



State of Wisconsin

## *Land and Water Conservation Board*

PO Box 8911  
Madison, WI 53708-8911  
608-224-4622

### **Land and Water Conservation Board Meeting**

**December 1, 2015**  
9:00 a.m. – 2:35 p.m.

Boardroom 106  
Wisconsin Department of Agriculture, Trade and Consumer Protection  
2811 Agriculture Drive  
Madison, WI

#### *Agenda*

*THE LWCB MAY TAKE ACTION ON ANY OF THE ITEMS LISTED ON THE AGENDA AT  
THE SCHEDULED MEETING*

- 
- 9:00 a.m. **1** Call to order—Mark Cupp, LWCB
- a. Pledge of allegiance
  - b. Open meeting notice
  - c. Approval of agenda
  - d. Approval of October 6, 2015, LWCB meeting minutes
- 9:05 a.m. **2** Public appearances\*
- \*Please complete a Public Appearance Request Card and submit it to a DATCP representative before the start of the meeting*
- 9:10 a.m. **3** Recommendation for approval of Land and Water Resource Management Plan revision for Manitowoc County— Jerry Halverson, County Conservationist and Tony Smith, Resource Conservationist, Manitowoc County Soil and Water Conservation Department
- 9:50 a.m. **4** Recommendation for approval of Land and Water Resource Management Plan revision for Oconto County— Ken Dolata, Oconto County Land Conservation Department
- 10:30 a.m. **5** Recommendation for approval of 5-year extension request for Columbia County Land and Water Resource Management Plan— Kurt Calkins, Columbia County Land and Water Conservation Department

*Mark Cupp, Chair • Lynn Harrison, Vice-Chair  
Members: George Mika • Robin Leary • Dale Hood • Dave Solin  
Eric Birschbach • Caitlin Frederick • John Petty • Mary Anne Lowndes*

## ***DECEMBER 1, 2015, LWCB Meeting Agenda***

- 11:10 a.m. **6** Recommendation for approval of Land and Water Resource Management Plan revision for Iowa County— Jim McCaulley, Iowa County Land Conservation Department
- 11:50 a.m. **7** Lunch Break
- 12:35 p.m. **8** Recommendation for approval of Land and Water Resource Management Plan revision for Rusk County— John Krell, Rusk County Land Conservation and Development Department
- 1:15 p.m. **9** Recommendation for approval of Land And Water Resource Management Plan revision for Adams County – Wally Sedlar, Adams County Land Conservation Department, and Fred Heider, North Central Wisconsin Regional Planning Commission
- 1:55 p.m. **10** Procedures for 2016 Election of LWCB Officers—Mark Cupp
- 2:05 p.m. **11** Approval of proposed 2016 LWCB Annual Agenda — Chris Clayton and Lisa Trumble, DATCP
- 2:10 p.m. **12** Agency reports
- a. FSA
  - b. NRCS
  - c. UW-CALS
  - d. UW-Extension
  - e. WLWCA
  - f. DATCP
  - g. DNR
- 2:30 p.m. **13** Planning for February 2016 Meeting—Mark Cupp
- 2:35 p.m. **14** Adjourn

**MINUTES  
LAND AND WATER CONSERVATION BOARD MEETING**

**October 6, 2015  
DATCP Board Room  
Wisconsin Department of Agriculture, Trade and Consumer Protection  
2811 Agriculture Drive, Madison, Wisconsin**

**Item #1      Call to Order—pledge of allegiance, open meeting notice, approval of agenda, approval of August 4, 2015 LWCB meeting minutes.**

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The meeting was called to order by Chairman Mark Cupp at 9:00 a.m. Cupp, George Mika, Dave Solin, Eric Birschbach, Dale Hood, Lynn Harrison, John Petty, Caitlin Frederick, Mary Anne Lowndes were in attendance. A quorum was present. Advisors Kurt Calkins and Jim VandenBrook (WI Land + Water) were present. Others present included Greg Coulthurst, Door County SWCD; Christopher Ertman and Eric Fehlhaber, Sheboygan County LWCD; Heather Palmquist, Iron County LWCD; Greg Cleereman, Marinette County LWCD; Richard Castelnuovo, Lisa Schultz, Lisa Trumble, and Chris Clayton, DATCP; and Linda Talbot, DNR.

Clayton confirmed that the meeting was publicly noticed.

Hood moved to approve the agenda as presented, Harrison seconded, and the motion carried.

The Board suggested a couple minor edits to the August 4, 2015 meeting minutes. Harrison moved to accept the August 4, 2015 minutes with edits, Mika seconded, and the motion carried.

Cupp provided an update on board member status. Although she has served past her term, Robin Leary continues to represent a city with a population of 50,000 or more. The board member slot for a charitable association representative has been open for some time.

**Item #2      Public Appearances**

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No public appearance cards were submitted.

**Item #3      2016 DATCP and DNR final joint allocation plan (Environmental Assessment and comments on the preliminary allocation)**

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Castelnuovo, DATCP, reported the preliminary allocation plan received no public comments, and DATCP made no changes to the final allocation plan.

Talbot, DNR, pointed out that Chart 1 of the final allocation plan summarizes requests and joint allocations for grant year 2016. She reported changes made to the allocation plan: DNR will request applications for the Urban Nonpoint Source and Storm Water Management grants every other year; in CY2016, DNR will offer urban construction grants, and in CY2017 DNR will offer urban planning grants; Table B showing the 2016 allocations to counties is complete; DNR is reserving \$1 million for Notice of Discharge grants and will request applications three times per year.

Castelnuovo reported that the withholding of \$218,000 from the DATCP total allocation amount is unresolved, but DATCP's preliminary and final allocation plans are identical. Potential resolutions were discussed.

The following was also discussed: the challenge to the counties to complete 9 key element plans; DNR giving ten points during the ranking of TRM grant applications, as a preference to projects occurring in watersheds with 9 key element plans; the challenge to counties developing 9 key element plans, given the extra workload required and lack of funding; WI Land + Water's interest in assessing resources needed to develop 9 key element plans; federal funding sources and TMDL implementation acting as drivers to developing 9 key element plans.

Hood moved to approve the 2016 DNR and DATCP Final Joint Allocation Plan as presented, Frederick seconded, and the motion carried.

**Item #4      Recommendation for Approval of Crawford and Washburn Co. Requests to Extend Land and Water Resource Management Plan Expiration Dates**

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Trumble, DATCP, presented information in support of Crawford County's 1-year extension of its LWRM plan and Washburn County's 2-year extension of its LWRM plan.

Trumble reported on Crawford County's progress toward meeting its current plan goals and the county's updated work plan covering planned activities during the one-year extension period. She also reported on Washburn County's progress toward meeting its current plan goals and presented an updated work plan covering planned activities during the two-year extension period. Trumble presented the reasons both counties requested extensions to their LWRM Plans.

Solin moved to approve Crawford County's 1-year extension and Washburn County's 2-year extension requests as presented, Birschbach seconded, and the motion carried.

**Item #5      Recommendation for approval of 5-year extension request for Door County Land and Water Resource Management Plan**

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Coulthurst made a presentation in support of Door County's 5-year extension of its LWRM plan. (The presentation can be accessed at: <http://datcp.wi.gov/uploads/Environment/pdf/LWCBDoorCountyOct2015.pdf>)

Coulthurst highlighted the county's progress in meeting planned goals and activities, and addressed key benchmarked activities pursued by the county over the past five years.

Coulthurst reported that the county's current farm priority strategy is effective, and the county submitted an updated work plan that covers planned goals and activities during the five year extension period.

The following issues were discussed: the county's relative success in developing nutrient management plans despite a large amount of rented lands; invasive species control of Phragmites and Wild Parsnip; ideas for implementing targeted water quality standards in Door County; proper implementation of the revised NRCS 590 standard; communicating land and water conservation issues to state legislators each year with Kewaunee County; discussions happening

in the county about the liabilities related to spreading manure; focusing efforts to implementing nutrient management plans; manure contamination of several wells in the Jacksonport area resulting in serious public health incidents.

While the county laid out its overall strategy of working with each farm to achieve conservation compliance including numerical milestones and future targets, Harrison commented that he would like to see more numerical measures related to specific activities and outcomes in the work plan.

Birschbach moved to approve Door County's 5-year extension request as presented, Mika seconded, and the motion carried.

**Item #6            Recommendation for approval of Land and Water Resource Management Plan Revision for Sheboygan County**

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Ertman made a presentation in support of Sheboygan County's LWRM plan revision. (The presentation can be accessed at:

<http://datcp.wi.gov/uploads/Environment/pdf/LWCBSheboyganCountyPresOct2015.pdf>)

Ertman reported that the DATCP staff reviewed the plan using the LWRM Plan Review Checklist and found that the plan complies with all requirements of section 92.10, Wisconsin Statutes, and Chapter ATCP 50, Wisconsin Administrative Code.

Ertman highlighted the county's ability to meet goals and activities in its previous 10-year plan, and addressed key benchmarked activities pursued by the county over the past five years. Ertman reported that the county's current farm priority strategy is effective, and he submitted an updated work plan that covers planned goals and activities during the five year extension period.

The following issues were discussed: implementing the first denitrifying bioreactor in the state; the county pursuing building a sand-iron filter to reduce dissolved phosphorus from tile drainage and possibly stormwater; dealing with the emerald ash borer; focusing cost-share on prioritized, core areas of the county. It was noted that the county's top priority is to hire an agronomist.

Solin moved to approve Sheboygan County's plan revision as presented, Hood seconded, and the motion carried.

**Item #7            Recommendation for approval of 5-year extension request for Iron County Land and Water Resource Management Plan**

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Palmquist made a presentation in support of Iron County's 5-year extension of its LWRM plan. (The presentation can be accessed at:

<http://datcp.wi.gov/uploads/Environment/pdf/LWCBIronCountyOct2015.pdf>)

Palmquist highlighted the county's progress in meeting planned goals and activities, and addressed key benchmarked activities pursued by the county over the past five years.

Palmquist reported that the county's current farm priority strategy is effective, and she submitted an updated work plan that covers planned activities during the five year extension period.

The following issues were discussed: active partnerships with the Bad River Tribe and the Great Lakes Indian Fish and Wildlife Commission; culvert replacements to improve fish passage; successfully engaging the people of Iron County despite limited staff and resources.

Mika moved to approve Iron County's 5-year extension request as presented, Solin seconded, and the motion carried.

**Item #9 Recommendation for approval of 5-year extension request for Marinette County Land and Water Resource Management Plan**

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Cleereman made a presentation in support of Marinette County's 5-year extension of its LWRM plan. (The presentation can be accessed at: <http://datcp.wi.gov/uploads/Environment/pdf/LWCBMarinetteCountyOct2015.pdf>)

Cleereman highlighted the county's progress in meeting planned goals and activities, and addressed key benchmarked activities pursued by the county over the past five years.

Cleereman reported that the county's current farm priority strategy is effective, and he submitted an updated work plan that covers planned activities during the five year extension period.

The county's effort to control aquatic invasive species in its lakes was discussed. It was noted that landowners in the county with manure storage permits are not allowed to winter spread their manure.

Hood moved to approve Marinette County's 5-year extension request as presented, Birschbach seconded, and the motion carried.

**Item #10 Report on 2014 Program Accomplishments by Counties**

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Schultz, DATCP, presented on the 2014 report of Wisconsin land and water conservation accomplishments. (The presentation can be accessed at: <http://datcp.wi.gov/uploads/Environment/pdf/LandWaterAnnualReport2014.pdf>)

The board noted a marked improvement in the annual report over the years, and especially in the 2014 report, making it more widely accessible and efficient in communicating to legislators, constituents, and other stakeholders the tangible work of county land and water conservation departments.

**Item #11 Agency Reports**

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WLWCA – Sand County Foundation selected Dave and Leslie Meuer to receive the 2015 Aldo Leopold Conservation Award for Wisconsin. Act 55 made major changes to shoreland zoning, and several counties are pushing to repeal the changes. A hearing on Senate Bill 239 is imminent. Under the proposed bill, permits for a high capacity wells would be held in perpetuity. Implementation of the multi-discharger variance, related to the phosphorus rules, is still being discussed. The first point source-nonpoint source phosphorus reduction agreements will be made in 2017. Counties will hear more about tracking and quantifying the effects of

practices on phosphorus reductions. During the October 8th of the Association's legislative committee meeting, DNR will discuss wetlands and Chapter 30 permitting.

**DATCP** – The Agricultural Enterprise Areas for 2015 were recently announced, bringing the total enrolled acreage to over 1 million. The final report of the Livestock Facility Siting Technical Expert Committee was delivered to Secretary Brancel. Because of recently passed legislation, suspended drainage districts will be forced to either be dissolved or reinstated.

**DNR** – Beginning June 1, 2016, DNR will enforce requiring wetland delineations be done prior to applying for permits. EPA has been present in Kewaunee County, and workgroups are being set up to make recommendations to address the specific conditions and groundwater issues in the county. Recommendations could include voluntary practices specific to defined geologic areas dominated by karst. Recommendations are unlikely to initiate the rule making process in the near future. EPA and DNR are working cooperatively on these efforts. One workgroup will also examine alternative technologies and treatments. Notice of public hearings on the permitting of non-metallic mining operations will occur soon.

**Item #12 Planning for December 2015 Meeting – Mark Cupp, LWCB**

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- Report and recommendations on the 2015 CREP spending authority.
- Six plan revisions from Adams, Columbia, Iowa, Manitowoc, Oconto, and Rusk Counties.
- Approval of proposed 2016 LWCB annual agenda.
- Cupp asked that Board members interested in serving on the 2016 LWCB nominating committee contact him.
- Prior to the December 2015 LWCB meeting, Cupp will discuss with Trumble and report back on better identifying the Board's responsibilities to review and recommend approvals.
- Harrison suggested that DATCP consider briefing the board on individual programs during future board meetings.

**Item #13 Adjourn**

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Hood moved to adjourn, Solin seconded. The meeting was adjourned at 1:58 pm.

Respectfully submitted,

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Eric Birschbach, Secretary

Date

Recorder: CRC, DATCP

**CORRESPONDENCE/MEMORANDUM** \_\_\_\_\_ **State of Wisconsin**

**DATE:** November 13, 2015

**TO:** Land and Water Conservation Board Members and Advisors

**FROM:** Keith Foye, DATCP   
Bureau of Land and Water Resource Management

**SUBJECT:** Recommendation for Approval of the *Manitowoc County Land and Water Resource Management Plan*

**Action Requested:** This is an action item. The department has determined that the *Manitowoc County Land and Water Resource Management Plan* meets ATCP 50 requirements and requests that the LWCB make a recommendation regarding approval of the plan consistent with the Board's criteria and guidance, including any recommendation regarding any conditions in the final order approving the plan.

**Summary:** The plan is written as a 10 year plan, and addresses one or more of the criteria demonstrating intent for a 10 year plan. If approved, the plan would remain in effect through December 31, 2025, and would be subject to a five year review prior to December 31, 2020.

DATCP staff reviewed the plan using the checklist and finds that the plan complies with all the requirements of section 92.10, Wisconsin Statutes, and Chapter ATCP 50, Wisconsin Administrative Code.

To qualify for 10 year approval of its plan, Manitowoc County must satisfy the Board that the plan has met the additional criteria in the Board's guidance.

Manitowoc County held a public hearing on November 19, 2015, as part of its public input and review process. The Manitowoc County Land and Water Conservation Committee will present the LWRM plan for County Board approval after receiving a recommendation for approval from the LWCB.

**Materials Provided:**

- LWRM Plan Review Checklist
- *Manitowoc County Land and Water Resource Management Plan* Summary, including workplan and budget

**Presenters:** Jerry Halverson, Manitowoc County Conservationist  
Tony Smith, Resource Conservationist, Manitowoc County



Wisconsin Dept. of Agriculture, Trade and Consumer Protection  
 Agricultural Resource Management Division  
 2811 Agriculture Drive, PO Box 8911  
 Madison WI 53708-8911  
 Phone: (608) 224-4608

## Land and Water Resource Management (LWRM)

### LWRM Plan Review Checklist

Sec. 92.10, Stats. & sec. ATCP 50.12, Wis. Adm. Code

County: Manitowoc

Date Plan Submitted for Review: 10/15/2015

I. ADVISORY COMMITTEE	Yes	No	Page
1. Did the county convene a local advisory committee that included a broad spectrum of public interests and perspectives (such as affected landowners, partner organizations, government officials, educational institutions)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2
II. PUBLIC PARTICIPATION AND COUNTY BOARD APPROVAL	Date(s)		
1. Provide the dates that the local advisory committee met to discuss the development of the LWRM plan and the county plan of work.	4/29, 5/15, 6/15,10/7		
2. Provide the date the county held a public hearing on the LWRM plan. <sup>1</sup>	11/19/15		
3. Provide the date of county board approval of the plan, or the date the county board is expected to approve the plan after the LWCB makes its recommendation. <sup>2</sup>	TBD		
III. RESOURCE ASSESSMENT AND WATER QUALITY OBJECTIVES	Yes	No	Page
1. Does the plan include the following information as part of a county-wide resource assessment:			
a. Soil erosion conditions in the county <sup>3</sup> , including:			
i. an estimate of the soil erosion rates for the whole county and for local areas where erosion rates are especially high	<input checked="" type="checkbox"/>	<input type="checkbox"/>	57-58
ii. identification of key soil erosion problem areas in the county	<input checked="" type="checkbox"/>	<input type="checkbox"/>	57-58
b. Water quality conditions of watersheds in the county <sup>3</sup> , including:			
i. location of watershed areas, showing their geographic boundaries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31
ii. identification of the causes and sources of the water quality impairments and pollutant sources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	36-58

<sup>1</sup> Appropriate notice must be provided for the required public hearing. The public hearing notice serves to notify landowners and land users of the results of any determinations concerning soil erosion rates and nonpoint source water pollution, and provides an opportunity for landowners and land users input on the county's plan. Individual notice to landowners is required if the landowners are referenced directly in the LWRM plan. DATCP may request verification that appropriate notice was provided.

<sup>2</sup> The county board may approve the county LWRM plan after the department approves the plan. The plan approved by the county board must be the same plan approved by the department. If the department requires changes to a plan previously approved by the county board, the department's approval does not take effect until the county board approves the modified plan.

<sup>3</sup> Counties should support their analysis of soil and water conditions by referencing relevant land use and natural resource information, including the distribution of major soil types and surface topographic features, and land use categories and their distribution. Sec. ATCP 50.12(3)(b) requires that a county assemble relevant data, including relevant land use, natural resource, water quality and soil data.

iii.	identification of key water quality problem areas in the county	<input checked="" type="checkbox"/>	<input type="checkbox"/>	36-58
2. Does the LWRM plan address objectives by including the following:				
a.	specific water quality objectives identified for each watershed based upon the resource assessment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chap. 3
b.	pollutant load reduction targets for the watersheds, if available	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Goals, 83, 85, 96
3.	Does the plan or related documentation reflect that the county consulted with DNR <sup>4</sup> to provide water quality assessments, if available; to identify key water quality problem areas; to determine water quality objectives; and to identify pollutant load reduction targets, if any.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

Other comments: Obtained current data from DNR.

IV. PLAN IMPLEMENTATION		Yes	No	Page
1. Does the LWRM plan include the following implementation strategies:				
a.	A voluntary implementation strategy to encourage farm conservation practices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	76
b.	State and local regulations used to implement the plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chap. 4
c.	Compliance procedures that apply for failure to implement the conservation practices in ATCP 50, ch. NR 151 and related local regulations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	77,81
d.	Relevant conservation practices to achieve compliance with performance standards and prohibitions and to address key water quality and erosion problems	<input checked="" type="checkbox"/>	<input type="checkbox"/>	88-89
e.	Strategy to monitor the compliance of participants in the farmland preservation program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	82
2.	Does the LWRM plan (or accompanying work plan) estimate cost-sharing and other financial assistance, and technical assistance needed for plan implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	89-90, work plan
3.	Does the LWRM plan describe a priority farm strategy designed to make reasonable progress in implementing state performance standards and conservation practices on farms appropriately classified as a priority?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	81

<sup>4</sup> While requirements for DNR consultation may be satisfied by including relevant DNR representatives on the advisory committee, counties may also need to interact with DNR staff in central or regional offices to meet all of the consultation requirements. DNR may point counties to other resources to obtain information including consultants who can calculate pollutant load reduction targets.

- |   |                                     |                          |                 |
|---|-------------------------------------|--------------------------|-----------------|
| 4. Was DNR consulted about the county’s plan for NR 151 implementation? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 17,22,<br>93,96 |
|---|-------------------------------------|--------------------------|-----------------|

Other comments: DNR was involved with the LAC and TAC.

<b>V. OUTREACH AND PARTNERING</b>	<b>Yes</b>	<b>No</b>	<b>Page</b>
1. Does the LWRM plan describe a strategy to provide information and education on soil and water resource management, conservation practices and available cost-share funding, including an estimate of the amount of I& E needed for plan implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	91-93
2. Does the LWRM plan describe coordination activities with local, state and federal agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	93-95

Other comments: \_\_\_\_\_

<b>VI. WORK PLANNING AND PROGRESS MONITORING</b>	<b>Yes</b>	<b>No</b>	<b>Page</b>
1. Does the county’s work plan do all of the following:			
a. Cover more than one year	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chap 5
b. Identify priorities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
c. Provide measurable annual and multi-year performance benchmarks (for at least all high priority items)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
2. Does the LWRM plan describe a strategy and framework for monitoring county progress implementing its plan including methodology to track and measure progress in meeting performance benchmarks and plan objectives?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	82,96, 97

Other comments:

<b>VII. EPA SECTION 319 CONSIDERATIONS</b>
1. DOES THIS PLAN INCLUDE ELEMENTS <u>CONSISTENT</u> WITH THE MINIMUM 9 KEY ELEMENTS FOR EPA APPROVAL UNDER SECTION 319 OF THE CLEAN WATER ACT: _____
2. IF THE ANSWER TO 1 IS “YES,” WHAT IS THE STATUS OF EPA’S REVIEW OF THE PLAN: NOT SUBMITTED _____ SUBMITTED BUT NOT APPROVED _____ APPROVED _____

**STAFF RECOMMENDATION**

Staff has reviewed the above-referenced county LWRM plan based on the criteria required in s. ATCP 50.12, Wis. Admin. Code, and s. 92.10, Stats., and has determined that the plan meets the criteria for DATCP approval

of this plan. This checklist review is prepared to enable the LWCB to make recommendations regarding plan approval, and for DATCP to make its final decision regarding plan approval.

Staff Signature: Lisa K. Trumble

Date: 11/05/2015

# Manitowoc County

Land and Water  
Resource Management Plan  
January 1, 2016 to December 31, 2025



As compiled by the Manitowoc County Soil and Water Conservation Department  
4319 Expo Drive P.O. Box 935, Manitowoc, WI 54221-0935

## **Acknowledgements**

### **Land Conservation Committee Members**

Catherine Wagner- LCC Chair & County Board  
Pat Kohlman- County Board  
Todd Holschbach- County Board  
Laurie Burke- County Board  
Melvin Waak- County Board  
Terri Wilfert- Farm Service Agency Representative  
Larry Bonde- Conservation Congress Representative

### **Manitowoc County Executive**

Robert Ziegelbauer

### **Manitowoc County Soil and Water Conservation Staff**

Jerry Halverson- Department Director  
Bruce Riesterer- Resource Conservationist  
Mike Wendt- Resource Conservationist  
Anthony Smith- Resource Conservationist  
Amanda Cordova- Education Coordinator/Administrative Assistant

### **Local Advisory Committee**

Andrew Noth	Eric Cooley	Matt Rataczak	Scott Gunderson
Andy Dexheimer	Gene Weyer	Michaeleen Gerken	Terri Wilfert
Bryce Larson	Greg Minikel	Golay	Tim Ryan
Danielle Block	James Lepich	Mike Glandt	
Diane Ott	Jim Kettler	Peter Pittner	
Dick Halverson	John Durbrow	Russ Tooley	
Elmer Dvoracheck	Mary Gansberg		

### **Technical Advisory Committee**

Danielle Block	Heidi Schmitt Marquez	Matt Rataczak	Tim Ryan
Amanda Cordova	Jerry Halverson	Mike Wendt	Titus Seilheimer
Bruce Riesterer	Jessica Wanserski	Scott Gunderson	Tony Smith
Erin Hanson	Mary Gansberg	Thomas Schneider	Travis Buckley

Public Hearing: November 19<sup>th</sup>, 2015

Approved by the Land Conservation Committee: November 19<sup>th</sup>, 2015

Approved by the State Land & Water Conservation Board: TBD

Approved by the Manitowoc County Board:

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## Purpose of the Land and Water Conservation Plan

Wisconsin Chapter 92 and Chapter ATCP 50.12 require counties to develop a Land and Water Resource Management Plan. The intent of this plan is to foster and support a locally led process that improves decision-making, streamlines administrative and delivery mechanisms, and better utilizes local, state, and federal funds to protect the county's land and water resources.

## Mission Statement for Manitowoc County Soil and Water Conservation Department

“Protecting our environment to enhance the quality of life for all County citizens. The responsibilities of the Soil & Water Conservation Department include erosion, runoff and sedimentation control and the conservation of soil, water, and related resources in Manitowoc County.”

The primary means of protecting our environment is by providing technical and financial assistance to landowners and land occupiers. The Department also assists town, city, and village governments with land use planning, standards, and technical assistance. The department is also responsible for enforcing county ordinances protecting soil and water resources.

## Plan Development Process

The Soil and Water Conservation Department developed this 10-year land and water management plan by utilizing a three-phase planning process:

### **First Phase: Public Involvement**

- Create a Local Advisory Committee (LAC) that includes a broad spectrum of public interest and perspectives:
  - Educate Local Advisory Committee members of current programs, achievements, and quality of Manitowoc County's Natural Resources
  - Identify, select, and analyze areas of concern
  - Develop a vision for protecting and enhancing Manitowoc County's Natural Resources
- Gather public opinion via community survey:
  - Distribute surveys to various members of the community to determine their concerns and values regarding Natural Resources in Manitowoc County

### **Second Phase: Technical Involvement**

- Create a Technical Advisory Committee that includes professionals from University of Wisconsin Extension, Wisconsin Department of Natural Resources, Natural Resource Conservation Service, Department of Agriculture, Trade and Consumer Protection, other

county departments, Farm Service Agency and the Soil and Water Conservation Department:

- Review Local Advisory Committee alternatives and best solutions
- Determine what changes are necessary to implement alternatives and solutions

### **Third Phase: Completion and Adaptation of Plan**

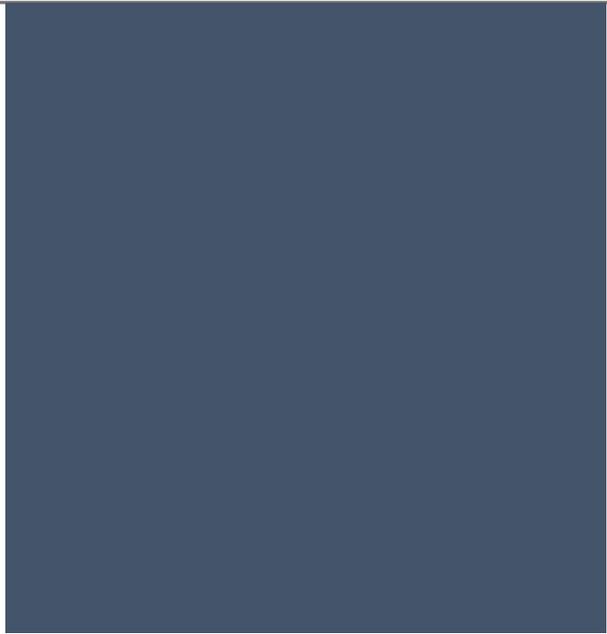
- Local Advisory Committee reviews draft plan and offers suggestions for changes
- Draft plan goes to Wisconsin Department of Agriculture, Trade, and Consumer Protection, Wisconsin Department of Natural Resources, and the United States Department of Agriculture for review and comment
- Land Conservation Committee holds public hearing on plan
- Present plan to State Land and Water Conservation Board
- Wisconsin Department of Agriculture, Trade, and Consumer Protection approves or denies the plan
- Manitowoc County Board approval
- Implement plan
- Review and monitor success

## **History of Manitowoc County**

“Manitowoc” is Native American word translated as the habitation of the Good Spirit and the Devil’s Den. The name resulted from a tradition among the Native Americans that a nondescript being was seen at various times at the mouth of the River. Different Native American tribes occupied the territory of Manitowoc at different times, though the Menominee were generally acknowledged as owners of the land. When European settlers arrived, the Native Americans did not resist their presence.

The first settlements were made in 1836 in Mishicot, Manitowoc, Two Rivers, Shoto, and Manitowoc Rapids. Numerous changes took place in the next decade as German, Norwegian, Irish, and Bohemian immigrants came to America in large numbers to create a new life in this area. Early settlements were primarily engaged in the lumber industry. Some efforts were also devoted to developing the waterpower that existed on the Manitowoc and Twin Rivers.

The fishing industry soon developed along the lakeshore. As the land was cleared, agricultural production expanded. In the 1850's, the European immigrants brought the skills and tradition to make farming a strong and stable base in the County. As the lumber industry was declining, the tanning and furniture industries grew, and they made use of the less valuable lumber and remaining hardwoods. During the same period, the shipbuilding, malting, and brewing industries began to grow.



# Chapter 5

Priorities, Goals, Activities, and Staffing for 10-Year Land and Water Management Plan

Manitowoc County Land and Water  
Conservation Department

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**CHAPTER 5- PRIORITIES, GOALS, ACTIVITIES, AND STAFFING FOR 10-YEAR LAND AND WATER RESOURCE MANAGEMENT PLAN**

<b>PRIORITY A: Implement Local Conservation Ordinances – <u>Manitowoc County Chapters 19,26,27, &amp; 28</u></b>					
GOALS: Control and reduce delivery of sediment, nutrients and other pollutants to surface and <u>groundwater</u> from agricultural cropland and production sites. Sustain healthy productive soil by minimizing soil loss on cropland. Minimize the risk and impact of animal waste in surface and <u>groundwater</u> . Reduce conflict resulting from evolving farm and waste management practices and farm expansions.					
<b>Priority Zone</b>	<b>Activity</b>	<b>Staff</b>	<b>Annual Hours</b>	<b>When</b>	<b>Expected Outcomes (Annual)</b>
Countywide	<b>Permit/License Administration</b> -- Meetings with applicants and consultants --Review applications	Department Director Resource Conservationist	150 75	Annually	5 AWO permits, 3 Facility Siting Licenses and 3 Facility Siting License modifications
	<b>Investigation/Enforcement</b>	Department Director Resource Conservationist	50 100	Annually	10 investigations 4 violation enforcements
	<b>Construction Inspection/Compliance Follow-up/Monitoring</b>	Department Director Resource Conservationist	100 250	Annually	12 Facility Siting compliance reviews. 2 year cycle Review 10 construction as-built
	* <b>Bold indicates high priority</b>				
<b>TOTAL</b>		Department Director Resource Conservationist	300 425		

**Estimated annual cost to meet this goal: \$46,500 (725 hours)**

<b>PRIORITY B: Implement and Enforce State Agricultural Performance Standards and Prohibitions</b>						
GOALS: Control and reduce delivery of sediment, nutrients, manure, wastewater and other pollutants to surface and groundwater from agricultural cropland and production sites. Sustain healthy productive soil by minimizing soil loss on cropland.						
<b>Priority Zone</b>	<b>Activity</b>	<b>Staff</b>	<b>Annual Hours</b>	<b>When</b>	<b>Expected Outcomes (Annual)</b>	
Countywide	<b>Allocate Soil and Water Resource Management Grant Dollars to Implement BMPs for State Standard Compliance</b>	Resource Conservationist	Included in Priority G	Annually	\$60,000 Bond Fund \$50,000 SEG Fund 3 miles of gully erosion control 2,000 acres of new nutrient Management and soil erosion control plans	
	<b>Investigation/Enforcement</b>	Department Director Resource Conservationist	Included in Priority A & C	Annually		
	<b>Conservation Planning</b>	Resource Conservationists	240	Annually		12 new plans 10 referrals to NRCS for conservation practice funding
	<b>One-on-one contacts with landowners</b> -- Plan implementation --Monitor compliance	Resource Conservationist	Included in Priority A & C	Annually		200 Farmland Preservation Program Participants, 12 Facility Siting Farms
	<b>*Bold indicates high priority</b>					
<b>TOTAL</b>		Resource Conservationist	240			

**Estimated annual cost to meet this goal: \$14,500 (240 hours)**

**PRIORITY C: Administer Working Lands Initiative- Farmland Preservation Program**

GOALS: Control and reduce delivery of sediment, nutrients, manure, wastewater and other pollutants to surface and groundwater from agricultural cropland and production sites.  
 Sustain healthy productive soil by minimizing soil loss on cropland.  
 Minimize the risk and impact of animal waste in surface and groundwater.  
 Assist landowners so that they can become or remain in compliance of required standards in order to receive income tax credit benefit.

<b>Priority Zone</b>	<b>Activity</b>	<b>Staff</b>	<b>Annual Hours</b>	<b>When</b>	<b>Expected Outcomes (Annual)</b>
Countywide except Town of Schleswig	<b>Write and review conservation plans</b>	Resource Conservationist	1,600	Annually	10 new participants 200 plan reviews
	<b>Monitor State Standard implementation and Compliance</b>	Resource Conservationist	400	Annually	
	<b>Data entry of conservation performance</b>	Resource Conservationist	400	Annually	
	<b>Administration of Program</b>	Resource Conservationist	100	Annually	
	<b>*Bold indicates high priority</b>				
<b>TOTAL</b>		Resource Conservationist	2,500		

**Estimated annual cost to meet this goal: \$150,000 (2,500 hours)**

<b>PRIORITY D: Implement Groundwater Protection Programming</b>					
GOALS: To improve quality of groundwater by decreasing nitrate levels by 20% in wells previously screened and above 10 mg/L in the towns of Cato, Maple Grove, Franklin, Gibson, Cooperstown, Rockland, Schleswig and Kossuth.					
<b>Priority Zone</b>	<b>Activity</b>	<b>Staff</b>	<b>Annual Hours</b>	<b>When</b>	<b>Expected Outcomes (Annual)</b>
Areas less than 60" of soil over bedrock  Soil types CnB, CnC, Krb, KrC & WpB  Sinkholes, conduits to ground-water and all the land that drains to those features  Towns with nitrates readings above 10mg/L	<u>Improve Groundwater Data</u>				
	<b>-Identify conduits to groundwater along with watersheds draining to conduits. Update and distribute hazard maps</b>	Resource Conservationist Education Coordinator	200 250	2016-2020	Use new LIDAR information and 2015 NRCS 590 Standard to revise hazard maps and distribute as needed
	-Well water screening for FPP participants	Resource Conservationist Education Coordinator	15 20	Annually	25% of FPP participants request voluntary nitrate screening during review (45 tests/year)
	-Well water study	Resource Conservationist Education Coordinator	10 80	Annually	3-4 wells in each 'critical' town become part of an annual study to monitor groundwater (32 wells)
	-Nitrate Screening at the Fair	Department Director Resource Conservationist Education Coordinator	20 40 30	Annually	160 screenings
	One-on-one meeting with landowners not in current programs with land vulnerable to groundwater contamination.	Department Director Resource Conservationist	60 120	Annually	15 landowners
	<b>Install Best Management Practices:</b> Well abandonment, buffer and sinkhole treatment	Resource Conservationist		Included in Priority G	
	<b>*Bold indicates high priority</b>				
		Department Director Resource Conservationist Education Coordinator	80 385 380		
	<b>TOTAL</b>				

**Estimated annual cost to meet this goal: \$40,000 (845 hours)**

<b>PRIORITY E: Implement Surface Water Programming</b>					
<b>Lakes Goals:</b>					
Goal 1. Maintain phosphorus levels at or below current levels for lakes between 0-24 ppb (Horseshoe, Pigeon, Shoe, Spring, Cedar, Wilke, Tuma, English)					
Goal 2: To decrease phosphorus levels by 10% for streams identified in the Impaired Waters List above the water quality standard of 0.100 mg/L for rivers and 0.075 mg/L for streams, including stretches of the Manitowoc River, Meeme River, Molash Creek, Pigeon River, Pine Creek, Silver Creek, South Branch River and the West Twin River by 2026.					
<b>Streams Goal:</b> To decrease phosphorus levels by 10% for streams identified in the Impaired Waters List above the water quality standard of 0.100 mg/L for rivers and 0.075 mg/L for streams, including stretches of the Manitowoc River, Meeme River, Molash Creek, Pigeon River, Pine Creek, Silver Creek, South Branch River and the West Twin River by 2026.					
<b>Priority Zone</b>	<b>Activity</b>	<b>Staff</b>	<b>Annual Hours</b>	<b>When</b>	<b>Expected Outcomes (Annual)</b>
<b>Lakes</b> identified in goals above	<b>Lakes Associations: Meet with board members. Review Lake Management Plans if available to identify pollution sources. Develop goals and strategies with lake members.</b>	Department Director	120	2016	Carstens Lake
		Resource Conservationist	80	2017 2020 2022	Long Lake Harpt Lake Gass Lake
<b>Streams</b> identified in Impaired Waters List	<b>Lake and Stream Watershed Land-owners: Meet with landowners. Discuss, promote, and implement BMPs that will reduce sediment, phosphorus and other pollutant loading to streams and lakes. Priority BMPs include: buffers, waterways, nutrient management, manure management, failed tile line repair, cover crops, reduced tillage, grasses, barnyard and feed storage runoff systems, proper milking center waste handling, working septic systems.</b>	Department Director	150	If time becomes available	Bullhead Lake Hartlaub Lake Silver Lake Weyers Lake
		Resource Conservationist	400		
	Watershed Model assessment	Resource Conservationist	300	Annually	Determine critical areas to apply BMPs
	Enforce State Conservation Standards and County Ordinances		Included in Priority A,B,C		
<b>TOTAL</b>	<b>*Bold indicates high priority</b>	Department Director Resource Conservationist	270 780		

**Estimated annual cost to meet this goal: \$66,000 (1,050 hours)**

<b>PRIORITY F: Promote Best Management Practices that Improve Soil Health</b>					
GOALS: Improve crop production and increase profitability. Minimize soil loss on cropland. Control and reduce delivery of sediment, nutrients, and other pollutants to surface and groundwater from agricultural cropland.					
<b>Priority Zone</b>	<b>Activity</b>	<b>Staff</b>	<b>Annual Hours</b>	<b>When</b>	<b>Expected Outcomes (Annual)</b>
Countywide	<b>Promote and encourage farmers to apply the following best management practices to cropland: reduced tillage, alfalfa and grasses in crop rotation, proper use of fertilizer and pesticide, residue management and cover crops.</b>	Resource Conservationists	Within ongoing programs	Annually	200 landowner/operator contacts per year
	<b>Promote soil health through demonstrations and distribution of soil health information.</b>	Education Coordinator Resource Conservationist	60 50	Annually	1 Field Day 5 additional landowners applying BMPs to improve soil health
<b>TOTAL</b>	<b>*Bold indicates high priority</b>	Resource Conservationist Education Coordinator	50 60		

**Estimated annual cost to meet this goal: \$5,000 (110 hours)**

**PRIORITY G: Implement Best Management Practices**

GOALS: Improve crop production and increase profitability.  
 Minimize soil loss on cropland.  
 Control and reduce delivery of sediment, nutrients, manure, wastewater and other pollutants to surface and groundwater from agricultural cropland and production sites.

<b>Priority Zone</b>	<b>Activity</b>	<b>Staff</b>	<b>Annual Hours</b>	<b>When</b>	<b>Expected Outcomes (Annual)</b>
Countywide	<b>Work with landowners/operators, consultants, and engineers to design and apply BMPs identified in Appendix A WI-NRCS Conservation Practice Standards</b>	Department Director Resource Conservationist	600 1200	Annually	-3 miles of gully erosion control practices installed -Nutrient management and sheet and rill erosion control plans on 3,000 additional acres -3 manure and wastewater storage facilities installed -2 feed storage runoff collection and treatment systems installed -3 well abandonments -3 sinkhole treatments, diversions, or buffers -3 stream buffers  Approximately \$110,000 annual allocation from WI Dept. of Agriculture, Trade and Consumer Protection- Soil and Water Resource Management Grant
	<b>Develop and administer cost-share contracts with landowners and operators to help defray landowner cost for practice installation.</b>	Department Director Resource Conservationist	20 50	Annually	
<b>TOTAL</b>		Department Director Resource Conservationist	620 1,250		

\*Bold indicates high priority

**Estimated annual cost to meet this goal: \$118,500 (1,870 hours)**

**Cost Share dollars from state and federal agencies: \$550,000**

\*If all expected annual best management practices were cost shared at 70% of the actual or estimated cost

<b>PRIORITY H: Implement Educational Programming</b>					
GOAL: To provide quality educational programming for farmers, agribusinesses, landowners, professionals, and the general public so that they can make informed conservation decisions.					
<b>Priority Zone</b>	<b>Activity</b>	<b>Staff</b>	<b>Annual Hours</b>	<b>When</b>	<b>Expected Outcomes (Annual)</b>
Countywide: Focus will be geared towards areas defined as "critical" for surface water and ground-water protection	<b>One-on-one contacts</b>	Resource Conservationist	Included in all Priorities	Annually	500 landowners/farm operators, public
	<b>Nutrient Management Farmer Education</b>	Resource Conservationist	170	Annually	12 nutrient management and conservation plans
	<b>Crop Advisor /Custom Manure hauler meeting</b>	Department Director Resource Conservationist	30 10	Every other year starting in 2016	25 participants
	Media releases	Department Director	25	Annually	2 per year
	Present at farm education opportunities	Department Director Education Coordinator	15 20	Annually	2 per year
	<b>Creation/update Contact Lists</b>	Education Coordinator	30	Annually	Create contact lists for crop advisors, farmers, landlords, custom manure haulers and other farm consultants
	Fair Participation -Demonstration in Ag Adventure Land Tent -Nitrate Screening (See Priority D)	Education Coordinator All SWCD staff	20 -Included in Priority D	Annually	Present conservation demonstrations throughout the day
	Conservation Education Incorporated. Area teacher training	Resource Conservationist	20	Annually	25 teachers

	Breakfast on the Farm	Education Coordinator	20	Annually	Booth highlighting conservation practices installed on host farm
	<b>Agriculture Education Center Display</b>	Education Coordinator	35	Annually	Highlight natural resources and conservation practices
	Promotion of Conservation through National/World Awareness Days	Education Coordinator	30	Annually	6 promotions or events
	<b>*Bold indicates high priority</b>				
<b>TOTAL</b>		Education Coordinator Department Director Resource Conservationist	135 70 220		

**Estimated annual cost to meet this goal: \$22,000 (425 hours)**

<b>PRIORITY I: Office Administration/Professional Development</b>					
GOALS: Administer and manage department functions Continuous improvement through staff training and meetings					
<b>Priority Zone</b>	<b>Activity</b>	<b>Staff</b>	<b>Annual Hours</b>	<b>When</b>	<b>Expected Outcomes (Annual)</b>
Countywide	Department Administration & Management	Department Director	400	Annually	
	Office and Administrative Support	Education Coordinator	400	Annually	
	Meetings/Training	<b>Department Director</b> <b>Resource Conservationist</b> <b>Education Coordinator</b>	80 120 40	Annually	
	Other Locally Identified Priorities ie: drainage, wildlife damage program, neighbor/community conflict issues	<b>Department Director</b>	200	Annually	
	<b>*Bold indicates high priority</b>				
<b>TOTAL</b>		<b>Department Director</b> <b>Resource Conservationist</b> <b>Education Coordinator</b>	<b>680</b> <b>120</b> <b>440</b>		

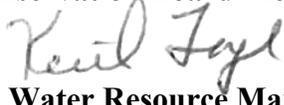
**Estimated annual cost to meet this goal: \$68,000 (1,240 hours)**  
**Operation, Maintenance and Fixed Costs: \$40,000**

<b>Staff Hours Needed to Accomplish Priorities</b>						
<b>Priority</b>		<b>Director</b>	<b>Resource Conservationist</b>	<b>Education Coordinator</b>	<b>Total Hours</b>	<b>% of Total Hours Available (7,400)</b>
<b>A</b>	<b>Local Conservation Ordinances</b>	300	425	0	725	<b>10</b>
<b>B</b>	<b>State Agricultural Performance Standards and Prohibitions</b>	0	240	0	240	<b>3</b>
<b>C</b>	<b>Working Lands Initiative</b>	0	2500	0	2500	<b>34</b>
<b>D</b>	<b>Groundwater Protection Programming</b>	80	385	380	845	<b>11</b>
<b>E</b>	<b>Surface Water Protection Programming</b>	270	780	0	1050	<b>14</b>
<b>F</b>	<b>Soil Health Programming</b>	0	50	60	110	<b>1.5</b>
<b>G</b>	<b>Best Management Practices</b>	620	1250	0	1870	<b>25</b>
<b>H</b>	<b>Education Programming</b>	70	220	135	425	<b>6</b>
<b>I</b>	<b>Office Administration</b>	680	120	440	1240	<b>16.5</b>
<b>Total</b>		2020	5970	1015	9005	<b>121%</b>

**CORRESPONDENCE/MEMORANDUM** \_\_\_\_\_ **State of Wisconsin**

**DATE:** November 13, 2015

**TO:** Land and Water Conservation Board Members and Advisors

**FROM:** Keith Foye, DATCP   
Bureau of Land and Water Resource Management

**SUBJECT:** Recommendation for Approval of the *Oconto County Land and Water Resource Management Plan*

**Action Requested:** This is an action item. The department has determined that the *Oconto County Land and Water Resource Management Plan* meets ATCP 50 requirements and requests that the LWCB make a recommendation regarding approval of the plan consistent with the Board's criteria and guidance, including any recommendation regarding any conditions in the final order approving the plan.

**Summary:** The plan is written as a 10 year plan, and addresses one or more of the criteria demonstrating intent for a 10 year plan. If approved, the plan would remain in effect through December 31, 2025, and would be subject to a five year review prior to December 31, 2020.

DATCP staff reviewed the plan using the checklist and finds that the plan complies with all the requirements of section 92.10, Wisconsin Statutes, and Chapter ATCP 50, Wisconsin Administrative Code.

To qualify for 10 year approval of its plan, Oconto County must satisfy the Board that the plan has met the additional criteria in the Board's guidance.

Oconto County held a public hearing on October 7, 2015 as part of its public input and review process. The Oconto County Land and Water Conservation Committee will present the LWRM plan for County Board approval after receiving a recommendation for approval from the LWCB.

**Materials Provided:**

- LWRM Plan Review Checklist
- *Oconto County Land and Water Resource Management Plan* Summary, including workplan and budget

**Presenters:** Ken Dolata, Oconto County Conservationist



Wisconsin Dept. of Agriculture, Trade and Consumer Protection  
 Agricultural Resource Management Division  
 2811 Agriculture Drive, PO Box 8911  
 Madison WI 53708-8911  
 Phone: (608) 224-4608

## Land and Water Resource Management (LWRM)

### LWRM Plan Review Checklist

Sec. 92.10, Stats. & sec. ATCP 50.12, Wis. Adm. Code

County: Oconto

Date Plan Submitted for Review: July 7, 2015

I. ADVISORY COMMITTEE	Yes	No	Page
1. Did the county convene a local advisory committee that included a broad spectrum of public interests and perspectives (such as affected landowners, partner organizations, government officials, educational institutions)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4,49
II. PUBLIC PARTICIPATION AND COUNTY BOARD APPROVAL	Date(s)		
1. Provide the dates that the local advisory committee met to discuss the development of the LWRM plan and the county plan of work.	3/4/15, 4/8/15, 9/23/15		
2. Provide the date the county held a public hearing on the LWRM plan. <sup>1</sup>	October		
3. Provide the date of county board approval of the plan, or the date the county board is expected to approve the plan after the LWCB makes its recommendation. <sup>2</sup>	Dec		
III. RESOURCE ASSESSMENT AND WATER QUALITY OBJECTIVES	Yes	No	Page
1. Does the plan include the following information as part of a county-wide resource assessment:			
a. Soil erosion conditions in the county <sup>3</sup> , including:			
i. an estimate of the soil erosion rates for the whole county and for local areas where erosion rates are especially high	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60-63
ii. identification of key soil erosion problem areas in the county	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chap 3
b. Water quality conditions of watersheds in the county <sup>3</sup> , including:			
i. location of watershed areas, showing their geographic boundaries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29

<sup>1</sup> Appropriate notice must be provided for the required public hearing. The public hearing notice serves to notify landowners and land users of the results of any determinations concerning soil erosion rates and nonpoint source water pollution, and provides an opportunity for landowners and land users input on the county's plan. Individual notice to landowners is required if the landowners are referenced directly in the LWRM plan. DATCP may request verification that appropriate notice was provided.

<sup>2</sup> The county board may approve the county LWRM plan after the department approves the plan. The plan approved by the county board must be the same plan approved by the department. If the department requires changes to a plan previously approved by the county board, the department's approval does not take effect until the county board approves the modified plan.

<sup>3</sup> Counties should support their analysis of soil and water conditions by referencing relevant land use and natural resource information, including the distribution of major soil types and surface topographic features, and land use categories and their distribution. Sec. ATCP 50.12(3)(b) requires that a county assemble relevant data, including relevant land use, natural resource, water quality and soil data.

- ii. identification of the causes and sources of the water quality impairments and pollutant sources   28-39
- iii. identification of key water quality problem areas in the county   38

2. Does the LWRM plan address objectives by including the following:

- a. specific water quality objectives identified for each watershed based upon the resource assessment   31
- b. pollutant load reduction targets for the watersheds, if available   31

- 3. Does the plan or related documentation reflect that the county consulted with DNR<sup>4</sup> to provide water quality assessments, if available; to identify key water quality problem areas; to determine water quality objectives; and to identify pollutant load reduction targets, if any.   28,31, 56

Other comments:

IV. PLAN IMPLEMENTATION	Yes	No	Page
1. Does the LWRM plan include the following implementation strategies:			
a. A voluntary implementation strategy to encourage farm conservation practices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	66
b. State and local regulations used to implement the plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	65
c. Compliance procedures that apply for failure to implement the conservation practices in ATCP 50, ch. NR 151 and related local regulations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	64-65
d. Relevant conservation practices to achieve compliance with performance standards and prohibitions and to address key water quality and erosion problems	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9
e. Strategy to monitor the compliance of participants in the farmland preservation program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	84
2. Does the LWRM plan (or accompanying work plan) estimate cost-sharing and other financial assistance, and technical assistance needed for plan implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	84
3. Does the LWRM plan describe a priority farm strategy designed to make reasonable progress in implementing state performance standards and conservation practices on farms appropriately classified as a priority?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chap 3
4. Was DNR consulted about the county's plan for NR 151 implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	66

<sup>4</sup> While requirements for DNR consultation may be satisfied by including relevant DNR representatives on the advisory committee, counties may also need to interact with DNR staff in central or regional offices to meet all of the consultation requirements. DNR may point counties to other resources to obtain information including consultants who can calculate pollutant load reduction targets.

Other comments: Oconto has minimal participation in FPP (14 older contracts)

V. OUTREACH AND PARTNERING	Yes	No	Page
1. Does the LWRM plan describe a strategy to provide information and education on soil and water resource management, conservation practices and available cost-share funding, including an estimate of the amount of I& E needed for plan implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	60-70
2. Does the LWRM plan describe coordination activities with local, state and federal agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	91-92

Other comments:

VI. WORK PLANNING AND PROGRESS MONITORING	Yes	No	Page
1. Does the county's work plan do all of the following:			
a. Cover more than one year	<input checked="" type="checkbox"/>	<input type="checkbox"/>	work plan
b. Identify priorities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Provide measurable annual and multi-year performance benchmarks (for at least all high priority items)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Does the LWRM plan describe a strategy and framework for monitoring county progress implementing its plan including methodology to track and measure progress in meeting performance benchmarks and plan objectives?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	82-90

Other comments:

VII. EPA SECTION 319 CONSIDERATIONS
1. DOES THIS PLAN INCLUDE ELEMENTS <u>CONSISTENT</u> WITH THE MINIMUM 9 KEY ELEMENTS FOR EPA APPROVAL UNDER SECTION 319 OF THE CLEAN WATER ACT: _____
2. IF THE ANSWER TO 1 IS "YES," WHAT IS THE STATUS OF EPA'S REVIEW OF THE PLAN: NOT SUBMITTED _____ SUBMITTED BUT NOT APPROVED _____ APPROVED _____

**STAFF RECOMMENDATION**

Staff has reviewed the above-referenced county LWRM plan based on the criteria required in s. ATCP 50.12, Wis. Admin. Code, and s. 92.10, Stats., and has determined that the plan meets the criteria for DATCP approval of this plan. This checklist review is prepared to enable the LWCB to make recommendations regarding plan approval, and for DATCP to make its final decision regarding plan approval.

Staff Signature: Lisa K. Trumble

Date: 11/05/2015

# 10-Year Land And Water Resource Management Plan



December 2015



## **Credits for Plan Development**

### **Citizens Advisory Committee**

Dennis Kroll	LCC Chairperson/Agricultural Producer
Ann Hogan	Town of Riverview/Lake Association
John Peterson	Agricultural Producer
Wayne Czypinski	Trout Unlimited
Randy Heise	Ag Ventures Co-op/Nutrient Management
Michael Sievert	Agricultural Producer
Brian Reith	NWTC Farm Business Instructor
Steve Fleming	Oconto County Lakes and Waterways
Greg Blaser	Agricultural Producer

### **Land Conservation Committee**

Lowell (Buzz) Kamke	Darrel Pagel
Dennis Kroll, Elected Chairperson	Charles (Bill) Grady
Mary Lemmen	Dick Gillis, FSA Rep

### **Technical Advisory Committee**

Ken Dolata	County Conservationist (LCD)
Chad Trudell	Conservation Technician (LCD)
Brady Stodola	Conservation Technician (LCD)
Jeff Maroszek	District Conservationist (NRCS)
Erin Hansen	Water Resource Mngmt. Specialist (WDNR)
Dale Mohr	Community Development Agent (UWEX)

## Plan Summary

In 2002 the *Department of Natural Resources (DNR)* passed NR 151 setting new performance standards for farms to prevent runoff and protect water quality. *Department of Agriculture, Trade and Consumer Protection (DATCP)* then passed rules in ATCP 50 that identifies the conservation practices that farmers must follow to meet DNR Standards.

Counties have a choice to participate in the effort to carry out the state performance standards and the four prohibitions. The local *Land Conservation Committees (LCC)* and staff are the designated county agents to carry this out. County LCCs may apply for implementation grants to assist in the effort to help county landowners meet the new standards.

What follows is a brief summary of the chapters contained within this document. This summary is meant as a way to familiarize you with the plan and its contents without getting into too much detail and robbing the substance from the plan itself.

Chapter 1 details the reason for developing Ten-year Land and Water Resource plans and outlines the requirements to be included for adoption by the state. The state prohibitions and standards make up a large part of the plan and are detailed here also. The Oconto County Animal Waste Ordinance has incorporated the prohibitions for enforcement on a local level. This chapter also introduces Oconto County's setting, history and natural resources.

*Environmental Protection Agency (EPA)* 303d waters are listed along with general stream and lake data which has been collected from the DNR. The numerous Outstanding and Exceptional Resource Waters are chronicled. Each watershed located within the county is summarized, followed by a brief discussion on surface water quality and concerns unique to the area. The discussion continues on water resources, shifting to groundwater resources and wetlands. The last part of the chapter includes land use figures along with population and development trends.

Chapter 2 discusses how the plan initially came to be, through public participation and various committees as listed in the preceding credits. Questions had been raised and concerns had been heard about a wide range of pertinent topics. Our previous Land and Water Resource Plans were the foundation for this plan. Because the feeling that the foundation was solid, this plan became more of a redirection than a recreation. Goals have been broadened and more thought has been put into specific objectives and strategies. This chapter then goes on to highlight the goals and objectives. The new broadened goals were categorized toward two of the main economic aspects of Oconto County: agricultural and recreational resources. Specific objectives and strategies allowing us to reach the goals are detailed as well. Information and education is the driving factor for much of this plan. Implementation by the Land Conservation Division or other partner agencies through ordinance or cost sharing, ultimately leads to the success of this plan through measureable results.

Chapter 3 deals with implementation of the state performance standards and prohibitions. The objective of improving soil health through reducing soil erosion will be implemented using a DNR model called *Erosion Vulnerability Assessment for Agricultural Lands (EVAAL)* to locate susceptible areas throughout the county, and follow-up with field checks to verify issues. The use of this tool can be referenced within goal 1, objective 1. Changes in crop rotation, tillage practices or timing of tillage can easily be implemented to reduce soil erosion without much economic hardship. The objective of controlling animal waste runoff encompasses the four prohibitions, and is implemented by the permit process through our animal waste ordinance or by priority farm designation. Initially, priority was set in *Water Quality Management Areas (WQMAs)* and while we continue to work with that list, a new list of priority farms outside WQMAs must be established. The chapter concludes with the compliance and enforcement procedures of the previously discussed standards and prohibitions. In the past we have encountered situations where our animal waste ordinance enforcement procedures have not progressed the way they had been envisioned. Referencing our ordinance allows us to clarify such situations and allows for a more streamlined and efficient enforcement process.

Chapter 4 details, in table format, our 5-year work plan for each goal. The objectives are laid out, along with activities, which will allow us to reach those objectives. Partners needed, estimated staff time necessary, agencies involved, cost in staff dollars, evaluation and monitoring parameters, and the specific benchmarks we will strive to achieve are included in this chapter. Staff and funding availability can, at times, dictate priority which is evident in some of the activities and their benchmarks. This part of the plan is the working document, which allows us to adapt to changing situations within our county over the next ten years. Many challenges can alter the work plan, from staff fluctuation, cost share funding availability, or changes in the public resource concerns. After 5 years, a regularly scheduled update to this work plan will be forthcoming.

Chapter 5 discusses the information and education strategies for the goals and objectives. Public input into this section resulted in some very interesting and promising strategies to try and reach the people concerned and influenced by the goals stated in this plan. Education is a key aspect of the planning process; therefore this is a very important part of our plan. Most strategies for information and education are a given part of some of the activities, whereas some activities are solely stated as being forms of education.

Chapter 6 cites our partners and collaborators for the implementation of this plan. It takes many agencies and organizations, both public and private working in cooperation, to fully reach the goals established herein. Also included here are possible funding sources available to help implement this plan. Federal, state, county, and other local or governmental sources may be available. From these sources, we have gained information included in the development of this plan and intend to continue collaboration during implementation.

## Chapter 5

### Work Plan with Evaluation and Monitoring and Targeted Benchmarks

The following tables illustrate a five-year work plan. Our goals and objectives will likely take more than five years to be implemented; this is indicated by the year range in the target benchmarks column. Each year, progress toward reaching plan goals will be evaluated and priorities will be graded and possibly reestablished.

As noted in the tables, estimated cost totals are on a yearly basis.

As noted in tables, lead agency for each activity is listed first.

Priority activities are in **bold**.

**Goal 1: Sustainably manage agricultural practices while controlling impacts to natural resources.**

Objective	Activities	Agencies (lead listed first)	Staff Hours	Staff Dollars	Cost-Share Dollars	Evaluation and Monitoring Parameters	Target Benchmarks (Short term/Long term)
1. Increase soil health by reducing erosion.	a. Implement Erosion Vulnerability Assessment for Agricultural Land using GIS	LCD, DNR	500/yr	\$15,500/yr	N/A	Number of watersheds modeled.	One watershed every two years/All necessary watersheds by 2026.
	b. Educate the public on soil health.	NRCS, LCD, UWEX	40/yr	\$1,240/yr	N/A	Number of events and/or publications.	One-Two per year**
	c. Promote BMPs that reduce erosion.	LCD, NRCS	40/yr	\$1,240/yr	20,000/yr	Number of BMPs installed.	Two contracts per year/10 contracts by the end of 2021.
	d. Inventory and correct areas of gully erosion.	LCD	200/yr	\$6,200/yr	5,000/yr	Linear feet of gully repaired.	200 linear feet per year/1,000 linear feet by 2021.
		<b>Totals</b>	<b>780/yr</b>	<b>\$24,180/yr</b>	<b>\$25,000/yr</b>		

Objective	Activities	Agencies (lead listed first)	Staff Hours	Staff Dollars	Cost-Share Dollars	Evaluation and Monitoring Parameters	Target Benchmarks (Short term/Long term)	
2. Control animal waste and agricultural runoff.	a. Gather existing information on the link between farm practices and nutrient transport.	LCD, NRCS	20/yr	\$620/yr	N/A	Number of referenced materials.	Compile sufficient information to produce a public document by 2021/Keep information updated.	
	b. Enforce animal waste ordinance.	LCD	220/yr	\$6,820/yr	N/A	Number of permits issued.	10-20 per year/Long term as needed.	
	c. Address priority farms.	LCD	1,040/yr	\$32,240/yr	\$500,000/yr	Number of farms brought into NR 151 compliance.	Two farms per year.**	
	d. Field research on the link between farm practices and nutrient transport.	NRCS, LCD,UWEX, DATCP, DNR	240/yr	\$7,440/yr	To be Determined*	Number of sites tested.	Two sites per year.**	
	e. Develop 9 key-element plans for impaired waters.	LCD,NRCS	500/yr	\$15,500/yr	N/A	Number of plans approved.	One plan per 10 year period.**	
	f. Work with DNR on Notice of Discharge, Notice of Intent, and Confined Animal Feeding Operations.	LCD, NRCS, DNR, UWEX	500/yr	\$15,500/yr	Dependent on # of instances.*	Number of complaints addressed.	As needed.	
	g. Promote nutrient management practices.	NRCS, LCD, UWEX	50/yr	\$1,550/yr	\$14,000/yr	Number of acres enrolled.	500 acres per year.	
	h. Complete county wide farm inventory.	LCD	1,600/yr	\$49,600/yr	N/A	Number of farms inventoried.	Complete 20 farms per year/Complete entire county by 2036.	
	i. Assist walk-in clients.	LCD, NRCS	1,500/yr	\$46,500/yr	Dependent on # of clients.*	Percentage assisted; as needed.	Assist 100% of clients continually.	
		Yearly Totals		5,670/yr	\$175,770/yr	\$514,000/yr		

Objective	Activities	Agencies (lead listed first)	Staff Hours	Staff Dollars	Cost-Share Dollars	Evaluation and Monitoring Parameters	Target Benchmarks (Short term/Long term)
3. Meet nutrient management requirements.	a. Educate the public about nutrient value.	UWEX, LCD, NRCS	20/yr	\$620/yr	N/A	Number of events and/or publications.	One-Two per year**
	b. Increase field visits.	LCD, NRCS	240/yr	\$7,440/yr	N/A	Number of field visits.	Two visits per year/20% per year**
	c. Perform greater reviews of plans and maps (spot checks).	NRCS, LCD	30/yr	\$930/yr	N/A	Amount of attention to detail.	Implement a more sufficiently detailed checklist each year
	d. Keep agronomists up to date on local NRCS 590 submittal requirements.	NRCS, LCD	20/yr	\$620/yr	N/A	Number of meetings.	One meeting per year.
	<b>Yearly Totals</b>			<b>310/yr</b>	<b>\$9,610/yr</b>	<b>N/A</b>	

Objective	Activities	Agencies (lead listed first)	Staff Hours	Staff Dollars	Cost-Share Dollars	Evaluation and Monitoring Parameters	Target Benchmarks (Short term/Long term)
4. Protect groundwater quality and quantity.	a. Cost-share eligible well abandonments.	LCD	40/yr	\$1,240/yr	\$2,500/yr	Number of wells abandoned.	Five wells per year/25 wells by 2021
	b. Educate the public on groundwater quality and quantity.	UWEX, LCD	20/yr	\$620/yr	N/A	Number of events and/or publications.	One-Two per year**
	<b>Yearly Totals</b>		<b>60/yr</b>	<b>\$1,860/yr</b>	<b>\$2,500/yr</b>		

Objective	Activities	Agencies (lead listed first)	Staff Hours	Staff Dollars	Cost-Share Dollars	Evaluation and Monitoring Parameters	Target Benchmarks (Short term/Long term)
5. Maintain prime farmland.	a. Educate and inform farmers on farmland preservation program.	LCD, UWEX	20/yr	\$620/yr	N/A	Number of events and/or publications.	One-Two per year**
	b. Encourage Agricultural Enterprise Areas in Prime farmland areas.	LCD, UWEX	20/yr	\$620/yr	N/A	Number of contacts made.	10 contacts made per year.
	c. Maintain FPP compliance with current contracts through field visits.	LCD	10/yr	\$310/yr	N/A	Number of field visits.	Minimum of 25% contract farms visited per year.
		<b>Yearly Totals</b>	<b>50/yr</b>	<b>\$1,550/yr</b>	<b>N/A</b>		

<b>Total Yearly Hours, Costs, and Funding Needed to Accomplish Goal 1</b>	
Staffing Hours	Cost-Share Dollars*
6,870 per year	\$541,500 per year

\* **Dependent of number of clients, variation of assistance, and/or occurrences in order to determine estimates of cost-sharing needed. It is important to note that this could increase cost-share dollars by significant amounts due to the Oconto County LCD bench mark to assist 100% of walk-in clients.**

\*\* **Dependent on staff and funding levels.**

Monitoring plan progress allows evaluation of effectiveness concerning reaching goals established in the plan. The next section further details objectives, key benchmarks reached, agencies involved, timelines and supportive narrative. These details may be used by partners to prepare other work plans for implementation of this plan and to evaluate the impacts of collaboration with other agencies. Evaluation, monitoring and ultimately reaching projected benchmarks is closely tied to the ability to maintain staff and funding at sufficient levels throughout the entirety of this plan.

## **Monitoring and Evaluation for GOAL #1 by objective:**

### 1) Increase soil health by reducing erosion

Inventorying county watersheds using the DNR EVAAL model will allow a systematic, targeted approach to address target areas for soil erosion. Once problem areas are identified, it will require yearly educational events or publications to get the word out which will hopefully lead to installed BMPs and rehabilitated gully erosion sites. Success will be dependent on consistent funding for BMP installation.

### 2) Control animal waste and agricultural runoff

By continuing to enforce the Animal Waste Management Ordinance, voluntary standards and prohibitions compliance will be achieved. Completion of the county-wide farm inventory on GIS based tracking will allow more efficient identification and tracking of compliance achieved versus farms where work needs to be done. We will strive to achieve complete inventory within 20 years, which comes out to approximately 20 per year. The pace will be re-evaluated at the end of the five-year work plan. Yearly enforcement of NR151 to address at least one operation is a reasonable goal on top of the walk-in and voluntary compliance at this time. As more operations come into compliance through expansion and voluntary permit issuance, then a more aggressive enforcement schedule may be necessary. This enforcement may likely be necessary through involvement with the DNR and their cost share options. As a county we would like to explore the link between agricultural practices and nutrient transport, and would like to gather as much existing information to pass along to farmers as possible. On-farm, field edge trials would be the ultimate goal of this activity. The final activity of this objective is to begin to formulate 9 Key Element plans for our impaired waters. These plans consist of detailed watershed information collection and comprehensive specific goals for each watershed which take significant time to generate. This leads to the expanded time frame for completion. Success of many activities falling under this objective are completely dependent on staff and funding levels remaining constant or increasing through the 10-year plan period.

### 3) Meet nutrient management requirements

There is a real need to educate the public about the value of farm nutrients as they are hauled past neighboring houses on the way to be spread on a field. Oconto County intends to stress the value through yearly educational events and/or publications. Recent local nutrient management planning issues are leading us to increase plan review detail, map verification and finally increased field inspections. Our partners at NRCS are instrumental in conducting these plan reviews. Between NRCS and county programs there are currently 78 farmers that have adopted nutrient management plans covering 79,000 of the 219,000 total cropland acres in the county. Remaining farmers if not willing to voluntarily sign up for nutrient management, they must be offered 70 percent cost share to assure compliance. This will require adequate funding throughout the span of this plan.

#### 4) Protect water quality and quantity

Quality drinking water is becoming a more limited resource as it is being pumped at a greater quantity by expanding suburban areas and growing high capacity use by many types of business. Improper land spreading of nutrients, herbicides and pesticides can affect the quality of drinking water when near conduits to ground water. Oconto County intends to try to educate the general public of these issues through yearly events and/or publications. Well abandonments continue to be the best option to limit surface to groundwater contamination issues in the county and 5-10 abandonments per year will continue to close-off these direct conduits for contaminants. Abandonments have been funded with a county cost share program which will need to be maintained to continue to close these wells.

#### 5) Maintain prime farmland

Farmland preservation has a limited presence in the county and we will continue to try and educate farmers of the benefit of the program through yearly event and/or publications. Their best avenue for adoption of the program is through AEAs. We will attempt to contact farmers to gauge interest on a yearly basis. Finally, the few existing contracts will be monitored through field visits of 25 percent of participants per year.

**Goal 2: Protect and enhance land and water resources to preserve and restore quality, ecological function and recreational and aesthetic value.**

Objective	Activities	Agencies (lead listed first)	Staff Hours	Staff Dollars	Cost-Share Dollars	Evaluation and Monitoring Parameters	Target Benchmark (Short term/Long term)	
1. Prevent, control, and possibly eliminate invasive species.	a. Pursue funding for invasive species oriented programs.	LCD, DATCP	150/yr	\$4,650/yr	N/A	Number of programs initiated or continued.	One new program developed by 2021.	
	<b>b. Pursue funding for additional invasive species staff.</b>	<b>LCD, DATCP</b>	<b>2,080/yr</b>	<b>\$64,000/yr</b>	<b>N/A</b>	<b>Number of new staff hired.</b>	<b>Minimum of one.</b>	
	c. Educate the public on invasive species control and management.	LCD, UWEX, TIP	40/yr	\$1,240/yr	N/A	Number of events held and/or information distributed.	One event or information source per year/Five events by 2021.	
	d. Inventory new populations and control existing stands.	LCD, TIP, DNR	1,000/yr	\$31,000/yr	\$20,000/yr	Acres of coverage.	10% decrease in acres of coverage within the next 5 years.	
	<b>e. Implement county invasives Strategic Action Plan.</b>	<b>LCD, UWEX, DNR</b>	<b>1,000/yr</b>	<b>\$31,000/yr</b>	<b>N/A</b>	<b>Portion of plan implemented.</b>	<b>As much as possible, dependent on funding.</b>	
	<b>f. Collaborate with TIP to monitor populations.</b>	<b>LCD, TIP, USFWS</b>	<b>200/yr</b>	<b>\$6,200/yr</b>	<b>N/A</b>	<b>Projects worked on.</b>	<b>Five projects by 2021/Ten by 2026</b>	
	g. Continue to update Oconto County website information pertaining to invasive species.	LCD	20/yr	\$620/yr	N/A	Website information status.	Continually keep current with new developments.	
	h. Continue Oconto County early detection monitoring program.	LCD	40/yr	\$1,240/yr	N/A	Number of lakes monitored.	Five eligible lakes per year/Continuous cycle through all eligible lakes	
	i. Establish a county-wide Clean Boats, Clean Waters team.	LCD, OCLAWA, UWEX, TIP	800/yr	\$9,600/yr	\$6,000/yr	Number of teams.	One team by 2021/Two or more teams by 2026	
	j. Obtain portable boat wash units for use throughout Oconto County.	LCD, OCLAWA, TIP	120/yr	\$3,720/yr	\$5,000/yr	Number of units obtained.	One unit in use by 2021/as available	
	k. Promote an increase in Clean Boats, Clean Waters monitoring hours.	LCD, OCLAWA, TIP	40/yr	\$1,240/yr	\$1,240/yr	Number of hours worked.	Five percent increase by 2026.	
		<b>Yearly Totals</b>		<b>5,490/yr</b>	<b>\$154,510/yr</b>	<b>\$32,240/yr</b>		

Objective	Activities	Agencies	Staff Hours	Staff Dollars	Cost-Share Dollars	Evaluation and Monitoring Parameters	Target Benchmark (Short term/Long term)
2. Protect and enhance lake and stream water quality.	a. Install shoreline buffers.	LCD	500/yr	\$15,500/yr	\$8,000/yr	Linear feet of buffer installed.	60 feet of lakeshore and 200 feet of streambank per year
	b. Promote county cost-share fund use for shoreline restoration.	LCD, DATCP	120/yr	\$3,720/yr	N/A	Personal contacts made/press releases.	Five contacts and one press release per year.
	c. Design and implement shoreline restoration plans.	LCD, TU, DU	80/yr	\$2,480/yr	\$3,000/yr	Feet of shoreline restored.	Minimum of 60 linear feet per year.
	d. Educate the public on benefits of natural land features.	LCD, UWEX	20/yr	\$620/yr	N/A	Number of events held and/or information distributed.	One event or information source per year/Five events by 2021.
	e. Promote and encourage completion of plans and surveys such as comprehensive aquatic management plans and point intercept surveys.	LCD, UWEX, OCLAWA, DNR, TIP	40/yr	\$1,240/yr	N/A	Amount of assistance provided.	Provide one waterbody with assistance every 2 years/Assist with 5 waterbodies by 2026
	<b>Yearly Totals</b>		<b>760/yr</b>	<b>\$23,560/yr</b>	<b>\$11,000/yr</b>		

Objective	Activities	Agencies	Staff Hours	Staff Dollars	Cost-Share Dollars	Evaluation and Monitoring Parameters	Target Benchmark (Short term/Long term)
3. Improve wildlife and waterway habitat.	a. Restore stream morphology.	LCD, NRCS, TU, DU	200/yr	\$6,200/yr	\$2,000/yr	Percentage of stream length that is restored to natural conditions.	Restore 100 linear feet by 2021.
	b. Encourage lakes to participate in the Citizen Lake Monitoring Network to assure quality wildlife waters.	LCD, Lakes and Waterway groups	40/yr	\$1,240/yr	N/A	Number of lakes with designated lake monitor(s).	Increase the number of participating lakes by 10% by 2019.
	c. Promote the removal of livestock grazing from woodlots.	NRCS, LCD	20/yr	\$620/yr	N/A	Number of contacts made.	Two contacts per year.
	d. Minimize the removal of natural tree-fall from lake shores.	LCD, Lakes and Waterway groups, Sportsmen's Clubs	240/yr	\$7,440/yr	N/A	Trees per mile.	Record an increase in tree-lined shore over the next 5 years/Continued increase
	<b>Yearly Totals</b>		<b>500/yr</b>	<b>\$15,500/yr</b>	<b>\$2,000/yr</b>		

Objective	Activities	Agencies	Staff Hours	Staff Dollars	Cost-Share Dollars	Evaluation and Monitoring Parameters	Target Benchmark (Short term/Long term)
4. Protect and restore wetlands.	a. Restore degraded wetlands.	LCD, NRCS	280/yr	\$8,680/yr	\$30,000/yr	Acreege of wetlands restored to native conditions.	Restore 3 acres per year/Restore 15 acres by 2021
	b. Educate landowners on the benefits of wetlands.	LCD, UWEX	20/yr	\$620/yr	N/A	Number of events held and/or information distributed.	One event or information source per year/Five events by 2021.
	<b>Yearly Totals</b>		<b>300/yr</b>	<b>\$9,300/yr</b>	<b>\$30,000/yr</b>		

Objective	Activities	Agencies	Staff Hours	Staff Dollars	Cost-Share Dollars	Evaluation and Monitoring Parameters	Target Benchmark (Short term/Long term)
5. Strengthen the capacity of Lakes and Waterways groups.	a. Assist Oconto County Lakes and Waterways Association in the development of a Lake and Stream Management Plan.	LCD, OCLAWA	240/yr	\$7,440/yr	N/A	Chapters/sections of plan completed.	Have 50 percent of the plan completed by the end of 2019/Complete plan by 2024.
	b. Partner with volunteer groups and DNR to monitor lake levels.	LCD, DNR	80/yr	\$2,480/yr	N/A	Number of participants.	Monitor 5 lakes per year/All eligible lakes at equal rate
	<b>Yearly Totals</b>		<b>320/yr</b>	<b>\$9,920/yr</b>	<b>N/A</b>		

Objective	Activities	Agencies	Staff Hours	Staff Dollars	Cost-Share Dollars	Evaluation and Monitoring Parameters	Target Benchmark (Short term/Long term)
6. Provide quality recreational opportunities.	a. Work with local organizations and government units to make public lands and waters handicap accessible.	LCD, DNR, Sportsmen's Clubs	120/yr	\$3,720/yr	\$1,000/yr	Number of access points created and properties made accessible.	One access point per five year period/2 access points by 2026.
	b. Create awareness of the value of Oconto County recreational resources.	LCD, UWEX	40/yr	\$1,240/yr	N/A	Number of events/publications.	One per year/five by 2021
	<b>Yearly Totals</b>		<b>160/yr</b>	<b>\$4,960/yr</b>	<b>\$1,000/yr</b>		

<b>Total Yearly Hours, Costs, and Funding Needed to Accomplish Goal 2</b>		
Staffing Hours	Staffing Dollars	Cost-Share Dollars
7,530 per year	\$233,430 per year	\$76,240 per year

## **Monitoring and evaluation for Goal #2 by objective:**

### 1) Prevent, control and possibly eliminate invasive species

With the loss of the AIS coordinator it is imperative to secure funding to continue the work on invasive species that was started, and look to increase programs and influence throughout the county. Regardless of securing another staff person to take on the work started, there needs to be a continued educational effort to increase public knowledge of control and management through events and information distributed. There is a network of contacts in place that should allow five events in the first five years of this plan. Inventory of new species and control of existing stands will be done in conjunction with the county strategic action plan, most likely with help from *Timberland Invasives Partnership (TIP)*. Website updates might be tied to the link to TIP increasing the effectiveness of the county website. The county has made a commitment to early detection monitoring of specified lakes for invasives (five lakes per year with retesting of lakes once all have been cycled through for the initial survey). The success of this objective is entirely dependent on increased invasive species funding for staff and projects.

### 2) Protect and enhance lake and stream water quality

Installation of shoreline buffers continues to be the most cost effective and easiest way to influence lake and stream water quality with 60 linear feet installed per year. Diversion of upslope water from reaching the lake or stream is another easily incorporated BMP as part of a larger restoration plan. The plans need to be designed and implemented by the county with cost share funding of one plan per two-year period. Finally, education about the sources of runoff and subsequent remedies is a cost effective way to address the issue. Yearly events and information distributed, likely at lake association meetings, will allow meeting the goal of five events in five years.

### 3) Improve wildlife and waterway habitat

Changing stream morphology has become an issue as waters widen and slow which warms them up and changes the biotic ecosystem. With the help of Trout Unlimited, we intend to try and return streams to their more natural state by restoring 200 linear feet of stream per year. Lakes are also rapidly changing and another activity would be to encourage lakes to find volunteer citizen monitors to detect these changes in early stages. With a 10 percent increase in monitors by 2018, negative effects could be mitigated in many instances. A simple cost effective way to improve water way habitat is to leave fallen beneficial woody debris in place measured by percent of shoreline with fallen trees. Some wildlife habitats in land are severely impacted by woodlot and wetland grazing. The county will attempt to monitor this issue.

4) Protect and restore wetlands

Protection of wetlands greatly impacts the runoff associated with increasingly stronger rainfall events. The county will attempt to increase wetland acreage through the limited effect we might have on reclamations, easements or other methods to secure protection of 10 acres in 10 years. Restoration of degraded or converted wetlands is likely to be more of a focus which restoration of 3 acres per year as a benchmark. Landowner education is needed to reveal the value of wetlands as something other than ðwaste landö by hosting yearly events or making publications available. Maintaining funding is essential to wetland restoration projects.

5) Strengthen the capacity of lakes and waterways groups

As a county, we would like to assist the Oconto County Lakes and Waterways Association in writing their comprehensive lake and stream management plan by 2024. There is a preliminary plan to assist DNR and lake groups with lake level monitoring, five lakes per year until finished, then continuous monitoring.

6) Provide a quality recreational opportunity

Working with local organizations and governmental units to open public lands to handicapped individuals could greatly increase recreational opportunities by increasing access points, two by 2024. The need to create a general awareness of the value of the expanse of recreational resources of the county needs to be conveyed as many ways as possible to interested users.

**CORRESPONDENCE/MEMORANDUM**\_\_\_\_\_ **State of Wisconsin**

**DATE:** November 13, 2015

**TO:** Land and Water Conservation Board Members and Advisors

**FROM:** Keith Foye, DATCP   
Bureau of Land and Water Resources Management

**SUBJECT:** Request for five-year extension of the Columbia County Land and Water Resource Management plan

**Recommended Action:** Staff requests the LWCB to recommend approval of Columbia County's request to extend the expiration date of the county land and water resource management plan until December 31, 2020.

**Summary:** The land and water resource management plan for Columbia County is currently approved through December 31, 2015. In order to maintain eligibility for grant funding through the soil and water resource management grant program, Columbia County must receive approval of an updated plan or approval of a request to extend the plan expiration date before December 31, 2015.

The Columbia County land and water resource management plan was last approved in 2010 with an expiration date of 2015. At that time, the plan was written with a 10-year planning horizon. Columbia County has completed the appropriate extension request form, guidance checklist, and provided an updated plan of work that will cover activities during the five year extension period. The presentation to LWCB members will provide detailed information on the county's accomplishments over the last five years of the plan implementation.

**Materials Provided:**

Columbia County extension request materials:

- *4 to 5 year Extension Request form*
- *County-prepared LWCB checklist*
- *Highlights of Accomplishments from 2011-2015*
- *Columbia County LWRM Plan of Work 2016-2020*

**Presenters:** Kurt Calkins, Columbia County Conservationist



**Land and Water Conservation Board  
County Land and Water Resource Management Plan  
Form to Request Extensions of 4 or 5 Years**

**County:** Columbia County

**Extension request:**  4 years  5 years

**Reason for request:** 10 year Planning Horizon (2011)

This is a request for Extension Of Additional 5 years

**Requirements for a four or five year extension**

1. Describe your county's progress in meeting planned goals and activities (e.g., nutrient management, water quality, FPP, etc) by listing key benchmarked activities pursued over the last five years.<sup>1</sup>

See Attached Documentation

2. Attach a completed guidance checklist documenting that your county plan has measureable benchmarks for key activities, an effective priority farm strategy, and includes sufficient elements to reflect a ten year planning horizon. An updated priority farm strategy may also be attached, if necessary.<sup>2</sup>

See Attached Documentation

3. Attach an updated work plan that covers planned activities during the four of five year extension period you have requested.

See Attached 5 year Updated Workplan

**Has your Land Conservation Committee approved this request?**  Yes  No

Date approved: 7/6/2015 LCC Meeting

If no, approval expected by: (date of next LCC meeting)

**Additional Comments** (please limit response to two sentences):

**Signature of Authorized Representative:** *Quintel D. Wright* **Date:** 8/3/15  
(e.g. County Conservationist, LCC chair)

Send completed form and attachments to:  
Lisa.Trumble@wi.gov

<sup>1</sup> Approval of this request requires a presentation to the LWCB to provide a detailed presentation identifying benchmarked activities and your progress in achieving the benchmark over the last five years.

<sup>2</sup> Guidance checklist available at: <http://datcp.wi.gov/uploads/Environment/doc/GuidanceChecklist.doc>



## County-prepared checklist to determine compliance with criteria for a LWCB recommendation for a 10-year approval and 5-year extension<sup>1</sup>

### I. Requirements for benchmarking and priority farm strategies

All counties must have plans that meet the requirements identified in Section I, questions no 1-3. This checklist is intended to ensure that counties have fulfilled these requirements when they seek a 10 year plan approval, or a 5 year extension of a plan previously approved for 5 years.<sup>1</sup>

1. For each key activity listed below, please answer whether or not the plan has specific, measurable benchmarks and targets	If “yes,” list the page numbers in the plan or work plan	If “no,” please provide a reason (e.g., not applicable)
a. Implementation of performance standards for farms	44-51	
b. Implementation of stormwater management and related urban standards	45	
c. Farmland Preservation conservation compliance	59	
d. Groundwater protection: quality and quantity	58	
e. Permit and ordinance administration	46,61,50	
f. Lake and stream protection (e.g. shoreline protected, invasive species management)	62,63,66	
g. Watershed protection (e.g. phosphorus reduction/trading, TMDL, nitrogen management)	44-51,59-63	
h. Program evaluation and monitoring	66	
i. Spending of state cost-share funds	46,66	
j. Forestry management	67	
2. Does the plan provide adequate information about the benchmarked activity that includes: the objective, activities, responsible parties, timeframe, anticipated annual outcomes, and I & E tools?	57-67	
3. Does the county’s priority farm strategy include the following items?	Yes	
a. Effectively implement state performance standards and conservation practices on farms	46-51	
b. Identify the specific conditions such as cropland nutrient runoff that will be addressed	60,62	
c. Provide an adequate framework to evaluate whether the county is making reasonable progress in implementing all high priority activities	66,57-67	

<sup>1</sup> A county seeking a four extension must meet the criteria for a five year plan extension.

**II. Planning requirements for counties seeking a 10 year LWRM plan approval, or a 5 year extension of a plan previously approved for 5 years.**

Counties seeking a 10 year plan approval, or a 5 year extension of a previously approved 5 year plan, need to complete Section II to document that county planned over a 10 year horizon.<sup>1</sup>

1. Please answer the following regarding each element of your planning process.	If “yes,” list the page numbers in the plan or work plan	If “no,” give a reason (e.g. not applicable)
a. The local advisory committee specifically considered this longer time horizon when they made their recommendations	Page 57 Original Work Plan, 7-8	
b. The planning documents make a reasonable attempt to identify and analyze resource needs for a period of at least 10 years into the future.	57-65,9-43,7-8	
c. The planning documents make a reasonable attempt to forecast applicable trends for a period of at least 10 years into the future.	9-43,57-65,7-8	
d. The planning documents make a reasonable attempt to identify existing and anticipated priorities, with the understanding that changes are likely within the 10 year planning period.	57-65,7-8	
e. The plan describes the process for reviewing and updating objectives and activities during the 10 year period, including changes needed as a result of annual work planning and a five year review before the LWCB	57-65,7-8	

**III. Review of Checklist**

DATCP will collect and submit the completed guidance checklist to the LWCB without any review or comment from the LWRM planner. The LWCB will use the checklist to determine whether to recommend a plan approval or extension.

**IV. Failure to meet checklist requirements**

If the revised plan fails to meet the requirements for a 10 year approval, the LWCB will recommend approval of the plan for a 5 year period. If plan previously approved for a 5 year period fails to meet the LWCB requirements for a 5 year extension, the LWCB will recommend a one year extension in order to provide sufficient time for the county to prepare a plan update.

# Highlights of Accomplishments 2011-2015

## Columbia County Land & Water Resource Management Plan

- **SWRM Staffing Grants \$651,510.00 Awarded (DATCP)**
  - Average \$130,302 (1.5-1.7 staff)
  
- **Targeted Runoff Management & NOD Grants**
  - 14 Small Scale (NOD & TRM) (Includes #4 NOD)
    - \$1.7 Million Awarded
  - 2 Large Scale TRM
    - \$891,000 Awarded
  - \$1,126,942 Allocated (2011-2015)
  - Total Awards \$2.6 Million
  
- **Land & Water Resource Management Cost Sharing (SWRM)**
  - \$494,653 Bond & SEG Funds Allocated (2011-2015)
  - Cumulative Underspending @ 1%
  - 20-30 Landowner Project Per Year
  
- **Summary of BMP's Engineered & Cost Shared (2011-2015)**
  - 80 Individual 590 NMP Plans 30,136 Acres
  - 4 Diversions
  - 12 Roof Runoff/Underground Outlet Systems
  - 11 Grassed Waterway Systems
  - 37 Well Abandonments
  - 6 Waste Transfer Systems
  - 1 Waste Treatment Leachate Control System
  - 11 Manure Storage Systems
  - 6 Manure System Abandonments

- **8 Barnyard Runoff Control Systems**
- **4 Livestock Exclusion Fencing Systems**
- **8 Access Roads/Cattle Crossings/Trails**
- **9 Heavy Use Protection**
- **5 Critical Area Stabilization**
- **6 Shoreline Protection/Restoration**
- **1 Grade Stabilization Structure**
- **2 Livestock Watering Facility**
  - **Total of 131 BMP's**
  - **Combined Total 211 BMP'**
  
- **Animal Waste Structure Permits (Ordinance)**
  - **29 New NRCS 313 Manure Storage Structures Permitted**
    - **Design Services/PE Reviews**
  - **11 Manure Storage Structure Closures**
  
- **Nutrient Management Planning Coverage**
  - **2011 (22,862 Acres) 7.7%**
  - **2015 (132,740 Acres) 45%**
  
- **Nutrient Management Farmer Education (NMFE)**
  - **2013/2014/2015 NMFE Grants**
  - **\$27,676 Grant Funds Used**
  - **48 Landowners Updated/Completed Plans 16,985 Acres**
  - **2011/2012 Done without Availability Of Funds**
  
- **Grazing Grants (GLCI) Technical Assistance**
  - **Awarded 2011/2012/2013/2014**
  - **\$21,304 staff support**
  - **Worked With 36 Landowners**
  - **Developed MIG Plans Or Mods On 1500 acres**
  - **Installed 56 Supporting BMP's**

- **Alternatives to NR 151 Compliance With less Expense**
  
- **NRCS Technical Service Provider**
  - **2011/2012 TSP Contract with NRCS \$9015.00**
  - **EQIP Technical Assistance**
  
- **Farmland Preservation Program Participation**
  - **2013 FPP Plan Recertification**
  - **2014 Recertified Exclusive Ag Zoning District County (18 Townships)**
  - **2014 Certified Town Of Courtland Zoning District**
  - **2 Township No Zoning (22 Active FPP Agreements)**
  - **710 FPP Claims Filed In 2014 \$973,232 Tax Credits**
  - **856 Eligible Landowners In our System**
  - **LWCD Developed LRS Based Tracking System 2014**
  - **2010-2015 Working On Issuance Of Schedules Of Compliance & Certificates Of Compliance (Heavy Workload)**
  - **Proven To Be NR 151 Conservation Compliance Tool**
  - **2014 Approval Of West Point AEA (15,000 Acres)**
  
- **Tree & Shrub Sales Program**
  - **188,000 sold (2011-2015)**
  - **\$27,000 proceeds (I/E)**
  - **1.2 Million Since 1981**
  - **Tree Planters 5 Rented Out**

➤ **Groundwater Focused Programming**

- **2007-2010 Drinking Water Sampling Program 600 +Wells**
- **25% of Wells >Nitrate Standard (Vulnerability)**
- **Public Use Wells Impacted**
- **Knowledge is Power = Development of Columbia County G-Flow Model**
- **Updated Bedrock Geology, Elevations & Flow Patterns**
- **Columbia County Investment \$190,538**
- **Federal Grant \$100,000 (WGNHS)**
- **Model Completed End of 2013**
- **Model Use 2014 and 2015**

➤ **Surface Water Focused Programming**

- **Connecting NPS Resource Issues To Water Bodies**
- **Began Approach In 2001 (DNR Lake Planning/Protection and River Planning Grants)**
- **Water Quality Monitoring Data & Flow**
- **Watershed Inventories (NR 151 Compliance)**
- **Lake Management Plans & Watershed Management Plans**
- **Aquatic Plan Management Plans**
- **Shoreline Stabilization and Habitat Restoration Plans**
- **Park Lake, Lazy Lake, Swan Lake, Tarrant Lake & Lodi Spring Creek**
- **(2011-2015) \$84,000 In Grant Awards**
- **3 Completed DNR Approved Lake Management Plans**
- **2 Approved DNR Aquatic Plant Management Plans**
- **Targeted NR 151 Compliance Work With Inventoried Agricultural Producers**

- **Conservation Reserve Enhancement Program (CREP)**
  - **44 Landowner Agreements Covering 320.80 Acres**
  
- **Information & Education (I & E)**
  - **Annual Poster Contest 150 participants**
  - **Annual Speaking Contest 34 participants**
  - **Annual Fall Conservation Tour (County Board, Media, Citizens and Partners)**
  - **Manure User Group**
  - **Town Hall Special Topic Meetings**
  - **6 Time per year Ag Reporter Newsletter**
  - **Website**
  
- **Conservation Aids Grant Projects**
  - **\$14,023 Awarded Since 2011**
  - **50% Local Match**
  - **Supplemental Funds**
  - **Fish Stocking, Invasive Species Control, Trout Habitat Work, Boat Ramps, Disabled blinds etc.**

# Accomplishments 2011-2015 Columbia County Land & Water Resource Management Plan

## **Goal: NATURAL RESOURCE PROTECTION RELATED TO LAND USE CHANGES AND GROWTH**

<b>Objectives</b>	<b>Actions</b>	<b>Accomplishments</b>
Proper utilization and implementation of storm water and erosion control standards	Continue to pursue the development of a county wide storm water management and erosion control ordinance	Revisions To Columbia County Zoning Code (16-140-090) include provisions. <ul style="list-style-type: none"> <li>➤ 1 Acre Disturbance</li> <li>➤ 5000 Square Ft Disturbance (12% Slope)</li> <li>➤ 2yr/10yr 100yr Events</li> <li>➤ PE Reviewed</li> </ul>
Implement Non-Agricultural Performance Standards and Prohibitions and Encourage BMP's	Develop county wide storm water management ordinance to include provision of NR 151	See above
<b>Use Land Use Planning and Incentive Based Programs to Preserve Agricultural Lands and Opens Space</b>	<b>Promote Farmland Preservation Program Under the WLI to landowners and Columbia County</b>	<ul style="list-style-type: none"> <li>• 2013 FPP Plan Recertified</li> <li>• 2014 Certified Ag Zoning County (18 Towns)</li> <li>• 2014 Certified Ag Zoning Town (1)</li> <li>• 22 FPP Agreements (2 Towns)</li> <li>• 2014 Town of West Point AEA Approval</li> </ul>

## **Goal: PROTECT AND ENHANCE GROUNDWATER QUALITY/QUANTITY**

Objectives	Actions	Accomplishments
Proper abandonment of unused groundwater wells	Provide technical assistance and cost sharing to close <b>5 to 10</b> wells per year	<ul style="list-style-type: none"> <li>• 37 Well Abandonments Completed</li> <li>• <b>7.4</b> Average per year</li> </ul>
Understand Groundwater resources to the fullest extent possible	<b>Complete</b> Phase 2 and Phase 3 of Columbia County groundwater survey and flow model development in cooperation with WGNHS	<ul style="list-style-type: none"> <li>• \$190,538 County Investment In G Flow Model</li> <li>• \$100,000 Federal USGS Grant Bedrock Geology</li> <li>• 2009-2010 Elevations, Recharge &amp; Susceptibility</li> <li>• 2011-2013 <b>Completion</b> Of G Flow Model Columbia County (Bedrock Geology Mapping)</li> <li>• WGNHS Major Partner (Controls Model)</li> </ul>
Educate general public about groundwater related issues, impacts and concerns	Provide media and I/E efforts targeted at groundwater in Columbia County	<ul style="list-style-type: none"> <li>• Summary of 2007-2010 Drinking Water Educational Program (600+ Samples) Still Distributed and Used.</li> <li>• 17 G Flow Model Use Inquires and Results</li> <li>• 2 Large Targeted Educational Workshops About G Flow Model Use (Cities, Villages, Operators, Towns &amp; Citizens)</li> <li>• Irrigations H Cap Meeting (July 2015) Permitting DNR related to subdivision impacts</li> </ul>

**Goal: PROTECT AND ENHANCE THE QUALITY OF OUR SURFACE WATER, GROUNDWATER AND SOILS RESOURCES**

<b>Objectives</b>	<b>Actions</b>	<b>Accomplishments</b>
<b>Implement NR 151 Runoff Management Standards</b>	<b>Continue to implement departmental process to implement Ag Standards, including tracking and data management associated with compliance</b>	<ul style="list-style-type: none"> <li>• Web Based (Land Records/GIS) Data Base Developed 2013 &amp; 2014. Started with FPP out of necessity.</li> <li>• 2015 Planning and Design On BMP &amp; Nutrient Reduction Phases</li> <li>• Tax Parcel Specific</li> <li>• \$ LIO Retained Fees</li> </ul>
<b>Continue inventory of high priority livestock operations for NR 151 compliance within WQMA of targeted watersheds</b>	<b>Utilize GIS to locate and create data base of potential livestock operations within WQMA in targeted watersheds</b>	<ul style="list-style-type: none"> <li>• Office Fully Functional With ArcMap Software &amp; Extensions (\$)</li> <li>• Ongoing used of Data To Inventory and Evaluate &amp; Target</li> <li>• Examples: Park, Lazy, Tarrant &amp; Lodi Spring Creek (Most Recent Example)</li> <li>• CREP Use</li> </ul>
<b>Notify identified landowners of NR 151 status and identify problems and associated BMP's needed</b>	<b>Follow up on NR 151 inventory results with <b>10 to 15</b> landowners per year inventory work will be used for searching out cost share mechanisms if needed (TRM, LWRM)</b>	<ul style="list-style-type: none"> <li>• Use Existing Inventory Data</li> <li>• FPP Spot Checks Field &amp; Self (200#)</li> <li>• Manure/Runoff Related Complaints (10-15 year)</li> <li>➤ <b>20</b> Onsite Determinations per year via all mechanism</li> </ul>
<b>Require compliance through NR 151 notification of non-compliance and make offer of cost sharing</b>	<b>Work with <b>3 to 5</b> livestock owners per year to achieve compliance with NR 151 Standards, the number of projects actually implemented through this process will be extremely dependent on cost share availability</b>	<ul style="list-style-type: none"> <li>• <b>14</b> (Small Scale) TRM/NOD (4) Projects</li> <li>• 2 (Large Scale) TRM Projects</li> <li>• <b>20</b> Landowner NR151 Issues Target via TRM</li> <li>• LWRM Funding 20 Landowners NR 151</li> <li>• 80 Landowners NR 151 Compliance With 590 NMP Plan Development</li> <li>• Total <b>120</b> Landowners NR 151 Compliance</li> </ul>

<b>Objectives</b>	<b>Actions</b>	<b>Accomplishments</b>
Implement Farmland Preservation Program (WLI) conservation compliance requirements	Make landowners aware of conservation requirements associated with existing and new participants set up schedule of compliance with existing participants and completing required status reviews annually	<ul style="list-style-type: none"> <li>• Conducted 2 large information meetings</li> <li>• Direct Mailings To All Participants</li> <li>• Farm Visits</li> <li>• Certified &gt; Half of FPP Participants Via Conservation Compliance Certificate</li> <li>• Balance Getting Schedules of Compliance</li> <li>• 4 Tier Approach Starting In 2010</li> <li>• Large Complex Workload/Database</li> </ul>
<b>Implement NMP 590 Standards In NR 151, with livestock operations being high priority</b>	<b>In the absence of limited GPR dollars to provide cost sharing to landowners to implement the NMP 590 standards found in NR 151 we will do the following; Encourage landowners to sign up for EQIP, require plans through local manure storage ordinance, require compliance with FPP(WLI) standards and conduct landowner self-certification training for 590 plan development. Despite dedicated funding we would like to target 5000 to 8,000 acres as a goal per year</b>	<ul style="list-style-type: none"> <li>• 296,000 Cropland Base 60% Of 495,000</li> <li>• 2011 22,862 Acres Certified 590 Plans</li> <li>• 2015 132,740 Acres Certified 590 Plans</li> <li>• 109,878 Acre Increase</li> <li>• 7.7% up to 45%</li> <li>• Cost Shared 80 Plans (30,136 Acres)</li> <li>• NMFE 48 Farmer Developed (16,985 Acres)</li> <li>• Increased Compliance With Animal Waste Ordinance Permit Requirements</li> <li>• FPP Eligibility Landowner Motivations</li> <li>• April 15 Deadline For Annual Updates</li> </ul>
<b>Update local policies and procedures related to Animal Waste Management</b>	<b>Revise and update current Animal Waste Management Ordinance to include Water Quality Management and incorporate policies and procedures to implement most current revisions to NR 151 and ATCP 50.</b>	<ul style="list-style-type: none"> <li>• Ordinance Update Discussion &amp; Approach Ongoing</li> <li>• MOU with DNR?</li> <li>• Full Standards Or Partial</li> <li>• 2016 County Goal For Consideration</li> </ul>

<b>Objectives</b>	<b>Actions</b>	<b>Accomplishments</b>
Continue the promotion of rotational grazing within Columbia County	Continue to use GLCI Grazing Grants to access funds associated with technical time to continue current upswing in rotational grazing use in Columbia County. Make staff technical resources available to service landowners need BMP and or grazing plan development. <b>Annual</b> target of working with <b>5 landowners</b> and a goal of revising or planning <b>250 acres</b> per year	<ul style="list-style-type: none"> <li>• GLCI Grants 2011-2014 \$21,304 Technical Staff Support</li> <li>• <b>36 Landowners</b> Served</li> <li>• <b>1500 Acres</b> MIG Or MODs To Plans</li> <li>• 56 Supporting BMP's To Grazing Systems</li> <li>• BMP \$ Assistance thru LWRM or EQIP</li> <li>• Lower Cost Alternatives To NR 151 Compliance Issues</li> <li>• Very Important To Target Limited technical resources (Staff)</li> </ul>
<b>Abandon existing unused nonconforming manure storage structures</b>	<b>Locate and properly abandon 2 existing non used nonconforming manure storage structures annually</b>	<ul style="list-style-type: none"> <li>• <b>12</b> Manure Storage Structures Closed</li> </ul>
<b>Monitor new and existing NMP 590 plans</b>	<b>Implement a long-term strategy to monitor utilization and compliance with NMP 590 plan through the use of self-certification annual review process</b>	<ul style="list-style-type: none"> <li>• April 15 Deadline For Submission</li> <li>• NMP Acres Database Tracking</li> </ul>
Develop local strategies for dealing with Manure Management issues in Columbia County	The LWCD in cooperation with WDNR will continue to use a local manure user group to discuss and tackle local issues and trends related to manure management in Columbia County	<ul style="list-style-type: none"> <li>• User group has been used to develop by in on issues and set expectations</li> </ul>
Revisit the value of grassed waterways as a “must have” tool for erosion control	The LWCD will continue to market the value of grassed waterways through information and education with local landowners. Implementation of the FPP (WLI) conservation compliance standards will be used as one tool in this process. We will work towards the installation of a <b>minimum of 5 new or replacement grassed waterways per year</b>	<ul style="list-style-type: none"> <li>• 11 LWRM</li> <li>• 18 EQIP</li> <li>• 10 Continues CRP</li> <li>• <b>Total 39</b> grassed waterways</li> </ul>

**Goal: CONTROL INVASIVE AND EXOTIC SPECIES IN COLUMBIA COUNTY**

<b>Objectives</b>	<b>Actions</b>	<b>Accomplishments</b>
<b>Control Gypsy Moth outbreaks in Columbia County</b>	<b>Maintain participation in WDNR Gypsy Moth Suppression Program and create and maintain local funding mechanism</b>	<ul style="list-style-type: none"> <li>• No eligible spray blocks 2011-2015</li> <li>• Completed documentation &amp; field work</li> </ul>
Control of all invasives	Provide program opportunities and I/E to public concerning invasive control of all existing and new invasive exotics	<ul style="list-style-type: none"> <li>• I/E on terrestrial &amp; aquatic invasive species thru various programs</li> <li>• Aquatic Plant Management Plans (Inventories)</li> <li>• Conservation Aid Grants</li> <li>• Signage At Boat Landings</li> </ul>

**Goal: PROMOTE THE PRESERVATION OF AGRICULTURE AND LIVESTOCK OPERATIONS IN COLUMBIA COUNTY**

<b>Objectives</b>	<b>Actions</b>	<b>Accomplishments</b>
Promote the value of livestock agriculture in Columbia County	Continue to work with the public to educate them on the value of livestock agriculture to the community, provide I/E about the changing face of livestock and its role in Columbia County.	<ul style="list-style-type: none"> <li>• Site visits to non-farm rural properties</li> <li>• 1996 60,000 livestock</li> <li>• 2015 52,000 livestock</li> <li>• 3 CAFO's (4<sup>th</sup> In permitting)</li> <li>• 999 club</li> <li>• 200-300 size dairy herds</li> <li>• Education public on value of proper utilization of manure and value of alfalfa etc.</li> </ul>

**Goal: IMPROVE RECREATION OPPORTUNITIES AND PRESERVATION OF NATURAL AREAS WITHIN COLUMBIA COUNTY**

<b>Objectives</b>	<b>Actions</b>	<b>Accomplishments</b>
Increase availability and quality of public access to waterways within Columbia County	The LWCD will work through state and local partnerships to identify and look for resources to improve boat landings and public access points within the County	\$1529.00 DNR Lake Planning Grant to complete lake access land records verification for Columbia County side of Lake Wisconsin

**Goal: PROVIDE INCREASED LAND AND WATER CONSERVATION SERVICE TO LANDOWNERS AND CITIZENS OF COLUMBIA COUNTY**

<b>Objectives</b>	<b>Actions</b>	<b>Accomplishments</b>
Increased customer service and conservation program implementation through the co-habitation of the LWCD with the NRCS and FSA office	The LWCD/LWCC will look into the feasibility of making this partnership a reality again. We will provide information and education to the Columbia County Board in regards to the necessity of such an arrangement.	<ul style="list-style-type: none"> <li>• Co-Location high priority for 2011 steering committee</li> <li>• Columbia County building new building 2017</li> <li>• NRCS-FSA space included in specs</li> <li>• One stop shop.</li> </ul>

**Goal: DEVELOP AND RETAIN LOCAL WATER QUALITY MONITORING DATA**

<b>Objectives</b>	<b>Actions</b>	<b>Accomplishments</b>
<p><b>Develop a local surface water quality monitoring program within Columbia County</b></p>	<p><b>The LWCD will work in cooperation with WDNR to continue to identify surface water resources that would benefit from the development of a local watershed based monitoring program. These programs and the data collected will be used to help the LWCD along with other resources managers better understand current watershed impacts and understand potential impacts within the watershed. This will allow LWCD to focus limited resources on focused areas with an updated foundation of current conditions.</b></p>	<ul style="list-style-type: none"> <li>• Historical work collected (Lazy/Park/Tarrant)-Used to prioritize TRM/NOD projects</li> <li>• 2011-2013 Lodi Spring Creek Sampling (Utilization For Adaptive Management decision making and priority farm selection)-livestock related</li> <li>• Park Lake data used for Upper Fox TMDL development/In lake P impacts to Park Lake</li> </ul>

**Goal: PROVIDE INFORMATION AND EDUCATION TO USERS OF OUR RESOURCES TO STRENGTHEN NATURAL RESOURCE UNDERSTANDING AND RECOGNITION**

<b>Objectives</b>	<b>Actions</b>	<b>Accomplishments</b>
<p>Increase information and education related to land use impacts on natural resources within Columbia County</p>	<p>Increase value and presence of LWCD within media, web page, workshops, newsletters etc.</p>	<ul style="list-style-type: none"> <li>• Web page established</li> <li>• Tree Program 600 Landowner Contacts</li> <li>• Poster Contest 150 participants</li> <li>• Speaking Contest 34</li> <li>• Annual Fall Conservation Tour</li> </ul>

		<ul style="list-style-type: none"> <li>• 6 Time per year Ag Reporter Newsletter</li> <li>• Various meetings</li> </ul>
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**Goal: INCREASE LOCAL AND STATE RECOGNITION AND VALUE OF LAND AND WATER CONSERVATION ACTIVITIES WITHIN COLUMBIA COUNTY**

<b>Objectives</b>	<b>Actions</b>	<b>Accomplishments</b>
Increase County Board awareness and value of land and water conservation activities	The LWCD will continue to market the value of local land and water conservation through discussion, presentations and participation in our annual fall conservation tour.	Annual Fall Tour County Board specific presentations
Increase awareness and value of land and water conservation activities to Columbia County Senators and State Representatives, LWCB and other State agencies and governing boards	The LWCD will increase its relationships and interactions with legislators and other important state boards to increase awareness and financial support for land and water conservation in Columbia County	LWCB –Director Advisor WLWCA-Director Board/Chair Committee WLWCA-LWCD staff committee membership WCA-regular contact with County Board representation Ongoing dialog with Local Senators & Representatives

**Goal: PROMOTE LONGTERM SUSTAINABLE FORESTRY IN COLUMBIA COUNTY**

<b>Objectives</b>	<b>Actions</b>	<b>Accomplishments</b>
Provide tree, shrubs and planting equipment to promote tree planting in Columbia County	The LWCD will continue to develop and grow its annual tree sales program and continue to provide and maintain tree planters for the citizens of Columbia County	Held annually since 1981 188,000 units sold 2011-2015 \$27,000 proceeds 1.2 million trees and shrubs since 1981 5 Tree Planters

**2016-2020 Updated Work Plan  
Goals/Objectives/Action/Staff /Budget**

This work plan is a 5 year work plan that will be updated as necessary with annual work plan adjustments made and submitted to DATCP as necessary

**Note: Bold Objectives/Actions are Priority Activities**

Annual Cost Share Resources Are Anticipated Financial Resources Above The Basic SWRM  
DATCP Staffing Grant

**Goal: NATURAL RESOURCE PROTECTION RELATED TO LAND USE  
CHANGES AND GROWTH**

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Annual Cost Share Resources</b>
Provide A Venue To Assist Landowners And Units Of Government In Understanding Challenges And Potential Solutions Surrounding Flood/Increased Rain Event Issues And Impacts In Columbia County	Provide Technical And I/E Assistance To Landowners And Units Of Government To Help Them Understand Scenarios That Could Assist Them With Reducing Impacts Associated With Increased Rain Events/Runoff/Flooding	On-going 2016-2020	LWCD, Towns, Villages and Cities, landowners, Columbia County Planning and Zoning	250 hours \$10,000	N/A
<b>Use Land Use Planning And Incentive Based Programs To Preserve Agricultural Lands And Opens Space</b>	<b>Promote Farmland Preservation Program Under The WLI To Landowners And Columbia County</b>	2016-2020 On-going	LWCD Landowners Townships P/Z Department	500 hours \$20,000	FPP Tax Credits \$5.00/Acre \$7.50/Acre \$10/Acre

**Goal: PROTECT AND ENHANCE GROUNDWATER QUALITY/QUANTITY**

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Annual Cost Share Resources</b>
<b>Proper Abandonment Of Unused Groundwater Wells</b>	<b>Provide Technical Assistance And Cost Sharing To Close 5 To 10 Wells Per Year</b>	Ongoing 2016-2020	LWCD	100-200 hours  \$8,000	\$7500  LWRMP DATCP
Understand Groundwater Resources To The Fullest Extent Possible	Continue To Use Columbia County G-Flow Model To Evaluate Groundwater Impacts To Individual Wells Via Well Capture Zone Delineation & Evaluate Land Treatment Options For That Area Aka...Well Head Protection (Goal Of 5 To 10 Reviews Per Year)	2016-2020	LWCD WGNHS Landowners Towns Cities Villages	200 hours WGNHS LWCD  \$8000	BMP/Land Treatment In Capture Zone  \$25,000 NMP Cropping etc
Understand Groundwater Resources To The Fullest Extent Possible	Use Columbia County G-Flow Model To Evaluate And Understand High Capacity Well Impacts In County	Ongoing 2016-2020	LWCD WGNHS Landowners Towns Cities Villages DNR	200 hours WGNHS LWCD  \$8000	N/A
Educate General Public About Groundwater Related Issues, Impacts And Concerns	Provide Media And I/E Efforts Targeted At Groundwater In Columbia County	Ongoing 2016-2020	LWCD/UWEX	100 hours  \$4,000	N/A
Educate General Public About Groundwater Related Issues, Impacts And Concerns	Explore Conducting Follow Up Drinking Water Educational Sampling Program In Columbia County Following (2007-2010)	2016-2020	LWCD/UWEX	250 hours  \$10,000	Township Financial Assistance \$10,500

**Goal: PROTECT AND ENHANCE THE QUALITY OF OUR SURFACE WATER, GROUNDWATER AND SOILS RESOURCES**

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Annual Cost Share Resources</b>
<b>Implement NR 151 Runoff Management Standards</b>	<b>Continue To Develop &amp; Integrate BMP Tracking/Nutrient Reduction/NR 151 Compliance Using Phase 2 In The BMP Tracking Phase Of Columbia County Land Management Accent Permit System</b>	2016-2020	LWCD	500 hours \$20,000	Land Information Retained Fees \$25,000 Towards Development
<b>Continue Inventory Of High Priority Livestock Operations For NR 151 Compliance Within WQMA Of Targeted Watersheds</b>	<b>Utilize GIS To Locate And Create Data Base Of Potential Livestock Operations Within WQMA In Targeted Watersheds. Evaluate Combinations Of Inventory Work With Adaptive Management/Trading/ MDV P Variance &amp; DNR TMDL 9 Key Element Planning Opportunities.</b>	Ongoing 2016-2020	LWCD	1,000 hours \$40,000	Additional Staff Cost Share & assistance via alternative sources AM/Trading/ MDV P Variance \$40,000 Staff BMP Alternative Cost Share \$100,000
<b>Notify Identified Landowners Of NR 151 Status And Identify Problems And Associated BMP's Needed</b>	<b>Follow Up On NR 151 Inventory Results With 10 To 15 Landowners Per Year Inventory Work Will Be Used For Searching Out Cost Share Mechanisms If Needed (TRM, LWRM, MDV P Variance, Trading/Adaptive Management)</b>	Ongoing 2016-2020	LWCD	2088 hours \$83,000	Additional Staff Resources NPS alternative programs \$50,000

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Annual Cost Share Resources</b>
<b>Require Compliance Through NR 151 Notification Of Non-Compliance And Make Offer Of Cost Sharing</b>	<b>Work With 3 To 5 Livestock Owners Per Year To Achieve Compliance With NR 151 Standards, The Number Of Projects Actually Implemented Through This Process Will Be Extremely Dependent On Cost Share Availability</b>	Ongoing 2016-2020	LWCD	1,000 hours \$40,000	DATCP-LWRM, TRM, NOD  \$750,000
<b>Implement Farmland Preservation Program (WLI) Conservation Compliance Requirements</b>	<b>Make Landowners Aware Of Conservation Requirements. Issue Conservation Compliance Certificates (<u>With Official CCC Assigned Numbers</u>). Issue Schedules Of Compliance Where Applicable. Conduct Required Annual Compliance Verifications. Goal 200 Verifications Per Year. Complete Annual Self-Certification Mailing And Processing. Issue Notice Of Non-Compliance As Needed.</b>	Ongoing 2016-2020	LWCD	4200 hours \$168,000	
<b>Implement NMP 590 Standards In NR 151, With Livestock Operations Being High Priority</b>	<b>In The Absence Of Limited GPR Dollars To Provide Cost Sharing To Landowners To Implement The NMP 590 Standards Found In NR 151 We Will Do The Following; Encourage Landowners To Sign Up For EQIP, Require Plans Through Local Manure Storage Ordinance, Require Compliance With FPP(WLI) Standards And Conduct Landowner Self-Certification Training For 590 Plan Development. Despite Dedicated Funding We Would Like To Target 5000 To 8,000 Acres As A Goal Per Year</b>	Ongoing 2016-2020	LWCD UWEX and NRCS	2000 hours \$80,000	DATCP, DNR& NRCS EQIP  \$100,000 to \$250,000

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Annual Cost Share Resources</b>
<b>Update Local Policies And Procedures Related To Animal Waste Management</b>	<b>Update Necessary Components Of Title 15 Animal Waste Management Ordinance To Align With NR 151 &amp; ATCP 50. Evaluate Inclusion Of Additional Ag Performance Standards &amp; Prohibitions. Discuss MOU With DNR Regarding Stepped Enforcement Process.</b>	2016 to 2020  As staff time and resources allow	LWCD	1,000 hours  \$40,000	
Continue The Promotion Of Rotational Grazing Within Columbia County	In The Absence Of Dedicated GLCI Funding, Continue To Devote Staff Technical Time And Resource To Assist In MIG Programming In Columbia County. Continue To Evaluate New Funding Options.	Ongoing 2016-2020	LWCD	300 hours  \$10,000	EQIP and LWRM for supporting BMP cost share dollars \$20,000
<b>Abandon Existing Unused &amp; Nonconforming Manure Storage Structures</b>	<b>Locate And Properly Abandon 2 Existing Non Used Nonconforming Manure Storage Structures Annually</b>	Ongoing 2016-2020	LWCD	250 hours  \$10,000	\$10,000 to \$20,000 DATCP (LWRM) TRM, EQIP
<b>Monitor New And Existing NMP 590 Plans</b>	<b>Implement A Long-Term Strategy To Monitor Compliance With NMP 590 Plan Through The Use Of Self-Certification Annual Review Process</b>	Ongoing 2016-2020	LWCD	100-200 hours  \$8,000	
Develop Local Strategies For Dealing With Manure Management Issues In Columbia County	The LWCD In Cooperation Will WDNR Will Continue To Use A Local Manure User Group To Discuss And Tackle Local Issues And Trends Related To Manure Management In Columbia County	Ongoing 2016-2020	LWCD WDNR	100 hours  \$3000	

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Annual Cost Share Resources</b>
<b>Revisit The Value Of Grassed Waterways As A “Must Have” Tool For Erosion Control</b>	<b>The LWCD Will Continue To Market The Value Of Grassed Waterways Through Information And Education With Local Landowners. Implementation Of The FPP (WLI) Conservation Compliance Standards Will Be Used As One Tool In This Process. We Will Work Towards The Installation Of A Minimum Of 5 New Or Replacement Grassed Waterways Per Year. Landowner Rental Agreement “Maintenance Language” Inclusion Outreach Will Be Conducted.</b>	Ongoing 2016-2020	LWCD	350 hours \$14,000	DATCP-LWRM, EQIP CRP \$25,000
<b>Surface Water Resource Planning &amp; Evaluation</b>	<b>Continue Implementing Goal Of Identifying Opportunities &amp; Value Of Developing Comprehensive Lake Management Plans For Major Columbia County Surface Water Resources. Including Swan Lake &amp; Lake Wisconsin</b>	2016-2020	LWCD WDNR UWEX UWSP	400 hours \$16,000	DNR Lake Planning Grants
Implement CREP Program	Continue To Make CREP Program Opportunities Available To Interested Landowners	2016-2020	LWCD	250 hours \$10,000	CREP payments DATCP FSA

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Annual Cost Share Resources</b>
<b>Limit Winter Application Of Manure In Vulnerable Areas On Landscape (SWQMA &amp; Steep Slopes) &amp; Other Growing Season Challenges Related Accessibility To Land During Growing Season</b>	<b>Promote The Planning And Installation Of NRCS 313 Manure Storage Structures On Livestock Farms That Have Problems Managing Manure Properly Throughout The Various Stages Of The Year. Goal Of Permitting 3 New Manure Storage Structures Per Year. Locate Alternatives To Manure Storage On Farms That Have Solid Manure Suitable For Stacking.</b>	2016-2020	LWCD	375 hours \$15,000	LWRM, TRM, NOD & EQIP  \$250,000

**Goal: CONTROL INVASIVE AND EXOTIC SPECIES IN COLUMBIA COUNTY**

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Annual Cost Share Resources</b>
Control Gypsy Moth Outbreaks In Columbia County	Maintain Participation In WDNR Gypsy Moth Suppression Program And Create And Maintain Local Funding Mechanism	Ongoing 2016-2020	LWCD	250 hours \$7500	Columbia County-Local match WDNR Suppression Program State Match  \$ from Trees - Local Tree Program
Control Of Invasive Species (Terrestrial & Aquatic)	Provide Program Opportunities And I/E To Public Concerning Invasive Control Of All Existing And New Invasive Exotics. Including Development & Implementation Of Aquatic Plant Management Plans	Ongoing 2016-2020	LWCD	200 hours \$8,000	DNR lake planning and protection grants to fund APM plans & implementation

**Goal: PROMOTE THE PRESERVATION OF AGRICULTURE AND LIVESTOCK OPERATIONS IN COLUMBIA COUNTY**

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Cost Share Resources</b>
Promote The Value Of Livestock Agriculture In Columbia County	Continue To Work With The Public To Educate Them On The Value Of Livestock Agriculture To The Community, Provide I/E About The Changing Face Of Livestock And Its Role In Columbia County.	Ongoing 2016- 2020	LWCD, UW Extension	75 hours  \$3,000	

**Goal: IMPROVE RECREATIONAL OPPORTUNITIES AND PRESERVATION OF NATURAL AREAS WITHIN COLUMBIA COUNTY**

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Cost Share Resources</b>
Create A Parks Program In Columbia County	The LWCD/LWCC Will Work Within The Framework Of Columbia County Government To Evaluate The Opportunities To Increase The Value Of A Parks Department Within Columbia County	Ongoing 2016- 2020	LWCD, LWCC, Columbia County Board of Supervisor, Highway	50 hours  \$2,000	
Increase Availability And Quality Of Public Access To Waterways Within Columbia County	The LWCD Will Work Through State And Local Partnerships To Identify And Look For Resources To Improve Boat Landings And Public Access Points Within The County	Ongoing 2016- 2020	LWCD, WDNR, Columbia County, Cities, Villages, Towns	50 hours  \$2,000	

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Cost Share Resources</b>
Provide A Local Avenue For Landowners Who Would Like To See Their Land Preserved Through Either Outright Donation Or Long Term Easement	The LWCD Will Work With Other Interested Parties To Research The Value And Opportunities Of Creating A Local Land Trust, Land Acquisition Program Or The Retention Of Important Tax Delinquent Properties Or Some Local Mechanism For Natural Area Preservation.	Ongoing 2016-2020	LWCD, Columbia County Board, Planning and Zoning, WDNR	50 hours \$2,000	Columbia County other potential outside resources

**Goal: PROVIDE INCREASED LAND AND WATER CONSERVATION SERVICE TO LANDOWNERS AND CITIZENS OF COLUMBIA COUNTY**

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Cost Share Resources</b>
Increased Customer Service And Conservation Program Implementation Through The Co-Habitation Of The LWCD With The NRCS And FSA Office	Complete Final Necessary Actions To Follow Thru With Co-Location Options On Horizon With Columbia County New Administration Building. Proposed Completion 2017	Ongoing 2016-2018	LWCD NRCS FSA	100 hours \$4,000	

**Goal: DEVELOP AND RETAIN LOCAL WATER QUALITY MONITORING DATA**

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Annual Cost Share Resources</b>
Develop A Local Surface Water Quality Monitoring Program Within Columbia County	The LWCD Will Continue To Expand Its Use Of Targeted Water Quality Monitoring Work To Help Collect Data To Help Local Decision Making More Targeted & Responsive	Ongoing 2016-2020	LWCD WDNR UWSP WAV	250 hours \$10,000	Columbia County and various State and Federal Grant Programs

**Goal: PROVIDE INFORMATION AND EDUCATION TO USERS OF OUR RESOURCES TO STRENGTHEN NATURAL RESOURCE UNDERSTANDING AND RECOGNITION**

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Annual Cost Share Resources</b>
Increase Information And Education Related To Land Use Impacts On Natural Resources Within Columbia County	Increase Value And Presence Of LWCD Within Media, Web Page, Workshops, Newsletters Etc. Develop 4 Quality Newsletter Article Annually.	Ongoing 2016-2020	LWCD	150 hours \$4,500	UWEX Budget Funding For Ag Reporter

**Goal: INCREASE LOCAL AND STATE RECOGNITION AND VALUE OF LAND AND WATER CONSERVATION ACTIVITIES WITHIN COLUMBIA COUNTY**

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Annual Cost Share Resources</b>
Increase County Board Awareness And Value Of Land And Water Conservation Activities	The LWCD Will Continue To Market The Value Of Local Land And Water Conservation Through Discussion, Presentations And Participation In Our Annual Fall Conservation Tour.	Ongoing 2016-2020	LWCD	100 hours \$3,000	
Increase Awareness And Value Of Land And Water Conservation Actives To Columbia County Senators And State Representatives, LWCB And Other State Agencies And Governing Boards	The LWCD Will Increase Its Relationships And Interactions With Legislators And Other Important State Boards To Increase Awareness And Financial Support For Land And Water Conservation In Columbia County	Ongoing 2016-2020	LWCD	100 hours \$4,000	

**Goal: PROMOTE LONGTERM SUSTAINABLE FORESTRY IN COLUMBIA COUNTY**

<b>Objectives</b>	<b>Actions</b>	<b>Year</b>	<b>Who</b>	<b>Staff Resources</b>	<b>Annual Cost Share Resources</b>
Provide Tree, Shrubs And Planting Equipment To Promote Tree Planting In Columbia County	The LWCD Will Continue To Develop And Grow Its Annual Tree Sales Program And Continue To Provide And Maintain Tree Planters For The Citizens Of Columbia County. Complete Development Of New "Timber" Web Based Program To Manage Tree Sales Program.	Ongoing 2016-2020	LWCD WDNR	250 hours \$7500	

**CORRESPONDENCE/MEMORANDUM** \_\_\_\_\_ **State of Wisconsin**

**DATE:** November, 17 2015

**TO:** Land and Water Conservation Board Members and Advisors

**FROM:** Keith Foye, DATCP   
Bureau of Land and Water Resource Management

**SUBJECT:** Recommendation for Approval of the *Iowa County Land and Water Resource Management Plan*

**Action Requested:** This is an action item. The department has determined that the *Iowa County Land and Water Resource Management Plan* meets ATCP 50 requirements and requests that the LWCB make a recommendation regarding approval of the plan consistent with the Board's criteria and guidance, including any recommendation regarding any conditions in the final order approving the plan.

**Summary:** The plan is written as a 10 year plan, and addresses one or more of the criteria demonstrating intent for a 10 year plan. If approved, the plan would remain in effect through December 31, 2025, and would be subject to a five year review prior to December 31, 2020.

DATCP staff reviewed the plan using the checklist and finds that the plan complies with all the requirements of section 92.10, Wisconsin Statutes, and Chapter ATCP 50, Wisconsin Administrative Code.

To qualify for 10 year approval of its plan, Iowa County must satisfy the Board that the plan has met the additional criteria in the Board's guidance.

Iowa County held a public hearing on October 8, 2015, as part of its public input and review process. The Iowa County Land and Water Conservation Committee will present the LWRM plan for County Board approval after receiving a recommendation for approval from the LWCB.

**Materials Provided:**

- LWRM Plan Review Checklist
- *Iowa County Land and Water Resource Management Plan* Summary, including workplan and budget

**Presenters:** Jim McCaulley, Iowa County Conservationist



Wisconsin Dept. of Agriculture, Trade and Consumer Protection  
 Agricultural Resource Management Division  
 2811 Agriculture Drive, PO Box 8911  
 Madison WI 53708-8911  
 Phone: (608) 224-4608

## Land and Water Resource Management (LWRM)

### LWRM Plan Review Checklist

Sec. 92.10, Stats. & sec. ATCP 50.12, Wis. Adm. Code

County: Iowa

Date Plan Submitted for Review: October 6, 2015

I. ADVISORY COMMITTEE	Yes	No	Page
1. Did the county convene a local advisory committee that included a broad spectrum of public interests and perspectives (such as affected landowners, partner organizations, government officials, educational institutions)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
II. PUBLIC PARTICIPATION AND COUNTY BOARD APPROVAL	Date(s)		
1. Provide the dates that the local advisory committee met to discuss the development of the LWRM plan and the county plan of work.	04/09/15		
2. Provide the date the county held a public hearing on the LWRM plan. <sup>1</sup>	10/08/15		
3. Provide the date of county board approval of the plan, or the date the county board is expected to approve the plan after the LWCB makes its recommendation. <sup>2</sup>	11/19/15		
III. RESOURCE ASSESSMENT AND WATER QUALITY OBJECTIVES	Yes	No	Page
1. Does the plan include the following information as part of a county-wide resource assessment:			
a. Soil erosion conditions in the county <sup>3</sup> , including:			
i. an estimate of the soil erosion rates for the whole county and for local areas where erosion rates are especially high	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10
ii. identification of key soil erosion problem areas in the county	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10-loss of CRP
b. Water quality conditions of watersheds in the county <sup>3</sup> , including:			
i. location of watershed areas, showing their geographic boundaries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	86

<sup>1</sup> Appropriate notice must be provided for the required public hearing. The public hearing notice serves to notify landowners and land users of the results of any determinations concerning soil erosion rates and nonpoint source water pollution, and provides an opportunity for landowners and land users input on the county's plan. Individual notice to landowners is required if the landowners are referenced directly in the LWRM plan. DATCP may request verification that appropriate notice was provided.

<sup>2</sup> The county board may approve the county LWRM plan after the department approves the plan. The plan approved by the county board must be the same plan approved by the department. If the department requires changes to a plan previously approved by the county board, the department's approval does not take effect until the county board approves the modified plan.

<sup>3</sup> Counties should support their analysis of soil and water conditions by referencing relevant land use and natural resource information, including the distribution of major soil types and surface topographic features, and land use categories and their distribution. Sec. ATCP 50.12(3)(b) requires that a county assemble relevant data, including relevant land use, natural resource, water quality and soil data.

- ii. identification of the causes and sources of the water quality impairments and pollutant sources   22-27
- iii. identification of key water quality problem areas in the county   basin plans

2. Does the LWRM plan address objectives by including the following:

- a. specific water quality objectives identified for each watershed based upon the resource assessment   13-22
- b. pollutant load reduction targets for the watersheds, if available   basin plans

- 3. Does the plan or related documentation reflect that the county consulted with DNR<sup>4</sup> to provide water quality assessments, if available; to identify key water quality problem areas; to determine water quality objectives; and to identify pollutant load reduction targets, if any.   36-adaptive Management

Other comments: Jim confirmed that DNR was consulted Andy Morton is working with the county on trading and Adaptive management.

IV. PLAN IMPLEMENTATION	Yes	No	Page
1. Does the LWRM plan include the following implementation strategies:			
a. A voluntary implementation strategy to encourage farm conservation practices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	50-52
b. State and local regulations used to implement the plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	48-50
c. Compliance procedures that apply for failure to implement the conservation practices in ATCP 50, ch. NR 151 and related local regulations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	48, 53-57
d. Relevant conservation practices to achieve compliance with performance standards and prohibitions and to address key water quality and erosion problems	<input checked="" type="checkbox"/>	<input type="checkbox"/>	82
e. Strategy to monitor the compliance of participants in the farmland preservation program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	51-52
2. Does the LWRM plan (or accompanying work plan) estimate cost-sharing and other financial assistance, and technical assistance needed for plan implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	58-68

<sup>4</sup> While requirements for DNR consultation may be satisfied by including relevant DNR representatives on the advisory committee, counties may also need to interact with DNR staff in central or regional offices to meet all of the consultation requirements. DNR may point counties to other resources to obtain information including consultants who can calculate pollutant load reduction targets.

3. Does the LWRM plan describe a priority farm strategy designed to make reasonable progress in implementing state performance standards and conservation practices on farms appropriately classified as a priority?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	50-53
4. Was DNR consulted about the county's plan for NR 151 implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	53-55 will sign MOU

Other comments:

V. OUTREACH AND PARTNERING	Yes	No	Page
1. Does the LWRM plan describe a strategy to provide information and education on soil and water resource management, conservation practices and available cost-share funding, including an estimate of the amount of I& E needed for plan implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	44-45, 50-51
2. Does the LWRM plan describe coordination activities with local, state and federal agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	49-50

Other comments: \_\_\_\_\_

VI. WORK PLANNING AND PROGRESS MONITORING	Yes	No	Page
1. Does the county's work plan do all of the following:			
a. Cover more than one year	<input checked="" type="checkbox"/>	<input type="checkbox"/>	58-68
b. Identify priorities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
c. Provide measurable annual and multi-year performance benchmarks (for at least all high priority items)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
2. Does the LWRM plan describe a strategy and framework for monitoring county progress implementing its plan including methodology to track and measure progress in meeting performance benchmarks and plan objectives?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	57-will tie to parcel

Other comments:

VII. EPA SECTION 319 CONSIDERATIONS
1. DOES THIS PLAN INCLUDE ELEMENTS <u>CONSISTENT</u> WITH THE MINIMUM 9 KEY ELEMENTS FOR EPA APPROVAL UNDER SECTION 319 OF THE CLEAN WATER ACT: N/A
2. IF THE ANSWER TO 1 IS "YES," WHAT IS THE STATUS OF EPA'S REVIEW OF THE PLAN: NOT SUBMITTED _____ SUBMITTED BUT NOT APPROVED _____ APPROVED _____

**STAFF RECOMMENDATION**

Staff has reviewed the above-referenced county LWRM plan based on the criteria required in s. ATCP 50.12, Wis. Admin. Code, and s. 92.10, Stats., and has determined that the plan meets the criteria for DATCP approval of this plan. This checklist review is prepared to enable the LWCB to make recommendations regarding plan approval, and for DATCP to make its final decision regarding plan approval.

Staff Signature:     Lisa K. Trumble    

Date:     11/16/2015

IOWA COUNTY LAND CONSERVATION  
DEPARTMENT

LAND AND WATER RESOURCE MANAGEMENT PLAN  
2016



## IOWA COUNTY LAND AND WATER RESOURCE MANAGEMENT PLAN

Developed by the **Department of Land Conservation** under the administrative leadership of the

### IOWA COUNTY LAND CONSERVATION COMMITTEE

Bob Bunker, Chairman

Dan Nankee, Vice-Chairman

Carol Anderson, Secretary

Ron Benish

Roger Dax

Greg Parman

Dave Ladd

### IOWA COUNTY LAND CONSERVATION DEPARTMENT

Jim McCaulley, County Conservationist

Rob Hemling, Engineer Technician

Len Olson, FPP Specialist

Debi Finkelmeyer, Assistant

### MEMBERS OF THE TECH ADVISORY COMMITTEE

Andy Walsh, NRCS District Conservationist

Laurie Makos, FSA County Executive Director

Scott Godfrey, Planning and Development Administrator

Jim Amrhein, DNR Grant/Platte/Sugar/Pecatonica Water Team Leader

Gene Schriefer, UW-Extension Basin Educator for Natural Resources

David Carper, DNR Wastewater Specialist

Peggy Compton, UW-Extension Basin Educator for Natural Resources

Travis Anderson, DNR Water Resources Management Specialist

Andy Morton, DNR Basin Team Supervisor

### MEMBERS OF THE CITIZENS ADVISORY COMMITTEE (CAC)

John Meyers - Farmer & County Board Chair

Bill Hanson - Crop Farmer, Farm Bureau Member & Member of FSA State Board

Curt Peterson - Farmer & Town of Dodgeville Chair

Gary Tibbits - Farmer & Realtor

Mark Klosterman - Landscape Business Owner & Pheasants Forever Officer

Denny McGraw - Farmer & High School Ag Teacher

Ken Wunderlin - Dairy Farmer & Past LCC Chair

Mike Dreischmeier - Landowner, Conservation Congress Member & Ag

Greg Lee – City of Dodgeville Public Works Director Engineer

Don Pluemer – Business Owner & Trout Unlimited Chapter President

Mark Masters – Farmer

Steve Holmes – Business Owner & Conservation Congress County Chair

Marilyn Welsh – Farm Owner & FSA County Committee Member

Ken Von Rueden – Ag Business Owner

## PLAN SUMMARY

In Wisconsin, Counties have been under statutory authority to plan and implement conservation progress to meet local needs. Recent changes in State law requires each County to develop a County Land and Water Resource management Plan (LWRM Plan). This plan has been developed to meet these requirements and to serve as a guide for local conservation efforts, administration by County, State and Federal Agencies.

In the process of developing a 10-year LWRM Plan, the Iowa County Land Conservation Committee (LCC), through the Land Conservation Department (LCD), has gathered information, comments and recommendations from a resources survey and citizen meetings with a “Public Hearing” held on October 8, 2015 at 9:00 A.M. The LCC appreciated the valued input from the members of the Citizens Advisory Committee (CAC) who met on April 9, 2015 at 3:00 P.M. and the Local Work Group (LWG) representing conservation partners.

A recent review of Iowa County soil and water resources shows that there is a trend in the County to increase agriculture production and wildlife habitat. It is noted in the body of this LWRM Plan that over 20,000 (31.5 sm) acres have come out of CRP and gone in to commodity crops (i.e. corn and soybeans). This is a result of a growing demand for bio-fuels. Also, the County’s animal agriculture is declining in the numbers of cattle, however the operations and herds are increasing in animal units. These larger operations tend to be located in areas of the County with more productive soils. Recreation, forestry and lower impact agriculture operations tend to be located in the northern and eastern parts of the County, which are dominated by lesser productive soils. The DNR Basin Plans – The Lower Wisconsin, The Sugar-Pecatonica, and the Grant-Platte – are referenced when implementing the County’s work plan. In addition, the priority farm definition is: farms in watershed draining to DNR listed as “Impaired Waters Section 303(D) or “Outstanding and Exceptional Resource Water”; farms with livestock or that have significant manure management problems; farms making clearly excessive nutrient applications; or farms with clearly excessive rates of cropland erosion. This definition will be guidance for NR-151 inventory, evaluations and implementation. Other items of compliance review are voluntary requests, complaint driven calls and farmers with animal agriculture waste issues. The Iowa County LCD is working with the County’s Land Records Office and the

Information Systems Department in the attempt to develop a record keeping mapping and software system for compliance status.

The NR-151 Performance Standards are identified and local implementation is discussed within the LWRM Plan. To implement NR-151 standards, a variety of cost share programs will be explored and offered through the United States Department of Agriculture (USDA), the Department of Natural Resources (DNR), and the Department of Agriculture, Trade and Consumer Protection (DATCP) funding.

As noted, the components of the local process of implementing NR-151 starts with defining a priority farm, dispensing information and notifying the landowners, and then monitoring and evaluating to assess our progress towards the LWRM goals. Other components of implementation are: financial considerations with NR-151; onsite farm visits; notification; technical assistance and cost sharing for voluntary and non-voluntary participation; re-evaluation of farms or parcels for compliance; the process for appeal of non-compliance decisions; and enforcement actions.

The ten priorities set by the Local Work Group are: Soil Erosion; Water Quality (Groundwater); Animal Waste (Management); Nutrient Management; Forestry; Riparian Corridors; Agricultural Productivity; Rural Land Uses Issues/Conflicts; Agricultural Sustainability; and Loss of Agricultural Land. An additional area of concern are Large Farms, which is addressed in the work plan. Each priority is explained in detail and its goal listed in a 5 Year Work Plan. These long range priorities and goals will be accomplished through coordination with local, state, and federal agencies in partnerships with private organizations.

In Iowa County, the Farmland Preservation Program has always been a great tool in dealing with soil erosion and will continue to be a focus in dealing with soil erosion and will continue to be a focus to meet NR-151 standards. (Please see the enclosed forms for FPP Farm Visits, Compliance Certificates and Non-Compliance Certificates). Water Quality with an emphasis on groundwater will be addressed through well decommissioning efforts and surface water quality a function of animal waste (management) and Nutrient Management Planning. Additionally, Phosphorous Trading and Adaptive Management has been addressed for consideration in this plan. Forestry and Riparian Corridors are issues that when expanded, will result in economic development, environmental protection and wildlife benefits. Other priority items are social/development issues in the County. However, all priorities are focused on clean water and productive soil which will result in an environment that will support a strong agriculture community, recreational opportunities and economic development.

**\*PLEASE REFER TO APPENDIX B ON PAGE 82 FOR SUPPORTING MAP INFORMATION RELATED TO ITEMS IN THIS PLAN.**

**PRIORITY #1. SOIL EROSION**

Objectives	Actions	Who	When	Anticipated Annual Outcome
Control Erosion to "T"	Write conservation plans to "T" and revise Conservation Plans to "T"	LCD and NRCS	2016-2020	500-1,000 acres of cropland, Conservation Plans and Revisions
Maintenance and construction of grassed waterways, use of contour strips and contour farming	Write conservation plans using CSC and contour farming. Make cost share available for construction of grassed waterways	LCD, NRCS, and DATCP	2016-2020	200-300 acres of CSC, 200-300 acres of Contour Farming, 5 acres of New Waterways
Promote no-till, conservation tillage, and shorter rotations	Write conservation plans using no-till and conservation tillage with residue management and short rotations. Work with landowners, coops, and fertilizer and seed dealers to promote conservation	LCD, NRCS, FSA, DATCP, UW-EX	2016-2020	500-1,000 acres of Conservation Plans
Conduct the Transect Survey	Conduct County Survey bi-annually on a set number of points	LCD, NRCS, LCC, DATCP	2016-2020	Reduce the County soil loss, monitor tillage and cropping trends, Also, share survey data with DATCP
One-on-One Contacts (NR151 Inventory and Evaluation)	Meet with landowners to discuss erosion and water quality issues, methods to solve them and possible cost share opportunities	LCD, NRCS	2016-2020	5-10 Landowners will be contacted, (Priority Farm focus)
FPP Farm Visits and Annual Self Certification System	Continue to promote and service FPP/WLI participants. Writing and revising plans to "T"	LCD	2016-2020	Service the 600 participants, Do farm visits on 25% (est. 150) and conduct the annual self-certification process
Educational and Award Programs	Produce a LCD-NRCS-FSA bi-annual newsletter, LCC Conservation awards and mailings and displays.	LCD, FSA, NRCS, UW-EX	2016-2020	Bi-annual newsletter, Farmers Appreciation Day display LCC Award program
Maintain flood control structures	Engineering reviews and annual mowing of structures, rehabilitation and evaluation if needed	LCD, NRCS, DNR	2016-2020	11 PL-566 Structures
Promote Nutrient Management Planning	The NMP addresses soil loss and meeting "T", provide cost-share opportunities for NMP	LCD, UW-EX	2016-2020	Getting a NMP on 1,000-2,000 acres per year

ESTIMATED ANNUAL LCD COST \$60,000-\$80,000

ESTIMATED ANNUAL COST OTHER THAN STAFF \$110,000-\$160,000

**PRIORITY #2. GROUNDWATER**

Objectives	Actions	Who	When	Anticipated Annual Outcome
Assist and promote Iowa County Groundwater Study	Work with the Iowa County Planning and Development Office and UW-Extension in staff education, distribute data and information to landowners	UW-EX, Planning and Development, LCD	2016-2020	3 - Staff Education (LCD, NRCS, FSA), 5 - Landowner information sharing events. Also included in Farmers Appreciation Day display
Encourage proper decommissioning of unused wells	Use DATCP cost share funds to assist landowners with the expense of having the wells professionally filled	LCD, NRCS, UW-EX, DATCP	2016-2020	15-20 - Decommissioning of wells, 1 well decommissioning demonstrations
Educate and encourage landowners to the importance of well water tests and the protection of groundwater	Work with UW-Extension on an education effort and one-on-one visits	LCD, NRCS, UW-EX, DNR	2016-2020	1 - Newsletter articles/Annual Report, 1 - Display at Farmers Appreciation Day, 10 - One-on-one contacts with focus on priority farms
Promote a well sampling program	Provide information on well testing	LCD, NRCS, UW-EX, DNR	2016-2020	20 to 50 - Landowners have their wells tested
Continue to track well decommissioning projects	Offer LWRM cost share and develop and maintain a record keeping system based on a GIS layer	LCD, NRCS, DNR	2016-2020	10 to 15 - Decommissioning files on LWRM -Cost share and GIS layer of mapping
Work with municipalities on well protection issues.	Offer groundwater information for County study and network communities with DNR program	LCD, DNR, UW-EX	2016-2020	Distribution of information and data and distribution of "sample ordinances" to 1-2 communities
Prevent contaminants from entering the groundwater	Assist in the administration of the animal waste storage and the waste utilization ordinance	LCD, Planning and Development	2016-2020	2-4 permits issued
Promote the benefit of Nutrient Management Planning in groundwater protection	Educate farmers of NMP application	LCD, DNR, UW-EX, Planning and Development	2016-2020	Assist in the development of NMP's on 500-1,000 acres

ESTIMATED ANNUAL LCD COST \$60,000-\$80,000

ESTIMATED ANNUAL COST OTHER THAN STAFF \$40,000-\$50,000

**PRIORITY #3. ANIMAL WASTE MANAGEMENT**

Objectives	Actions	Who	When	Anticipated Annual Outcome
Assist in the enforcement of Iowa County Manure Storage Ordinance	Respond to new permit applications and complaints	LCD, Planning and Development, NRCS, DNR	2016-2020	1 to 3 - Storage structures built to standards
Encourage barnyard runoff control systems where feasible	Review feasibility, offer cost sharing and do technical designs	LCD, NRCS	2016-2020	1 to 3 – Install barnyard improvement practices built to standards for clean water diversions
Be proactive to reduce runoff events	Work with agencies and local radio stations (WDMP) to prevent runoff events and field visits to aid farmers of management	LCD, NRCS, DNR, D99point3	2016-2020	1 to 3 - Alerts and avoided events
Winter spreading management (possible ordinance)	Work with agencies and education of risk of winter spreading	LCD, DNR, DATCP, UWEX	2016-2020	1 - Meeting with agencies, 5-10 farm visits
Deal with Livestock Siting Issue (possible ordinance)	Assist the Iowa County Planning and Development Office in the investigation of a Siting Ordinance and provide technical assistance on animal units and odor items, etc.	LCD, UW-EX, Planning and Development, NRCS	2016-2020	1 to 2 – Meetings, 1 to 2 - Permit Reviews, 1-2 CAFO assistance sites

ESTIMATED ANNUAL LCD COST \$50,000-\$70,000

ESTIMATED ANNUAL COST OTHER THAN STAFF \$100,000-\$150,000

**PRIORITY #4. NUTRIENT MANAGEMENT**

Objectives	Actions	Who	When	Anticipated Annual Outcome
Increase acreage managed under a Nutrient Management Plan (NMP) to NRCS 590 Standard	Encourage use of SEG and EQIP cost share funds to develop NMP's, provide restriction maps, offer cost share, and maintain NMP files and assist in farmer training	UW-EX, LCD, NRCS, FSA, DATCP	2016-2020	1,000-2,000 acres of NMP
Prevent manure run-off incidents and accidents	Work with DATCP, DNR and local radio stations on spreading alerts as a public service announcement	LCD, DATCP, UW-EX, D99point3	2016-2020	1 to 3 - Alerts
Promote enforcement of the County's Nutrient Storage, Utilization and Abandonment Ordinances	Work with Iowa County Planning and Development Office with enforcement of ordinance and review technical items to assure the most standards	Planning and Development, LCD, NRCS, UW-EX	2016-2020	1 to 3 - Project reviews and technical assistance

ESTIMATED ANNUAL LCD COST \$50,000-\$70,000

ESTIMATED ANNUAL COST OTHER THAN STAFF \$20,000-\$40,000

**PRIORITY #5. FORESTRY**

Objectives	Actions	Who	When	Anticipated Annual Outcome
Encourage establishment of quality tree plantings	Assist forestry components in CRP and CREP conservation plans	LCD, NRCS, FSA, DNR	2016-2020	2 to 5 - Contracts
Establish sustainable harvesting practices and BMPs	Assist DNR foresters in the technical components of a harvest plan	LCD, DNR	2016-2020	2 to 5 - Plans
Planting of wildlife habitat areas	Assist landowners and federal agencies with incorporation of wildlife plants in CRP contracts	LCD, FSA, NRCS, DNR	2016-2020	2 to 5 - Plans
Control of terrestrial invasive species	Educate public on benefits and methods to control terrestrial invasives	LCD, NRCS, FSA, DNR	2016-2020	20 to 25 - Landowners assisted
Provide sound tree planting equipment	Work with DNR foresters to make available sound planting equipment	LCD, DNR	2016-2020	Provide and maintain 3 planters to up to 100 planters to have 200-250,000 trees planted

ESTIMATED ANNUAL LCD COST \$10,000-\$20,000

ESTIMATED ANNUAL COST OTHER THAN STAFF \$2,000-\$3,000

**PRIORITY #6. RIPARIAN CORRIDORS**

<b>Objectives</b>	<b>Actions</b>	<b>Who</b>	<b>When</b>	<b>Anticipated Annual Outcome</b>
Promote installation of grass filters and riparian buffers, esp. CREP	Write articles and conservation plans including buffer standards.	LCD, NRCS, FSA, DNR, MRPHA	2016-2020	1 to 2 Articles, 5 to 10 CREP plans
Notify landowners of CREP opportunities on all streams and 6 townships in Iowa County	Send information, do farm visits, and do newsletter articles on CREP and other cost share opportunities.	LCD, NRCS, FSA, DNR, MRPHA	2016-2020	1 to 2 - Direct mail newsletters, 2to 5 - Landowner visits
Establish stream buffers, crossing and fish habitat on County waters	Service CREP contracts. Offer LWRM cost share on rip rap and crossings. Work with Trout Unlimited on incorporation of fish habitats.	LCD, NRCS, DNR, TU, DATCP	2016-2020	2 to 3 - Projects through LWRM cost share, 1 to 2 - Projects with cooperation with TU
Inform landowners of other buffering opportunities	Offer LWRM fencing cost share to protect streams. Remind landowner of continuous CRP signup options.	LCD, NRCS, FSA	2016-2020	2 to 3 - Projects/Contracts

ESTIMATED ANNUAL LCD COST \$20,000-\$30,000

ESTIMATED ANNUAL COST OTHER THAN STAFF \$50,000-\$80,000

**PRIORITY #7. AGRICULTURAL PRODUCTIVITY**

<b>Objectives</b>	<b>Actions</b>	<b>Who</b>	<b>When</b>	<b>Anticipated Annual Outcome</b>
Keep soil in place and productive	Continue to work with farmers in meeting "T" through FPP, NR151 and NMP	LCD, NRCS, FSA, UW-EX	2016-2020	500-600 - Landowner conservation plans certified through FPP
Keep water clean	Assist landowners in land management through BMPs i.e. no-till, min-till, grassed waterways	LCD, NRCS, FSA	2016-2020	20 to 30 - Conservation plans updated, 4 to 10 ac. of grassed waterways
Offer Wildlife Damage assistance	Work with USDA-APHIS and DNR on crop loss issues and also assist in venison donation	LCD, USDA-APHIS, DNR	2016-2020	20 to 30 - Landowners assisted

ESTIMATED ANNUAL LCD COST \$10,000-\$15,000

ESTIMATED ANNUAL COST OTHER THAN STAFF \$30,000-\$40,000

**PRIORITY #8. RURAL LAND USE ISSUES/CONFLICTS**

Objectives	Actions	Who	When	Anticipated Annual Outcome
Assist in farm and non-farm issues to reduce conflicts	Distribute "Partners in Rural Wisconsin" publication	LCD, Townships, Planning and Development, Banks, Realtors	2016-2020	Distribution of 50-100 booklets
Application of County's Smart Growth plan and Farmland Preservation plan	Work and consult on land use issue in County	LCD, Townships, Planning and Development	2016-2020	1 to 2 - Meetings

ESTIMATED ANNUAL LCD COST \$5,000

ESTIMATED ANNUAL COST OTHER THAN STAFF \$1,000

**PRIORITY #9. AGRICULTURAL SUSTAINABILITY**

Objectives	Actions	Who	When	Anticipated Annual Outcome
Promote grazing opportunities	Offer paddock and watering design	LCD, NRCS, UW-EX	2016-2020	2 to 3 - Conversion to grass base ag
Feed what is grown, grow what is fed	Promote crop rotation and animal ag	LCD, NRCS	2016-2020	2 to 3 - Farm change overs
Keep soil productive	Promote low-till, NMP, and rotations to lower impact ag activities	LCD, NRCS	2016-2020	8 to 10 - Conservation Plans revised
Track ag activities and land use changes	Document ag statistics by year	LCD, NRCS, FSA, DATCP	2016-2020	1 - Review (survey) of DATCP statistics
Partner on grazing opportunities	Promote and provide capacity for Grazing Broker Effort	LCD, NRCS, DATCP, SW Badger RC &D	2016-2020	Develop grazing & farm plans on 5 to 6 farms and 100-400 cattle on grass

ESTIMATED ANNUAL LCD COST \$10,000

ESTIMATED ANNUAL COST OTHER THAN STAFF \$10,000

**PRIORITY #10. LOSS OF AGRICULTURAL LANDS**

<b>Objectives</b>	<b>Actions</b>	<b>Who</b>	<b>When</b>	<b>Anticipated Annual Outcome</b>
Inventory Iowa County cropland and track ag use	Review DATCP ag statistics report.	LCD, NRCS, FSA, Planning and Development	2016-2020	Annual review and report of inventory
Keep ag as a land use activity	Work with Iowa County Planning and Development Office on Comprehensive Plans (Smart Growth), especially the ag component and the Farmland Preservation plan	LCD, NRCS, Planning and Development	2016-2020	1 to 2 Meetings
Keep animal ag in the County	Work with Iowa County Planning and Development Office on the Ag Siting Issue	LCD, Planning and Development	2016-2020	1 to 2 Meetings and possible ordinance and education issues and requirements
Keep good soil in productive ag use	Work with planners, Iowa County Planning and Development Office, and townships in review of development plots.	LCD, Planning and Development, Townships	2016-2020	1 to 2 Meetings
Positive Landowner/Renter relations	Work with landowners and renters on land management/land use activities.	LCD, NRCS	2016-2020	8 to 10 Jointly developed conservation and NMP plans

ESTIMATED ANNUAL LCD COST \$5,000

ESTIMATED ANNUAL COST OTHER THAN STAFF \$5,000

**ADDITIONAL EFFORTS. EDUCATION AND OUTREACH**

<b>Objectives</b>	<b>Actions</b>	<b>Who</b>	<b>When</b>	<b>Anticipated Annual Outcome</b>
Improve understanding of resource management	Do public education events	LCD, NRCS, UW-EX	2016-2020	Educate
Modernize information sharing	Integrate technology in education efforts	LCD, NRCS, UW-EX, Planning and Development	2016-2020	Improve accessibility through technology to resource education

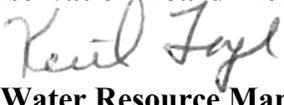
**ADDITIONAL EFFORTS. CONCERN FOR LARGE FARMS**

<b>Objectives</b>	<b>Actions</b>	<b>Who</b>	<b>When</b>	<b>Anticipated Annual Outcome</b>
Appreciate growing operations	Monitor the trend in farm sizes	LCD, NRCS, DATCP, UW-EX	2016-2020	Learn about changing farmer customer needs
Meet water and soil resource management issues	Match staffing and training to customer needs	LCD, NRCS, DATCP, UW-EX	2016-2020	Meet the resource management needs of larger crop and Ag operations
Garner cost-share funds to meet needs	Work with State agencies on cost-share grant management	LCD, NRCS, DATCP	2016-2020	Survey needs and apply grant funds where needed
Anticipate and appreciate social issues related to larger operations	Assist the County Planning and Development Office to mediate potential issues	LCD, NRCS, Planning and Development	2016-2020	Help the different social and land use interests, share County resources and area

**CORRESPONDENCE/MEMORANDUM** \_\_\_\_\_ **State of Wisconsin**

**DATE:** November 13, 2015

**TO:** Land and Water Conservation Board Members and Advisors

**FROM:** Keith Foye, DATCP   
Bureau of Land and Water Resource Management

**SUBJECT:** Recommendation for Approval of the *Rusk County Land and Water Resource Management Plan*

**Action Requested:** This is an action item. The department has determined that the *Rusk County Land and Water Resource Management Plan* meets ATCP 50 requirements and requests that the LWCB make a recommendation regarding approval of the plan consistent with the Board's criteria and guidance, including any recommendation regarding any conditions in the final order approving the plan.

**Summary:** The plan is written as a 10 year plan, and addresses one or more of the criteria demonstrating intent for a 10 year plan. If approved, the plan would remain in effect through December 31, 2025, and would be subject to a five year review prior to December 31, 2020.

DATCP staff reviewed the plan using the checklist and finds that the plan complies with all the requirements of section 92.10, Wisconsin Statutes, and Chapter ATCP 50, Wisconsin Administrative Code.

To qualify for 10 year approval of its plan, Rusk County must satisfy the Board that the plan has met the additional criteria in the Board's guidance.

Rusk County held a public hearing on October 12, 2015, as part of its public input and review process. The Rusk County Land and Water Conservation Committee will present the LWRM plan for County Board approval after receiving a recommendation for approval from the LWCB.

**Materials Provided:**

- LWRM Plan Review Checklist
- *Rusk County Land and Water Resource Management Plan* Summary, including workplan and budget

**Presenters:** John Krell, Rusk County Conservationist



Wisconsin Dept. of Agriculture, Trade and Consumer Protection  
 Agricultural Resource Management Division  
 2811 Agriculture Drive, PO Box 8911  
 Madison WI 53708-8911  
 Phone: (608) 224-4608

## Land and Water Resource Management (LWRM)

### LWRM Plan Review Checklist

Sec. 92.10, Stats. & sec. ATCP 50.12, Wis. Adm. Code

County: Rusk

Date Plan Submitted for Review: 10/15/15

I. ADVISORY COMMITTEE	Yes	No	Page
1. Did the county convene a local advisory committee that included a broad spectrum of public interests and perspectives (such as affected landowners, partner organizations, government officials, educational institutions)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Appendix
II. PUBLIC PARTICIPATION AND COUNTY BOARD APPROVAL			Date(s)
1. Provide the dates that the local advisory committee met to discuss the development of the LWRM plan and the county plan of work.			10/12/15
2. Provide the date the county held a public hearing on the LWRM plan. <sup>1</sup>			10/12/15
3. Provide the date of county board approval of the plan, or the date the county board is expected to approve the plan after the LWCB makes its recommendation. <sup>2</sup>			December
III. RESOURCE ASSESSMENT AND WATER QUALITY OBJECTIVES	Yes	No	Page
1. Does the plan include the following information as part of a county-wide resource assessment:			
a. Soil erosion conditions in the county <sup>3</sup> , including:			
i. an estimate of the soil erosion rates for the whole county and for local areas where erosion rates are especially high	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19
ii. identification of key soil erosion problem areas in the county	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See note
b. Water quality conditions of watersheds in the county <sup>3</sup> , including:			
i. location of watershed areas, showing their geographic boundaries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13

<sup>1</sup> Appropriate notice must be provided for the required public hearing. The public hearing notice serves to notify landowners and land users of the results of any determinations concerning soil erosion rates and nonpoint source water pollution, and provides an opportunity for landowners and land users input on the county's plan. Individual notice to landowners is required if the landowners are referenced directly in the LWRM plan. DATCP may request verification that appropriate notice was provided.

<sup>2</sup> The county board may approve the county LWRM plan after the department approves the plan. The plan approved by the county board must be the same plan approved by the department. If the department requires changes to a plan previously approved by the county board, the department's approval does not take effect until the county board approves the modified plan.

<sup>3</sup> Counties should support their analysis of soil and water conditions by referencing relevant land use and natural resource information, including the distribution of major soil types and surface topographic features, and land use categories and their distribution. Sec. ATCP 50.12(3)(b) requires that a county assemble relevant data, including relevant land use, natural resource, water quality and soil data.

- ii. identification of the causes and sources of the water quality impairments and pollutant sources   15-16 chap 3
- iii. identification of key water quality problem areas in the county   Chap 3

2. Does the LWRM plan address objectives by including the following:

- a. specific water quality objectives identified for each watershed based upon the resource assessment   Chap 3
- b. pollutant load reduction targets for the watersheds, if available   Chap 3

- 3. Does the plan or related documentation reflect that the county consulted with DNR<sup>4</sup> to provide water quality assessments, if available; to identify key water quality problem areas; to determine water quality objectives; and to identify pollutant load reduction targets, if any.   Plan Sum.

Other comments: Rusk County will be working with DATCP on entering survey points and start a new SnapPlus15 database.

IV. PLAN IMPLEMENTATION	Yes	No	Page
1. Does the LWRM plan include the following implementation strategies:			
a. A voluntary implementation strategy to encourage farm conservation practices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	42
b. State and local regulations used to implement the plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chap 7
c. Compliance procedures that apply for failure to implement the conservation practices in ATCP 50, ch. NR 151 and related local regulations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	43
d. Relevant conservation practices to achieve compliance with performance standards and prohibitions and to address key water quality and erosion problems	<input checked="" type="checkbox"/>	<input type="checkbox"/>	44
e. Strategy to monitor the compliance of participants in the farmland preservation program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	see note
2. Does the LWRM plan (or accompanying work plan) estimate cost-sharing and other financial assistance, and technical assistance needed for plan implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chap.9
3. Does the LWRM plan describe a priority farm strategy designed to make reasonable progress in implementing state performance standards and conservation practices on farms appropriately classified as a priority?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	42

<sup>4</sup> While requirements for DNR consultation may be satisfied by including relevant DNR representatives on the advisory committee, counties may also need to interact with DNR staff in central or regional offices to meet all of the consultation requirements. DNR may point counties to other resources to obtain information including consultants who can calculate pollutant load reduction targets.

4. Was DNR consulted about the county’s plan for NR 151 implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	42-43 appen dix
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Other comments: 1.e. FPP has only 5 participants in Rusk Co. those 5 will be checked for compliance as noted in workplan.

V. OUTREACH AND PARTNERING	Yes	No	Page
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1. Does the LWRM plan describe a strategy to provide information and education on soil and water resource management, conservation practices and available cost-share funding, including an estimate of the amount of I& E needed for plan implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chap.9
2. Does the LWRM plan describe coordination activities with local, state and federal agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chap 7

Other comments:

VI. WORK PLANNING AND PROGRESS MONITORING	Yes	No	Page
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1. Does the county’s work plan do all of the following:			
a. Cover more than one year	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chap.9
b. Identify priorities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
c. Provide measurable annual and multi-year performance benchmarks (for at least all high priority items)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
2. Does the LWRM plan describe a strategy and framework for monitoring county progress implementing its plan including methodology to track and measure progress in meeting performance benchmarks and plan objectives?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chap.8

Other comments:

VII. EPA SECTION 319 CONSIDERATIONS
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1. DOES THIS PLAN INCLUDE ELEMENTS CONSISTENT WITH THE MINIMUM 9 KEY ELEMENTS FOR EPA APPROVAL UNDER SECTION 319 OF THE CLEAN WATER ACT: \_\_\_\_\_
2. IF THE ANSWER TO 1 IS “YES,” WHAT IS THE STATUS OF EPA’S REVIEW OF THE PLAN:  
 NOT SUBMITTED \_\_\_\_\_ SUBMITTED BUT NOT APPROVED \_\_\_\_\_ APPROVED \_\_\_\_\_

**STAFF RECOMMENDATION**

Staff has reviewed the above-referenced county LWRM plan based on the criteria required in s. ATCP 50.12, Wis. Admin. Code, and s. 92.10, Stats., and has determined that the plan meets the criteria for DATCP approval

of this plan. This checklist review is prepared to enable the LWCB to make recommendations regarding plan approval, and for DATCP to make its final decision regarding plan approval.

Staff Signature: Lisa K. Trumble

Date: 11/5/2015

*Rusk County*  
Land and Water Resource Management Plan  
January 2016



**Land & Water Conservation Committee**

Arian Knops – Chair  
Lyle Lieffring – Vice Chair  
Jerry Biller  
Robert Nawrocki  
Roger Gierke  
James Kelley – FSA Representative

**County Conservationist**

John J. Krell

## *Plan summary*

The Rusk County Land and Water Resource Management Plan is a ten year plan that provides direction to natural resources managers of all levels for the protection and improvement of our natural resources.

In 1997, Wisconsin Act 27 and in 1999, Wisconsin Act 9 amended Chapter 92 of the Wisconsin Statutes, requiring counties to develop Land and Water Resource Management Plans. The intent of this is to foster and support a locally led process that improves decision-making, streamlines administrative and delivery mechanisms and better utilizes local, state, and federal funds to protect Wisconsin's land and water resources. The purpose of the Rusk County Land and Water Resource Management Plan is to:

- Identify and prioritize natural resources issues and concerns for Rusk County.
- Develop a coordinated effort to resolve these issues and concerns.
- Determine the roles of agencies in implementing the plan.
- Develop strategies, goals, objectives, and outcomes for program years 2016-2020.
- Service funding for the protection and improvement of the natural resource base in Rusk County.

The implementation of this plan is dependent upon having available staff hours to assist landowners in meeting the agricultural performance standards and prohibitions, monitoring, compliance and delivering technical assistance. The Rusk County Land and Water Resource Management Plan will make every attempt to accomplish the goals set forth through a coordinated effort aimed at improving program effectiveness at all levels of government.

## ***Chapter 1: Introduction***

### **Background**

The purpose of this plan is to identify and prioritize natural resource issues of concern and to develop strategies to address concerns.

The Rusk County Land & Water Resource Management Plan was first developed in 2001. Its purpose was to guide citizens, county, state and federal agencies in their efforts to conserve and protect natural resources while supporting sustainable economic and recreational use of these resources. Subsequent revisions continue to carry that purpose.

Goals and objectives in the plan will help guide county resource conservation and protection work in Rusk County through 2020. The plan will also provide the basis for seeking funding from various private, local, state and federal sources to conduct resource assessment, conservation and protection efforts in Rusk County.

1997 Wisconsin Act 27 and 1999 Wisconsin Act 9 (the 2000-2001 Budget Bill), amended Chapter 92 of the Wisconsin Statutes, requiring counties to develop Land and Water Resource Management Plans. The intent of this change is to foster and support a locally led process that improves decision-making, streamlines administrative delivery mechanisms, and better utilizes local, state, and federal funds to protect Wisconsin's land and water resources.

### **Plan Development and Citizen Participation**

The focus of plan development is to identify and prioritize natural resource issues of concern and to develop strategies to address these concerns. A public and landowner survey gathered information to guide development of the plan.

The local advisory committee work group met on October 12, 2015. This group looked at a planning range of five to ten years while reviewing the draft Plan and expressing their resource concerns.

A draft of the plan was presented to the Rusk County Land and Water Conservation Committee on October 13, 2015. The draft was also submitted to the DATCP and DNR state office liaisons for suggestions. The Plan was sent to the Wisconsin LWCB and will be reviewed by the LWCB at their December 1, 2015 meeting.

The public hearing was held October 12, 2015. The Plan was approved by the Rusk County LWCC on October 13, 2015. DATCP approved the Plan on \_\_\_\_\_. The Plan will be presented to the Rusk County Board of Supervisors for approval at their December, 2015 meeting.

### **Related Resource Management Plans**

Several resource management plans have been previously developed that have a relationship to this plan. Data from these plans was reviewed in the preparation of the Rusk County Land and Water Resource Management Plan.

These include:

- Rusk County Land and Water Resource Management Plan (2007)
- Rusk County Land and Water Resource Management Plan (2000)
- Rusk County Farmland Preservation Plan (1982)
- Rusk county Comprehensive Land Use Plan (2009)
- Soil Erosion Control Plan (2000)

The following pages outline the resource goals, objectives, and actions the Land & Water Conservation Committee plan to address within the next ten years. All high priority activities are highlighted in bold and shaded. **Goal #1**

Objectives	Actions	Who (Lead agency first)	When	Staff & other costs (LCD costs only)	Anticipated annual outcomes	I & E tools
<b>Reduce sediment delivery and phosphorus delivery.</b>	<b>Conduct county-wide transect survey</b>	LWCD	Annually	100 staff hours (\$4,000)	Transect survey completed [identifies erosion hot spots; can indicate year-to-year variations in erosion hot spot locations and amounts]	LWCD Website
	<b>Inventory FPP participant farms for conservation compliance</b>	LWCD	Annually	150 staff hours (\$6,000)	10 farms certified in compliance	LWCD Website, UWEX
	<b>Write conservation plans to “T”</b>	LWCD, NRCS	Annually	150 staff hours (\$6,000)	10 conservation plans written	LWCD Website, UWEX
	Install agricultural BMPs to reduce soil erosion as identified	LWCD, NRCS, DNR, DATCP	Annually	400 staff hours (\$16,000) \$60,000 cost-share	100% of cost-share funding available is spent in the county	LWCD Website, NRCS standards
	Conduct farmer training nutrient management workshops	LWCD, DATCP, UWEX	Annually	50 staff hours (\$2,000)	10 farmers trained to write their own NM plans	LWCD Website, UWEX
	<b>Write nutrient management plans</b>	LWCD, NRCS	Annually	100 staff hours (\$4,000) \$20,000 cost-share	NM plans written for 800 acres annually	LWCD, UWEX
	Encourage CRP/CREP enrollment of sensitive lands	LWCD, NRCS, FSA, UWEX	Annually	10 staff hours (\$400)	100 acres enrolled in CRP	LWCD Website
	Promote conservation practices that reduce sediment delivery to surface waters	LWCD, NRCS	Annually	40 staff hours (\$1,600)	5 farmers convert to no-till; 5,000 new acres of residue management, 1,000 new acres under cover crop	LWCD Website, NRCS, UWEX

<b>Goal #2</b>						
<b>Improve surface water quality by implementing erosion control and other stormwater management standards and practices</b>						
<b>Objectives</b>	<b>Actions</b>	<b>Who (Lead agency first)</b>	<b>When</b>	<b>Staff &amp; other costs (LCD costs only)</b>	<b>Anticipated annual outcomes</b>	<b>I &amp; E tools</b>
Ensure erosion control and stormwater management standards are met	Implement stormwater and erosion control management into Rusk County ordinances	LWCD, Zoning	Annually	500 staff hours (\$20,000)	Review plat plans, issue erosion control permits and conduct inspections	LWCD Website
	Conduct workshops on stormwater management	LWCD, County Highway Department	Annually	75 staff hours (\$3,000)	Hold a workshop for construction contractors and other interested parties	LWCD Website, DNR website, Transportation department website
	Coordinate activities with MS4s	LWCD, City and Village water utilities	Annually	75 staff hours (\$3,000)	Hold yearly MS4 meetings to improve county wide coordination	LWCD, Partner websites
	Integrate GIS tracking of permitted sites	LWCD, LIO	Annually	250 hours (\$10,000)	Erosion control permits are geolocated to facilitate inspection	LWCD Website
Encourage practices that treat stormwater as an asset	Encourage rain gardens, native plantings, and constructed wetlands into site landscaping plans.	LWCD, UWEX, DNR	Annually	100 hours (\$4,000)	Hold annual workshop with master gardeners, landscaping companies etc., on rain barrels, rain gardens, and constructed wetlands.	LWCD Website

<b>Goal #3</b>						
<b>Conserve and protect productive agricultural lands</b>						
<b>Objectives</b>	<b>Actions</b>	<b>Who (Lead agency first)</b>	<b>When</b>	<b>Staff &amp; other costs (LCD costs only)</b>	<b>Anticipated annual outcomes</b>	<b>I &amp; E tools</b>
<b>Preserve productive farmland</b>	<b>Update the Rusk County Farmland Preservation Program (FPP) plan</b>	<b>LWCD, Zoning, UWEX, DATCP</b>	<b>2016-2017</b>	<b>200 staff hours (\$8,000)</b>	<b>FPP plan updated</b>	LWCD Website, UWEX website, DATCP website
	Pursue Agricultural Enterprise Area (AEA) designation on prime farmlands in the county	LWCD, Zoning, UWEX, DATCP	2016-2017	40 staff hours (\$1,600)	One AEA designated	
	<b>Monitor compliance on 25% of FPP participants</b>	<b>LWCD, UWEX, NRCS</b>	<b>Annually</b>	<b>100 staff hours (\$4,00)</b>	<b>Compliance monitoring completed on 25% of FPP participants</b>	
Enroll highly erodible lands into CREP/CRP	Encourage CRP/CREP enrollment of sensitive lands	LWCD, NRCS, FSA, UWEX	Annually	10 staff hours (\$400)	Erodible lands enrolled in CRP	LWCD Website

<b>Goal #4: Protect groundwater quality and quantity</b>						
<b>Objectives</b>	<b>Actions</b>	<b>Who (Lead agency first)</b>	<b>When</b>	<b>Staff &amp; other costs (LCD costs only)</b>	<b>Anticipated annual outcomes</b>	<b>I &amp; E tools</b>
Seal/protect direct conduits to groundwater to prevent contamination	Conduct well decommissioning field day	UWEX, LWCD, NRCS	Annually	50 staff hours \$2,000	Field day attended by 10 landowners	LWCD Website Announcements in local papers
	Decommission wells as identified	LWCD, NRCS	Annually	50 staff hours \$2,000 \$5,000 cost-share	3 wells decommissioned	LWCD Website
Identify and protect springs in Rusk County	Identify & map springs in Rusk County	LWCD, WGNHS, USGS,	Annually	50 staff hours \$2,000	Springs are identified and voluntarily protected	LWCD Website, WGNHS, USGS
	Inform landowners about detrimental effects of grazing, tiling, cropping, spraying, drainage, and building ponds on springs and groundwater			50 staff hours \$2,000		
	Encourage preservation of spring recharge areas during the plan review process			Included in plan review process		
	Encourage use of buffers to protect springs			Included in plan review process		

Goal #5 Administer ordinances under LWCD jurisdiction and permits issued by LWCD						
Objectives	Actions	Who (Lead agency first)	When	Staff & other costs (LCD costs only)	Anticipated annual outcomes	I & E tools
Administer the county animal waste storage and nutrient management ordinance	Educate landowners about the Animal Waste Prohibitions	LWCD, UWEX, NRCS	Annually	100 staff hours \$4,000	Host 1 open meeting with interesting landowners on Animal Waste Prohibitions	LWCD Website, NRCS, DNR website, UWEX website
	Conduct spot checks of nutrient management plans	LWCD	Annually	100 staff hours \$4,000	5 nutrient management plans inspected	LWCD Website, NRCS, DNR website, UWEX website
	Issue manure storage permits	LWCD	Annually	50 staff hours \$2,000	1 new storage facilities permitted; 1 facility properly abandoned	LWCD Website
Assist in administering non-metallic mining ordinance	Assist in issue non-metallic mining permit as required	LWCD, Zoning	Annually	50 staff hours \$2,000	Permit application meets requirements of non-metallic mining ordinance	LWCD Website, Annual mailing to permit holders
	Verify mine reclamation plan is compliant				All existing non-metallic mines are visited	
Provide technical assistance to Zoning Administrator for potential livestock facility siting ordinance	Ensure permit application complies with technical requirements of local ordinance	Zoning, LWCD, DATCP	Annually	100 staff hours \$4,000	1 new facilities permitted	Zoning website, LWCD Website, DATCP

<b>Goal #6</b>						
<b>Maintain, protect and improve Rusk County surface water resources</b>						
<b>Objectives</b>	<b>Actions</b>	<b>Who (Lead agency first)</b>	<b>When</b>	<b>Staff &amp; other costs (LCD costs only)</b>	<b>Anticipated annual outcomes</b>	<b>I &amp; E tools</b>
Work with landowners and agencies to minimize soil erosion and protect water quality.	Maintain and evaluate shoreland buffers and shoreland restoration	LWCD, Lakes association, DNR	Annually	100 staff hours (\$4,000)	Monitor 2 restoration sites each year for compliance to county operation and maintenance contracts, effectiveness in erosion protection, and recovery of near shore wildlife habitat.	LWCD Website
	Provide technical assistance and cost-share funding for shoreland restoration, erosion control, and near shore habitat recovery	LWCD, Lakes association, DNR	Annually	150 staff hours (\$6,000)	Install 2 shoreline protection BMPs to reduce erosion and improve near-shore habitat recovery	LWCD Website
	Prioritize project sites with significant erosion impacts.	LWCD, Lakes association, DNR	Annually	100 staff hours (\$4,000)	Partner with individuals, municipalities, and lake organizations to investigate / identify 3 culverts or ditches annually that may allow sediment to travel to adjacent waterways.	LWCD Website
Protect aquatic ecosystems from non-native invasive species.	Disseminate information about terrestrial invasive species ID, prevention, management, and control	LWCD, UWEX, DNR	Annually	100 staff hours (\$4,000)	Host presentation/workshop about aquatic invasive species ID, prevention, management, and control.	LWCD Website, UWEX, DNR
	Train citizens and volunteer groups to identify aquatic and terrestrial invasive species.	LWCD, UWEX, DNR	Annually	50 staff hours (\$2,000)	Coordinate 1 annual program to train individuals.	LWCD Website, UWEX, DNR

<b>Goal #7</b>						
<b>Establishment of point/nonpoint nutrient trading program</b>						
<b>Objectives</b>	<b>Actions</b>	<b>Who (Lead agency first)</b>	<b>When</b>	<b>Staff &amp; other costs (LCD costs only)</b>	<b>Anticipated annual outcomes</b>	<b>I &amp; E tools</b>
<b>Establish local trading workgroup and begin pilot nutrient trading program</b>	<b>Host meetings among prospective trading partners</b>	LWCD, DNR, Farm Bureau	Annually	100 staff hours (\$4,000)	2 meetings among potential trading partners. Potential win-win outcomes identified.	LWCD Website, DNR, Newspaper articles
	Coordinate between potential trading partners and DNR/EPA to establish parameters for verifiable reductions	LWCD, DNR, Farm Bureau	Annually	100 staff hours (\$4,000)	Partner agencies determine how to verify pollutant reductions.	LWCD Website, DNR, Newspaper articles
	Select pilot projects for nutrient trading	LWCD, DNR, Farm Bureau	Annually	50 staff hours (\$2,000)	Primary and backup sites selected for pilot project.	LWCD Website, DNR
	Install monitors and BMPs to verify pollutant reductions	LWCD, DNR, Farm Bureau	Annually	125 staff hours (\$5,000) \$5000 cost-share	Monitoring site installed and monitoring begun prior to BMP installation	LWCD Website, DNR, Newspaper articles
	Review trading pilot and assess program continuation	LWCD, DNR, Farm Bureau	Annually	75 staff hours (\$3,000)	Final report completed, with estimated pollutant reductions identified.	LWCD Website, DNR

<b>Goal #8</b>						
<b>Demonstrate program effectiveness</b>						
<b>Objectives</b>	<b>Actions</b>	<b>Who (Lead agency first)</b>	<b>When</b>	<b>Staff &amp; other costs (LCD costs only)</b>	<b>Anticipated annual outcomes</b>	<b>I &amp; E tools</b>
<b>Monitor county-wide erosion potential</b>	<b>Conduct county-wide transect survey</b>	<b>LWCD</b>	<b>Annually</b>	<b>Included under Goal 1, Objective 1, Action 1</b>	<b>Transect survey completed [identifies erosion hot spots; can indicate year-to-year variations in erosion hot spot locations and amounts]</b>	<b>Publish results on LWCD Website</b>
Assess water quality	Support citizen-based monitoring	LWCD, Citizen Monitors, Local TU chapter	Annually	125 staff hours (\$5,000)	Better informed citizens	LWCD Website, local TU chapter Newspaper article
	Install county monitoring equipment priority streams	LWCD, High School Biology class	Annually	225 staff hours (\$9,000) \$2000 (equipment)	Continuous water quality information on priority streams	LWCD Website, High school demonstrations
Inform County Board and citizens of LWCD progress	Report to County Board	LWCD	Annually	25 hours (\$1,000)	Support for department's programs	LWCD website, Newspaper article
Inform DATCP of progress	DATCP report	LWCD	Annually	25 hours (\$1,000)	Support for department's programs	LWCD website, Annual report

<b>Goal #9</b>						
<b>Spend local and state cost-share and staffing dollars effectively</b>						
<b>Objectives</b>	<b>Actions</b>	<b>Who (Lead agency in bold)</b>	<b>When</b>	<b>Staff &amp; other costs (LCD costs only)</b>	<b>Anticipated annual outcomes</b>	<b>I &amp; E tools</b>
Prioritize cost-share dollars for high-return practices	Calculate practice effectiveness prior to offering cost-share	LWCD	Annually	250 staff hours (\$10,000)	Cost-share is spent to maximize soil and water quality improvements	LWCD Website
<b>Use LWRM plan as tool to acquire additional cost-share and staffing dollars from other sources</b>	<b>Apply for additional grants based on LWRM plan priorities and proven accomplishments.</b>	<b>LWCD</b>	<b>Annually</b>	<b>1,000 staff hours (\$40,000)</b>	<b>Grants are to help further attain the LWCD's goals.</b>	<b>LWCD Website</b>
Maintain appropriate records	Monitor contracts to ensure practices are maintained appropriately for the life of the contract.	LWCD, NRCS	Annually	250 hours (\$10,000)	Contracts requiring a practice to be sustained for 10 years are still effectively sustained after 10 years.	LWCD Website, DATCP, NRCS

<b>Goal #10</b>						
<b>Improve forest management on private lands</b>						
<b>Objectives</b>	<b>Actions</b>	<b>Who (Lead agency in bold)</b>	<b>When</b>	<b>Staff &amp; other costs (LCD costs only)</b>	<b>Anticipated annual outcomes</b>	<b>I &amp; E tools</b>
Provide technical assistance for forestry BMPs	Evaluate & correct erosion, stability, and location problems on existing forest roads, recreational trails, landings, and crossings	Forestry, <b>LWCD</b> NRCS	Annually	25 staff hours (\$1,600)	1 forest roads located to reduce erosion; 1 landing re-sited to less environmentally-sensitive area	LWCD Website, Forestry Website
Inform public of resources available for forest management	Educate farmers about forest management during farm visits	Forestry, <b>LWCD</b> , NRCS	Annually	50 staff hours (\$1,6000)	MFL plans developed	LWCD website, Forestry website
<b>Provide tools for woodland management</b>	<b>Provide tree planter to landowners</b>	<b>LWCD, DNR, Forestry</b>	<b>Annually</b>	<b>Maintain planter (\$300)</b>	<b>Rent planter to 5 people</b>	<b>LWCD website, Ladysmith News</b>
	<b>Conduct tree &amp; shrub sale</b>	<b>LWCD, DNR, NRCS</b>	<b>Annually</b>	<b>100 staff hours (\$4,000)</b>	<b>Sell 5,000 trees</b>	<b>LWCD Website, Ladysmith News</b>
Provide support for wildlife- related programs	Administer Wildlife Damage Abatement Claims Program	<b>LWCD, DNR, WDATCP</b>	Annually	50 staff hours (\$1,6000)	25 program participants	LWCD Website, FSA newsletter, DNR bulletin
	Administer deer donation program	<b>Deer donors, LWCD, local meat processors</b>	Annually	25 staff hours (\$1,600)	5,000 pounds venison distributed	LWCD Website, Hunters for the Hungry

**ANNUAL RUSK COUNTY WORK PLAN**

SUMMARY OF ESTIMATED ANNUAL COSTS TO ACCOMPLISH GOALS IN WORK PLAN			
GOAL	ESTIMATED STAFF HOURS	ESTIMATED SALARY & FRINGE	ESTIMATED COST-SHARE
1 – Protect and improve the quality of surface water resources	1,000	\$40,000	
2 – Improve surface water quality by implementing erosion control and other stormwater management standards and practices	1,000	\$40,000	
3 – Conserve and protect productive agricultural lands	350	\$14,000	
4 – Protect groundwater quality and quantity	200	\$8,000	
5 – Administer ordinances under LWCD jurisdiction and permits issued by LWCD	400	\$16,000	
6 – Maintain, protect and improve Rusk County surface water resources	500	\$20,000	
7 – Establishment of point/nonpoint nutrient trading program in Rusk County	450	\$18,000	
8 – Demonstrate program effectiveness	400	\$16,000	
9 – Spend local & state cost-share & staffing dollars effectively	1,500	\$60,000	
10 – Improve forest management on private lands	250	\$10,000	
• Soil and Water Resource Management Grant – Staff and Support			\$110,000
• Land and Water Resource Management Implementation Grant – (Bond Funding)			\$60,000
• Land and Water Resource Management Implementation Grant – (SEG Funding)			\$20,000
• WDNR Targeted Resource Management Grant – Small-scale projects			\$50,000
❖ Estimated total annual cost to accomplish goals in plan	<b>6,050 hours</b>	<b>\$242,000</b>	<b>\$240,000</b>

**CORRESPONDENCE/MEMORANDUM** \_\_\_\_\_ **State of Wisconsin**

**DATE:** November 12, 2015

**TO:** Land and Water Conservation Board Members and Advisors

**FROM:** Keith Foye, DATCP   
Bureau of Land and Water Resource Management

**SUBJECT:** Recommendation for Approval of the *Adams County Land and Water Resource Management Plan*

**Action Requested:** This is an action item. The department has determined that the *Adams County Land and Water Resource Management Plan* meets ATCP 50 requirements and requests that the LWCB make a recommendation regarding approval of the plan consistent with the Board's criteria and guidance, including any recommendation regarding any conditions in the final order approving the plan.

**Summary:** The plan is written as a 10 year plan, and addresses one or more of the criteria demonstrating intent for a 10 year plan. If approved, the plan would remain in effect through December 31, 2025, and would be subject to a five year review prior to December 31, 2020.

DATCP staff reviewed the plan using the checklist and finds that the plan complies with all the requirements of section 92.10, Wisconsin Statutes, and Chapter ATCP 50, Wisconsin Administrative Code.

To qualify for 10 year approval of its plan, Adams County must satisfy the Board that the plan has met the additional criteria in the Board's guidance.

Adams County held a public hearing on June 25, 2015, as part of its public input and review process. The Adams County Land and Water Conservation Committee will present the LWRM plan for County Board approval after receiving a recommendation for approval from the LWCB.

**Materials Provided:**

- LWRM Plan Review Checklist
- *Adams County Land and Water Resource Management Plan* Summary, including workplan and budget

**Presenters:** Wally Sedlar, Adams County Conservationist  
Fred Heider, North Central WI Regional Planning Commission



Wisconsin Dept. of Agriculture, Trade and Consumer Protection  
 Agricultural Resource Management Division  
 2811 Agriculture Drive, PO Box 8911  
 Madison WI 53708-8911  
 Phone: (608) 224-4608

## Land and Water Resource Management (LWRM)

### LWRM Plan Review Checklist

Sec. 92.10, Stats. & sec. ATCP 50.12, Wis. Adm. Code

County: Adams

Date Plan Submitted for Review: November 9, 2015

I. ADVISORY COMMITTEE	Yes	No	Page
1. Did the county convene a local advisory committee that included a broad spectrum of public interests and perspectives (such as affected landowners, partner organizations, government officials, educational institutions)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 7-12
II. PUBLIC PARTICIPATION AND COUNTY BOARD APPROVAL			Date(s)
1. Provide the dates that the local advisory committee met to discuss the development of the LWRM plan and the county plan of work.			12/10/14; 5/6/15
2. Provide the date the county held a public hearing on the LWRM plan. <sup>1</sup>			6/25/15
3. Provide the date of county board approval of the plan, or the date the county board is expected to approve the plan after the LWCB makes its recommendation. <sup>2</sup>			Winter '15/'16
III. RESOURCE ASSESSMENT AND WATER QUALITY OBJECTIVES	Yes	No	Page
1. Does the plan include the following information as part of a county-wide resource assessment:			
a. Soil erosion conditions in the county <sup>3</sup> , including:			
i. an estimate of the soil erosion rates for the whole county and for local areas where erosion rates are especially high	<input checked="" type="checkbox"/>	<input type="checkbox"/>	55-56
ii. identification of key soil erosion problem areas in the county	<input checked="" type="checkbox"/>	<input type="checkbox"/>	47-48, 54-55
b. Water quality conditions of watersheds in the county <sup>3</sup> , including:			
i. location of watershed areas, showing their geographic boundaries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	52

<sup>1</sup> Appropriate notice must be provided for the required public hearing. The public hearing notice serves to notify landowners and land users of the results of any determinations concerning soil erosion rates and nonpoint source water pollution, and provides an opportunity for landowners and land users input on the county's plan. Individual notice to landowners is required if the landowners are referenced directly in the LWRM plan. DATCP may request verification that appropriate notice was provided.

<sup>2</sup> The county board may approve the county LWRM plan after the department approves the plan. The plan approved by the county board must be the same plan approved by the department. If the department requires changes to a plan previously approved by the county board, the department's approval does not take effect until the county board approves the modified plan.

<sup>3</sup> Counties should support their analysis of soil and water conditions by referencing relevant land use and natural resource information, including the distribution of major soil types and surface topographic features, and land use categories and their distribution. Sec. ATCP 50.12(3)(b) requires that a county assemble relevant data, including relevant land use, natural resource, water quality and soil data.

ii.	identification of the causes and sources of the water quality impairments and pollutant sources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18-39, App. A
iii.	identification of key water quality problem areas in the county	<input checked="" type="checkbox"/>	<input type="checkbox"/>	53, App. A
<hr/>				
2.	Does the LWRM plan address objectives by including the following:			
a.	specific water quality objectives identified for each watershed based upon the resource assessment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18-39, 58-59
b.	pollutant load reduction targets for the watersheds, if available	<input type="checkbox"/>	<input type="checkbox"/>	N/A
<hr/>				
3.	Does the plan or related documentation reflect that the county consulted with DNR <sup>4</sup> to provide water quality assessments, if available; to identify key water quality problem areas; to determine water quality objectives; and to identify pollutant load reduction targets, if any.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Other comments: The county plans to create a WEPS (wind erosion) model and use TMDL pollutant load reduction targets, when available, to help with future plan implementation. The county should use these and other relevant data when developing its next workplan.

<b>IV. PLAN IMPLEMENTATION</b>		<b>Yes</b>	<b>No</b>	<b>Page</b>
1.	Does the LWRM plan include the following implementation strategies:			
a.	A voluntary implementation strategy to encourage farm conservation practices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	56
b.	State and local regulations used to implement the plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	56-60, 82
c.	Compliance procedures that apply for failure to implement the conservation practices in ATCP 50, ch. NR 151 and related local regulations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	56-60, 82
d.	Relevant conservation practices to achieve compliance with performance standards and prohibitions and to address key water quality and erosion problems	<input checked="" type="checkbox"/>	<input type="checkbox"/>	56-60, App. D
e.	Strategy to monitor the compliance of participants in the farmland preservation program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	88-89
<hr/>				
2.	Does the LWRM plan (or accompanying work plan) estimate cost-sharing and other financial assistance, and technical assistance needed for plan implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	65

<sup>4</sup> While requirements for DNR consultation may be satisfied by including relevant DNR representatives on the advisory committee, counties may also need to interact with DNR staff in central or regional offices to meet all of the consultation requirements. DNR may point counties to other resources to obtain information including consultants who can calculate pollutant load reduction targets.

3. Does the LWRM plan describe a priority farm strategy designed to make reasonable progress in implementing state performance standards and conservation practices on farms appropriately classified as a priority?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	58
4. Was DNR consulted about the county's plan for NR 151 implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	56-60

Other comments: The county should continue to consider the number and location of private wells exceeding the safe drinking water standard for nitrate when developing subsequent workplans.

V. OUTREACH AND PARTNERING	Yes	No	Page
1. Does the LWRM plan describe a strategy to provide information and education on soil and water resource management, conservation practices and available cost-share funding, including an estimate of the amount of I& E needed for plan implementation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	68-71, 85
2. Does the LWRM plan describe coordination activities with local, state and federal agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	86-93

Other comments:

VI. WORK PLANNING AND PROGRESS MONITORING	Yes	No	Page
1. Does the county's work plan do all of the following:			
a. Cover more than one year	<input checked="" type="checkbox"/>	<input type="checkbox"/>	66-81
b. Identify priorities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	66-81
c. Provide measurable annual and mult-year performance benchmarks (for at least all high priority items)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	66-81
2. Does the LWRM plan describe a strategy and framework for monitoring county progress implementing its plan including methodology to track and measure progress in meeting performance benchmarks and plan objectives?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	83-84

Other comments:

VII. EPA SECTION 319 CONSIDERATIONS
1. DOES THIS PLAN INCLUDE ELEMENTS <u>CONSISTENT</u> WITH THE MINIMUM 9 KEY ELEMENTS FOR EPA APPROVAL UNDER SECTION 319 OF THE CLEAN WATER ACT: No
2. IF THE ANSWER TO 1 IS "YES," WHAT IS THE STATUS OF EPA'S REVIEW OF THE PLAN: NOT SUBMITTED _____ SUBMITTED BUT NOT APPROVED _____ APPROVED _____

**STAFF RECOMMENDATION**

Staff has reviewed the above-referenced county LWRM plan based on the criteria required in s. ATCP 50.12, Wis. Admin. Code, and s. 92.10, Stats., and has determined that the plan meets the criteria for DATCP approval of this plan. This checklist review is prepared to enable the LWCB to make recommendations regarding plan approval, and for DATCP to make its final decision regarding plan approval.

Staff Signature:           *stopher Clayton*          

Date:   11/10/15

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**Adams County  
Land and Water Resource Management Plan  
2016-2025**



**November 2015**

Prepared by: North Central Wisconsin Regional Planning Commission

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# PLAN SUMMARY

## Introduction

The Adams County Land and Water Resource Management Plan is drafted as a 10-year plan (2016-2025) with a 5-year Work Plan (2016-2020) in accordance to the requirements set forth in Chapter 92 of the Wisconsin Statutes.

## Plan Development

To assist in the revision of the land and water resource management plan, Adams County Land and Water Conservation Department invited participants from a variety of natural resource professionals, and interested citizens representing farming, riparian owners, and others throughout the County.

The TAC met on **October 29, 2014** to identify major resource concerns in the County, and to review and revise the Resource Assessment chapter.

The CAC met on **December 10, 2014** to complete a worksheet developed from TAC identified resource concerns that allowed participants to rank:

1. The most important resource problems;
2. The importance of select areas of work; and
3. The importance of Department activities and programs.

The TAC met on **March 25, 2015** to review what the data says about the state of the natural resources in Adams County, and to identify possible Work Plan goals.

The CAC met on **May 6, 2015** to hear what the TAC identified as the state of the natural resources in Adams County, and then to rate which goals were most important for the Work Plan.

**June 25<sup>th</sup>, 2015** - Public hearing held.

**December 2015** - Presentation of Plan to the Wisconsin Land and Water Conservation Board (LWCB).

**Winter 2015/2016** - Adoption of the plan by the Adams County Board of Supervisors.

**Winter 2015/2016** - DATCP sends letter adopting the Plan following LWCB recommendations.

## Resource Assessment

Brief summaries of the land and water resources in Adams County, and how they may have changed over the past 6 years (2-year plan extension), are described in this chapter.

## **Location/Geography**

Adams County is located in the Central Sands region of Wisconsin. The County's whole west border is the Wisconsin River, and Castle Rock and Petenwell Lakes. The City of Adams and the Village of Friendship share a border and are the only incorporated municipalities in the county. Combined, Adams-Friendship have 2,692 residents as of the 2010 Census.

## **General Land Use**

Adams County is just over 50 percent covered with woodlands, with the majority of these lands in private ownership. A variety of federal and state owned lands are scattered throughout the county, in addition to county, town, city, village and other landowners. Combined federal, state, county and town governments own over 20,000 acres or about 5% of the land in Adams County. Federal ownership is concentrated in the Town of New Chester where a federal prison is located with over 900 acres. Adams County has approximately 411 acres of State Parks and 7,938 acres of wildlife and natural conservancy areas within the county.

### Agriculture

Irrigated vegetable farming is the primary agricultural enterprise (e.g. potatoes, corn, snap beans, soybeans, and peas). Cranberry production is increasingly important too. Two CAFO's have been built in the last 3 years in the county and will continue to bring approximately 52,000 acres under contract of nutrient management plans and the 3<sup>rd</sup> CAFO is planned to start construction in late 2015 or early 2016 and will be completed in 2016 or 2017 depending on the start date. This 3<sup>rd</sup> CAFO has a nutrient management plan already submitted to Adams County with an additional 18,000 acres under contract for a total of more than 70,000 acres under nutrient management.

### Forestry

Even though there is only a small amount of County Owned Land, 3244 acres owned by the county, and none of the land is under Forest Management, there are a couple state wildlife areas and state natural areas with extensive wetland environments which make up 16,454 acres and 4,900 acres of Federal Government lands. Paper company holdings offer vast areas of Managed Forest Law lands that are open to the public, approximately 30,000 acres, which in recent months have been sold and the issue of public lands open for recreational use may be reduced significantly.

### Residential Development

Most residential development occurs around the lakes in the Town of Rome, within the City of Adams and the Village of Friendship, and in the communities of Monroe and Dellwood along Castle Rock and Petenwell Lakes. Many housing subdivisions and scattered residential uses exist along town roads and inland lakes throughout the County.

### Commercial & Industrial Development

Resorts are expanding out of Wisconsin Dells along the STH 13 corridor. Many stores exist in Adams and Friendship. Mining, manufacturing, and agricultural warehousing and processing are scattered throughout the County. New

expansions within the county, such as a large golf course, may change the northern area of the county.

### **Surface Water**

Adams County has a high level of tourism, recreation, and seasonal housing resulting from people being drawn to mainly the waters of Castle Rock and Petenwell Lakes and 20 other inland-lakes with public access.

Total surface water in Adams County exceeds 26,000 acres. Thirty-two named lakes are located within the county, although they don't all have public access. Many of the lakes have been heavily developed over the years for recreational purposes. In addition, there are 30 unnamed lakes located in the county. About 73 streams stretch 235 linear miles and cover 450 surface acres. Three drainage districts cover about 28,340 acres, and contain about 17 ditches (about 44 linear miles).

As of 2015, 21 of the 22 lakes with public access have approved lake management plans. Since 2004, volunteers have monitored the lakes using the Citizen Lake Monitoring Program and recorded their data in the SWIMS database. Since 2007, thirty streams also have active volunteers monitoring water quality.

#### Impaired Waters – 303(d) Waters

In 2014, there were 6 waterbodies in Adams County on the 303(d) list. Petenwell and Castle Rock Lakes have been on the impaired waters list since 1998. Mason Lake was placed on the list in 2002. Lakes Arrowhead, Sherwood, and Friendship were newly listed in 2014. It is expected that Lake Camelot may be listed in 2016.

#### Outstanding and Exceptional Resource Waters

Adams County has 1 outstanding water, and 12 exceptional waters, one of which leads into a 303(d) listed lake.

### **Groundwater**

Groundwater is the primary source of drinking water and irrigation water in Adams County. Nearly 14 billion gallons of groundwater are used for irrigation annually, while all other groundwater use equals less than 1 billion gallons annually. Groundwater quality is generally good in Adams County.

- 88% of 3,964 private well samples met the health-based drinking water limit for nitrate-nitrogen. The other 12% are considered unsuitable for consumption by infants and women who are pregnant or trying to become pregnant.
- 28,817 acres of land in Adams County are in atrazine prohibition areas.
- Most soils in Adams County are highly susceptible to groundwater contamination.

### **Soils**

The majority of soils in Adams County result from glacial sandstone deposits, while southeast Adams County has glacial till. The soil erosion problem areas in the County contain annually cultivated glacial sandstone deposits, which are prone to wind erosion, or annually cultivated glacial till soils located on slopes that are prone to water erosion.

## **Performance Standards and Prohibitions**

Agricultural Performance Standards will continue to be achieved through education delivered in a variety of ways.

Priority farms will be identified by LWCD as those farms that allow unfiltered stormwater runoff into state waters as well as the new agricultural fields that are converted from forest land to crop production. A priority farm ranking exists.

Non-agricultural Performance Standards are regulated by the County Planning and Zoning Department through ordinances.

## **2007-2011 Work Plan Accomplishments**

Accomplishments and activities completed from the 2007-2011 Adams County Work Plan are summarized in Chapter 4.

- Streams were monitored for quality and quantity.
- A lake specialist coordinated citizen volunteers on 20 lakes who monitored water quality and inventoried aquatic invasive species.
- More than 20 aquatic plant surveys were conducted on county lakes.
- 92 agricultural compliance inventories were completed.
- Farmland Preservation program participant reviews were completed.
- A tree and shrub sale assisted about 645 people with installing conservation practices.
- The Stormwater Runoff Ordinance was completed in 2007.
- Preventing point source groundwater pollution was not met, because of workload priorities.
- Revised the Animal Waste Storage Ordinance in 2010.

## **2016-2020 Work Plan**

Based upon resource concerns identified by the Citizens Advisory Committee and Technical Advisory Committee members, the Work Plan goals are listed in priority order.

Goal 1: Create a culture where landowners take ownership of their impact on the environment. Social and Ecological resource assessments will be conducted before project details are identified.

Goal 2: Protect and improve groundwater quality and quantity as well as surface water quality.

Goal 3: Reduce wind erosion.

Goal 4: Promote working forests and farms.

Goal 5: Improve forest silviculture for multiple uses.

Goal 6: Manage wildlife conflicts.

Goal 7: Control invasive species.

## **Monitoring and Evaluation**

Performance Standards – Spot checks on a watershed basis are the main tool used to monitor erosion within the county. Spot checks will be conducted on 25% of all installed practices cost shared in the last four years. LWCD staff will spot check 25% of those farms required to update Nutrient Management Plans for compliance with the Animal Waste Management Ordinance and Nutrient Management plan completion by all required landowners will be checked off annually. The Farmland Preservation Program Plan, which is implemented in the Planning and Zoning Department, is being updated and the LWCD will conduct the compliance component of the plan once it has been updated. The future goal is to get more agricultural producers involved with the Farmland Preservation Program.

Water Quality Monitoring – Volunteers - coordinated by LWCD staff, monitor lakes and streams for water quality and inventory aquatic invasive species.

## **Information and Education**

Based upon limited success of various educational strategies in the 2007-2012 Work Plan, a different educational strategy will be utilized. The new strategy includes presenting targeted UWEXtension produced materials at local lake district/association meetings, watershed group meetings, Adams County's web site and town association meetings. Additionally, articles in widely distributed newspapers, and presentations on local radio will reach the general public.

**BUDGET ESTIMATE:** An annual estimated budget for the 2016-2025 work plan is outlined here. In estimating the budget, it is presumed that the county will continue to staff the Land and Water Conservation Department at its current level of 4.375 persons. It is further presumed that DATCP and WDNR will meet their financial obligations for staffing of local conservation personnel and projects.

YEAR	COUNTY	DATCP	WDNR	COST SHARE	TOTAL ESTIMATE
2016	\$152,716	\$136,000	\$34,640	\$85,000	\$408,456
2017	\$155,000	\$136,300	\$34,640	\$85,000	\$410,940
2018	\$155,000	\$136,300	\$40,000	\$85,000	\$416,300
2019	\$155,000	\$139,000	\$40,000	\$85,000	\$419,000
2020	\$158,000	\$136,000	\$37,000	\$85,000	\$416,000
2021	\$160,000	\$132,000	\$37,000	\$85,000	\$414,000
2022	\$161,000	\$132,000	\$34,000	\$85,000	\$412,000
2023	\$163,000	\$132,000	\$34,000	\$85,000	\$414,000
2024	\$163,000	\$132,000	\$34,000	\$85,000	\$414,000
2025	\$165,000	\$132,000	\$34,000	\$85,000	\$416,000

Adams County has been successful in attaining funding from a number of sources in the past. During the implementation phase of the following work plan, we intend to continue applying for grants to sustain the current level of staff and project funding. Potential sources of conservation funding may come from the following:

- Natural Resource Conservation Service (NRCS) Public Assistance Programs
- Department of Agriculture, Trade, and Consumer Protection (DATCP) Soil and Water Resource Management funding
- Wisconsin Department of Natural Resources (WDNR) Lake Planning and Protection Grant Programs; and AIS Education & Management Programs
- Wisconsin Department of Natural Resources (WDNR) Targeted Runoff Management Program - Small scale non-TMDL projects
- Other funding sources as they may become available

**See Chapter 10 Glossary for definitions of abbreviations used here.**

**Goal 1: Create a culture where landowners take ownership of their impact on the environment.**  
*(Resource Concerns – With the right information, citizens will make good choices for the greater good.)*

<b>Objective</b> (Highest priority in bold)	<b>Activities</b> (Highest priority in bold)	<b>Responsible Agencies</b> (Lead agency in bold)	<b>Measurement Tools</b>
<b>A. Restore Leola Drainage District</b>	1. Identify why district was suspended and work on water quality issues in the drainage area.	<b>LWCD, LWCC,</b> Corp. Council.	Leola Drainage District is reactivated or dissolved.
<b>B. Provide information clearinghouse.</b>	<b>1. Provide information about land &amp; water resource management and educational information relating to all the goals in this plan.</b>	<b>LWCD, AIS,</b> UWEX	Web site will have information about all Work Plan goals, and digital copies of information and brochures. Staff will perform multiple presentations (10 annually), answer office visit questions, and distribute brochures.
	2. Maintain county webpage for LWCD services - www.adamscountylwcd.net	<b>LWCD, AIS,</b> UWEX	Update web site for LWCD, ongoing.
	3. Link DNR and UWEX shoreland restoration web sites to LWCD web site.	<b>LWCD, AIS, P&amp;Z</b>	Provide 1 separate link for DNR, provide 1 separate link for UWEX , provide 1 separate link for P&Z.
	4. Link various organizations (e.g. UWEX-Lakes, NRCS, DATCP, RC&D) to LWCD web site.	<b>LWCD, AIS</b>	Provide links to other natural resource sites & pursue additional links annually.
	5. Provide a contact list of resource professionals	<b>LWCD, UWEX</b>	Provide list of 15 resource professionals, update list annually.
	6. Landowner led programs/conservation initiative, where innovative BMPs may be used.	<b>LWCD, UWEX,</b> DNR	Create 1 active group annually.

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<b>C. Reduce wind erosion.</b>			LWCD, CWWP	Install at least 3 miles, annually, of wind breaks with 10-year easements.
	1. Work with Central Wisconsin Windshed Project to install tree and shrub wind breaks and provide cost sharing as allowed.			
	2. Utilize the wind erosion prediction models (WEPS) to gain knowledge and install conservation practices to reduce sedimentation into stream and lakes within the county.	LWCD, NRCS		<b>Wind Erosion Prediction and soil monitoring with development of tracking system.</b>
<b>D. Control invasive species.</b>				
	1. Work with DNR and AIS Coordinator	LWCD, AIS, DNR		Harvesting, chemical application plans, lake groups, volunteers. AIS Coordinator update 4 plans annually.
	2. Identify invasive species in lake management plans and develop methods to reduce potential spread of aquatic and terrestrial species.	AIS, LWCD, DNR		Establish PI surveys to develop historical data and plant species. Implement control methods. Update management plans.

**Goal 2: Protect and improve groundwater quality and quantity as well as surface water quality.**  
*(Resource Concerns – Soil Erosion, Nutrient Loading, and Shoreline Buffer/Stabilization)*

Objective (Highest priority in bold)	Activities (Highest priority in bold)	Responsible Agencies (Lead agency in bold)	Measurement Tools
A. Control soil erosion on agricultural lands			
	<b>1. Develop conservation plans using a model that meet the tolerable soil loss on cropland as a minimum standard to achieve water quality soil &amp; soil erosion (NR 151.02).</b>	LWCD, NRCS	4 plans annually.
	<b>2. Provide technical assistance and cost sharing (if available) to landowners, contractors, and others as requested.</b>	LWCD, UWEX, NRCS	As requested.
	3. Promote ground cover through the implementation of best management practices for Shoreland buffers/filter strips.	LWCD, UWEX, NRCS	5 acres annually.
	4. Promote conservation tillage.	LWCD, UWEX, NRCS	200 acres annually.
	5. Promote rotational grazing to livestock farmers.	LWCD, UWEX, NRCS	1 news release or training session annually.
	6. Educate landowners on soil erosion performance standards through newsletter(s), landowner visits, and informational meetings.	LWCD, UWEX, NRCS	1 news release; landowners visit or informational meeting, department newsletter.
	7. Pursue cost sharing to install projects that reduce wind and water erosion.	LWCD, NRCS	1 annually.
	8. Encourage landowner participation in EQIP.	LWCD, NRCS	1-2 newsletters annually.
	9. Educate the public about wind erosion.	LWCD, NRCS	1-2 newsletters annually.

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<p><b>B. Promote nutrient management.</b></p>	<p><b>1. Provide training session for agricultural producers to develop and implement nutrient management plans for their cropland and pastures (NR 151.04).</b></p>	<p>LWCD, UWEX</p>	<p>Annual training session to attract 10 farmers and on-site visits.</p>
	<p>2. Educate landowners of the value of nutrient management planning</p>	<p>LWCD, UWEX</p>	<p>Annual training session 1 news release annually.</p>
	<p>3. Print restriction maps for Nutrient Management Plan.</p>	<p>LWCD</p>	<p>As requested (Maps available on line).</p>
	<p>4. Provide a list of crop consultants certified for nutrient management planning.</p>	<p>DATCP, LWCD</p>	<p>Have 10 copies available at the front desk. Update list annually.</p>
	<p>5. Encourage landowner participation in EQIP.</p>	<p>NRCS, LWCD</p>	<p>2 new landowners annually.</p>
	<p>6. Pursue cost sharing for nutrient management planning.</p>	<p>LWCD, NRCS</p>	<p>Apply annually.</p>
	<p>7. Educate rural non-farm residents about what to expect living next to a farm.</p>	<p>LWCD, UWEX, P&amp;Z, WDNR</p>	<p>1 news release annually. Send document to real estate agencies to be given to potential rural resident clients.</p>
	<p>8. Ensure landowners with manure storage systems installed since county ordinance became effective have a nutrient management plan.</p>	<p>LWCD</p>	<p>Annually submittal of NMP for each issued permit (based on number of issued permits).</p>
	<p>9. Encourage landowner participation in FPP.</p>	<p>LWCD</p>	<p>1 news article annually.</p>
<p><b>C. Protect groundwater from contamination.</b></p>	<p><b>1. Provide technical assistance and cost sharing (if available) to landowner to properly decommission a well.</b></p>	<p>LWCD, P&amp;Z</p>	<p>3 annually.</p>
	<p>2. Distribute literature in office literature racks about groundwater protection.</p>	<p>LWCD, P&amp;Z, Health</p>	<p>Provide 20 copies annually in office literature racks.</p>
	<p>3. Ground water/ well testing</p>	<p>Health, UWEX</p>	<p>Suggest testing be done with change in rural resident landownership.</p>
	<p>4. Encourage landowner participation in EQIP.</p>	<p>LWCD, NRCS</p>	<p>During on-site visits – 10 annually.</p>
	<p>5. Consider nutrient loss via leaching in sandy soils when developing Nutrient Management Plan.</p>	<p>LWCD, NRCS, DNR</p>	<p>3 annually.</p>
	<p>6. Work with WDNR groundwater division staff to address high nitrate levels in wells.</p>	<p>LWCD, UWEX, HHS, DNR</p>	<p>Create a plan to mitigate health effects of high nitrate wells.</p>

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D. Properly manage animal waste.					
	1. Administer, and enforce Adams County's Animal Waste Management Ordinance	LWCD		Annual NMP spot check for all farms with WPDES permits and 590 checklist.	
	2. Educate landowners through landowner visits, newsletter, and informational meeting.	LWCD		1 or 2 newsletters annually. During visit for FPP done every 4 years Email as new information is made available.	
	3. Provide technical assistance and possibly cost share for new animal waste storage facilities.	LWCD, NRCS		As requested.	
	4. Encourage landowner participation in EQIP.	LWCD, NRCS, UWEX		2 landowners annually.	
	5. Pursue cost sharing for upgrading existing animal waste storage facilities.	LWCD, NRCS, DNR		As needed in the farming community.	
E. Implement agricultural performance standards.					
	1. Provide technical assistance to landowners with NPS discharges.	LWCD, NRCS, UWEX, P&Z, DNR		As needed.	
	2. Make a list of native plants available to area landowners.	LWCD, P&Z		Provide 15 copies of plant list annually in office public literature racks, and place list on web site.	
	3. Work with P&Z to create a shoreland zoning fact sheet, and publish online to encourage compliance with the non-agricultural performance standards and prohibitions.	LWCD, P&Z, NCWRPC		Provide 15 copies annually in office public literature racks. Provide to all new shoreland property owners in their mailing.	
	4. Promote development of nutrient management plans (NR 151.07)	LWCD, UWEX, P&Z		1 or 2 newsletters annually. During visit for FPP done every 4 years Email as new information is made available.	

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	<p>5. Provide technical assistance and possibly cost sharing to ensure:</p> <ol style="list-style-type: none"> <li>No overflowing manure storage facility;</li> <li>No unconfined manure pile in a water quality management area;</li> <li>No direct runoff from feedlot or stored manure pile;</li> <li>Restricted access by livestock to waters of the state.</li> </ol>		<p>1-2 newsletters send annually. During the 2 to 4 FPP spot checks done every year. Add performance standards and prohibitions fact sheets on county web site.</p>
	6. Promote BMPs to implement NR 151 and ATCP 50.	LWCD, NRCS, P&Z	2 annually.
	7. Encourage landowner participation in EQIP.	LWCD, UWEX, NRCS	2 annually.
	<b>8. Monitor NR 151 compliance of all non-FPP farms per operation and maintenance agreements.</b>	LWCD, DATCP	25% of non-FPP farms annually.
<b>F. Implement non-agricultural performance standards.</b>			
	1. Inform contractors, developers, and citizens about non-agricultural performance standards.	LWCD, DATCP, P&Z	Have copies available in office public literature racks. Provide a copy with every zoning permit issued.
	2. Educate about ground water contamination	Health, UWEX, P&Z, LWCD	Department newsletters, Have copies available in office public literature racks.
	3. Educate public about damage caused by failing septic systems	Health, P&Z	1 news article annually.
	4. Educate public about damage caused by wind/rain and lack of vegetative cover has on the shoreland	P&Z, LWCD	3 shoreland restoration annually.
	<b>5. NR 151 compliance checks will be completed annually on 25% of practices completed each year for the maintenance life of the project</b>	LWCD, DATCP, NRCS	<b>15-16 projects annually.</b>

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G. Establish and protect vegetated shoreland buffers.				
	<b>1. Promote the benefits of shoreland buffers through presentations</b>	<b>LWCD, P&amp;Z, AIS</b>		<b>3 events Annually.</b>
	2. Work with lake district /associations to distribute educational information.	<b>LWCD, DNR, AIS</b>		25% of district/associations annually.
	3. Distribute educational handouts on shoreland health, including brochures, to the public on display rack at Land Water Cons. Office.	<b>LWCD, UWEX</b>		Have copies available in office public literature racks, and on county web site.
	4. Provide access to cost-sharing for shoreline and stream bank restoration through DATCP allocations.	<b>LWCD, P&amp;Z, DATCP</b>		2 Annually.
	5. Create technical design for shoreline and stream bank restorations projects.	<b>LWCD, P&amp;Z, NRCS</b>		2 Annually.
	6. Encourage voluntary restoration of shoreland buffers through cost-sharing using Lake Protection Grant funds.	<b>LWCD, P&amp;Z, DNR</b>		3 Annually.
	7. Maintain shoreland buffer restoration demonstration sites on county owned shoreland properties (Dams) for examples of restoration.	<b>LWCD, P&amp;Z, DNR</b>		Annually.
	8. Stock and update displays at demo sites with educational information on shoreland buffer health.	<b>LWCD</b>		Refresh brochures annually.
	9. Share techniques used in shoreland restoration with other counties and agencies.	<b>LWCD, P&amp;Z, LWCD, UWEX</b>		Two annual meetings.
	10. Develop a tracking system to accurately track conservation practices and Shoreland restoration practices.	<b>LWCD, P&amp;Z</b>		Update current tracking system as projects are completed and update past conservation practices.
	11. Hold workshop for contractors and landowners on proper techniques and practices for shoreline stabilization and buffer restoration.	<b>LWCD, P&amp;Z</b>		Annually.

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H. Increase compliance with ordinances.				
	<b>1. Educate public on shoreland ordinances and waterways classification obligations and benefits through presentations.</b>	<b>LWCD, P&amp;Z, DNR</b>	<b>2 annually.</b>	
	2. Educate new shoreland owners on shoreland health and landowner's obligations through an information packet mailed to them upon purchase of property.	<b>P&amp;Z, LWCD</b>	Monthly, based on change in land ownership.	
	3. Use shoreland zoning ordinance to increase number of vegetated buffers by requiring restoration or protection with certain zoning permits.	<b>P&amp;Z, LWCD</b>	10 annually.	
	4. Monitor properties for compliance with shoreland restoration permits.	<b>P&amp;Z, LWCD</b>	15 annually.	
I. Inform contractors, developers, and citizens about construction site erosion control.				
	Distribute a fact sheet regarding construction site erosion control to contractors or landscapers at workshop on teaching proper BMPs for shoreline stabilization and lake buffers.	<b>P&amp;Z, LWCD</b>	Distribute fact sheet to 10 contractors & landscapers annually.	

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J. Assist agricultural producers on proper nutrient management, conservation plan development, and agricultural best management practices (BMP's)					
		<b>1. Create a list of agriculture producers in the county</b>	<b>LWCD, UWEX</b>		<b>Updated annually.</b>
		2. Implement agricultural BMPs with voluntary producers	<b>LWCD, DATCP, NRCS</b>		3 agricultural producers annually.
		3. Review and record nutrient management plans for landowners and land users and conduct in field verification for compliance	<b>NRCS, LWCD, UWEX, DATCP</b>		3 nutrient management plans annually.
K. Promote rotational grazing to protect surface and ground water.					
		1. Provide information to local producers during pasture walks.	<b>LWCD, UWEX</b>		1 pasture walk annually.
		<b>2. Develop rotational grazing plans for farmers in the county.</b>	<b>LWCD, DATCP, NRCS, UWEX</b>		<b>Develop 1 plan annually.</b>
L. Reduce pollution from stormwater runoff in developed areas.					
		1. Provide guidance and/or technical assistance for two local units of government on storm water management	<b>LWCD, DNR, P&amp;Z</b>		Send information to 19 local gov'ts, & assist 2 local gov'ts.
		2. Assist local units of government with the County Storm Water Runoff Ordinance	<b>LWCD, P&amp;Z, DNR</b>		Send information to 19 local gov'ts, & assist 1 gov't.
		3. Encourage local units of government to apply for stormwater management funding through DNR's Targeted Runoff Management Program (TRM)	<b>LWCD, DNR, P&amp;Z</b>		Send information to 19 local gov'ts.
		4. Encourage landowners to use rain gardens and rain barrels to address stormwater runoff.	<b>LWCD, UWEX</b>		Provide annual rain barrel sale.

**Goal 3: Reduce Wind Erosion.**

*(Anticipated Outcome – Reduce soil loss by wind erosion to increase cropland productivity and to prevent nutrient loading into the lakes and stream)*

Objective (Highest priority in bold)	Activities (Highest priority in bold)	Responsible Agencies (Lead agency in bold)	Measurement Tools
Provide creative BMP's to reduce soil loss and develop sound tracking methods to document the reductions.			
	<b>1. Develop wind erosion data collection and tracking system to verify wind erosion issues located in county.</b>	<b>LWCD, NRCS, UWEX</b>	<b>WEPS documentation and GIS/Arc Map tracking system developed for future planning an erosion control. 2000 acres annually tracked.</b>
	2. Host farmer lead field days to promote conservation methods.	<b>LWCD, UWEX</b>	Seek landowner participants for 3 farmer lead field demonstrations, annually, to promote the use of cover crops and alternative forage types as well as tillage methods to reduce wind erosion and nutrient loading.
	3. Establish cost share practices to promote sound erosion control methods.	<b>LWCD, UWEX</b>	Ongoing demonstration projects to document the soil loss reductions. Provide cost share to landowners for conservation BMP promotion.
	4. Provide public with brochure about economic impact on the environment due to soil loss related to wind erosion.	<b>LWCD, UWEX</b>	Have brochure available in public literature racks by each office.
	5. Promote proper buffers along riparian land to reduce sediment deposition into waterways.	<b>LWCD, UWEX, P&amp;Z, Co-ops</b>	Aid agricultural producers to become compliant with shoreland buffer ordinance in Adams County.
	6. Inform public about ground water contamination reductions via nutrient uptake with alternative cropping systems to reduce soil loss and nitrogen movement in the soil.	<b>LWCD, UWEX</b>	Develop and promote conservation practices to reduce impacts to ground water and nutrient management.

**Goal 4: Promote Working Forests and Farms.**

*(Anticipated Outcome – Preserve economically viable farmland and forestland for future generations.)*

Objective (Highest priority in bold)	Activities (Highest priority in bold)	Responsible Agencies (Lead agency in bold)	Measurement Tools
<b>A. Maintain economically viable forests.</b>			
	1. Provide technical assistance to local governments to implement comprehensive plans.	<b>P&amp;Z,</b> NCWRPC	Quarterly NCWRPC newsletter to every local government. Maintain local plans and map revisions online.
	<b>2. Promote involvement in Managed Forest Law program for tax benefits.</b>	<b>DNR, P&amp;Z,</b> LWCD	Ongoing, Increase MFL Program Acres.
<b>B. Preserve productive farmland.</b>			
	<b>1. Update Farmland Preservation Plan from 1981 version, will be updated by fall of 2016.</b>	<b>P&amp;Z, LWCC,</b> NCWRPC, LWCD	Created new Farmland Preservation Plan.
	2. Encourage landowner participation in FPP.	<b>LWCD, LWCC,</b> P&Z	Annually create newsletter. Annually speak at local Farm Bureau meeting.
	3. Require development in agricultural area to be consistent with the Comprehensive Plan	<b>P&amp;Z, LWCD</b>	Review of all zoning change requests in agricultural lands.
	4. Provide technical assistance to local governments to implement comprehensive plans.	<b>P&amp;Z,</b> NCWRPC, LWCD	Quarterly NCWRPC newsletter to every local government. Maintain local plans and map revisions online.

**Goal 5: Improve forest silviculture for multiple uses.**

*(Anticipated Outcome – Maintain a healthy vigorous forest, while also providing for wildlife habitat, water quality, and recreation.)*

Objective (Highest priority in bold)	Activities (Highest priority in bold)	Responsible Agencies (Lead agency in bold)	Measurement Tools
A. Improve forest management to control sediment, erosion and protect habitat cover types.			
	1. Encourage private landowners to use professional forestry assistance	<b>DNR, LWCD, AIS, NRCS, UWEX</b>	5 landowners annually.
	2. Promote teacher use of DNR Environmental Education for Kids (EEK) program	<b>DNR</b>	Annually.
	3. Promote use of forestry best management practices (BMPs.)	<b>DNR, LWCD</b>	Information provided when logger permits are issued.
	4. Encourage participation in EQIP	<b>NRCS, DNR, LWCD</b>	2 landowners annually.
	5. Promote use of county owned tree planters	<b>DNR, LWCD</b>	3 landowners annually.
	6. Provide information on invasive species to general public.	<b>LWCD, DNR, AIS, NRCS, UWEX</b>	Have information available in office public literature racks.

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<p>B. Control illegal garbage dumping on commercial, county, state, federal and private forestlands.</p>			
<p>1. Support volunteers and groups to assist with clean up along roadways in the county.</p>	<p>Highway Dept., Wellness</p>	<p>Volunteer groups to meet with Hwy Department annually.</p>	
<p>2. Help promote and support the "Clean Sweep" program.</p>	<p>Solid Waste, LWCD</p>	<p>Program advertised at all towns with garbage transfer sites.</p>	
<p>C. Reduce erosion and habitat degradation caused by trail use.</p>			
<p>1. Assist ATV clubs by providing erosion educational materials for users.</p>	<p>LWCD, Parks</p>	<p>Annually.</p>	
<p>2. Provide technical assistance for erosion problems and trail development.</p>	<p>LWCD, P&amp;Z, Parks</p>	<p>As needed.</p>	

**Goal 6: Manage wildlife conflicts.**

*(Anticipated Outcome – Less crop damage from wildlife.)*

Objective (Highest priority in bold)	Activities (Highest priority in bold)	Responsible Agencies (Lead agency in bold)	Measurement Tools
A. Reduce wildlife damage to crops.			
	<b>1. Provide technical assistance to agricultural producers.</b>	<b>APHIS, LWCD</b>	<b>Assist landowners having wildlife issues. Usually 4-6 per year.</b>
	2. Participate in <i>Venison Donation Program</i>	<b>APHIS, LWCD</b>	Usually 4-6 donations annually.
	3. Meet with APHIS technician	<b>APHIS, LWCD</b>	Usually 4 times a year.
	4. Crop damage assessment and claims	<b>APHIS, LWCD, LWCC</b>	Usually 2 times a year.
	5. Deer, bear and wolf management and provide assistance as needed to verify damage issues related to agricultural crop production.	<b>LWCD, APHIS</b>	6-10 landowners annually.
B Provide input to DNR & Conservation Congress about hunting and harvesting goals for large game.			
	1. Attend DNR meeting prior to the spring Conservation Congress meeting.	<b>LWCD, DNR</b>	Annually.
	2. Adams County Deer Council.	<b>LWCD</b>	Bi-monthly to quarterly.

**Goal 7: Control Invasive Species.**

*(Anticipated Outcome –Native ecosystem protection.)*

Objective (Highest priority in bold)	Activities (Highest priority in bold)	Responsible Agencies (Lead agency in bold)	Measurement Tools
A. Control Terrestrial and Aquatic Invasive Species.			
	<b>1. Pursue DNR grants to continue Terrestrial &amp; AIS employee.</b>	<b>LWCD</b>	<b>2 annually or per granting cycle.</b>
	2. Inventory populations on county owned properties (e.g. campgrounds, boat landings)	<b>LWCD, DNR</b>	5 sites per year.
	3. Hold Terrestrial and Aquatic Invasive ID workshops	<b>AIS, DNR</b>	1 workshop annually.
	4. Educate public.	<b>DNR, UWEX</b>	Have brochures available in office public literature racks, and on county web site. Create 3 newspaper articles annually.
	5. Signs at trail access points: install, inspect and replace if needed.	<b>Parks, DNR</b>	2 sites per year.
	6. Install boot brushes at trail access points, and inspect and replace if needed.	<b>Parks, DNR</b>	Install at 2 sites per year.
	7. Eradication workdays.	<b>LWCD, AIS, DNR</b>	2 times annually.
	8. Remain active in TIP.	<b>LWCD</b>	Ongoing.
	9. Educate timber contractors on TIS with each contract.	<b>DNR</b>	Information provided with each county timber sale.
	10. Educate ATV riders, trappers, ice fishermen and hunters about the spread on invasive species	<b>Parks, LWCD, AIS, P&amp;Z</b>	Annually.
	11. Share information where invasive species are located in forested areas	<b>LWCD, AIS, DNR</b>	Update master map of TIS annually.
	12. Participate in <i>Ice Your Catch 4<sup>th</sup> of July boat landing blitz</i> for Clean Boats - Clean Water	<b>LWCD, AIS</b>	Annually.

**(Continued on next page)**

Adams County 2016-2020 WORK PLAN

	13. Clean Boats - Clean Waters training session	AIS, LWCD	1 annually, or as requested by individual lake.
	14. Citizen lake monitoring workshop	AIS, DNR, Lake Districts	1 annually, or as requested by individual lake.
	15. Attend public events and fairs with education tables	AIS, UWEX, LWCD	2 annually.
	16. Release beetles to control purple loosestrife	AIS, LWCD, Lake Districts	8 pots of beetles will be released near infestations annually.
	17. Attend lake group/waterway meetings	AIS, LWCD, Lake Districts	Usually there are 12 requests annually.
	18. Provide information to every new shoreland owner	P&Z, LWCD	Every new land owner will receive a packet of information based on ownership changes to tax parcels.
	19. Public access sign maintenance	AIS, DNR	4-5 signs annually.
	20. Shoreland demo education	LWCD, P&Z	1 annually.
	21. Support lake association & lake district's grant requests with letters of support	LWCD, P&Z	2 or 4 annually.
	22. Monitor for AIS	LWCD, DNR	20% of lakes annually.
	23. Assist manual removal	AIS, Lake Districts	2 lakes annually.
	24. Aquatic Plant Surveys	AIS, Lake Districts	20% of lakes annually.
	25. Lake Management Plan Development and updates	AIS, Lake Districts	20% of lakes annually.

# CORRESPONDENCE/MEMORANDUM

STATE OF WISCONSIN

**DATE:** November 11, 2015

**TO:** Land and Water Conservation Board Members and Advisors

**FROM:** Keith Foye, DATCP  
Land and Water Resource Bureau



Mary Anne Lowndes, DNR  
Runoff Management Section



**SUBJECT:** Approval of Proposed 2016 LWCB Annual Agenda

**Recommended Action:** This is an action item. The LWCB may choose to approve the proposed 2016 annual agenda or choose to amend it before approval.

**Summary:** DNR and DATCP staff have prepared a proposed annual agenda for LWCB meetings in 2016. Subject to LWCB approval, the meeting dates for 2016 are as follows:

February 2, 2016, in Madison

April 5, 2016, in Madison

June 7, 2016, in Madison

August 2, 2016, in Madison

October 4, 2016, in Madison

December 6, 2016, in Madison

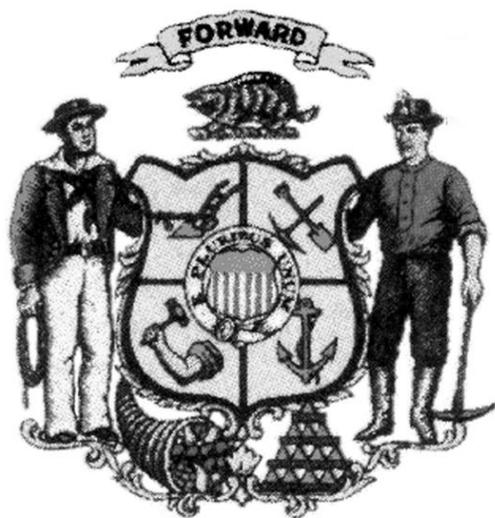
If you have any questions about the annual agenda, please contact at [Christopher.Clayton@wisconsin.gov](mailto:Christopher.Clayton@wisconsin.gov) or at (608)224-4630.

**Materials Provided:** LWCB 2016 Proposed Annual Agenda.

**Presenter:** Chris Clayton, DATCP.

# Land and Water Conservation Board

## 2016 ANNUAL AGENDA



Department of Agriculture, Trade and Consumer Protection  
and the  
Department of Natural Resources

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## February 2, 2016 LWCB MEETING

### SOIL AND WATER RESOURCE MANAGEMENT PROGRAM

- ◆ 2017 Grant Applications (written report only)  
*Responsible Party: Richard Castelnovo and Linda Talbot*
- ◆ Planning for Gathering Input from Stakeholders and Public on Funding and Annual Grant Awards under the Nonpoint Program  
*Responsible Party: LWCB*
- ◆ FPP Bi-annual report  
*Responsible Party: Alison Volk*
- ◆ Recommendations on Land and Water Resource Management (LWRM) Plans  
*Responsible Party: Lisa Trumble*
- ◆ Report and Potential Recommendation on the 2016 CREP Spending Authority  
*Responsible Party: Brian Loeffelholz*

### LWCB ADMINISTRATIVE MATTERS

- ◆ Election of 2016 Officers  
*Responsible Party: Officers Nominating Committee Chairperson*

## APRIL 5, 2016 LWCB MEETING

### SOIL AND WATER RESOURCE MANAGEMENT PROGRAM

- ◆ Recommendations on Land and Water Resource Management Plans  
*Responsible Party: Lisa Trumble*
- ◆ Extension of DATCP Projects from 2015 into 2016  
*Responsible Party: Richard Castelnovo*
- ◆ Report on DATCP and DNR Transfer of Cost-Share Dollars  
*Responsible Party: Richard Castelnovo and Linda Talbot*

## JUNE 7, 2016 LWCB MEETING

### SOIL AND WATER RESOURCE MANAGEMENT PROGRAM

- ◆ Recommendations on Land and Water Resource Management Plans  
*Responsible Party: Lisa Trumble*
- ◆ Gathering Input from Stakeholders and Public on Funding and Annual Grant Awards under the Nonpoint Program  
*Responsible Party: LWCB*

## AUGUST 2, 2016 LWCB MEETING

### SOIL AND WATER RESOURCE MANAGEMENT PROGRAM

- ◆ Recommendations on Land and Water Resource Management Plans  
*Responsible Party: Lisa Trumble*
- ◆ Presentation of 2017 Joint Preliminary Allocation Plan  
*Responsible Party: Richard Castelnovo and Linda Talbot*
- ◆ Report on 2015 Program Accomplishments by Counties  
*Responsible Party: Lisa Schultz and DNR representative*

### NONPOINT SOURCE WATER POLLUTION ABATEMENT PROGRAM

- ◆ DNR Presentation of the Scores and Rankings of Targeted Runoff Management (TRM) Projects for CY 2017  
*Responsible Party: Linda Talbot*
- ◆ DNR Presentation of the Scores and Rankings of Urban Nonpoint Source and Storm Water Management Projects for CY 2017  
*Responsible Party: Linda Talbot*

## OCTOBER 4, 2016 LWCB MEETING

### SOIL AND WATER RESOURCE MANAGEMENT PROGRAM

- ◆ Recommendations on Land and Water Resource Management Plans  
*Responsible Party: Lisa Trumble*
- ◆ Report and Potential Recommendation on the 2017 CREP Spending Authority  
*Responsible Party: Brian Loeffelholz*
- ◆ Recommendation for approval of the 2017 Joint Final Allocation Plan  
*Responsible Party: Richard Castelnovo and Linda Talbot*

### NONPOINT SOURCE WATER POLLUTION ABATEMENT PROGRAM

- ◆ DNR Presentation of the Rankings and the Funding Level for CY 2017 Targeted Runoff Management (TRM) Projects  
*Responsible Party: Linda Talbot*
- ◆ DNR Presentation of the Rankings and Funding Level for CY 2017 Urban Nonpoint Source and Storm Water Management Projects  
*Responsible Party: Linda Talbot*

## DECEMBER 6, 2016 LWCB MEETING

### SOIL AND WATER RESOURCE MANAGEMENT PROGRAM

- ◆ Recommendations on Land and Water Resource Management Plans  
*Responsible Party: Lisa Trumble*
- ◆ Report on Land and Water Resource Management Plans with 2017 expiration date  
*Responsible Party: Lisa Trumble*
- ◆ Report on 2015 Program Accomplishments by Counties (also listed in August)  
*Responsible Party: Lisa Schultz and DNR Representative*

### LWCB ADMINISTRATIVE MATTERS

- ◆ Approval of Proposed 2017 LWCB Annual Agenda  
*Responsible Party: LWCB Chairperson*
- ◆ Review of the LWCB Bylaws  
*Responsible Party: LWCB Chairperson*

### FARMLAND PRESERVATION PROGRAM (Scheduled if needed)

- ◆ Approval of Farmland Preservation Program Releases or Relinquishments  
*Responsible Party: Alison Volk*
- ◆ Review Farmland Preservation Program Agreement Appeals  
*Responsible Party: Alison Volk*