to work under the supervision of the assigned technical representative who will approve and sign off on the work. A non-federal registered engineer signing off on the project must participate to the extent that (s)he can “certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Minnesota,” or an NRCS engineer must participate to the extent required by the NRCS technical approval process.

The practice plan(s) and specifications must be prepared following:

- the standards in the Field Office Technical Guide; or
- standards certifiable by a registered professional engineer;
- or other standards approved by the state board.

(Request state board approval of other standards on a case-by-case basis by submitting a copy to the BWSR Grants Coordinator.)

The state is concerned about invasive non-native species. The State Cost-Share Program prohibits the seeding/planting of invasive non-native species on State Cost-Share Program conservation practices where they are likely to colonize more desirable stable plant communities.

Where the SWCD determines that site conditions necessitate the use of invasive non-native species, prior to planting, the SWCD must include a copy of the justification to plant invasive non-native species in the project file (please refer to Invasive Non-Native Species Policy found later in Part V.).

B.3 Practice construction and sign-off

It is the responsibility of the district technical representative to review the conservation practice plan(s) and specifications with the land occupier and the contractor hired to install the practice, prior to starting construction. Make sure they understand what is required to properly install the conservation practice according to the plans and specifications for the conservation practice.

It is extremely important that the construction of the practice is adequately monitored by the conservation district technical representative (possibly with assistance from someone working under his or her supervision). The technical representative will attest to the proper installation of the practice by certifying that it was completed according to the plans and specifications. This must take place before district board approval to make final payment. To make such a certification, the technical representative will need to determine those portions of the installation that need continuous monitoring and those that can be monitored periodically. For example, the technical representative will want to take elevation shots indicating the elevations of installed tiles or be present to document that a fill around corrugated metal pipe was

adequately tamped. Survey notes and a construction inspection diary indicating how the practice was built are needed to rule out faulty construction if the practice fails. Monitoring the construction of a practice(s) sends an important message to the contractor - that the conservation district will not approve cost sharing for the project unless it was built according to the plans and specifications. Documentation during construction also enables assessment of the “reasonableness” of a contractor’s bill. The technical representative should keep the land occupier updated on the construction progress, particularly if problems or any modifications to the plans and specifications occur.

When the project is complete, the technical representative certifies that all plans and specifications, including technically approved modifications to the plan, have been satisfied. This sign-off is located on the Voucher and Practice Certification Summary. The technical representative(s) must also ensure that as-built project plans are completed and filed.

C. APPROVED PRACTICE LIST

The 12 approved conservation practice categories and corresponding eligible components are listed later in this section. The numbers correspond to the practice codes identified in the NRCS’s Field Office Technical Guide (FOTG).

Conservation practices achieve the purpose of controlling soil erosion, sedimentation, or chemical or nutrient runoff or infiltration. The conservation practice must be designed to meet the purpose of the practice, as defined in the FOTG, for an effective life of not less than 10 years from the date it is approved for final payment.

Eligible practices help achieve the purpose of the conservation practice category. Sometimes a single eligible practice will achieve the intended purpose and adequately address the erosion or water quality problem. However, in most cases, several eligible practices will be installed to meet the purpose of the conservation practice category, but not necessarily installed at the same time.

Although operation and maintenance (O&M), and utilization of the practice are not eligible for cost share, it is important to provide the land occupier with guidance for these functions, as part of the overall project plans and specifications.

Objectives of approved construction practices include activities that:

- control nutrient runoff;
- stabilize critical eroding areas;
- divert runoff to protect and improve water quality;
- reduce wind erosion;
- control gully, rill, or sheet erosion;
- protect shoreland from erosion;
- control stormwater runoff; or
- protect surface water and groundwater quality.

The approved practice categories list, along with the cost-share policy guidelines, has been developed in consultation with Soil and Water Conservation District representatives and other interested parties.

D. PRACTICE GUIDELINE

General Cost-Share Program Policies:

Notes

Notes section with horizontal lines for writing.

CONSERVATION PRACTICES ELIGIBLE COMPONENTS

Code	Conservation Practice	Ecological Practice	Engineering Practice
313	Waste Storage Facility		✓
322	Channel Bank Vegetation	✓	
326	Clearing and Snagging		✓
342	Critical Area Planting	✓	
350	Sediment Basin		✓
351	Unused Well Sealing		✓
362	Diversion		✓
378	Pond		✓
380	Windbreak / Shelterbelt Est.	✓	
382	Fencing	✓	
386	Field Border	✓	
393	Filter Strip	✓	
410	Grade Stabilization		✓
412	Grassed Waterway	✓	✓
468	Lined Waterway or Outlet		✓
472	Livestock Exclusion-Use Exclusion	✓	
484	Mulching	✓	

Code	Conservation Practice	Ecological Practice	Engineering Practice
484	Mulching	✓	
500	Obstruction Removal		✓
512	Pasture and Hayland Planting	✓	
516	Pipeline		✓
570	Runoff Management System		✓
580	Streambank & Shoreland Protection		✓
585	Channel Stream Stabilization		✓
586	Stripcropping	✓	
600	Terrace		✓
606	Subsurface Drain		✓
612	Tree/Shrub Establishment	✓	
614	Trough or Tank Water Facility		✓
620	Underground Outlet		✓
638	Water & Sediment – Control Basin		✓
655	Forest and Trails & Landings	✓	
712	Bioretention Basin		✓
784	Wastewater and Feedlot Runoff Control		✓

PRIMARY PRACTICE CODE	PRIMARY CONSERVATION PRACTICE	TECHNICAL STANDARDS (CORRESPONDING NUMBERS) (CODE CORRESPONDS TO THE FOTG)	
		Conservation Practice	Eligible Component(s)
D1	Critical Area Planting	342	382,472,484,612, 613, 643
D2	Diversions	362	342, 382, 410, 412, 484, 500, 570, 606, 620
D3	Field Windbreaks	380	650
D4	Shelterbelt	380	650
D5	Grass Waterway	412, 468	342, 410, 484, 606, 620, 638
D6	Livestock Waste Management		313, 317, 362, 382, 533, 558, 561, 606, 620, 634, 629, 635
D7	Filter Strips	393	322, 326, 382, 386, 391, 472, 512, 516, 612, 614, 712
D8	Sediment Basins	350, 378, 410, 638	342, 382, 484, 606, 620, 712
D9	Streambank, Shoreland and Roadside Protection	580, 410, 655	342, 382, 393, 391, 484, 684
D10	Stripcropping	585	386, 500
D11	Terraces	600	342, 412, 484, 606, 620, 638
D12	Unused Well Sealing	351	351
D13	Forestry Conservation Practice		82, 314, 326, 327, 342, 383, 384, 391, 409, 410, 490, 560, 578, 612, 638, 643, 647, 655, 666

Note: Please refer to NRCS Field Office Technical Guide for the current Operation and Maintenance for each practice.

D. 1 Critical Area Stabilization

Conservation Practice

Critical Area Planting (342): Establishing permanent vegetation on sites that have or are expected to have high erosion rates, and on sites that have physical, chemical, or biological conditions that prevent the establishment of vegetation with normal planting practices.



Eligible Component(s): Fencing (382)
Use/Livestock Exclusion (472)
Mulching (484)
Tree/Shrub Establishment (612)
Establishment of Cooperative Weed Management Areas (613)
Restoration and Management of Declining Habitats (643)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

Policies

Cost sharing is authorized for the materials and activities required to establish the practice and protect the site during construction of the practice. They include, but are not limited to:

Materials:

Seed
Trees
Herbicides
Fertilizer
Minerals
Fence Materials
Mulch

Activities:

Grading (Earthwork)
Planting
Fertilizer/Herbicide Application
Fencing Labor
Mulching Labor

- Cost share is authorized where at least 80 percent of the contributing watershed controlled by the land occupier has the appropriate cultural, management, or structural practices in place (or scheduled to be installed) to stabilize sources of sediment and reduce surface water runoff.
- Cost share is not authorized where runoff or sediment from the contributing watershed would prevent the practice from achieving its intended purpose with normal operation and maintenance. The contributing watershed includes land not controlled by the land occupier.
- Weed control performed within 24 months of installation, as needed for establishment, is authorized at the discretion of the district board.

D. 2 Diversion

Conservation Practice

Diversion (362): A channel constructed across the slope with a supporting ridge on the lower side.



Eligible Components: Critical Area Planting (342)
Fencing (382)
Grade Stab. Structure (410)
Grassed Waterway (412)
Mulching (484)
Obstruction Removal (500)
Runoff Management System (570)
Subsurface Drain (606)
Underground Outlet (620)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

Policies

Cost sharing is authorized for the materials and activities required to establish the practice and protect the site during construction of the practice. They include, but are not limited to:

Materials:

Tile Systems
Pipe
Seed
Herbicides
Fertilizer
Minerals
Fence Materials
Mulch

Activities:

Earthwork
Planting
Fertilizer/Herbicide Application
Fencing Labor
Mulching Labor
Tile Installation

- Cost sharing of subsurface drain tile is only authorized for the purpose of eliminating spot seepage to ensure the practice functions properly and to safely convey the water to an adequate and stable outlet as determined by the district technical representative. If the land occupier wants to install larger tile (s)he must document, in writing, the purpose and the area to be served and must be responsible for the additional material and installation costs.
- Cost share is not authorized where the *entire* contributing watershed is a sediment source that will reduce the capacity of the practice to achieve its intended purpose and reduce the ability to perform normal operation and maintenance during the planned effective life of the practice.

D. 3 Field Windbreaks

Conservation Practice

Field Windbreak (380): Linear plantings of single or multiple rows of trees or shrubs or sets of linear plantings.



Eligible Component(s): Windbreak/Shelterbelt Renovation (650)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

Policies

Cost sharing is authorized for the materials and activities required to establish the practice and protect the site during construction of the practice. They include, but are not limited to:

Materials:

Trees
Herbicides
Fertilizer
Minerals
Fence Materials
Plastic Tubes
Tree Mats

Activities:

Tree Planting
Fertilizer/Herbicide Application
Fencing Labor
Weed Control-Mechanical
Site Preparation

- The primary purpose of the field windbreak must be to control erosion. Cost sharing is not allowed when the primary purpose is for farm beautification, protection of buildings or livestock, energy conservation, or other uses where erosion control is not the primary purpose.
- The use of animal control devices such as, but not limited to, plastic tubes is authorized at the discretion of the district board.
- Weed control performed within 24 months of installation, as needed for establishment, is authorized at the discretion of the district board. Weed control is not authorized to maintain the windbreak.
- The tree planting must be protected from destructive fire and destructive grazing as documented in the operation and maintenance plan for the practice.

D.4 Shelterbelts

Conservation Practice

Shelterbelt (380): Linear plantings of single or multiple rows of trees or shrubs or sets of linear plantings.



Eligible Component: Windbreak/Shelterbelt Renovation (650)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

Policies

Cost sharing is authorized for the materials and activities required to establish the practice and protect the site during construction of the practice. They include, but are not limited to:

Materials:	Activities:
Trees	Tree Planting
Herbicides	Fertilizer/Herbicide Application
Minerals	Weed Control-Mechanical
Tree Mats	Site Preparation

- Cost sharing is authorized for site preparation, seedlings, and planting trees or shrubs as needed for establishing a farmstead windbreak. Cost sharing is not authorized for planting orchard trees or ornamental plantings.
- Weed control performed within 24 months of installation, as needed for establishment, is authorized at the discretion of the district board. Weed control is not authorized after 24 months at which time the windbreak is considered established. Mechanical: 3 times/year, Chemical: 1 time/year.
- The tree planting must be protected from destructive fire and destructive grazing as documented in the operation and maintenance plan for the practice.

MAXIMUM cost-share rates are as follows (districts can set lower rates):

1. Site Preparation;
 - A. Chemical: 75% of the eligible cost not to exceed \$94 per acre.
 - B. Mechanical: 75% not to exceed \$68 per acre.
 - C. Debris removal: 75% of the eligible cost not to exceed \$500 per acre. Cost sharing is not authorized for burning or burying debris.
2. Trees, Shrubs, Planting:
 - A. Trees, shrubs (stock & planting): 75% of eligible cost not to exceed \$146 per 100.
 - B. Container conifers (stock & planting): 75% of eligible cost not to exceed \$8 each.
3. Weed Control:
 - A. Mechanical: 75% of eligible cost for up to 3 cultivations not to exceed \$7.20 per 100 ft. of total payment.
 - B. Chemical: 75% of eligible cost for 1 application not to exceed \$2.40 per 100 ft. of row per year.
 - C. Tree mats: Roll- 75% not to exceed \$40/100 ft.; Square- 75% not to exceed \$1 each.
4. Wildlife Control Devices: 75% of eligible cost not to exceed \$4 per tree.

D. 5 Grassed Waterway

Conservation Practices

Grassed Waterway (412): A natural or constructed channel that is shaped or graded to required dimensions and established in suitable vegetations for the stable conveyance of runoff.

Lined Waterway or Outlet (468): A waterway or outlet having an erosion-resistant lining of concrete, stone, or other permanent material.



Eligible Component(s):

Critical Area Planting (342)
Grade Stabilization Structure (410)
Mulching (484)
Subsurface Drain (606)
Underground Outlet (620)
Water and Sediment Control Basin (638)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

Policies

Cost sharing is authorized for the materials and activities required to establish the practice and protect the site during construction of the practice. They include, but are not limited to:

Materials:

Tile Systems
Seed
Rip Rap
Filter Material
Herbicides
Fertilizer
Minerals
Mulch
Netting
Sod

Activities:

Earthwork—Grading & Shaping
Site preparation—Seeding
Planting
Fertilizer/Herbicide Application
Mulching & Netting Labor
Rock Placement
Tile Installation

- Cost share is authorized where at least 75 percent of the contributing watershed controlled by the land occupier has the appropriate cultural, management, or structural practices in place (or scheduled to be installed) to stabilize sources of sediment and reduce surface water runoff.
- Cost share is not authorized where runoff or sediment from the contributing watershed would prevent the practice from achieving its intended purpose with normal operation and maintenance. The contributing watershed includes land not controlled by the land occupier.
- Cost share of subsurface drain tile is limited to the minimum size and length of tile needed to convey seepage water to an adequate and stable outlet, as determined by the conservation district technical representative. If the land occupier wants to install larger tile, (s)he must document, in writing, the purpose and the area to be served and must be responsible for the additional material and installation costs.

D. 6 Livestock Waste Management

Conservation Practice

Livestock Waste Management: The application of eligible conservation practice components to improve water quality associated with livestock wastewater and runoff.



Eligible Component(s):	Diversion (362)	Underground Outlet (620)
	Waste Storage Facility (313)	Manure Transfer (634)
	Fencing (382)	Composting Facility (317)
	Heavy Use Area Protection (561)	Subsurface Drain (606)
	Roof Runoff Management (558)	Waste Treatment (629)
	Pumping Plant (533)	Waste Treatment Strip (635)

(In certain circumstances, other eligible components may be applicable. If other eligible components are needed, please see Part V.E. Other Recognized Technical Practices.)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

STATE FEEDLOT COST-SHARE POLICIES

General Policies

- 1) Cost-sharing is limited to correction of existing pollution problems at feedlots that are at least 5 years old.
- 2) Cost-sharing is limited to feedlots that are not classified as a Large Concentrated Animal Feeding Operation (CAFO) and have less than 1000 animal units, in accordance with state feedlot rules.
- 3) Feedlot pollution abatement projects must acquire all applicable permits and comply with all applicable environmental standards to be eligible for cost-share.
- 4) Partial systems that correct only a portion of an existing feedlot pollution problem are eligible for cost-share only if allowable by the applicable regulatory authority.
- 5) The maximum cost-share rate is 75% for eligible practices. (Applies to combined state and federal cost-share from any source.)
- 6) The maximum cost-share amount is limited to the amount authorized by the district board for the most feasible and practical alternative that achieves the cost-share program objectives, not to exceed \$50,000 per feedlot project, including interim and final measures.
- 7) Cost-sharing is authorized for eligible runoff control, waste storage and treatment practices for manure and process wastewaters, including milkhouse wastewater and silage leachate, and for associated transfer components.
- 8) Cost-sharing is not authorized for production facilities or equipment including, but not limited to, buildings, feed storage, feeding facilities and equipment, or manure application equipment, except that cost-sharing is authorized for waste storage structures that serve as foundations for buildings, up to the eligible cost-share for a functionally comparable waste storage structure that does not serve as a foundation for a building.
- 9) Cost-sharing is not authorized for manure or process wastewater collection facilities, except for the inlet of eligible systems to transfer manure or process wastewater to storage or treatment facilities.
- 10) Innovative waste management systems with multiple benefits, or design standard variances, can be considered by submitting a written request to the BWSR Grants Coordinator.

STATE FEEDLOT COST-SHARE POLICIES, CONTINUED

- 11) BWSR will review feedlot cost-share eligibility on a case-by-case basis where formal enforcement actions have been taken, considering the environmental and legal facts of the situation, as well as the feedlot owner's demonstration of good faith.
- 12) If a project is canceled in a SWCD, cost-share funds may be encumbered on another feedlot project, with Board Conservationist approval.
- 13) In order to maximize the leveraging of EQIP funding, which has a 50% cost-share maximum, SWCDs may replace FWQMG funds with available EQIP funds and use the excess FWQMG funds for their next highest priority feedlot project, with Board Conservationist approval.
- 14) Prior to the SWCD Proceeding with a cost-share approval on either a feedlot relocation or feedlot roof structure, the SWCD shall contact the Board Conservationist to discuss the applicable cost-share policies.

Feedlot Relocation Policies (in addition to General Policies)

- 1) Cost-sharing at a feedlot relocation site is limited to:
 - a) the maximum cost-share amount approved to upgrade the existing eligible feedlot site;
 - b) eligible practices and components of the most feasible and practical waste management system at the relocation site, as determined by the district board, with applicable assistance from its technical advisors.
- 2) The existing eligible feedlot must be permanently closed in accordance with the state feedlot rules and, thereafter, is no longer eligible for feedlot cost-share.
- 3) Cost-sharing is authorized for closure of the existing feedlot in accordance with state feedlot rules, including fence removal, waste storage facility closure and seeding, but is not authorized for removal or land application of manure from an open lot or waste storage facility.
- 4) Feedlot relocation and associated closure of an existing feedlot shall be considered one feedlot project for application of limitations on the cost-share amount.

Feedlot Roof Structure Policies (in addition to General Policies)

- 1) A feedlot roof to eliminate precipitation on a feedlot, and associated runoff, is eligible for cost-share only when a documented alternatives analysis shows this to be part of the most feasible and practical alternative that meets applicable state feedlot rule requirements, including manure storage, land application and feedlot runoff requirements, or when the amount of cost-share approved by the district board for the feedlot project is based on the estimated costs for the most feasible and practical alternative. The documented alternatives analysis must be kept in the district file for the feedlot project.
- 2) Cost-sharing is authorized only when the roof structure design and construction is approved by a professional engineer registered in Minnesota.
- 3) Cost-sharing is not authorized when the roof structure is to be a component of a planned waste management system that will also include a waste storage or treatment facility, unless drainage conditions make routing of the feedlot runoff to the waste storage or treatment facility impractical, as determined by the district board, with applicable assistance from its technical advisors.
- 4) Cost-sharing is not authorized for surfaced floors or walls, but is authorized for a 1-foot high curb for clean water diversion, or up to a 4-foot high retaining wall to contain a manure pack, if applicable.

D. 7 Filter Strips

Conservation Practice

Filter Strip (393): A strip or area of herbaceous vegetation situated between cropland, grazing land, or disturbed land (including forest land) and environmentally sensitive areas.



Eligible Component(s):	Channel Bank Vegetation (322)	Pasture & Hayland Planting (512)
	Clearing and Snagging (326)	Pipeline (516)
	Fencing (382)	Tree/Shrub Establishment (612)
	Field Border (386)	Trough or Tank
	Use/Livestock Exclusion(472)	Water Facility (614)
	Riparian/Forest Buffers (391)	Bioretention Basin (712)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

Policies

Cost sharing is authorized for the materials and activities required to establish the practice and protect the site during construction of the practice. They include, but are not limited to:

Materials:

Seed
Trees & Shrubs
Herbicides*
Fertilizer*
Fence Materials
Minerals
Mulch
Netting
Pipeline
Rip Rap
Trough or Tank

Activities:

Earthwork- Grading & Shaping
Site Preparation-Seeding
Planting
Fertilizer/Herbicide Application
Mulching & Netting Labor
Fencing Labor

* The use of herbicides and fertilizers is permitted only in conjunction with soil tests and an application plan developed by the district technical representative.

- Construction of livestock watering facilities outside of the filter strip is authorized.
- Areas established to grass may be grazed or hayed periodically if it is identified in a conservation farm plan and the conservation district determines that these management measures are needed for wildlife management, weed control, or nutrient removal. The operation and maintenance plan must include provisions for approved grazing or haying.

D. 8 Sediment Basins

Conservation Practices

Sediment Basin (350): A basin constructed to collect and store debris or sediment.

Pond (378): A water impoundment made by constructing a dam or an embankment or by excavating a pit or dugout.

Grade Stabilization Structure (410): A structure used to control the grade and head cutting in natural or artificial channels.

Water & Sediment Control Basin (638): An earth embankment or a combination ridge and channel generally constructed across the slope and minor watercourses to form a sediment trap and water detention basin.



.....
Eligible component(s):

- Critical Area Planting (342)
- Fencing (382)
- Mulching (484)
- Subsurface Drainage (606)
- Underground Outlet (620)
- Bioretention Basin (712)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

POLICIES

Cost sharing is authorized for the materials and activities required to establish the practice and protect the site during construction of the practice. They include, but are not limited to:

Materials:

- Tile Systems
- Pipes
- Rip Rap
- Filter Material
- Seed
- Herbicides
- Fertilizer
- Minerals
- Fence Materials
- Mulch
- Netting

Activities:

- Earthwork—Grading & Shaping
- Site Preparation—Seeding
- Planting
- Fertilizer/Herbicide Application
- Mulching & Netting Labor
- Tile Installation

- Cost share is authorized where at least 80 percent of the contributing watershed controlled by the land occupier has the appropriate cultural, management, or structural practices in place (or scheduled to be installed) to stabilize sources of sediment and reduce surface water runoff.
- Cost share is not authorized where runoff or sediment from the contributing watershed would prevent the practice from achieving its intended purpose with normal operation and maintenance. The contributing watershed includes land not controlled by the land occupier.
- Cost share of subsurface drain tile is limited to the minimum size and length of tile needed for the proper functioning of the structure and to convey the water to a safe and stable outlet as determined by the conservation district technical representative. If the land occupier wants to install larger tile (s)he must document, in writing, the purpose and the area to be served, and must be responsible for the additional material and installation costs.

D. 9 Streambank, Shoreland, and Roadside Protection

Conservation Practices

Streambank and Shoreland Protection (580): Using vegetation or structures to stabilize and protect banks of streams, lakes, estuaries, or excavated channels against scour or erosion.

Grade Stabilization Structure (410): A structure used to control the grade and head cutting in natural or artificial channels.

Forest Harvest Trails and Landings (655): A route, travel-way, or cleared area within a forest.



Eligible Components:

Critical Area Planting (342)

Filter Strips (393)

Fencing (382)

Riparian/Forest Buffers (391)

Mulching (484)

Stream Channel Stabilization (584)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

Policies

Cost sharing is authorized for the materials and activities required to establish the practice and protect the site during construction of the practice. They include, but are not limited to:

Materials:

Tile Systems

Pipes

Rip Rap

Filter Material

Seed

Herbicides

Fertilizer

Minerals

Fence Materials

Mulch

Netting

Activities:

Earthwork – Grading & Shaping

Site preparation – Seeding

Planting

Fertilizer/Herbicide Application

Mulching & Netting Labor

Tile Installation

Bioengineering (Ch 16 FOTG)

- Cost share is authorized where at least 75 percent of the contributing watershed controlled by the land occupier has the appropriate cultural, management, or structural practices in place (or scheduled to be installed) to stabilize sources of sediment and reduce surface water runoff.
- Cost share is not authorized where runoff or sediment from the contributing watershed would prevent the practice from achieving its intended purpose with normal operation and maintenance. The contributing watershed includes land not controlled by the land occupier.
- Cost share of subsurface drain tile is limited to the minimum size and length of tile needed for the proper functioning of the structure and to convey the water to a safe and stable outlet as determined by the conservation district technical representative. If the land occupier wants to install larger tile (s)he must document, in writing, the purpose and the area to be served, and must be responsible for the additional material and installation costs.

D. 10 Stripcropping

Conservation Practice

Stripcropping (585): Growing row crops, forages, small grains, or fallow in a systematic arrangement of equal width strips on or near the contour of the field slope. A strip of grass or grass/legume or small grain is alternated with a strip of tilled annual crop or fallow.



Eligible Component: Field Border (386)
 Obstruction Removal (500)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

Policies

Cost sharing is authorized for the materials and activities required to establish the practice and protect the site during construction of the practice. They include, but are not limited to:

Materials & Activities:

Equipment and labor costs involved in the marking of individual strip lines.

- Cost sharing is authorized up to the equivalent total costs as listed in “Custom Rate Estimates for Minnesota” published annually by the University of Minnesota Agricultural Extension Service, and available in county agricultural extension offices.

D. 11 Terraces

Conservation Practice

Terrace (600): An earth embankment, or a combination ridge and channel constructed across the field slope.



Eligible Components:

Critical Area Planting (342)
Grass Waterway (412)
Subsurface Drain (606)
Underground Outlet (620)
Water and Sediment Control Basin (638)
Mulching (484)

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

Policies

Cost sharing is authorized for the materials and activities required to establish the practice and protect the site during construction of the practice. They include, but are not limited to:

Materials:

Tile Systems
Seed
Herbicides
Fertilizer
Minerals
Mulch
Netting

Activities:

Earthwork – Grading & Shaping
Site Preparation—Seeding
Planting
Fertilizer/Herbicide Application
Mulching & Netting Labor
Tile Installation

- Cost share is authorized where at least 75 percent of the contributing watershed controlled by the land occupier has the appropriate cultural, management, or structural practices in place (or scheduled to be installed) to stabilize sources of sediment and reduce surface water runoff.
- Cost share of subsurface drain tile is limited to the minimum size and length of tile needed to convey water to a safe and stable outlet, as determined by the conservation district technical representative. If the land occupier wants to install larger tile he/she must document, in writing, the purpose and the area to be served and must be responsible for the additional material and installation costs.

D. 12 Unused Well Sealing

Conservation Practice

Well Decommissioning (351): The sealing and permanent closure of a water well no longer in use. Minnesota Rules Chapter 4725 specifies the requirements for sealing unused wells in Minnesota.

.....



Eligible Component: N/A

The number in parentheses corresponds to the practice number in the Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

.....

Policies

Cost sharing is authorized for the materials and activities required to seal unused wells in accordance with Minnesota Rules Chapter 4725 (Minnesota Dept. of Health).

- Maximum cost-share rates are 50 percent of the eligible costs. Districts may set lower rates.
- Cost sharing will be authorized only for unused wells identified as “high priority.” (See attachment).
- Districts must develop either a list of identified high-priority unused wells for sealing or a well-designed method for selecting unused wells to be sealed. (Maintain list in cooperator file.)
- Unused wells in the contribution zone of a public water supply well, a designated wellhead protection area (WHPA), or a drinking water supply management area (DMSMA) should be given special priority for cost sharing.
- Use cost-share funds to fill in gaps in funding for well sealing that may be available through other sources.
- Take maximum advantage of training, education, and demonstration opportunities afforded by the well-sealing work.

WELL-SEALING PRIORITY CHECKLIST
PRIORITY WELL CHARACTERISTICS FOR WELL-SEALING COST-SHARE FUNDS
(More conditions met → higher priority for sealing)

Construction, depth, condition (provides pathway for contamination migration substantially faster than provided by natural hydrogeologic conditions):

- Well serves to channel surface or near surface contaminants into an aquifer (drainage or waste disposal wells reaching water table, wells in pits with surface water drainage to the well.)**
- Well penetrates confining layer(s).**
- Well has sand-packed or ungrouted casing(s) penetrating confining layer(s).**
- Multi-aquifer well.**
- Multiple screened well >100 ft deep.**
- Well poses hazard of people and animals falling into well.**

Location, aquifer characteristics:

- Within ½ mile of public water supply well and in same aquifer.**
- Within the zone of contribution of a public water supply well or within a designated Drinking Water Supply Management Area (DWSMA).**
- Well in area subject to flooding.**
- Well provides connection to water supply aquifer for which there are limited alternative supplies.**
- Well in or near a confirmed or suspected zone of contamination and capable of transferring contamination to water supply aquifer(s) faster than natural flowpaths.**
- Well in an area and aquifer where unsealed unused wells provide the main pathways for contamination to reach the aquifer.**
- Well in area which will undergo development or other changes in land and water use which have the potential to increase the contaminant load.**

REASONS FOR NOT USING COST-SHARE FUNDS TO SEAL AN UNUSED WELL

- Well does not meet any of above criteria.**
- Well has potential use as a monitoring or water level observation well and an organization is willing to "adopt" it and meet all provisions of the well code.**
- Well-sealing cost-share funds available through other sources.**

D.13 Forestry Conservation Practice

Forestry Conservation Practice

Establishment or improvement of long term forestry practices to improve or protect water quality or control soil erosion.

Eligible Components: Access Road (560)	Forest Trails and Landings (655)
Brush Management (314)	Fuel Break (383)
Clearing and Snagging (326)	Grade Stabilization (410)
Conservation Cover (327)	Prescribed Forestry (409)
Critical Area Plantings (342)	Restoration and Management of Rare or Declining Habitats (643)
Early Successional Habitat Development/ Management (647)	Riparian Forest buffer (391)
Fence (82)	Stream Crossing (578)
Forest Site Preparation (490)	Tree/Shrub Establishment (612)
Forest Stand Improvement (666)	Water and Sediment Control Basin (638)
Forest Slash Treatment (384)	

The number in parentheses corresponds to the practice number in the NRCS Field Office Technical Guide (FOTG). Please refer to the FOTG for a definition of the practice, its purpose, applicability, and recommended standards and specifications.

(In certain circumstances, other eligible components may be applicable. If other eligible components are needed, please see Part V.E. Other Recognized Technical Practices)

POLICIES

- A **Small Acreage Assessment** must be completed to document needs.
- Cost share is authorized where at least 80 percent of the contributing watershed controlled by the land occupier has the appropriate cultural, management, or structural practices in place (or scheduled to be installed) to stabilize sources of sediment and reduce surface water runoff.
- Cost share is not authorized where runoff or sediment from the contributing watershed would prevent the practice from achieving its intended purpose with normal operation and maintenance. The contributing watershed includes land not controlled by the land occupier.

Cost sharing is authorized up to 75% (Districts can set lower rates.) of total eligible project costs for the materials and activities required to establish the practice and protect the site during construction of the practice. They include, but are not limited to:

Materials:

Seed
Trees/Shrubs
Herbicides
Fertilizer
Minerals
Fence Materials
Mulch
Tubes
Mats

Activities:

Grading (Earthwork)
Planting
Fertilizer/Herbicide Application
Fencing Labor
Mulching Labor
Site Preparation

Small Acreage Assessment

Name: _____ Assessment Date: _____
Address: _____ Planner: _____
City: _____ E911 Sign _____
Agency: _____ LAT / LONG (X / Y): _____
Township Range Section: _____

Stand Inventory Worksheet (Complete one sheet for each stand or different area on the property.)

_____ Stand number or letter (mark this on your map) Neighboring property

Soil – dig a small hole about a foot deep. Is the soil at the bottom of the hole:

- Sand Wet **OR** County Soil Survey: _____
 Clay (sticky and hard to dig) Dry Soil Type: _____
 Loam (rich, black dirt)

Slope – is the land: Level Hilly (If it's hilly, which direction does the hill face:
 North East South West Rolling, no specific direction

Comments / suggested opportunities: _____

Woodland – Predominant tree type:

- Deciduous (broadleaf, loses leaves in fall). List species you recognize in order of predominance: _____

- Evergreen (leaves are needles). List species you recognize in order of predominance: _____

Predominant tree size:

- Seeding (under 5 feet tall) Sapling (5 feet tall to 5 inches in diameter)
 Pole (5 to 8 inches in diameter at 4 feet above the ground [Dbh]) Sawtimber (over 8 inches Dbh)

Comments / suggested opportunities: _____

Tree condition:

- Vigorous (no leaf discoloration, stems are straight without blemishes, few dead branches in the crown)
 In trouble – check conditions that apply:
 Discolored or shredded leaves Odd growths on stems and branches
 Many dead branches in tree crowns Many dead trees in the area
 Other observed problems _____

Comments / suggested opportunities: _____

Are trees in rows? Yes No

Undergrowth: Pine needles or bare soil Short (<1 ft.) shrubs & form (species): _____

Medium brush (1-3 feet tall) (species): _____

Tall brush (over 3 feet tall) (species): _____

Density: Heavy (hard to walk through) Moderate Sparse

Comments / suggested opportunities: _____

Developed:

- Homesite:
Predominant trees: Deciduous Evergreen – list species: _____
Tree size: Seedlings Saplings Pole Sawtimber
Tree condition: Vigorous Problems. List: _____

Hard space mitigation needs: _____

Other significant features: _____

Comments / suggested opportunities: _____

Conservation Needs Assessment

Name: _____

Basic type:

- Open (grassland, bare soil, pasture, crops, predominantly brush or shrubs – few or no trees)
 Woodland (predominantly trees)
 Wetland (open water, wet soil, or periodically wet area)
 Developed (property with buildings on it or utility right of way)

Comments / suggested opportunities: _____

Shoreline:

- River
 Lake
 Small stream or intermittent stream
 Wetland
Riparian zone condition: None Poor Good

Concerns or suggested opportunities: _____

Wetland character:

- Open water: Lake Stream Pond Forested Wetland
 Seasonally wet area (not always open water). Predominant vegetation:
 Bare soil Grasses Cattails Shrubs Type _____

Concerns or suggested opportunities: _____

Invasive species present:

- Open Wooded Wetland

Concerns or suggested opportunities: _____

Water Quality:

Erosion:

- Gullies present
 Other _____

Concerns or suggested opportunities: _____

Wildlife:

Types:

- Animals: _____
 Food Habitat Water
 Birds: _____
 Food Habitat Water

Concerns or suggested opportunities: _____

Other significant features:

- Nest (bird?): _____ Animal den (animal?): _____
 Beaver dam Steep slope Water seep or spring Other: _____
 Special species of concern present: _____

Concerns or suggested opportunities: _____



SUBJECT: INVASIVE NON-NATIVE SPECIES POLICY
EFFECTIVE DATE: SEPTEMBER 8, 2004

Minnesota is graced with a diverse landscape of prairies, forests, waters, and agricultural areas. They have high social, economic, and ecological value, and, a long tradition of resource-related recreational activities such as fishing and hunting, commercial activities (agriculture, forestry) and tourism.

Invasive species, not native to Minnesota, harm our valuable state resources. They displace native species, thus threatening outdoor recreation opportunities, increase costs for industry, and diminish the natural heritage of significant sites in the state such as parks and natural areas.

Public awareness and action are key components of minimizing the impacts of invasive species. The Minnesota Invasive Species Advisory Council is seeking to increase public awareness of this issue and is conducting a variety of events throughout the summer to promote awareness concerning invasive species.

The BWSR is also concerned about invasive non-native species. At their June Meeting, the BWSR adopted new policy pertaining to the State Cost Share Program and invasive non-native species and actions that can be taken with regard to conservation practices. This policy:

Prohibits the seeding/planting of invasive non-native species on State Cost Share Program conservation practices where they are likely to colonize more desirable stable plant communities.

Where the SWCD determines that site conditions necessitate the use of invasive non-native species, prior to planting, the SWCD must include a copy of the justification to plant invasive non-native species in the project file.

An Invasive Non-Native Species List has been provided by the DNR – Ecological Services:

GRASSES & WILDFLOWERS

Alliaria petiolata - Garlic mustard
Berteroa incana - Hoary alyssum
Bromus inermis - Smooth brome grass
Butomus umbellatus - Flowering rush
Carduus nutans - Musk thistle
Centaurea maculosa - Spotted knapweed
Chrysanthemum leucanthemum - Ox-eye daisy
Cirsium arvense - Canada thistle
Cirsium vulgare - Bull thistle
Coronilla varia - Crown vetch
Daucus carota - Queen Anne's lace
Digitalis lanata - Grecian foxglove
Euphorbia esula - Leafy spurge
Glechoma hederacea - Creeping Charlie
Iris pseudacorus - Yellow iris
Linaria vulgaris - Butter and eggs
Lotus corniculatus - Bird's-foot trefoil
Lythrum salicaria - Purple loosestrife
Melilotus alba & M. officinalis - White & yellow sweetclover

Miscanthus sacchariflorus - Amur silver grass
Nymphaea spp. - Non-native waterlilies
Pastinaca sativa - Wild parsnip
Phalaris arundinacea - Reed canary grass
Polygonum cuspidatum - Japanese knotweed
Sonchus arvensis - Sow thistle
Vicia villosa - Hairy vetch

TREES & SHRUBS

Acer ginnala - Amur maple
Acer platanoides - Norway maple
Berberis thunbergii - Japanese barberry
Caragana arborescens - Siberian peashrub
Elaeagnus angustifolia - Russian olive
Lonicera tartarica & hybrids - Non-native honeysuckles
Rhamnus cathartica - Common buckthorn
Rhamnus frangula - Glossy buckthorn
Robinia pseudocacia - Black locust
Ulmus pumila - Siberian elm

The BWSR recognizes that some of these species are commonly used by many SWCDs for conservation practices. It is important to remember that these species are prohibited from being used only on State Cost Share practices *where they could colonize existing native plant communities.*

A couple examples:

#1 Stormy County SWCD cost-shared on a 1,200’ waterway in cropland that outlets into a wetland. The SWCD technician usually would write a seeding/planting plan that would include a cover crop with smooth brome grass or reed canary grass. However, the technician recognizes that both smooth brome grass and reed canary grass are invasive species, and either of these has the potential to threaten the biological integrity of the wetland, if they were to colonize it. Instead, she modifies the plan, substituting smooth brome grass and reed canary grass with perennial rye and timothy.

#2 Stormy County SWCD cost-shared on stabilizing 600’ of eroding streambank. Because the landowner also has concerns about improving wildlife habitat, the technician usually would write a seeding/planting plan that would include russian olive on the borrow areas. However, the technician recognizes that russian olive is an invasive species that has the potential to threaten the biological integrity of the uplands, if it were to colonize them. Instead, he modifies the plan, substituting the russian olive with american plum.

The first step in complying with this policy is learning what species are non-native and invasive. The second step is recognizing conditions where they could colonize native plant communities. Simply put, the policy says, “Think before you plant.”

In almost all situations there is a viable substitute for an invasive non-native species. But on occasion, certain conditions may necessitate the use of invasive non-native species. The SWCD must then include in the project file a justification for using invasive non-native species.

This policy is effective immediately on any new contracts approved after September 8, 2004, regardless of which fiscal year funds are used.

POSTED March 31, 2006

<i>Bemidji</i> 3217 Bemidji Avenue N. Bemidji, MN 56601 phone (218) 755-4255 fax (218) 755-4201	<i>Brainerd</i> 217 S. 7th Street Suite 202 Brainerd, MN 56401 phone (218) 828-2383 fax (218) 828-6156	<i>Duluth</i> 394 S. Lake Avenue Room 405 Duluth, MN 55802 phone (218) 723-4752 fax (218) 723-4794	<i>Fergus Falls</i> 413 W. Stanton Avenue Fergus Falls, MN 56537 phone (218) 736-5443 fax (218) 736-7213	<i>Marshall</i> 1408 E. Lyon Street Box 267 Marshall, MN 56258 phone (507) 537-6060 fax (507) 537-6568	<i>New Ulm</i> 261 Highway 15 S. New Ulm, MN 56073 phone (507) 359-6074 fax (507) 359-6018	<i>Rochester</i> 40 36th Street S.E. Suite A Rochester, MN 55904 phone (507) 285-7458 fax (507) 280-2875	<i>Saint Paul</i> One West Water Street Suite 250 Saint Paul, MN 55107 phone (651) 282-9999 fax (651) 284-0080
---	---	---	--	---	--	---	---