

GOALS, OBJECTIVES, & ACTIONS

Several agencies and groups have input in the goals, objectives, & action plans, they are: Crawford County Land Conservation staff, USDA-NRCS Field Office staff, USDA-FSA staff, the WI-DNR Forestry staff, the UWEX Ag/Resource Agent, Crawford County Land Use Group, Prairie Rod and Gun Club, and other local groups and agencies. Priority activities are listed in the work plan for each goal.

Land Conservation Staff and Committee:

- The Committee and staff filled out a questionnaire passed out at the May 2005 meeting and discussed the results at both the June and July monthly Land Conservation Committee (LCC) meetings. The LCC reviewed the 2001 Land and Water Plan and wanted to reflect and strengthen the goals of that plan in the 2006 Plan. They also included an emphasis on Nutrient Management and gave their strong support to complying with the provisions of NR 151. Their fell under four catagories, Soil Erosion, Water Resources, Nutrient Management, Land Use Planning and Waste recycling.

USDA-NRCS Staff

- Participated in Local Work Group that reviewed goals and objectives
- Personal interviews

WI-DNR Forestry staff

- Participated in Local Work Group, LCC meetings that reviewed plan
- Personal interviews

UWEX Staff

- Participated in Local Work Group, LCC meetings, Land Use Group

County Land Use Group

- Discussed at February and November meetings. Used nominal group method to identify goals

WI – DNR Planning Staff

- Sent draft sections to West Central DNR planning staff for review and incorporated comments.
- Conferred with DNR staff to harmonize goals and objectives (see Related Plan section & request letter in appendix)

Soil Erosion

Crawford County experienced significant erosion through the early 1900's. Upland cropland erosion has been addressed since the early 1950's. The topography makes managing soil erosion difficult. The Crawford County Soil Erosion Control Plan estimated the county wide average cropland erosion rate at 3.2 tons/acre/year. The county average tolerable soil loss limit is 2.0 tons/acre/year. A large number of farmers have adopted contour strip cropping and/or reduced tillage or no-till planting. Excessive summer rains of 2004 in Crawford County has caused widely noticed sheet, rill, and gully erosion. More waterways and effective use of good ground cover and contour strips are needed.

THE 2004 SOIL EROSION TRANSECT SURVEY
SHOWED THE FOLLOWING SOIL EROSION RATES IN EACH WATERSHED

| WATERSHED | CROPLAND ACRES | TOTAL SOIL LOSS (TONS/YR) | AVERAGE EROSION RATE (T/AC/YR) |
|-----------------------|----------------|---------------------------|--------------------------------|
| RUSH CREEK | 27,946 | 101,505 | 3.8 |
| MILVILLE CREEK | 10,324 | 34,381 | 3.3 |
| LOWER KICKAPOO RIVER | 22,428 | 61,482 | 2.9 |
| REEDS & TAINTER CREEK | 18,334 | 37,186 | 2.8 |
| KNAPP CREEK | 18,868 | 49,885 | 1.7 |
| | | | |

Crawford County has seen a significant increase in the amount of corn and soybeans grown since the 1990's, and a decrease in the amount of hayland during the same period. One of the principal reasons for the change is a decrease in the number of dairy farms.

Crawford County conducted a countywide transect survey yearly sine 1999. The transect survey's goals are:

1. Provide the county and the state with statistically reliable data needed to update their "T by 2000" goals.
2. Verify the need for additional funding to put in Best Management Practices.
3. Document the "T by 2000" progress being made by the county.
4. Document trends in soil erosion and land use.

The county will conduct the survey every year to monitor changes.

The county will also document soil loss through the USDA NRCS filed office progress reports. Cropland soil losses are entered in the computer for the before and after practices applied.

Soil erosion issues on land other than croplands shall be addressed. Some additional sources are stream banks, overgrazed pastures, logging roads, access roads, driveways, and roadsides. These sources are difficult to inventory and need to be addressed on a case by case basis. Education is needed to prevent the erosion instead of repairing damage.

Eroded soil ends up in the streams and rivers of Crawford County as sediment. Sediment carries nutrients, which affect the water quality.

Several agencies will be involved in the implementation of the action plans, they are: Crawford County Land Conservation staff, USDA-NRCS Field Office staff, USDA-FSA staff, the WI-DNR Forestry staff, the UWEX Ag/Resource Agent, and local conservation clubs and organizations.

Goal: Reduce soil erosion on all cropland to "T".

Objective:

- Determine the average soil loss of Crawford County and track trends in soil erosion.
- Promote the reduction of soil erosion to "T" tolerable soil loss limit on all cropland.

Action:

- Complete transect survey yearly and evaluate data.
- Maintain computer database.
- Compare aerial photos from different years.
- Provide Farmland Preservation plans to landowners.

Objective:

- Education for landowners on conservation practices.

Action:

- Identify absentee landowners.
- Develop and provide a model rental contract with soil erosion prevention items in it.
- Assemble information on conservation programs, practices, and agencies to provide to landowners
- Work one-on-one with landowners as they call or stop in.
- Develop a postcard for realtors and title companies to give to new landowners at the time of land transaction with the phone number of who to contact about programs.

Objective:

- Reduce soil erosion to “T” tolerable soil loss limit on all cropland.

Action:

- Plan & treat crop fields to tolerable soil loss levels or less.
- Provide technical assistance to landowners to install contour strip cropping and contour buffer strips.
- Promote no-till, zone-till, and reduced tillage systems.
- Encourage landowners that crop fields of 18% or steeper to use less intensive cropping practices.

Objective:

- Provide examples of good conservation ethics.

Action:

- Provide educational articles to the media.

Goal: Reduce erosion on land other than cropland.

Objective:

- Inform loggers and earth moving contractors on how to properly build driveways, logging roads, and access roads.

Action:

- Assist Southwest Badger RC&D in holding a workshop to demonstrate to loggers and other earth moving contractors the proper construction of logging and access roads that minimize erosion.
- Discuss at the Crawford/Richland County Contractor Workshop construction and/or repair of logging and access roads and driveways.
- Provide technical assistance to landowners on proper construction, repair, and maintenance of driveways, logging roads, and access roads.
- Work with townships to educate them on the need to develop and enforce a driveway ordinance.
- Work with one township per year on mulching the soil surface roadsides when working up roadsides and new roadways.

Objective:

- Inform landowners on how to prevent erosion on land other than cropland.

Action:

- Encourage landowners to work with DNR Foresters on developing a logging contract for their property to prevent and control soil erosion during and after timber sale.
- Promote intensive rotational grazing practices and provide technical assistance.
- Encourage Southwest Badger RC&D to continue the “Selling Timber Smart” workshops.

Objective:

- Increase riparian areas protected.

Action:

- Work with FSA and NRCS to enroll areas of stream corridor in CRP as riparian buffers.
- Provide landowners brochures on the CRP buffer initiative.

Objective:

- Inform landowners and contractors of erosion along driveways, logging roads, access roads, and roadsides along public roads.

Goal: Increase money available for cost-sharing to install practices to prevent erosion.

Objective:

- Assist landowners in signing up for cost-share programs

Action:

- Work with landowners to sign up for the USDA Environmental Quality Incentives Program CREP, and continuous CRP.
- Work with landowners to sign up for the state forest landowner grant program for logging road repair.

Objective:

- Provide more cost-share funding.

Action:

- Apply to state for Land and Water Management Grant money to provide more cost share dollars.
- Apply to state for other grant money, as it becomes available.
- Work with southwest Badger RC&D to look for private sources of money.
- Apply for grants from private sources.
- Apply for grant money for demonstration projects.
- Work with wildlife groups for possible grants.
- Look into possible other local sources of money.

Water Resources

Goal: Maintain the groundwater integrity and supply of the county.

A: Objective:

- Educate landowners (both rural and urban), on the proper use and application of fertilizers and pesticides.

Action:

- Provide brochures explaining proper use and application of fertilizers and pesticides.
- Continue the pesticide applicator training program.
- Outside the Manure Management Ordinance jurisdiction develop a 590EZ Plan that will encourage landowners to use manure management.
- Encourage UWEX to initiate a call in radio show to discuss proper use and application of fertilizers and pesticides on lawns and gardens.

B: Objective:

- Reduce the potential of ground water pollution from improperly constructed and mismanaged manure storage structures.

Action:

- Inform owners and operators of mismanaged systems to explain a better way of managing their systems.
- Provide technical assistance to landowners of manure storage.

C: Objective:

- Reduce groundwater pollution through direct conduits to groundwater.

Action:

- Develop a mechanism for distribution of educational materials on sinkholes, well abandonment, septic systems, and underground tanks.
- Provide technical assistance on well abandonment and sinkhole protection.
- Encourage landowners to sign up for EQIP for well abandonment and sinkhole protection.

Goal: Maintain and enhance the surface water quality of the county.

A: Objective:

- Inform landowners on how to prevent chemicals, sediment, and other contaminants from reaching the rivers and streams.

Action:

- Apply for education grants to assist with the following goals.
- Provide information on radio and in newspaper on preventing urban runoff.
- Stencil storm drains with “Dump no waste. Drains to river”
- Provide hands on experience for school children relating to stream rehabilitation.
- Encourage children to talk to their parents about stream health.

B: Objective:

- Reduce sediment delivery from erosion sources.

Action:

- Utilize available funding sources to cost share Best Management Practices.
- Encourage landowners to sign up for cost share funds and proven technical assistance for installation of Best Management Practices.
- Invite the public to a stream bank demonstration project along Sugar Creek and Plum Creek to review the following:
 1. Install rock rip rap
 2. Install Lunker structures
 3. Install a stream crossing.

- Invite the public to a stream bank demonstration project on private property with cattle access to view the following:
 1. Install a cattle crossing
 2. Install a rotational grazing system along a stream

C: Objective:

- Protect existing wetlands and increase wetlands through restoration.

Action:

- Encourage landowners to participate in the Federal Wetland Reserve Program.
- Work with NRCS, US F&WS, and DNR to promote wetland restoration and the Wetland Reserve Program.
- Educate the public on what wetland restoration is and why it is done.
- Educate the public about the function and need of wetlands.

Goal: Increase funding for cost-sharing and demonstration projects.

A: Objective:

- Increase the amount of cost-share and grand dollars available to landowners.

Action:

- Assist landowners applying for Federal cost-share programs.
- Assist landowners applying for State cost-share dollars.
- Apply for state grants when they are available.
- Work with Southwest Badger RC&D to secure private grants.
- Search for other financial assistance programs.
- Work with local sports groups for financial assistance or volunteer help.
- Work with federal and state agencies to secure funds for demonstrations.
- Work with sports groups such as Trout Unlimited and Wisconsin Waterfowl to secure funds for demonstrations.
- Meet yearly with partner agencies for updates and planning.

B: Objective:

- Communicate and coordinate with adjacent counties on projects.

Nutrient Management

Proper nutrient management is important to protect the natural resources of Crawford County. Improper application of manure and purchased fertilizer can cause pollution to our groundwater and surface water from farm fields and home lawns.

According to Rick Lange, NRCS District Conservationist, the amount of over application of nutrients per acre is greater for lawns and gardens than for cropland. However, over application of nutrients per acre is greater for lawns and gardens, Crawford County wants to address both segments of the population.

Nitrate levels over 10.0 mg/l have been detected in some wells in Crawford County. Any amount over 10.0 mg/l exceeds state groundwater standards. At this level it is recommended that infants and pregnant women not consume the water because the nitrate interferes with the ability of blood to carry oxygen. High nitrate levels may also be an indication that other contaminants are present in the drinking water. High nitrate concentrations in the drinking water have also been linked to spontaneous abortions in livestock.

Over application of nutrients for specific crop or lawn needs can migrate to surface water via storm water runoff. Excessive nutrients associated with organic load in surface water can cause nuisance algae blooms and decreased levels of dissolved oxygen.

There are currently several programs involving nutrient management planning.

1. Federal
 - Environmental Quality Incentives Program
2. State
 - Nutrient and Pest Management Program
 - Land and Water Resource Management Program
3. Private
 - Southwest Badger RC&D
 - Kraft Grant for nutrient Management Program

Goal: Improve and protect the quality of our natural resources by the judicious and economic use of nutrients.

A: Objective:

- Educate Crawford County residents on wise use of nutrients

Action:

- Use radio, bulletins, demonstrations, and workshops
- Use county scales to calibrate manure spreaders
- Work w/ SouthWest Technical College to facilitate county class designed for landowners to write their own nutrient management plan

Land Use Planning

Land use planning is a big issue in Crawford County. Farms are being split up into smaller parcels and both year-round residences and summer homes are being built on these parcels. Townships have started land use planning, Clayton township is nearing completion of their comprehensive plan. Others need and want help from the county.

Land use planning is volatile. People have conflicting land use goals. Change is a constant. Planning brings thoughtful citizens to the table to map the character and community for their future. The Land Conservation Department is committed to be at that table, to pursue it's goals, and facilitate an even handed process for the land users of Crawford county. Education is critical in this process.

The Zoning Department and the town boards will be the people involved directly in land use planning. The Crawford County Land Conservation Department and UW Extension Ag/Resource Agent will provide assistance and information when needed.

Goal: Provide guidance and expertise from cooperating agencies to assist townships with land use planning.

Objective:

- Support townships with the land use planning process.

Action:

- Provide information and education to the townships.
- Look into options for development of a GIS system.
- Document land use changes when doing the transect survey.

Waste Disposal

Proper solid waste disposal and recycling have been an issue for many years. Recycling protects the landscape and water quality.

Efforts need to be made to start new programs, and create new markets so fewer items end up in landfills on the land.

Goal: Enhance the recycling of waste products

Objective:

- Collect/reuse recyclables

Action:

- Hold a tire sweep periodically.
- Encourage recycling of ag plastics (silo & bale bags) annually
- Encourage the recycling of all size batteries.
- Encourage paint recycling

Goal: Protect the environment by the proper disposal of unwanted & hazardous ag waste products

Objective:

- Collect and remove hazardous waste

Action:

- Encourage collection of mercury.
- Encourage collecting of fluorescent bulbs annually.
- Hold a joint Household/Ag Clean Sweep annually.

The agencies and personnel that will be involved in the implementation of the action plan in this concern are the Crawford County Land Conservation Department, UW-Extension NPM Staff Ag/Resource Agent, USDA- FSA & NRCS Offices, and Southwest Badger RC&D.

Funding Plan Implementation

The Crawford County Land and Water Resources Plan is a document that can be used by all of the partners that work to protect soil & water resources in Crawford County. Therefore, a combination of private, local, state, and federal sources will be sought to implement the priorities of the plan. As fund opportunities arise, the plan goals and objectives will be referenced to develop project applications. A partial list of potential funding sources is included. The lead agency to pursue funding will depend upon the individual objectives being pursued.

County Cost-Share Program

The Crawford County Land Conservation Committee will work to develop a county-funded cost share program that will supplement other funding sources. One advantage of local program is that it can be structured with greater flexibility than federal or state programs to encourage landowner participation.

Local residents, staff, and elected officials will use their influence to structure the development of state and federal grant programs whenever possible, and will assist the Land Conservation Committee in developing the cost-share program.

Potential funding sources – including, but not limited to:

Private Sources

Private Foundations
Volunteer Hours
Southwest Badger Resource Conservation & Development
Ducks Unlimited
Individual Contributions
Conservation Organizations

Local Government Sources

Crawford County Department Budgets
(Land Conservation, Zoning, Emergency Government Offices)
Crawford County Cost-Share Program (Under Development)

State Government Sources

New Nonpoint Source Funds
Stewardship Grants
Wisconsin Waterfowl Stamp
WPFLGP (Wisconsin Private Forest Landowners Grant Program)
Department of Agriculture, Trade, and Consumer Protection Land and Water Plan Implementation Funds
Department of Natural Resources
DNR Wildlife Sources
Turkey Stamp Funds

Federal Sources

Farm Service Agency and Natural Resources Conservation Service
Conservation Reserve Program (CRP) Competitive and Continuous
Environmental Quality Incentives Program (EQIP)
Wildlife Habitat Improvement Program (WHIP)
Wetland Reserve Program (WRP)
North American Waterfowl Conservation Act (NAWCA)

Environmental Protection Agency
Environmental Education Grants
319 (Clean Water Act) Grants