

Status of the Goals, Objectives and Action Items as of the end of 2009

Goal 1. Source Water Protection

Objective A. Promote, support and participate in education directed at source water protection issues

1. Promote and support Source Water Protection educational activities, in particular concerning maintenance of onsite sewage treatment systems, proper disposal of hazardous chemicals through the Household Hazardous Waste program, stormwater runoff, low impact development, BMP's during construction, and properly sealing unused wells.

Partners: ESD, SWCD, MDH, MRWA, public water suppliers, CMWEA

Timeline: 2008-2017

Focus Area: DWSMA's

2008

One of the 2008 CMWEA newspaper and radio ads was directed at proper disposal of unused pharmaceuticals. One of the 2008 CMWEA Top Ten Tips for Water Protection was the proper maintenance of individual sewage treatment systems.

SWCD assisted Cold Spring WHP team in inventorying all wells in the Cold Spring, Rockville and Richmond DWSMA's. This information was used by the MDH to help understand the source of nitrate in the public water supply wells.

St. Cloud coordinated a storm drain marking program to label "only rain down the storm drain" on all storm drain inlets throughout the City with the assistance of SWCD

SWCD is assisting the City of Kimball with a stormwater management plan that will offer further protection to the city wells. Kimball is developing Part I of a WHPP. Education will be a primary focus of their plan.

SWCD developed a WHP brochure for Waite Park and Paynesville. SWCD also developed an article on WHP for the city of Paynesville's January 2009 newsletter.

ESD and SWCD gave presentations at MN Rural Water Association annual conference, providing information to other Wellhead Protection Plan managers on the Stearns SWCD's and ESD's role in WHP efforts across the County.

2008-2009

HHW collections were conducted in Sauk Centre, Paynesville, Richmond, Melrose, Cold Spring & Greenwald, all of which have WHP Plans. All the communities with WHP plans in the County have access to a HHW collection.

CMWEA conducted an ad campaign to promulgate simple actions that citizens can do to alleviate the adverse affects of stormwater runoff. DWSMA communities which are contributing members of CMWEA are St. Cloud, Sartell, Cold Spring, Melrose, Rockville, Richmond, Waite Park and Paynesville. An invitation to join CMWEA was extended to all WHP communities with an adopted plan.

SSTS inspection program is being carried out in Paynesville WHPA through NFCRWD funding. Each homeowner receives information about maintenance of SSTS.

Stearns County sends an annual newsletter to all County residents. In 2009 there was guidance on how to dispose of household hazardous waste, notification of agricultural waste collections and correct disposal of unwanted pharmaceuticals.

The 2009 feedlot newsletter had information on “straight-pipe” laws. “Straight pipes” are sewage disposal systems that transport raw sewage directly to a lake or stream or discharge onto the ground. They are illegal and must be corrected.

Goal 1. Source Water Protection

Objective A. Promote, support and participate in education directed at source water protection issues

2. Participate with communities on educational activities, such as water festivals and educational fairs.

Partners: ESD, SWCD, MDH, MRWA, public water suppliers, DNR, WD’s, lake associations

Timeline: 2008-2017

Focus Area: DWSMA’s

2008

The County provided financial support of \$10/attending student. There were 1470 students who attended a fest in 2008, compared to 1019 in 2007.

2008-2009

WD’s and public water suppliers put on water fests at ROCORI, Paynesville, Sartell, Lower & Middle Sauk. The ROCORI and Paynesville fests are organized by the city’s Wellhead Protection team. All the fests have sessions that address ground water protection. SWCD, NRCS, ESD, MRWA, DNR, lake associations, the Sauk River Watershed District and the public water suppliers are highly involved.

Goal 1. Source Water Protection

Objective B. Focus inspection and enforcement within shoreland and DWSMA’s.

1. Continue to inspect all feedlots, with focus on feedlots within vulnerable and highly vulnerable DWSMA’s. Work with owners/operators to bring facilities into compliance. In addition, assess the potential negative effects on ground water quality that can result from manure storage and stockpiling of manure.

Partners: ESD, SWCD, MDH, MRWA, BWSR, MDA, USGS

Timeline: 2008-2017

Focus Area: DWSMA’s

2008

SWCD and a SCSU graduate student conducted a research project, through a 319 grant, to evaluate the effectiveness of alternative closure techniques of abandoned manure storage basins. Currently State Law requires that within one year of ceasing operation all manure and manure-contaminated soils must be removed and land applied. Then the site is to be re-vegetated with a perennial forage crop such as alfalfa. This research project looked at 8 abandoned manure storage basins. The project stockpiled excavated soils, excavated to native soils, pushed in berms, backfilled, graded and planted with reed canary grass or converted to wetland. Soil water samples, including phosphorus and nitrate, were taken upstream, at the pit, and downstream. Results indicated that there was little phosphorus or nitrate leaching from the abandoned manure storage pit area after the alternative closure. The conclusion was that

there is currently insufficient evidence to determine whether abandoned manure storage basins directly impact groundwater.

The U of MN and MDA have been and are continuing to conduct field research on the effects on ground water quality that can result from manure storage and stockpiling of manure. Concerning the stockpiling of poultry manure, U of MN and MDA did a pilot study and determined that poultry litter can hold a significant amount of water and water movement through the pile is quite limited. Nitrogen losses through the pile and via runoff were extremely small over the 8-9 month study period. U of MN did a study of the prevalence of antibiotic-resistant bacteria (ARB) in swine and turkey manure. The results indicate that the use of tetracycline as feed additive is leading to the emergence of ARB in manure samples. However, no significant difference was observed in the prevalence of ARB in soil and dog fecal samples suggesting that this resistance may not be spreading to soil and to pets on the farm. Comparison of individual bacterial species in manure, soil, and dog fecal samples between the Antibiotic Using and the Non Antibiotic Using farms showed little significant differences.

By the end of 2008 all feedlots in the County will have received a Level 3 inspection and will have been rated.

In 2008 all the Level 3 inspections were completed and ESD is in the process of looking at all 2500 files to list the “not in compliance” sites. This project should be completed by the end of March 2009.

The following table shows the status of the feedlots in the DWSMA's as of the end of 2008

DWSMA	# of Active Feedlots	# Not in Compliance	Open Lot Agreement	Interim Permit
Paynesville	9	0		
Melrose	8	2	2	
Sauk Centre	5	1	1	
St. Andrews	2	0		
Gold'n Plump	9	0		
Meire Grove	4	0		
Rockville	2	0		
New Munich	12	3	2	1
Sartell	23	1	1	
Cold Spring	16	0		

2009

The following chart shows the status of the feedlots in DWSMA's at the end of 2009

DWSMA	# of feedlots	In compliance	Not in compliance
Cold Spring	14	12	2
Gold 'n Plump	6	6	0
Meire Grove	4	4	0
Melrose	7	5	1
New Munich	13	11	2
Paynesville	8	8	0
Richmond	1	1	0
Rockville	2	2	0
Sartell	17	16	1
Sauk Centre	5	3	1
St Andrews	2	2	0
Towns Edge	1	1	0
Viking Industries	1	1	0

Goal 1. Source Water Protection

Objective B. Focus inspection and enforcement within shoreland and DWSMA's.

2. Continue to inspect all feedlots, with an emphasis on feedlots in shoreland, work with owners/operators to bring facilities into compliance, and assess the potential impacts to surface water quality from open lot runoff.

Partners: ESD, SWCD, BWSR, MDA

Timeline: 2008-2017

Focus Area: Shoreland

2008

A U of MN study looked at the presence of antibiotics in manure and found that storing manure in protected (i.e., covered) facilities could reduce aquatic contamination risks associated with manure stockpiling or other outdoor manure management practices.

All feedlots in the County will have been inspected for compliance and rated by the end of 2008.

2009

All feedlots have been inspected, and re-inspections, along with re-registrations, are underway for feedlots with 50 animal units or more or feedlots not in compliance. Of the 2,140 feedlots with 10 animal units or more, 373 feedlots are considered noncompliant for open lot runoff and/or unpermitted liquid manure storage area. Of these, 287 feedlots are noncompliant with open lot runoff and 148 are noncompliant due to unpermitted manure storage. Of the 373 noncompliant feedlots, 50 are located in shoreland.

Goal 1. Source Water Protection

Objective B. Focus inspection and enforcement within shoreland and DWSMA's.

3. Inspect areas within DWSMA's and shoreland for proper application of nutrients and review records of land application.

Partners: ESD, SWCD, MDH, MRWA, BWSR, MPCA

Timeline: 2008-2017
Focus Area: Shoreland and DWSMA's

2008-2009

Feedlots <100AU are not required to keep manure land application records, and most don't have written records. As required by State law, the ESD reviews manure land application during a compliance inspection at feedlots with 100 AU or more (also known as a Level I manure land application inspection). The ESD conducts compliance inspections on a 4-year cycle regardless of where the site is located. The ESD does not review commercial fertilizer (nitrogen) land application unless manure is also applied to that particular field.

SWCD worked with the ESD to make recommendations for a turkey manure holding facility in New Munich's WHPA.

2009

In addition to the ESD methods from 2008-09, staff have occasionally conducted an inspection of manure land application (aka Level III land application inspection) or an in-depth manure land application record review (aka Level II land application inspection). In 2009, there were 17 Level II or III land application inspections. All land application efforts are largely educational, and Level II and III land application inspections are most often conducted in shoreland or where waters of the State are in nearby.

Goal 1. Source Water Protection

Objective B. Focus inspection and enforcement within shoreland and DWSMA's.

4. Work with MPCA to focus NPDES Phase II Construction Permit inspections in the area of St. Cloud Priority Area A DWSMA.

Partners: ESD, MPCA, SWCD, St.Cloud

Timeline: 2008-2017

Focus Area: St Cloud DWSMA

2008

All active NPDES permits were inspected at least once in 2008. Stearns County and the Stearns County SWCD have entered into an agreement with the Minnesota Pollution Control Agency to conduct NPDES Construction Stormwater inspections within the county. County inspectors are responsible for identifying all new construction activity and ensuring that applicable stormwater management and erosion control regulations are complied with. The program has established relationships with local government units that have similar regulations to ensure that the available resources are applied equitably. All sites are inspected annually to ensure permit compliance and reduce the potential for surface water impacts.

2009

The Joint Powers Agreement between Stearns County/Stearns County SWCD and the MPCA to conduct NPDES Construction Stormwater Permit inspections expired on June of 2009. Due to lack of funding the MPCA was not able to extend the agreement. Currently the MPCA and their nine inspectors are responsible for Construction Stormwater Permit inspections for all permitted sites throughout the state. Due to the large number of active Construction Stormwater Permits, the vast area covered and the small number of MPCA staff inspectors, most areas of the state are only being inspected on a complaint basis. If the MPCA receives a complaint, the inspector

will do an inspection of the site. These complaint inspections typically result in an enforcement case.

Goal 1. Source Water Protection.

Objective C. Administer initiatives that advance source water protection

1. Seek funding for Source Water Protection, including both Wellhead Protection and protection of surface water intakes.

Partners: MDH, MRWA, ESD, SWCD, BWSR, MPCA

Timeline: 2008-2017

Focus Area: DWSMA's

2008

SWCD sought and received funding to hire an Urban Conservationist. This staff person's primary duties include working with communities to implement their Source Water Protection Plans.

Stearns SWCD drafted and submitted a resolution to the Area SWCD titled "Conservation Easements for Drinking Water Supply Management Areas (DWSMA)". This resolution was subsequently approved at the Area and State levels and legislative changes sought.

ESD requested and received a grant from the Mid-MN Mississippi RC&D to help finance the educational water fests in the County. The fests include sessions about ground water protection.

2008-2009

St Cloud sought and received Upper Miss R Source Water Protection Program grant.

The Urban Conservationist keeps WHP managers up-to-date on grant opportunities or other natural resource opportunities that offer additional protection to their groundwater supplies.

Conservation Easements for DWSMA's was approved and the legislature provided \$2 million in funding for this purpose (appropriated to BWSR) from the Clean Water Fund during the 2009 session. Perennial crops and/or native vegetation can reduce nitrate leaching losses by a factor of 30 to 50 times less than conventional row crop systems. This conservation easement program will leverage local, state and federal resources (similar to CREP) to protect drinking water supplies. Thee conservation easement program would target community water suppliers with elevated nitrate concentrations, especially suppliers approaching or exceeding health standards.

Goal 1. Source Water Protection.

Objective C. Administer initiatives that advance source water protection

2. Participate, as requested, in the development and implementation of Source Water Protection Plans.

Partners: ESD, SWCD, MDH, MRWA, public water suppliers

Timeline: 2008-2017

Focus Area: DWSMA's

2008

SWCD assisted with the letter of Notice of Plan Development to LGU's for St. Martin.

SWCD provided ongoing technical support on ordinance language on erosion and sediment control and buffer ordinances.

SWCD participated and provided comment, when applicable, on Paynesville, St. Martin, Sartell, Kimball, Holdingford, Rockville 2, and St. Cloud SWP/WHP plan development.

SWCD developed a 2- and 10-year work plan for Sartell and Paynesville.

SWCD worked with Richard Soule, MDH, to develop language for Stearns County Stormwater Ordinance to protect vulnerable WHP areas from infiltration practices.

SWCD coordinated emergency response plans with local police and fire departments, Stearns Co. ESD, and state MPCA for ROCORI.

SWCD coordinated a countywide WHP workshop on 1/24/2008.

SWCD presented at Kimball and Cold Spring City Council meetings to provide information on WHP and the interaction of natural resources.

SWCD was lead on developing and implementing a stormwater management plan for the City of Kimball that protects the capture zone of their city wells and Willow Creek trout stream. Team consists of members from the DNR fisheries, MnDOT, MDH, CRWD, City Representatives, and Wenck Associates.

ESD participated in first implementation report for Paynesville.

2008-2009

SWCD Urban Conservationist worked with all the WHPA's closely to assist them in implementation of their plans. The SWCD Urban Conservationist acts as the connecting agency to the WHP managers and other agencies, communicating activities taking place in WHPA and how to proceed to offer additional protection.

ESD, SWCD, MRWA and public water suppliers participated in the water fests, which are action items in the Paynesville & ROCORI WHP plans.

Goal 1. Source Water Protection.

Objective C. Administer initiatives that advance source water protection

3. Support local efforts to conduct nitrate testing for private wells through nitrate "clinics".

Partners: MDA, SWCD, MDH, MRWA, BWSR, LA's, WD's

Timeline: 2008-2017

Focus Area: DWSMA's

2008

ROCORI WHP team and SWCD collected nitrate samples from wells in Cold Spring, Richmond and Rockville WHPA's.

Water samples were brought in by the students and were analyzed at the ROCORI water fest.

Although MDA does not have funding to carry out the nitrate clinics, MDA will lend equipment to others to carry out the clinics and give training on how to do the tests and what the implications of the results are. The Sauk Lake Association borrowed the MDA equipment and attended training to learn how to do the testing.

SWCD assisted with two nitrate clinics in Rockville in August 2008.

2009

Goal 1. Source Water Protection.

Objective C. Administer initiatives that advance source water protection

4. Explore development of planning and zoning tools, such as an overlay district, which promote proactive land use planning in order to protect drinking water supplies. One of the aspects of the overlay district will include evaluation of proposed storm water infiltration projects in vulnerable WHPA's, using MDH guidance.

Partners: ESD, MDH, MRWA, Cities and Townships

Timeline: 2008-2009

Focus Area: DWSMA's

2008

An Implementation Action in the 2030 Comp Plan, p.4-17 is "Identify and protect groundwater recharge areas and wellhead areas... Work with the State Department of Health to identify wellhead protection areas. Create an overlay for wellhead protection and groundwater recharge areas."

Stearns County Landuse Ordinance #209, section 7.21.6 was modified to require that stormwater plans which include wet detention basins include a defined groundwater vulnerability map. If a wet detention basin is located in an area identified as highly susceptible to ground water contamination, except ground water discharge areas, it shall be designed so that the bottom of the basin is located at least three feet above the seasonal high ground water elevation and/or bedrock and be lined with two feet of soil having a permeability less than five minutes per inch.

2009

Stearns County's Landuse Ordinance is being modified. As of this writing, draft Section 7.8 contains a section "Drinking Water Supply Management Areas" for the management of DWSMA's. Draft language is that any proposed use or structure within a DWSMA shall comply with DWSMA Plan adopted by the relevant public water supplier. ESD shall review all land use permit and subdivision applications within DWSMA's for potential impact on drinking water supplies. ESD may impose conditions on any land use permit of subdivision within a DWSMA to prevent negative impacts on drinking water supplies.

Conditions may include, but are not limited to, the following:

- 1) prohibiting or limiting allowed uses;
- 2) limiting location or technology of subsurface sewage treatment systems,
- 3) limiting land application or storage of manure;
- 4) limiting the storage or use of chemicals or other materials
- 5) requiring specific stormwater management practices to prevent drinking water contamination
- 6) limiting location or technology of individual drinking water wells
- 7) limiting the movement, excavation and removal of soil and underground materials
- 8) limiting excavation

The ESD will forward all land use applications, except for single family residential dwelling units, residential accessory structures and agricultural accessory structure, to the drinking water supplier and to the SWCD for review.

Goal 1. Source Water Protection.

Objective C. Administer initiatives that advance source water protection

5. Explore development of additional required protective measures for aggregate mining in wellhead protection areas overlying geologically sensitive aquifers. Additional measures are detailed in the MDH guidance document "Wellhead Protection Issues Related to Mining Activities".

Partners: ESD, MDH, MRWA, WD's

Timeline: 2008-2009

Focus Area: DWSMA's

2008

Comp Plan, p. 4-16, Policies and Actions, "Consider creating an aggregate overlay district that guides how development is staged in areas with high quality aggregate resources."

MRWA and SWCD are exploring establishment of a conservation easement program to put permanent vegetation in the fringe areas of mining sites. This would reduce the potential of harmful runoff into the mining site.

2008-2009

DNR is working on an Aggregate Resource Map for Stearns County.

Draft Stearns Landuse Ordinance provides that ESD may impose conditions on any land use permit, including excavation, within a DWSMA to prevent negative impacts on drinking water supplies.

Goal 1. Source Water Protection

Objective D. Employ land and water treatment initiatives for the protection of source water.

1. Promote efforts to minimize the potential negative effects of unused wells by reactivating, sealing by a licensed contractor or obtaining a maintenance permit for the well.

Partners: ESD, MDH, MRWA, public water suppliers, SWCD, BWSR, WD's

Timeline: 2008-2017

Focus Area: County

2008

SWCD developed a brochure about proper well sealing that has been distributed to the ROCORI WHPA and is available at City Hall and distributed at public events. Paynesville will be mailing brochure on used wells to all residents in its DWSMA and the brochure is available at City Hall.

SWCD assisted in the New Munich well sealing of the former Pitzl Brewery, including securing grant funding. Submitted press release and was interviewed by the St. Cloud Times; that article was picked up by several local newspapers and the Star Tribune. The City of New Munich has sealed two abandoned wells within its DWSMA.

Holdingford sealed an old municipal well.

Cold Spring conducted a survey in summer 2008 to identify all the wells in its DWSMA.

SWCD will try to coordinate information published in community newsletters or parish readers to promote further education on this issue.

2008-2009

Goal 1. Source Water Protection

Objective D. Employ land and water treatment initiatives for the protection of source water.

2. Promote the cost-share programs for properly sealing unused wells.

Partners: ESD, MDH, MRWA, public water suppliers, SWCD, BWSR, WD's

Timeline: 2008-2017

Focus Area: County

2008

Cost-share assistance used to seal wells in New Munich, Holdingford and Albany.

2008-2009

Carrie Raber (SWCD) is listed on the MDH website as a local contact for well sealing. As a result, SWCD continually provides information on well sealing and wellhead protection to interested citizens.

Goal 1. Source Water Protection

Objective D. Employ land and water treatment initiatives for the protection of source water.

3. Cooperate with public water suppliers with vulnerable DWSMA's to inventory those ISTS located within the vulnerable areas of the DWSMA and explore possible sources of funding to correct noncompliant systems. Support innovative approaches towards inspection programs of individual septic treatment systems.

Partners: ESD, MRWA, public water suppliers, SWCD, BWSR, WD's

Timeline: 2008-2017

Focus Area: DWSMA's

2008

SWCD collected information to develop ISTS inventory list for ROCORI.

2008-2009

NFCRWD funded an initiative to inspect all the ISTS throughout the WD, including the Paynesville DWSMA.

NFCRWD and SWCD have cost-share funds to help upgrade non-compliant systems.

Ag BMP loans, from SWCD, are used for upgrading ISTS.

The Sauk Chain of Lakes Association, the County and the MPCA (Clean Water Legacy Grant) partnered to inspect all the ISTS within the shoreland of Sauk Chain of Lakes. The ESD hired a temporary (three years), fulltime employee to carry out these inspections.

Goal 1. Source Water Protection

Objective D. Employ land and water treatment initiatives for the protection of source water.

4. Support the awarding of additional scoring points in the determination of eligibility for conservation program funding if an area is within a DWSMA.

Partners: NRCS, SWCD, MRWA, public water suppliers, BWSR, WD's

Timeline: 2008-2009

Focus Area: DWSMA's

2008

Land within a DWSMA is given higher points for EQIP.

2008-2009

As a result of a Stearns SWCD resolution, "Conservation Easements for DWSMA's" was approved and the legislature provided \$2 million in funding for this purpose (appropriated to BWSR) from the Clean Water Fund during the 2009 session.

There was a significant change involving the CRP wellhead protection eligibility. For the past few years ongoing efforts have taken place here in Minnesota and throughout the Region 5 EPA States to expand the CRP eligibility for CRP wellheads from the 2000 foot radius to the wellhead protection area. CRP Amendment 17 contains policy that allows the Region 5 EPA States of Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin to use a State established hydrologically delineated public wellhead protection area using a 5-year or 10-year time-of-flow criteria provided the State water quality agency has approved the hydrologically delineated public wellhead protection area. For Minnesota this expanded CRP wellhead eligibility will have a significant impact.

Goal 1. Source Water Protection

Objective D. Employ land and water treatment initiatives for the protection of source water.

5. Cooperate with the public water suppliers in their promotion of conservation programs.

Partners: NRCS, SWCD, MRWA, public water suppliers, BWSR, WD's

Timeline: 2008-2017

Focus Area: DWSMA's

2008

SWCD partnered with the City of New Munich, Cold Spring, Rockville and Richmond to promote EQIP conservation programs available through federal and state cost-share programs. Each producer received a letter.

SWCD hosted a meeting at Cold Spring City Hall to promote nutrient reduction programs. Letters of invitation were mailed to all operators in the ROCORI WHP.

SWCD developed a parcel mailing list for feedlot operators in the DWSMA's of Cold Spring, Alano, Granite, Gluek, Gold'n Plump, Melrose, New Munich, Richmond, Rockville, Sauk Centre and St. Joseph.

SWCD created a letter for WHP managers to invite all feedlot operators in their DWSMA to the manure management field day sponsored by the SWCD. Each WHP manager in the county received a letter to put on their own letterhead, supporting material for field day and a mailing list for all operators in their DWSMA. Information was also provided to St. Joseph since it is a sensitive source water area.

SWCD developed a list of conservation practices applied in DWSMA and an accompanying map.

Goal 1. Source Water Protection

Objective D. Employ land and water treatment initiatives for the protection of source water.

6. Promote BMP's associated with irrigation on coarse textured soils in DWSMA's.

Partners: MDA, NRCS, SWCD, MRWA, public water suppliers, WD's, DNR

Timeline: 2008-2017

Focus Area: DWSMA's

2008

SWCD is working with the MDA to develop BMP's for producers with irrigation in the Cold Spring DWSMA.

SWCD produced a flyer which was sent to all irrigators who have DNR Water Appropriation Permits. The flyer promoted assistance through EQIP technical assistance and cost-share for Irrigation Water Management.

2008-2009

Goal 1. Source Water Protection

Objective D. Employ land and water treatment initiatives for the protection of source water.

7. Support research for the purpose of developing the use of native/alternative plants as a cellulosic source for biofuels. Support the planting of native/alternative plants as vegetative buffers, particularly in Source Water Protection areas.

Partners: MDA, NRCS, SWCD, MRWA, public water suppliers

Timeline: 2008-2012

Focus Area: DWSMA's

2008-2009

As a result of a Stearns SWCD resolution, "Conservation Easements for DWSMA's" was approved and the legislature provided \$2 million in funding for this purpose (appropriated to BWSR) from the Clean Water Fund during the 2009 session. There are also resolutions at the State SWCD level for Perennial Grass as Alternative Fuel and Biomass for Ethanol Production.

Goal 1. Source Water Protection

Objective D. Employ land and water treatment initiatives for the protection of source water.

8. Explore the possibility of supplemental incentive funding to existing programs for vegetative buffers, set aside programs and BMP's. Possible sources are watershed districts, the UMRSWPP, or municipal water utility funds.

Partners: NRCS, SWCD, MRWA, public water suppliers, BWSR, WD's, lake associations, non-profits

Timeline: 2008-2017

Focus Area: County

2008

SWCD is pursuing this. Gave a presentation to the County Board and has been in discussion with DNR and BWSR.

SWCD will contact the City of St. Cloud to see if there is the possibility of using UMRSWPP funds for this incentive funding.

2008-2009

SWCD and the Sauk River Watershed District are partners in a pilot project with the MPCA and Kieser and Associates LLC to initiate a Water Quality/Ecoservices Trading pilot project. Water quality trading is a market-based approach to promote the protection and restoration of surface waters in conjunction with other existing voluntary, regulatory and financial assistance programs. The water quality trading concept is based on the fact that businesses, industries, wastewater treatment facilities, urban stormwater systems, agricultural operations and other watershed sources of pollutants may face substantially different pollution control costs. Sources facing high pollution control costs may realize substantial cost savings by securing environmentally equivalent, or superior, pollutant reductions by purchasing water quality credits generated by sources with substantially lower pollutant reduction costs.

Goal 1. Source Water Protection

Objective D. Employ land and water treatment initiatives for the protection of source water.

9. Cooperate with public water suppliers with DWSMA's in their efforts to reduce agricultural chemical usage in areas where runoff and/or infiltration to the aquifer are a concern through education and incentive programs.

Partners: NRCS, SWCD, MRWA, public water suppliers, BWSR, WD's

Timeline: 2008-2017

Focus Area: DWSMA's

2008

SWCD is working with the ROCORI WHP team to develop a strategy to administer incentive funding to reduce nutrient application in DWSMA's. Cold Spring City Council awarded \$3000 for this effort. They used the funds to do a series of soil tests in areas of concern for high nitrate.

2008-2009

The SWCD's Conservation Easement Resolution advocates for an incentive program. SWCD is working on the use of cover crops to tie up excess nitrogen in the soil, but more research is needed.

Draft Landuse Ordinance Section 7.8 indicates that ESD can impose conditions on Landuse permits that will limit chemical storage or use.

Goal 1. Source Water Protection

Objective D. Employ land and water treatment initiatives for the protection of source water.

10. Encourage public water suppliers with Source Water Protection plans to collect household hazardous waste through the County Household Hazardous Waste program

Partners: ESD, public water suppliers
Timeline: 2008-2017
Focus Area: DWSMA's

2008-2009

Communities with Source Water Protection plans that are participating in the County Household Hazardous Waste Program are Sauk Centre, Paynesville, Richmond, Melrose, and Cold Spring.

SWCD worked to establish Household Hazardous Waste collection sites in a 3-year rotating schedule for New Munich, Meire Grove, and Greenwald, starting in 2008.

The dates and sites for the HHW program are listed on the ESD website
<http://www.co.stearns.mn.us/Environment/RecyclingandWasteDisposal/HHWMobileUnit>

Goal 1. Source Water Protection

Objective E. Conduct mapping and inventory initiatives for the purpose of source water protection.

1. Cooperate with the requests of public water suppliers in mapping and inventory initiatives within DWSMA's. These initiatives may include detailed inventory of potential contaminants; mapping and documenting storm water outfalls on rivers and tributaries; mapping and documenting private and public drainage ditches; gathering information on stormsheds for storm outfalls and ditch outfalls; inventory and map areas that need buffers to reduce sediment loading.

Partners: ESD, SWCD, public water suppliers
Timeline: 2008-2017
Focus Area: DWSMA's

2008

MDA, MDH, SWCD, and ROCORI Wellhead Team conducted a ROCORI well sampling effort to detect areas of elevated nitrates. Eighty-three wells were sampled. The results were communicated through letters and a public meeting.

SWCD investigated a potential Class V Injection Well in the City of Paynesville's DWSMA.

The City of Saint Cloud gps'd and mapped all the storm outfalls in its boundaries.

2008-2009

Both ESD and SWCD are willing to help with this, as requested.

Goal 2. Development Impacts

Objective A. Encourage low impact development and better site design on all new and redevelopment projects throughout County.

1. Promote low impact development strategies by seeking to include in the zoning ordinance incentives for projects that use low impact development strategies

Partners: ESD, SWCD
Timeline: 2008-2009
Focus Area: County

2008

Comp Plan, p 4-16 advocates that the County require new development in shoreland areas and in watersheds that may be designated as impaired to utilize LID strategies.

2008-2009

Draft Landuse Ordinance Section 10.3, 7.5 and 7.6 contains provisions for Conservation Overlay Districts. These districts will provide for low impact design developments, with the incentive being additional numbers of allowed lots. The additional residential density will be allowed through the Transfer of Development Rights process (Section 11). If the proposed plat is in a Natural Resource Conservation Overlay then a conventional subdivision would require a Conditional Use Permit.

Goal 2. Development Impacts

Objective A. Encourage low impact development and better site design on all new and redevelopment projects throughout County.

2. Promote minimization of soil compaction around building sites. Strategies include:

- inclusion in the Shoreland Contractor Workshop agenda;
- inclusion in the County Circular, published quarterly;
- inclusion on the Central Minnesota Water Education Alliance website;
- provide incentives in Stearns County Planning and Zoning Ordinance #209 for minimization of soil compaction

Partners: SWCD, ESD, municipalities, CMBA

Timeline: 2008-2017

Focus Area: County

2008

This was included as an agenda item at the January 2009 Shoreland Contractor Workshop.

2008-2009

One of the CMWEA Top Ten items promotes infiltration.

Goal 2. Development Impacts

Objective A. Encourage low impact development and better site design on all new and redevelopment projects throughout County.

3. Promote projects that can be used to demonstrate green roofs, rain gardens, pervious pavement, infiltration boulevards, etc. Strategies include: tours of completed projects every two years (tours are open to development community, agency staff, and interested citizens); completion of one project in the County every two years; development of a cost share program

Partners: SWCD, County Parks Dept., MECA, LA's

Timeline: 2008-2012

Focus Area: County

2008

Pervious pavement and rain gardens at the Stearns County West Service Center will be installed and used as a demonstration site. An informational sign will be placed near the pavement.

Stearns County's Two Rivers Park will have pervious pavement and an informational kiosk.

SWCD has worked with or is working with the following to complete new or redevelopment projects:

- Cold Spring Granite -- redevelopment project.
- City of Kimball.
- The Saint Cloud Library has a green roof and bio-retention cells in the parking lot.
- The County is helping to fund the development and installation of an infiltration pond in the parking lot of the Albany Hospital.
- SWCD is working with the City of Avon to reconstruct its public beach, incorporating rain gardens and buffers.
- Two residential sites, one on the Mississippi River and one on Lake Koronis, with rain gardens, buffers, etc.
- City of Albany Lions Park rain gardens and buffer.

The City of Sartell has promoted and installed numerous rain gardens. The SWCD sent a letter to the Mayor and City Council of Sartell expressing the SWCD's support and appreciation of the proposed raingarden installation within the 2008 Capital Improvement Project.

2009

Goal 2. Development Impacts

Objective A. Encourage low impact development and better site design on all new and redevelopment projects throughout County.

4. Clarify and strengthen the language in the General Erosion and Sediment Control Standards of Stearns County Landuse and Zoning Ordinance #209 Section 7.5.1 so that it is more clearly defined and understandable. Encourage municipalities to synchronize their erosion control standards with the County's.

Partners: ESD, SWCD, municipalities

Timeline: 2008-2009

Focus Area: County

2008

SWCD is contacting other NPDES permit holders on coordination of NPDES. SWCD reviews ordinances that municipalities are developing and suggests ways to synchronize with County and State regulations.

2008-2009

(Draft Ordinance puts the former Section 7.5.1 into Section 7.10.)

Goal 2. Development Impacts

Objective A. Encourage low impact development and better site design on all new and redevelopment projects throughout County.

5. Include in the zoning ordinance a means of utilizing conservation design, either through incentives or mandates.

Partners: ESD, SWCD

Timeline: 2008-2009

Focus Area: County

2008

Comp Plan, p.3-10, objective is “Develop and employ land use regulations and other techniques for natural resource protection, including transfer of development rights or density, best management practices, and public acquisition.”

Comp Plan, p. 3-13, Lakes Natural/Recreational Area, policy is “Work to limit the impacts of additional shoreland development by clustering housing away from shorelines, using a conservation design approach”.

Comp Plan, p. 3-14, Avon Hills Natural Resource Area, policy is “Encourage open space protection through techniques such as conservation easements, parkland acquisition, and limited residential development emphasizing conservation design.”

Comp Plan, p. 3-21, in Avon Hills Conservation Area, “Conservation design would be required for densities above the base density of 1 per 40”.

Comp Plan, p. 3-21, in Shoreland/Concentrated Residential, “Encourage conservation design that keeps lakeshore in naturally vegetated state.”.

Comp Plan, P. 10-5, has provision for conservation overlay option in the A-40 zone. “This option would likely be introduced as a conditional use within the A-40 District. It should not be viewed as a density bonus, but rather as an alternative to 40-acre lot sizes. Conservation design would be required as a condition of this use, with protection of a minimum of 50% of the parcel in open space or agricultural or forestry use”.

Comp Plan, p. 10-6, has provision for Conservation Design in the Avon Hills Landuse District. “An Avon Hills Overlay District could recognize the difference between the typical “A-40” agricultural district and the Avon Hills. It could require the preservation of a higher percentage of wooded sites in their natural state (i.e., 80%), and could include additional requirements for siting of new houses to preserve scenic views and open space networks and identifying green corridors that could guide open space protection goals for conservation development”.

Comp Plan, p. 10-8, has provision for conservation design in other districts. “In the past, conservation design was encouraged via bonuses, but was viewed as a departure from the norm of conventional development, making it more difficult to gain approvals. There is now an increased desire to treat conservation as the norm, and conventional development as the exception. This could be achieved by revisions to additional residential districts such as the R-5 and R-10. Conventional large-lot development could be treated as a conditional use, within the burden on the applicant to demonstrate that conservation design would be inappropriate”.

Comp Plan, P. 10-8 has provision for encouraging landowner compacts for conservation design. “A landowner compact is a method by which two or more adjoining landowners make a legally binding agreement to jointly plan their common landholdings to create a conservation subdivision. Landowners agree to share the net proceeds proportionately based upon the number of lots that each could have otherwise developed independently”.

Comp Plan, P. 10-8 has provision for considering transitions from large-lot zoning. “...the R-20 and T-20 districts have consumed large areas of land and created conflicts between agricultural and residential uses. The conservation design options would allow similar or higher densities to those allowed by the R-20 and T-20 districts. The County will consider replacing these districts with a variety of conservation design options (i.e., the A-40 or Avon Hills options above) or with other zoning districts that will better protect agricultural and natural resources”.

2008-2009

Draft Landuse Ordinance contains provisions for Conservation Design Overlay Districts. These districts can either be focused on agricultural conservation in low-value agricultural areas or natural resource conservation in areas designated and adopted by townships or groups of townships.

The primary incentive in the agricultural conservation district will be preservation of good farmland and being allowed additional allowed lots.

Subdivision developments in the Avon Hills area will have conservation subdivisions be the “norm”. Traditional subdivisions will need to conditional use permits.

Goal 2. Development Impacts

Objective A. Encourage low impact development and better site design on all new and redevelopment projects throughout County.

6. Research a County-managed conservation easement program which would promote the use of conservation easements.

Partners: ESD, County Park Department, MN Land Trust

Timeline: 2008-2009

Focus Area: County

2008

Comp Plan contains a number of possible mechanisms, p 10-9 and 10-10. “Develop a County program that could hold permanent easements on agricultural land protected through the TDR Program, possibly in combination with other agriculturally oriented agencies such as the Soil and Water Conservation District.” And “Encourage the Department of Natural Resources to donate development rights to a township when the DNR acquires land within that township for conservation purposes. The County might need to act as the entity that would hold these development rights on behalf of the township”. And “Consider a Purchase of Development Rights (PDR) Program. Purchase of development rights programs are one method that Minnesota counties have used to address protection of critical natural resources or agricultural areas. PDR programs rely on voluntary participation of landowners who wish to ensure long-term protection of natural resources, community character, or agricultural practices. The County would identify an entity to accept conservation easements, and a funding source to purchase easements in areas meeting the County’s specific protection goals. The land would remain in private ownership, but would be permanently restricted to land use activities allowed by the easement. PDR programs are generally most effective where development pressure is high, and where the presence of significant natural resources can generate public support for this type of protective mechanism”

SWCD has developed new requirements for permanent deed restrictions on shoreland buffer projects.

2008-2009

This has begun to be worked on as part of the draft Landuse Ordinance.

Goal 2. Development Impacts

Objective A. Encourage low impact development and better site design on all new and redevelopment projects throughout County.

7. Include as part of the platting process the requirement that the first plan submitted by the applicant should be a conceptual sketch plan, with detailed existing resource and site analysis map rather than a preliminary plat. A context map will also be submitted of the immediate area

surrounding the land to be platted. Pre-application meetings with the applicant, using the conceptual sketch plan, will be used as an opportunity to design the plat with the goal of preserving sensitive land.

Partners: ESD, SWCD

Timeline: 2008-2009

Focus Area: County

2008

ESD requires a pre-application meeting if the plat has more than two lots. ESD looks at the area around the proposed plat, approximately half a mile in radius.

2008-2009

Draft Landuse Ordinance requires with agricultural conservation designs (section 7.5.3) that the applicant submit a plan at the beginning of the process that identifies the conservation goals, including protection of tillable farmland, protection of buffers separating agricultural uses from natural resources or groundwater recharge areas. In Natural Resource Conservation Design, the applicant must identify specific natural resource conservation goals for the subdivision. Both must include lands on the biological Survey, shore and bluff impact areas, wetlands and floodplains. Decision on allowed density will be based on what land remains after the decision has been made concerning what natural resources should be conserved.

Goal 2. Development Impacts

Objective A. Encourage low impact development and better site design on all new and redevelopment projects throughout County.

8. Utilize the DNR Green Infrastructure Mapping to identify significant natural areas, to identify corridors that serve as connections between these significant areas and to guide development to less sensitive areas.

Partners: ESD, SWCD

Timeline: 2008-2010

Focus Area: County

2008

Comp Plan, P. 3-11, "Evaluate the current tax assessment policies of Stearns County in conjunction with statewide requirements, in order to evaluate the effects of assessment policies on protected open space, whether protected by easement or by zoning and land use policies."

Comp Plan, P. 4-15, Policies and Actions, "Work with DNR on its green infrastructure corridors to:

- Ensure consistency with County land use priorities and park and recreation goals ;
- Mutually achieve the County's and the State's green infrastructure priorities;
- Set implementation priorities that integrate agricultural protections with the protection of green infrastructure corridors."

Comp Plan, P. 10-4, advocates for an updated zoning code which includes provisions for protecting the County's green infrastructure, regardless of the zoning district in which the resources may be found. The standards could apply to a mapped overlay district or as a set of performance standards that apply to a defined but unmapped resource.

2008-2009

Draft Landuse Ordinance Section 7.6.4 (A) 2 requires that the applicant must identify greenway corridors and connections to open spaces on adjacent sites.

Draft Landuse Ordinance Section 7.7.2 is a new section concerning the County Biological Survey. Development standards are proposed that will prohibit clearing of vegetation and limits placement of buildings.

Goal 2. Development Impacts

Objective A. Encourage low impact development and better site design on all new and redevelopment projects throughout County.

9. Research and implement portions of the Alternative Shoreland Standards as developed by the Governor's Initiative

Partners: ESD, DNR

Timeline: 2008-2009

Focus Area: Shoreland

2008

Comp Plan, in Shoreland/Concentrated Residential 3-21, "Consider elements of Alternative Shoreland Standards to protect water quality."

The Landuse and Zoning Ordinance #209 was amended to change the regulations regarding resorts so that the regulations conform to the Alternative Shoreland Standards.

2009

As of December 2009, the Alternative Shoreland Standards were moving through a DNR internal review. Public hearings on the proposed rules may occur in late spring or early summer 2010.

Goal 2. Development Impacts

Objective B. Promote land and water best management practices in shoreland

1. Assist landowners with shoreland and riparian BMP's, such as vegetative buffers, including cost-share assistance if requested.

Partners: SWCD, WD's, DNR, ESD, lake associations, MN Waters

Timeline: 2008-2017

Focus Area: Shoreland

2008

Comp Plan, p. 3-13, Lakes Natural/Recreational Area, policy is "Encourage shoreland protection and restoration methods such as vegetative buffers."

SWCD has an active buffer/lakescaping program which now requires a permanent deed restriction on the property.

SWCD put together a presentation to promote buffers with lake associations and other groups.

2009

SWCD, Pheasants Forever, the Rice Lake Association, Koronis Lake Association, North Fork Crow River Watershed District and USDA partnered to promote CRP and shoreline restoration on the lakes.

SWCD was awarded a Clean Water Assistance Grant for approximately 40 shoreland restoration projects.

The Draft Landuse Ordinance Section 4.15.3 (B) 3 contains the following language “conditions that must be met before the Panel will consider an after-the-fact shoreland alteration permit include:... (3) Finding of required mitigation. Determination by the Shoreland Review Panel of specific mitigation steps to correct for damage or risk posed by the unpermitted alteration, and a demonstration by the property owner or agent that such mitigation steps have been implemented to the satisfaction of the Shoreland Review Panel and the department. Mitigation requirements can include restoration or partial restoration of shoreline.”

Goal 2. Development Impacts

Objective B. Promote land and water best management practices in shoreland

2. Promote disconnection of impervious surfaces from waters of the state by the use of BMP's, promoted through education and incentives.

Partners: SWCD, Lake Associations, ESD, WD's

Timeline: 2008-2017

Focus Area: Shoreland

2008

CMWEA 2008 Top Ten includes “Find the “Gold” in Your Gutters”. “One easy way to help protect lakes, rivers and drinking water sources is to redirect your roof gutters and downspouts away from hard surfaces such as your driveway or the nearest street. Instead, direct the water to your lawn, flower bed or rain garden....”

SWCD is developing a rain garden packet for landowners. SWCD is encouraging implementation of rain gardens and other stormwater BMP's.

SWCD worked with St Cloud State University to develop a homeowner's guide on stormwater management. Topics include downspout disconnection, rain gardens and rain barrels.

SWCD is working with the City of Kimball to develop a disconnection program for City residents. SWCD will also encourage the use of rain barrels and promote demonstration sites down Main Street.

SWCD worked with SCSU to install a rain garden on campus through a senior class project. It will be located at the child care center of campus.

2008-2009

The website of the Stearns SWCD promotes remedies to negative effects of stormwater runoff http://www.stearnscountyswcd.net/Water%20Resources%20Concerns/Stormwater/stormwater_and_NPDES_Phase_II.htm

CMWEA offered rain barrels at wholesale prices in 2009 and 2010.

SRWD has funding available for rain gardens of up to 50% cost share and 75% cost share in locations within an impaired reach of the river.

Goal 2. Development Impacts

Objective B. Promote land and water best management practices in shoreland

3. Have a detailed countywide Natural Resource Inventory completed. The purpose of the inventory is to identify sensitive natural areas for the purpose of restoration and preservation and for the purpose of planning future development.

Partners: SWCD, DNR, ESD, WD's, lake associations

Timeline: 2008-2017

Focus Area: County

2008

A detailed natural resource inventory was done as part of the Mississippi Renaissance project. This inventory covered both sides of the Mississippi River and extended from the 10th Street bridge in St. Cloud to Little Falls. There will be discussion about using this inventory as a pilot in Brockway Township to help us determine how to prioritize the mapping areas and what uses would be made of a completed inventory.

Goal 2. Development Impacts

Objective B. Promote land and water best management practices in shoreland

4. Seek to adopt language in the Stearns County Landuse and Zoning Ordinance #209 so that construction of retaining walls in shoreland is only approved for sediment and erosion control and will not be allowed for aesthetic purposes

Partners: ESD

Timeline: 2008-2009

Focus Area: Shoreland

2009

Draft Landuse Ordinance (Section 10.2.14) requires that most retaining walls will only be allowed with issuance of a Major Shoreland Alteration Permit. This section also states "Bioengineered solutions, such as the use of natural vegetation, slope stabilization using mulch, biomat, or similar bioengineered means, shall be the preferred method of preventing or mitigating the risk of erosion."

Goal 2. Development Impacts

Objective B. Promote land and water best management practices in shoreland

5. Seek out and assist with storm water management and/or erosion control retrofit opportunities, particularly around lakes and rivers

Partners: SWCD, ESD, WD's, lake associations, municipalities, townships

Timeline: 2008-2017

Focus Area: Shoreland

2008

The Pollutant Loading Model is used by ESD on proposed projects in shoreland.

2009

SWCD was awarded a Clean Water Assistance grant for a watershed based stormwater infiltration project near Middle Spunk Lake. There will be installation of approximately 30 infiltration practices (raingardens, infiltration swales and infiltration basins)

Goal 2. Development Impacts

Objective B. Promote land and water best management practices in shoreland

6. Include in the Stearns County Landuse and Zoning Ordinance #209 a provision that the Stearns Pollutant Loading Model will be run for all proposed projects in shoreland. If the

calculated total suspended solids and total phosphorus exceed pre-settlement conditions, then a BMP will be required such that the BMP will reduce loading to pre-settlement conditions or as defined by a TMDL

Partners: ESD, SWCD
Timeline: 2008-2009
Focus Area: Shoreland

2008-2009

ESD has been running this Model and is now compiling statistics and a summary of the results. The plan is to add a reference to it if/when the new shoreland standards are adopted.

Goal 2. Development Impacts

Objective C. Improve quality of stormwater runoff and manage flow, volume and direction.

1. Work with contractors/developers on fulfilling the requirements of the NPDES. Strategies include:

- inspections by staff concerning compliance with stormwater ordinance;
- presentations at township meetings;
- presentations to contractors, through Central MN Builders Association (CMBA)

Partners: ESD, SWCD, WD's, MPCA, CMBA
Timeline: 2008-2017
Focus Area: County

2008

Inspections are ongoing and SWPPP's are being reviewed. Presentation was done by ESD at 2008 meeting of Stearns County Township Officers Association.

2008-2009

A presentation concerning NPDES requirements and stormwater control was given at the County Shoreland Contractors workshop and at meetings with the individual township boards.

ESD reviews all new plats for compliance with County Landuse Ordinance regulations on stormwater and NPDES.

Goal 2. Development Impacts

Objective C. Improve quality of stormwater runoff and manage flow, volume and direction.

2. The County will do public education and outreach to increase public awareness and understanding of stormwater runoff and erosion control issues. Possible means of education and outreach include:

- Central Minnesota Water Education Alliance;
- SWCD website;
- articles in Stearns County Circular, a newsletter sent to all County taxpayers quarterly, that highlight seasonal stormwater issues and stormwater related events and programs;
- stormwater information on the County web site;
- "Sediment and Erosion Control for New Homeowners" brochure will be provided to all Construction Permit applicants;
- work with local schools to develop and implement a program for elementary school children focused on household stormwater management;
- supplement/endorse Watershed District and Lake Association education efforts;
- Shoreland Contractor Workshop

Partners: ESD, SWCD, WD's, MN Waters
Timeline: 2008-2017
Focus Area: County

2008-2009

CMWEA conducted radio, newspaper and billboard educational campaign and put on high school TV-ad contest.

Shoreland Contractor Workshop was held in January 2008 and 2009.

NPDES inspections include education.

The City of St. Cloud partnered with SCSU and the Retired and Senior Volunteer Program in drain marking program.

"After the Storm" brochure is given by ESD to all construction permit applicants.

Stearns SWCD has educational material on its website about storm water runoff and erosion issues

http://www.stearnscountyswcd.net/Water%20Resources%20Concerns/Stormwater/stormwater_and_NPDES_Phase_II.htm

Stearns County has educational material concerning its SWPPP on its website

<http://www.co.stearns.mn.us/Environment/WaterResources/StormWaterPollutionPrevention>

In May 2009 the City of St Cloud will be working with AmeriCorps in a storm drain marking event. Approximately 50 to 100 AmeriCorps volunteers will work under the direction of the City.

Goal 2. Development Impacts

Objective C. Improve quality of stormwater runoff and manage flow, volume and direction.

3. Clarify requirements of long-term operation and maintenance plans for permanent stormwater practices and develop enforcement measures that include a monitoring procedure.

Partners: SWCD, ESD

Timeline: 2008-2017

Focus Area: County

2008

SWCD is utilizing existing literature to complement SWPPP's for proper long-term function of these facilities.

2009

In Stearns County we are currently monitoring all the Stormwater facilities that are required per the county zoning ordinance. These sites were required as part of the platting process, variance request, conditional use permit request or construction site permit request. The types of stormwater facilities required are ponds, raingardens, swales or vegetative buffers. We maintain a database for these sites and perform yearly inspections to verify compliance.

Goal 2. Development Impacts

Objective C. Improve quality of stormwater runoff and manage flow, volume and direction.

4. Revise the design standards for projects requiring storm water facility calculations. In particular, allow flexibility in the calculation for treating the discharge rates and volumes of storm water to allow for the preservation of sensitive natural resources.

Partners: ESD, SWCD

Timeline: 2008-2012

Focus Area: County

2008

It is allowable to utilize low impact development strategies, such as rain gardens or pervious pavement, to allow for the preservation of sensitive natural resources provided that the storm water runoff will be taken care of.

Goal 2. Development Impacts

Objective C. Improve quality of stormwater runoff and manage flow, volume and direction.

5. The County will establish a program, working with the Cities, to ensure that construction sites are adequately inspected for compliance with NPDES stormwater and erosion regulations should NPDES Pilot Program be discontinued

Partners: ESD, SWCD, MPCA

Timeline: 2008-2017

Focus Area: County

2008

SWCD is establishing a working relationship with the Cities. The Cities already contact SWCD if there is an NPDES issue they need assistance with.

2009

The County/MPCA NPDES Pilot Program was terminated at the end of June 2009.

Goal 2. Development Impacts

Objective C. Improve quality of stormwater runoff and manage flow, volume and direction.

6. The County will continue to participate actively in the Central Minnesota Water Education Alliance (CMWEA).

Partners: MS4's, public water suppliers, LA's, ESD, SWCD, WD's

Timeline: 2008-2017

Focus Area: County

2008 -2009

County contributed dues of \$6391.44 for 2008 and 2009.

ESD and SWCD staff has actively participated in CMWEA educational campaign.

Goal 2. Development Impacts

Objective C. Improve quality of stormwater runoff and manage flow, volume and direction.

7. Offer education to communities and individual contractors on the storage and application of road salt and on winter snow management techniques

Partners: SWCD, ESD, MPCA, WD's, municipalities, Lake Associations

Timeline: 2008-2017

Focus Area: County

2009

Road Salt Symposium conducted in Avon in 2007 and in St. Cloud in January 2009. The Sauk River Watershed District organized these symposiums, with local assistance.

Goal 2. Development Impacts

Objective D. Better coordination of the Water Management Plan with the NPDES permit requirements of Stearns County and the MS4 communities within the County.

1. The County will distribute information on the County's SWPPP including information on illicit discharges, erosion control, shoreline management, composting and pollution prevention and other applicable BMP's.

Partners: ESD, SWCD, CMWEA

Timeline: 2008-2017

Focus Area: County

2008-2009

The County website

<http://www.co.stearns.mn.us/Environment/WaterResources/StormWaterPollutionPrevention> contains information on the SWPPP. Information on erosion control, shoreline management, composting and pollution prevention is made available by CMWEA through the CMWEA website, newspaper ads, radio ads, billboard, high school ad contest, etc..

The City of St. Cloud has information about illicit discharge on its website

<http://www.ci.stcloud.mn.us/Utilities/docs/SWPPP.pdf>

The City of St Cloud and other MS4's will have a poster at the 2009 St Cloud Home Show with illicit discharge information and phone numbers of where to report illicit discharges. The SWCD and CMWEA booths at the Home Show will also have information available on shoreline management, composting, pollution preventions tips for homeowners, erosion control, etc.

Goal 2. Development Impacts

Objective D. Better coordination of the Water Management Plan with the NPDES permit requirements of Stearns County and the MS4 communities within the County.

2. County will provide public education and outreach on illicit discharge and elimination. The activities will include: publish articles in Stearns County Circular related to illicit discharge and hazardous waste disposal; provide training about the hazards and environmental impacts associated with illegal discharges; set up Stormwater Hotline for citizens to report illegal dumping

Partners: ESD, SWCD

Timeline: 2008-2017

Focus Area: County

2008-2009

Stearns SWCD has educational material on its website about storm water runoff and erosion issues

http://www.stearnscountyswcd.net/Water%20Resources%20Concerns/Stormwater/stormwater_and_NPDES_Phase_II.htm

Stearns County has educational material concerning its SWPPP on its website
<http://www.co.stearns.mn.us/Environment/WaterResources/StormWaterPollutionPrevention>

The City of Saint Cloud has a contact for citizens to report illegal discharges. Information can be found at <http://www.ci.stcloud.mn.us/Utilities/IllicitDischarge.aspx>

Goal 2. Development Impacts

Objective D. Better coordination of the Water Management Plan with the NPDES permit requirements of Stearns County and the MS4 communities within the County.

3. County will provide education to County staff on construction site run-off control by sending staff to training sessions related to erosion control materials, techniques and methods.

Partners: ESD, SWCD

Timeline: 2008-2017

Focus Area: County

2008-2009

ESD and SWCD staff attended the Minnesota Erosion Control Association conference. SWCD staff is president of MECA.

All of the County Highway field engineering technicians (construction inspectors) are certified erosion/sediment control specialists in site management. The design technician is certified in the design of erosion/sediment control measures and SWPPP.

Goal 2. Development Impacts

Objective D. Better coordination of the Water Management Plan with the NPDES permit requirements of Stearns County and the MS4 communities within the County.

4. Training will be provided to those County employees that are involved in activities in the field which may impact stormwater quality, including road salt and sand application, landscaping and other activities

Partners: ESD, SWCD

Timeline: 2008-2017

Focus Area: County

2008

The County Highway Department had a training session regarding road salt and sand application for the plow truck operators scheduled in December 2008 but it was canceled due to snow. Highway staff (Jeff Miller) attended the Road Salt Symposium on Feb. 5, 2008.

2009

Goal 2. Development Impacts

Objective D. Better coordination of the Water Management Plan with the NPDES permit requirements of Stearns County and the MS4 communities within the County.

5. Work cooperatively with local units of government for the purpose of minimizing development impacts and standardizing the specifications of their individual SWPPP's.

Partners: SWCD, townships and municipalities

Timeline: 2008-2017

Focus Area: County

2008

SWCD is working with the City of Paynesville on the development of a sediment and erosion control ordinance and a buffer ordinance. SWCD is also assisting when possible in the development of a stormwater management plan.

SWCD is working with the City of Rockville on the development of a stormwater/shoreland ordinance.

2008-2009

SWCD does the annual SWPPP reporting for LeSauk and St. Joseph townships.

Goal 3. Impaired Waters

Objective A. Assess the ability of the County's surface water to meet its designated uses.

1. Coordinate and track water monitoring for the entire County.

Partners: ESD, SWCD, WD's, St. Cloud, LA's

Timeline: 2008-2017

Focus Area: County

2008

SWCD, ESD and MPCA reviewed all lake monitoring recorded on STORET 1996- 2007.

The County discussed monitoring plans with the watershed districts. NFCRWD and CRWD will carry on their monitoring programs as previously planned. SRWD is working with the County to partner monitoring goals and efforts. The result of the lake monitoring that was completed in 2008 is contained in the Water Management Annual Report.

2009

All of the Watershed Districts reported on their 2009 monitoring results to the Water Management Advisory Committee. Monitoring in the non-watershed district parts of the County is being done through a Surface Water Assessment Grant.

Goal 3. Impaired Waters

Objective A. Assess the ability of the County's surface water to meet its designated uses.

2. Develop and annually review a priority list of lake, river and stream monitoring for each year's monitoring.

Partners: ESD, SWCD, WD's, LA's, MPCA, MN Waters

Timeline: 2008-2017

Focus Area: County

2008

SWCD and ESD developed a priority list for lake monitoring for 2008 & 2009. The County and the watershed districts monitored all the lakes that were of high priority in 2008.

2009

A Surface Water Assessment Grant was applied for and awarded for 2009 & 2010. This grant is from the MPCA and reflects the Intensive Monitoring Program that is a priority of the MPCA. The MPCA plans to monitor the waters of the State over a ten-year period, with certain watersheds being targeted every two years. In 2009-2010 the Clearwater-Elk watershed is targeted & many of the lakes and streams in this watershed will be monitored. With the

assistance of the SWAG money, most of the County's lakes will be assessed by the end of 2010.

Goal 3. Impaired Waters

Objective A. Assess the ability of the County's surface water to meet its designated uses.

3. Seek funding for lake, river and stream monitoring.

Partners: ESD, SWCD, WD's, LA's, MPCA

Timeline: 2008-2017

Focus Area: County

2008

Water Plan fund was used in 2008 for lake monitoring. SRWD made in-kind contributions as part of its monitoring of lakes within SRWD. EPA 319 funding was used for lake monitoring within SRWD in 2008.

2009

In 2009 & 2010 a Surface Water Assessment Grant will cover the costs of monitoring many of the lakes and some of the streams. Many of the named public water lakes in the County will have been monitored to the extent needed to be considered assessed by the end of 2010.

Goal 3. Impaired Waters

Objective A. Assess the ability of the County's surface water to meet its designated uses.

4. Create monitoring plans of waters.

Partners: SWCD, ESD, WD's, MPCA, MN Waters, LA's

Timeline: 2008-2017

Focus Area: County

2008

A lake monitoring plan was developed for 2008 & 2009 by ESD and SWCD in conjunction with SRWD and RMB Environmental Lab.

2009

The monitoring plan for 2009 was modified to accommodate the requirements of the SWAG and also to include some wetlands, streams and most of the water bodies in the Clearwater-Elk watershed.

Goal 3. Impaired Waters

Objective A. Assess the ability of the County's surface water to meet its designated uses.

5. Promote volunteer monitoring through development and support of volunteer workshops.

Partners: WD's, SWCD, ESD, MN Waters

Timeline: 2008-2017

Focus Area: County

2008

Sauk Lake Association is monitoring the inlets into Sauk Lake. This is being coordinated by the Sauk River Watershed District and is being paid for the SRWD and the County

2008-2009

The SRWD holds its annual training workshop in April each year, themed around stream and lake monitoring. CROW also held a training workshop for volunteer monitors.

Goal 3. Impaired Waters

Objective A. Assess the ability of the County's surface water to meet its designated uses.

6. Carry out monitoring programs as needed for priority waters.

Partners: SWCD, ESD, WD's, MPCA, BWSR

Timeline: 2008-2017

Focus Area: County

2008-2009

Planned lake monitoring was completed in 2008 and 2009 as detailed in the Water Management Annual Report.

Goal 3. Impaired Waters

Objective A. Assess the ability of the County's surface water to meet its designated uses.

7. Submit surface water quality data to the MPCA annually to be entered into STORET.

Partners: ESD, SWCD, WD's, LA's

Timeline: 2008-2017

Focus Area: County

2008-2009

All data gathered by RMB Environmental Lab, SRWD, NFCRWD and CRWD was submitted to STORET.

Goal 3. Impaired Waters

Objective A. Assess the ability of the County's surface water to meet its designated uses.

8. Include a summary of surface and ground water quality monitoring data in the Water Management Plan Annual Report.

Partners: ESD, SWCD

Timeline: 2008-2017

Focus Area: County

2008-2009

A summary was provided for all 2008 lake monitoring results. Links to stream monitoring and ground water monitoring results are given in the Annual Report.

Goal 3. Impaired Waters

Objective A. Assess the ability of the County's surface water to meet its designated uses.

9. Seek funding for development of TMDL studies and plans and implementation of TMDL plan.

Partners: ESD, SWCD, WD's, BWSR, MPCA

Timeline: 2008-2017

Focus Area: County

2008-2009

The Watershed Districts are seeking 319 and Clean Water Legacy funding for TMDL studies.

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

1. Support and cooperate with Watershed Districts and the MPCA on ongoing TMDL projects.

Partners: SWCD, ESD, WD's, MPCA

Timeline: 2008-2017

Focus Area: County

2008

SWCD is involved in the Sauk Lake TMDL.

SWCD/SRWD received an agricultural watershed grant in the Hoboken watershed.

The Sauk Chain of Lakes is on the 2008 Impaired Waters List. ESD is partnering with the Sauk Chain of Lakes Association to inventory all septic systems in the shoreland of the Chain. All non-compliant systems will be required to upgrade.

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

2. Seek ways to provide environmental education to all citizenry in the County. This may be partially through environmental educational fests for children of one grade. The development of a County/regional Natural Resources Learning Center will be explored. A brochure will be produced that details the current environmental education opportunities.

Partners: SWCD, ESD, WD's, U of MN Ex Service, Parks, College of St. Benedict, St. John's U, SCSU

Timeline: 2008-2017

Focus Area: County

2008

All 4th graders had the opportunity to attend a water fest in 2008. In 2008 1470 attended a fest as opposed to 1019 in 2008. The County is reimbursing at \$10/student. A new fest was organized in Sartell.

SWCD and ESD are working on production of a brochure detailing environmental education opportunities.

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

3. Educate feedlot owners on proper feedlot management, including manure storage and application, for the purpose of meeting regulatory requirements. Tools to be used are field days, flyers, classes and mailings, including the Feedlot Newsletter which is sent to all permitted feedlot owners.

Partners: ESD, SWCD, MDA, NRCS, Ex Service

Timeline: 2008-2017

Focus Area: County

2008

SWCD hosted a Manure Management Field Day in 2007 promoting proper manure application and spill response.

In 2008 SWCD organized a Methane Digester Field Day and a Field Day on Woodchip Bio-filters for the Treatment of Runoff.

The Environmental Services Department sends a newsletter to all feedlot owners in the County twice each year. 2009 information included:

- Manure pits are only necessary if feedlot runoff cannot be controlled by other means, such as vegetative buffers.
- Proper location of temporary manure stockpiles.
- Setbacks for manure application.
- Importance of completing manure management plans and keeping records.

SWCD co-sponsored two Certified Crop Advisers training events, emphasizing soil and water management and related BMPs

2009

The 2009 feedlot newsletter contained information on proper manure spreader calibration, and minimum manure application setbacks near sensitive features.

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

4. Provide information, technical and/or financial assistance to County landowners implementing agricultural BMP's on working lands to reduce soil erosion, protect stream banks and improve water resources.

Partners: SWCD, MDA, NRCS, ESD

Timeline: 2008-2017

Focus Area: County

2008

Two million dollars in EQIP is going out in 2008.

Stearns SWCD submitted a Resolution to the regional SWCD titled "Incentive Program for Vegetative Buffers along Lakes and Streams". The Resolution said that "the MASWCD will work with BWSR, DNR and others to explore the opportunity of establishing a buffer incentive program in MN....that SWCD's will be the lead local governmental organization in providing technical assistance in the establishment of vegetative buffers...the agencies within the state of MN shall recognize the importance of vegetative buffers and develop an aggressive promotional and awareness campaign for establishing, maintaining, and restoring these ecologically sensitive areas."

A wetland restoration was funded by the SWCD and the County. The wetland restoration will improve the quality of the runoff into Two River Lake.

2009

SWCD, Pheasants Forever, the Rice Lake Association, Koronis Lake Association, North Fork Crow River Watershed District and USDA partnered to promote CRP and shoreline restoration on the lakes.

The above Resolution was forwarded by MASWCD to BWSR for their consideration. The BWSR response dated November 2009 states "No incentive program was created in the 2009 session. However, \$6.5 million in Clean Water Funding was appropriated to BWSR for permanent conservation easements on riparian buffer strips. Also, buffers and the DNR

shoreland ordinance requirements appear poised for greater visibility during the upcoming 2010 season.”

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

5. Actively promote and market federal/state/local conservation programs to targeted landowners and help prepare them for eligibility in programs such as CSP and EQIP.

Partners: SWCD, MDA, NRCS, Ext Service,

Timeline: 2008-2017

Focus Area: County

2008

SWCD has done mailings to all producers in the DWSMA's and have done press releases, radio shows, and field days for all producers in the County.

SWCD is hosting a “Wildlife Habitat Management on Working Agricultural Lands” Field Day. The goal of the Field Day is to increase awareness of the wildlife habitat enhancements in the Conservation Security Program, illustrate how the wildlife enhancements have changed over time, and solicit support for improved wildlife habitat provisions in the “working lands” programs. These “working lands” wildlife habitat provision will become increasingly important with added pressure to bring additional acres into production.

See Goal 3.B. 4 concerning SWCD Resolution.

2009

SWCD was awarded funds for Native Buffers from Clean Water Legacy funds.

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

6. Educate urban and rural landowners about proper land application of nutrients and pesticides, including P-free fertilizer for residential use. Evaluate success of educational programs through developed assessment programs.

Partners: SWCD, ESD, MDA, NRCS, Ext Service, WD's, LA's, CMWEA, SCSU

Timeline: 2008-2017

Focus Area: County

2008

One of the “Top Ten” CMWEA is the use of phosphorus-free fertilizer.

SWCD met with a neighborhood association in St. Cloud to discuss ways to reduce phosphorus loading in a stormwater pond and provided information on “green” landscaping techniques.

2009

Information on this will be promoted at the Two Rivers Lake Park kiosk.

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

7. Promote and market conservation programs that provide cost-share and assistance to livestock producers for the adoption of comprehensive nutrient management practices.

Partners: SWCD, MDA, NRCS, WD's
Timeline: 2008-2017
Focus Area: TMDL watersheds

2008

SWCD has done mailings to all producers in the DWSMA's and have done press releases, radio shows, and field days for all producers in the County.

SWCD hosted a "Wildlife Habitat Management on Working Agricultural Lands" Field Day. The goal of the Field Day is to increase awareness of the wildlife habitat enhancements in the Conservation Security Program, illustrate how the wildlife enhancements have changed over time, and solicit support for improved wildlife habitat provisions in the "working lands" programs. These "working lands" wildlife habitat provision will become increasingly important with added pressure to bring additional acres into production.

2008-2009

SWCD and the Sauk River Watershed District are partners in a pilot project with the MPCA and Kieser and Associates LLC to initiate a Water Quality/Ecoservices Trading pilot project. Water quality trading is a market-based approach to promote the protection and restoration of surface waters in conjunction with other existing voluntary, regulatory and financial assistance programs. The water quality trading concept is based on the fact that businesses, industries, wastewater treatment facilities, urban stormwater systems, agricultural operations and other watershed sources of pollutants may face substantially different pollution control costs. Sources facing high pollution control costs may realize substantial cost savings by securing environmentally equivalent, or superior, pollutant reductions by purchasing water quality credits generated by sources with substantially lower pollutant reduction costs.

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

8. Ensure the proper use and abandonment of manure pits.

Partners: SWCD, ESD, MDA, NRCS, WD's
Timeline: 2008-2017
Focus Area: County

2008-2009

ESD notifies SWCD on any abandoned pits. 319 grant funds are available for help with abandonment costs.

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

9. Continue to inspect feedlots and work with owner/operators to bring their facilities into compliance, with those feedlots that are within identified TMDL watersheds having priority.

Partners: SWCD, ESD, MDA
Timeline: 2008-2017
Focus Area: TMDL watersheds

2008

All feedlots within the County will have been inspected to determine compliance and rated by the end of 2008.

In the Ashley Creek TMDL watershed the status of the feedlots is --

18 active feedlots, 1 is not in compliance, that same one has an open lot agreement. This feedlot had its status determined in October 2005.

2009

The ESD has completed compliance inspections for every feedlot in the County. Stearns County ESD continues to implement the 4-year inspection cycle but now only inspects feedlots with fewer than 50 AU if there is a known compliance issue. For additional details, see 1.B.2.

Looking at the catch basins that the waters of the 2010 Impaired Waters List are located in, there are 455 active feedlots. This number includes feedlots which have less than 10 animal units. Of the 455 feedlots, there are 69 that are not in compliance.

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

10. Utilize the drained wetland inventory developed by Ducks Unlimited and LIDAR to identify areas within the TMDL watersheds that should be targeted for wetland restoration.

Partners: SWCD, NRCS, Ducks Unlimited

Timeline: 2008-2017

Focus Area: TMDL watersheds

2008

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

11. Inspect areas within watersheds of impaired waters for proper application of nutrients and review records of land application.

Partners: ESD, SWCD, MPCA

Timeline: 2008-2017

Focus Area: TMDL watersheds

2008

SWCD, the County Survey Department and ESD met to discuss a GIS method of tracking manure application areas. It is being explored that Special Protection Areas could be made available by GIS and taken into consideration in development of manure management plans.

2009

The ESD does not track the number of manure land application inspections within impaired watersheds. In 2009, there were 300 inspections conducted at feedlots with 100 AU or more where a manure land application review would have been required. The manure land application inspection compliance rate is unknown, but with new reporting requirements, it will be tabulated in 2010. For background information, see 1.B.3.

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

12. Promote and establish vegetative buffers on public and private ditches.

Partners: SWCD, ESD, WD's, NRCS, Pheasants Forever
Timeline: 2008-2017
Focus Area: County

2008

Stearns SWCD submitted a Resolution to the regional SWCD titled "Incentive Program for Vegetative Buffers along Lakes and Streams".

2009

SWCD, Pheasants Forever, the Rice Lake Association, Koronis Lake Association, North Fork Crow River Watershed District and USDA partnered to promote CRP and shoreline restoration on the lakes.

See Goal 3.B.4 for disposition of Resolution "Incentive Program for Vegetative Buffers along Lakes and Streams."

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

13. Establish and maintain stream and field vegetative buffers in accordance with existing Stearns County Landuse and Zoning Ordinance #209, Section 10.2.19 and MN Rules 6120.3300 Subpart 7. General cultivation farming, grazing, nurseries, horticulture, truck farming, sod farming, and wild crop harvesting are permitted if steep slopes and shore and bluff impact zones are maintained in permanent vegetation or operated under an approved conservation plan (Resource Management Systems) consistent with the field office technical guides of the local Soil and Water Conservation District or the NRCS or as provided by a qualified individual or agency. The shore impact zone for parcels with permitted agricultural land uses is equal to a line parallel to and 50 feet from the ordinary high water level..

The following is the proposed process to accomplish this goal:

- a. 2009 – inventory County to determine ordinance compliance with permanent vegetation/conservation plan requirements within shoreland and bluff impact zones and steep slopes.
- b. 2010 – conduct an informational/educational effort to inform all County citizens of the Stearns County Landuse and Zoning Ordinance #209 requirements for permanent vegetation.
- c. 2011 – County staff will begin contacting at least 20% landowners per year that have been determined to be substantially out of compliance with the Stearns County Landuse and Zoning Ordinance #209 and offer technical assistance/existing program availability to rectify issues.
- d. 2012 – begin to bring high priority lands into compliance with Stearns County Landuse and Zoning Ordinance #209 through enforcement. Areas in identified TMDL watersheds will be first priority.

Partners: SWCD, ESD, WD's, NRCS
Timeline: 2008-2017
Focus Area: Shoreland

2008

See Goal 3.B.4 for information on SWCD Resolution "Incentive Program for Vegetated Buffers along Lakes and Streams".

The managers of the ESD and SWCD are working on this initiative

2009

A grant from Clean Water Assistance Funds was requested to finance this initiative. The grant was not funded.

Goal 3. Impaired Waters

Objective B. Improve those water resources that are impaired and protect those that are not impaired.

14. Evaluate and coordinate water quality trading for the purpose of achieving water quality improvement.

Partners: MPCA, SWCD, ESD, WD's, LA, public water suppliers

Timeline: 2008-2017

Focus Area: TMDL watersheds

2008-2009

Water Quality Trading is being actively pursued by SWCD and SRWD as a pilot project with the MPCA.