

PO Box 8911 Madison, WI 53708-8911 608-224-4630

Land and Water Conservation Board Agenda

February 4, 2020

The Land and Water Conservation Board will meet on February 4, 2020 beginning at 9:00 a.m. in Boardroom 106 at the Wisconsin Department of Agriculture, Trade and Consumer Protection, 2811 Agriculture Drive, Madison, WI. The agenda for the meeting is shown below.

AGENDA ITEMS AND TENTATIVE SCHEDULE:

- 1. Call the Meeting to Order Mark Cupp, LWCB Chair
 - a. Pledge of allegiance
 - b. Open meeting notice
 - c. Introductions
 - d. Approval of agenda
 - e. Approval of December 3, 2019 meeting minutes
- 2. Public appearances*

*Each speaker is limited to 5 minutes or less. Each speaker must complete a Public Appearance Request Card and submit it to a DATCP representative before the start of the meeting

- 3. Election of Officers- Mark Cupp, LWCB Chair
- 4. Recommendation for approval of 5 year LWRM plan review for Manitowoc County Jerry Halverson, County Conservationist, Manitowoc County SWCD; Catherine Wagner, Chair, Land Conservation Committee
- 5. Report and Recommendation on the 2020 CREP Spending Authority—Brian Loeffelholz and Melissa Gilmore, DATCP
- 6. Gathering input from stakeholders and public regarding nonpoint funding

 Mark Cupp, LWCB Chair
- 7. Board discussion regarding climate issues as they relate to LWRM plans— Mark Cupp, LWCB Chair

Mark Cupp, Chair • Dave Solin, Vice-Chair Members: Monte Osterman • Andrew Buttles • Ron Grasshoff • Mike Hofberger Eric Birschbach • Bobbie Webster • Andrew Potts • Sara Walling • Brian Weigel

- 8. Recommendation regarding SWRM allocation- Jenni Heaton-Amrhein
 - a. Waiver authority for extended grant contracts
 - b. Reallocation of 2020 Soil and Water Resource Management reserve funds
- 9. Results from Water Quality Task Force and the Governor's 2019 Year of Clean Drinking Water report—Mark Cupp, LWCB Chair, Eric Ebersberger, Policy Advisor to DNR Secretary
- 10. Agency reports
 - c. FSA
 - d. NRCS
 - e. UW-CALS
 - f. UW-Extension
 - g. WI Land + Water
 - h. DOA
 - i. DATCP
 - j. DNR
- 11. Planning for April 2020 LWCB meeting Mark Cupp, LWCB
- 12. Adjourn

MINUTES LAND AND WATER CONSERVATION BOARD MEETING

December 3, 2019 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 October 1, 2019 LWCB meeting minutes.

The meeting was called to order by Chairman Mark Cupp at 9:00 a.m. Members Eric Birschbach, Bobbie Webster, Mike Hofberger, Ron Grasshoff, Andrew Buttles, Dave Solin, Monte Osterman, Brian Weigel, Sara Walling, and Andrew Potts were in attendance. A quorum was present. Advisors Angela Biggs (NRCS) and Matt Krueger (WI Land + Water) also were present. Others present included Lisa Trumble and Katy Smith, DATCP.

Smith confirmed that the meeting was publicly noticed.

Solin moved to approve the agenda as presented, seconded by Grasshoff, and the motion carried.

Potts moved to approve the October 1st meeting minutes with two minor edits, seconded by Osterman, the motion carried.

Cupp introduced the new board member, Mike Hofberger.

Item #2 Public Appearances

No public appearance cards were submitted.

Grasshoff discussed climate change resiliency in plan review, particularly discussing Ashland County as an example. Grasshoff suggested that the board have a discussion on encouraging or instructing land and water resource management planners on including climate change resiliency in plans that come before the board. The discussion should focus on what role counties can play and the issues that affect them locally. Cupp requested that a discussion of climate change and how it affects LWRM plans be added as a 15 minute item at the February board meeting

Item #3 Recommendation for approval of Land and Water Resource Management Plan revision for Marquette County

Pat Kilbey, Marquette County Land and Water Conservation Department, and Robin Buchholz, Land Conservation Committee Chair, made a formal presentation in support of a 10-year approval of the county's LWRM plan.

DATCP's review of the plan using the LWRM Plan Review Checklist found that the plan complies with all requirements of section 92.10, Wisconsin Statutes, and Chapter ATCP 50, Wisconsin Administrative Code.

Marquette County Land and Water Conservation Department provided written answers to the Board's standardized questions, recent work plans and accomplishments, and other materials (available on LWCB's website: https://datcp.wi.gov/Pages/About_Us/LandWaterConservationBoard.aspx).

Board members and county representatives discussed the following: DNR's proposed program tracking software, BITs; stream and lakeshore erosion; a noted decrease in the number of total farms as compared to a county increase in the number of farms participating in farmland preservation; the value of having a half-time agronomist on staff in the department and what it would take to get a full-time agronomist on staff; the TMDL plan being put out for public comment; county interactions with Amish and Mennonite populations and field days for the Demonstration Farm Network.

Birschbach moved to recommend approval of Marquette County's plan revision for a period of 10 years, seconded by Webster, and the motion carried.

Item #4 Recommendation for approval of Land and Water Resource Management Plan revision for Rock County

Tom Sweeney and Anne Miller, Rock County Land Conservation Department, and Richard Bostwick, Land Conservation Committee Chair, made a formal presentation in support of a 10-year approval of the county's LWRM plan.

DATCP's review of the plan using the LWRM Plan Review Checklist found that the plan complies with all requirements of section 92.10, Wisconsin Statutes, and Chapter ATCP 50, Wisconsin Administrative Code.

Rock County Land and Water Resources Department provided written answers to the Board's standardized questions, recent work plans and accomplishments, and other materials (available on LWCB's website: https://datcp.wi.gov/Pages/About_Us/LandWaterConservationBoard.aspx).

Board members and county representatives discussed the following: the county's Purchase of Agricultural Conservation Easement program; town zoning; the high level of nutrient management plans in the groundwater water focus area; options for 9-key element plans; farm consolidation and the economy pushing towards large scale operations; the high rate of reenrollment in the CREP program; NR 151 compliance, county support of increases to the farmland preservation tax credit, and the future use of social media for program outreach.

Weigel moved to recommend approval of Rock County's plan revision for a period of 10 years, seconded by Solin, and the motion carried.

Item #5 Recommendation for approval of Land and Water Resource Management Plan revision for Portage County

Steve Bradley, Portage County Land and Water Conservation Department, and Barry Jacowski, Land and Water Conservation Committee Chair, made a formal presentation in support of a 10-year approval of the county's LWRM plan.

DATCP's review of the plan using the LWRM Plan Review Checklist found that the plan complies with all requirements of section 92.10, Wisconsin Statutes, and Chapter ATCP 50, Wisconsin Administrative Code.

Portage County Land and Water Conservation Department provided written answers to the Board's standardized questions, recent work plans and accomplishments, and other materials (available on LWCB's website: https://datcp.wi.gov/Pages/About Us/LandWaterConservationBoard.aspx).

Board members and county representatives discussed the following: the county weed commissioner; the need for focus on programmatic documentation to establish a baseline for evaluating compliance and implementation of recommendations for metrics like Nitrogen applications; balancing the importance of programmatic documentation with institutional knowledge; a recommendation to spend time and money on activities that will have the best return on investment, for example, using the land and water resource management plan as an educational tool; the absence of a grazing program in the county; an opportunity for the department to partner with the Central Rivers Watershed; the inability to use SEG cost share dollars to incentivize nutrient management over the last several years, and farmer sentiments regarding the obligation to prepare a nutrient management plan and maintain the plan in perpetuity; and the obligations of preparing an annual work plan the county feels is not necessary.

Solin moved to recommend approval of Portage County's plan revision for a period of 10 years, seconded by Buttles, and the motion carried.

Item #6 Update on Funding sources for Programs Subject to LWCB Oversight

Susan Mockert, DATCP, made a presentation to introduce different ways that Georgia, Iowa, Minnesota, Missouri and Ohio fund conservation programming.

Cupp directed the Board to contact Lisa Trumble or him with topics of interest related to this discussion by December 20th, 2019. A secondary presentation regarding funding sources will be made at the February meeting. Cupp requested additional information regarding the Ohio Water Fund, in particular its funding source. Birschbach inquired about the funding source for the farmland preservation tax credit and the possible use of underspent funds. Smith clarified that the funding required for the farmland preservation credit is re-estimated every year so that there should not be a significant amount of unused funds associated with that allocation. In follow-up to the Board's discussion of the Ohio Water Fund, Potts noted that Wisconsin already moves half of its surplus to a "rainy day fund." This would need to be considered if the board highlighted the state surplus as potential source for conservation funding shortfalls. Cupp also noted that the board should expect a legislative package potentially addressing staffing grants, to come out of the water quality task force in the new year.

Following discussion from Weigel, Cupp and Osterman regarding the scope of board authority, the board agreed to keep the scope and nature of the inquiry into how other states fund conservation programming broad. Walling asked Potts that future discussions draw comparisons of state-level funding in Wisconsin with that in other States. Krueger reiterated that the importance of considering board authority as the board continues its discussion of conservation funding, however reinforced that taking a broad perspective in future discussions would provide an opportunity to identify and discuss funding shortfalls in conservation.

Item #8 Recommendation for approval of Land and Water Resource Management Plan revision for Bayfield County

Ben Dufford, Bayfield County Land and Water Conservation Department, and Fred Strand, Land Conservation Committee Chair, made a formal presentation in support of a 10-year approval of the county's LWRM plan.

DATCP's review of the plan using the LWRM Plan Review Checklist found that the plan complies with all requirements of section 92.10, Wisconsin Statutes, and Chapter ATCP 50, Wisconsin Administrative Code.

Bayfield County Land and Water Conservation Department provided written answers to the Board's standardized questions, recent work plans and accomplishments, and other materials (available on LWCB's website: https://datcp.wi.gov/Pages/About Us/LandWaterConservationBoard.aspx).

Board members and county representatives discussed the following: the county study on Chronic Wasting Disease on a local deer farm; annual fence inspections from the Land Conservation and Zoning Departments; approval of the Marengo Watershed Plan as a 9-key element plan; hazard mitigation; the need for conservation training for highway engineers; county utilization of available cost share dollars and a shift of focus away from shore land and wetland projects and towards ag projects; utilization of ATCP 51 and ordinance for CAFO operations; the elimination of forestry goals from the LWRM plan with the growth of an independent county forestry department and the mitigation of high waters on Lake Superior and the need to refer landowners to private engineers to move structures adjacent to the lake.

Osterman moved to recommend approval of Bayfield County's plan revision for a period of 10 years, seconded by Walling, and the motion carried.

Item #9 Recommendation for approval of Land and Water Resource Management Plan revision for Polk County

Katelin Anderson and Eric Wojchik, Polk County Land and Water Resources Department, Kim O'Connell, Environmental Services Committee Chair, made a formal presentation in support of a 10-year approval of the county's LWRM plan.

DATCP's review of the plan using the LWRM Plan Review Checklist found that the plan complies with all requirements of section 92.10, Wisconsin Statutes, and Chapter ATCP 50, Wisconsin Administrative Code.

Polk County Land and Water Resources Department provided written answers to the Board's standardized questions, recent work plans and accomplishments, and other materials (available on LWCB's website: https://datcp.wi.gov/Pages/About_Us/LandWaterConservationBoard.aspx).

Board members and county representatives discussed the following: retirement of the county conservationist, Tim Ritten; a decrease of interest in the farmland preservation program; an increased emphasis on the producer led watershed protection grant program and the impact that requiring NR151 compliance would have on these groups; the effectiveness of farmer written nutrient management plans as compared to agronomist written plans; the effectiveness of partnering with the county health department to send out a mailing for water sampling; the likelihood of frac sand mining coming to the county in the future; county consideration of enacting a hog CAFO moratorium; county utilization of the nutrient management farmer education grants; the effectiveness of having a committee that oversees five other county departments and why there are so many lakes on the 303d impaired waters list when there is a limited amount of ag in the county.

Webster moved to recommend approval of Polk County's plan revision for a period of 10 years, seconded by Weigel, and the motion carried.

Item #10 Approval of Proposed 2020 LWCB Annual Agenda

Trumble provided a memo with the dates and locations for the next year. Trumble and Cupp have discussed having a business meeting outside of the Madison area for June meeting.

Trumble discussed a theme related to the year of clean drinking water. A potential proposal will be discussed at the February meeting. Osterman noted that April 7th is the county elections and that it would affect 3 members of the board. Cupp noted that if Iron County felt that the elections would be a conflict for presenting their LWRM plan, they could push to the June meeting.

Potts motioned to approve. Seconded by Hofberger. Carried.

Item #11 Agency Reports

NRCS – Biggs reported that NRCS is still under continuing resolution. Conservation Stewardship Program (CSP) interim rules have been posted and are available for comment. NRCS expects EQIP interim rules to be posted soon.

WI Land + Water – Krueger reported that the county conservationist meeting will be held on December 12th and 13th. They are taking a roundtable approach as opposed to having keynote speakers. Topics will include connecting new county cons with seasoned county cons, nitrates and hazard mitigation. The WI Land +Water Conference is coming up March 4-6 in Green Bay.

DOA – Potts reported that DOA will be releasing their certified financial report in a couple of weeks. Tax collection resulted in an unexpected surplus of about \$321 million- this will be redirected to a rainy day fund. There is talk of pushing the rainy day fund to 5-10% of the operating budget, however getting to 2% would be a more realistic goal. The legislature defines a rainy day. DOA is working with the DNR on the Central Sands Study for three lakes in Waushara County. The study needs to go to joint finance committee to request additional funds.

DATCP – Walling reported that the annual reporting cycle has started for counties (asked to report counties for the 2019 cycle). Trumble has started annual work planning with counties. Siting is on the ATCP board's agenda for the December 12th meeting as a discussion item only. Chris Clayton has taken a position with DNR as the Ag Runoff Section Chief. Producer Led Watershed Protection Grant (PLWPG) awards for 2020 have been announced- 28 projects will be funded. The 2020 Agricultural Enterprise Area petition cycle is now open. December 9th Dana Christel will be starting work in the PLWPG program in an NRCS funded position.

DNR – Weigel reported that the runoff section has been divided into Ag Runoff and Urban Stormwater. Chris Clayton has started as the Section Chief in the Ag Runoff Section. He will be hiring 6 new staff- one hydrogeologist for the CAFO program, a permit application intake specialist position, an engineering supervisor, an engineer, a CAFO program coordinator and a non-point coordinator. NR 151 targeted performance standards for nitrates had 3 public hearings in November. TRM grants for urban construction will open in January. Several counties have had to return TRM grants when construction projects cannot be completed. DNR is evaluating capacity to spend going forward.

Item #13 Planning for February 2020 LWCB meeting

Cupp reported the meeting will be on the 4th of February.

In addition to the items identified in the proposed annual agenda, staff should plan to include agenda items for discussion on 1) climate issues as they related to LWRM plans, 2) a presentation on BITs from DNR 3) a presentation on topics of interest on funding sources for programs subject to LWCB oversight. Manitowoc County will be presenting their LWRM plan.

Item #14 Adjourn

Grasshoff moved to adjourn, seconded by Osternan, the motion carried. The meeting was adjourned at 2:41 pm.

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Eric Birschbach, Secretary Date

Recorder: KS, DATCP

CORRESPONDENCE/MEMORANDUM _____State of Wisconsin

DATE: January 17, 2020

TO: Land and Water Conservation Board Members and Advisors

FROM: Lisa K. Trumble, DATCP Lisa K. Trumble

Resource Management Section,

Bureau of Land and Water Resources

SUBJECT: Five Year Review of the Manitowoc County Land and Water Resource Management

Plan

Recommended Action: This is an action item. The LWCB should determine whether the county has met the LWCB's guidance and criteria for a five year review of a LWRM plan approved for ten years. If the LWCB makes a formal determination that the county has failed to meet the LWCB guidance, DATCP will automatically modify its order to terminate approval of the county's plan effective December of this year.

Summary: The Manitowoc County land and water resource management plan has been approved through December 31, 2025 contingent on a five year review conducted prior to December 31, 2020. In advance of the five year review, Manitowoc County has completed a DATCP approved form designed to implement the LWCB's June 2017 guidance and criteria for conducting a five year review. The county has provided written answers to four questions regarding past and future plan implementation, has provided the required work planning documents, and has appropriately involved the Land Conservation Committee.

The county has prepared either a PowerPoint presentation or a hand out to accompany its 5-8 minute snapshot regarding county resources and management issues.

Materials Provided:

- Completed Five Year Review Form
- 2019 Annual Workplan with Accomplishments
- 2020 Annual Workplan

Presenter: Jerry Halverson, Department Director, Manitowoc County SWCD

Catherine Wagner, Land Conservation Committee Chair



Land and Water Conservation Board County Land and Water Resource Management Plan Five Year Review of LWRM Plans

County: Manitowoc County

Implementation Covering Past Five Years and Future Directions

Answer these four questions in writing (not to exceed 4 pages)

1. Provide a representative number of accomplishments that can be directly traced to activities identified in multiple work plans. For each accomplishment, explain how the planning process helped the county achieve its outcome, including planning adjustments that helped better target county activities.

Priority A: Implement local conservation ordinances

Accomplishment: Farmers, Crop Advisors, and Manure Haulers understand our ordinances.

- Annual meetings with Crop Advisors and Manure Haulers
- Compliance reviews for FPP and facility siting
- Locally administered notices of violations and citations
- Easy availability of restriction maps

The 10-year Land and Water Resource Management Plan identifies enforcement of regulations as a high priority to control and reduce delivery of sediment, nutrients and other pollutants to surface and groundwater from agricultural cropland and production sites.

Priority B & C: Implement and enforce state agricultural performance standards and prohibitions and Farmland Preservation Program

Accomplishment: High level of compliance with state agricultural performance standards and prohibitions

- FPP: 907 compliance certificates, 680 participants
- Livestock Siting Ordinance: 28 Facility Siting Licenses, 32,000 cows and 17,000 youngstock
- Manitowoc County Manure and Waste Ordinances
- 23 CAFOs that are required to meet state standards
- Knowledgeable Crop Advisors with a high level of expertise

We implemented and enforced the performance standards by utilizing a number of complimentary programs such as facility siting, CAFOs, FPP, and County Manure and Waste Ordinances. These activities are identified in the 10 year plan and annual work plans.

Priority D: Implement groundwater protection programming

Accomplishment: Heightened awareness and implementation of new standards to protect groundwater

- Used LIDAR to identify conduits to groundwater along with contribution areas resulting in better hazard identification
- Quarterly nitrate monitoring
- Annual nitrate testing at the Manitowoc County Fair
- One-on-One meetings with landowners in target areas

These activities are identified in the 10 year plan and annual work plans. Adjustments were made in 2018 to include new Silurian bedrock targeted performance standards.

Priority E: Implement surface water programming

Accomplishment: Needs identification for opportunities and direction for the Pine Creek and Long Lake watersheds that result in water quality improvement.

- 9 Key Element Plans Pine Creek Watershed
- 9 Key Element Plan CalMan Lakes Watershed
- Lake watershed improvements

The 9 Key Element Plans are more complete and comprehensive than the original watershed modeling planned. Adjustments to staff time were made to complete these plans.

Priorities F, G, and H: Educational programming and promote and implement Best Management Practices

Accomplishment: Increased education programming by adding staff.

- Hired 60% Education Coordinator
- Manure Application on shallow soils field day
- Soil Health and Cover Crop Forum
- Increased social media communication

The county survey used to develop the 10-year land and water resource management plan identified a need to improve our information and education programming.

2. Identify any areas where the county was unable to make desired progress in implementing activities identified in multiple work plans. For each area identified, explain the work plan adjustments that were made to refocus planned activities. If no areas are identified, explain how the county was able to make progress in all the areas planned.

Grassed waterway construction for gully erosion is slow to implement county-wide. Gully erosion control is not a stand-alone standard making it difficult to enforce. Alternative gully control management is encouraged such as lifting tillage equipment through concentrated flow channels.

Land improvements are a low priority during depressed commodity prices.

Implementation of BMPs to improve surface and groundwater was delayed due to lengthy watershed planning processes. Staff time was allocated to project planning vs. implementation.

3. Describe how the county's work plans implement its priority farm strategy and the effectiveness of county actions implementing agricultural performance standards and conservation practices on farms. In particular, the county should describe outreach, farm inventories, and additional funds that were pursued to implement its strategy.

Farms required to comply with agricultural performance standards identified in state programs such as FPP and facility siting, and farms in violation of county ordinances are priorities. Participant farms are regularly scheduled for reviews of compliance. Our outreach includes farm visits, up-to-date map products of restrictions and explanation of penalties for non-compliance. Inventory of groundwater conduits and contribution areas has significantly improved targeting cropland and helped us prioritize farms to work with. We applied for and received Multi Discharge Variance Dollars and accepted additional Bond and SEG dollars available from DATCP.

4. Provide representative examples that show changes in direction for work planning in the upcoming five years, with specific examples provided showing adjustments in planned activities in the county's most recent work plan.

TMDL and 9 Key Element Plan implementation is not identified in the 10-year plan but is the direction for program implementation in the next five years. Additional staff and cost-share dollars will be required to implement additional BMPs.

Participation in the Demo Farm Network to increase awareness of Best Management Practices

Shift staff hours away from engineering projects to nonstructural land management

Annual Work Plans

Attach both of the following:

- a. The most current annual work prepared by the county.
- b. The work plan for the previous year that includes a column that identifies the progress in implementing the planned activities for that year.

Presentation Regarding County Resource Concerns

Prepare and present a 5-8 minute snapshot to the board regarding county resources and management issues. The county must prepare one of following as part of this brief presentation:

- a. A PowerPoint (showing what your county looks like, can include maps), or
- b. A hand out (2 page max)

Guidance on Board Review Process

The LWCB encourages and supports honest presentations from the county. The goal of the review is not to fail counties. The board recognizes the dynamic nature of the planning process. Board members are interested in how counties tackle priorities over time and how they respond to changing conditions in pursuing their priorities. The board will evaluate a county's planning and implementation based on how well the county balances and prioritizes the following:

agricultural performance standards, other state priorities (impaired waters, FPP checks), and local priorities. When needed, the Board will provide constructive support to counties to improve the quality of their planning.

Land Conservation Committee Notification

The LCC was provided a completed copy of this form (including attachments) on: January 16, 2020

Signature of Authorized Representative: Jerry Halverson, Manitowoc County Soil & Water Conservation Department Director **Date:** January 9, 2020 (e.g. County Conservationist, LCC chair)

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

Table 1: Planned activities and performance measures by category

CATEGORY (goal and objective from LWRM plan can be added in each category)	PLANNED ACTIVITIES WITH BENCHMARKS If applicable identify focus areas, e.g. HUC 12 watershed code (examples of types of "planned activities" in italics)	PERFORMANCE MEASUREMENTS (examples in italics)
Cropland		
Cropland, soil health and/or nutrient management	1,200 additional acres in Nutrient Management	Type and units of practice(s) installed 2,070 acres of Nutrient Management Plans + 547 acres CC + 154 acres No Till
(Priority A, B, E, F, G)		Amount of cost-share dollars spent SEG \$99,350.00 \$82,820.00 Nutrient Management 2,070 acres \$13,680.00 Cover Crops 547 acres \$2,849.00 No Till 154 acres
	2 miles of gully erosion control practices(5 ac)	Bonded \$47,683.00 1.5 miles of waterway 9.8 acres stream buffer
	34,000 acres of cropland identified as achieving conservation compliance (tillage setback, tolerable soil loss, high residue farming for erosion controletc.)	# acres of cropland in compliance with a performance standard (e.g. soil erosion, tillage setback) 152,500 acres of 2019 Nutrient Management Plans submitted 43,750 acres completed 4-year inspection
	Cover Crop & Soil Health Forum Farmer mentor program 3 Nutrient Management Farmer Education events	# of Cover crop & Soil Health Events 1 Cover Crop Forum 1 Manure Application/Cover Crop Field Day 35 New Cover Crop Signs 3 NMFE Classes
• Livestock		<u>I</u>
Livestock (Priority A, B, E, G)	2 manure and wastewater storage facility 1 process wastewater (milkhouse waste and feed leachate) treatment systems	Type and units of practice(s) installed 2 manure and wastewater storage facilities 2 processes waste water for feed leachate 2 manure storage abandonments 3 new livestock facility siting license 2 Livestock facility license modifications Amount of cost-share dollars spent NRCS Cost-share # of livestock facilities in compliance with a performance standard 60 livestock facilities inspected in 2019(FPP and Livestock Siting)

• Water quality

Water quality/quantity (other than activities already listed in other categories)	Improve groundwater education & implement management practices. Focus towns: Cato, Maple Grove, Franklin, Gibson, Cooperstown, Rockland, Schleswig, Kossuth. Sinkholes, conduits to groundwater, and shallow bedrock. 160 well water screenings county-wide 60 landowners to be reached via 1-on-1 contacts Implement strategies with Lake Association Members- Carstens Lake, restore hydrology to Gass Lake, & Long Lake plan implementation.	# of FPP & groundwater participants request voluntary nitrate screening 2 # well water screenings 205 screened for nitrates # of landowners to be reached via 1-on-1 meetings 31 1-on-1 meetings 25 Nutrient Management Plan reviews for 151.075 and NRCS 590 standard compliance # of BMPs installed Carstens Lake Watershed – 80% in no-till with cover crops, 2 new wetland restorations, stream monitoring Long Lake Watershed – Worked with Calumet County on 9- Key Element Plan development(Approved by DNR and EPA) Gass Lake Watershed – Worked with Lake Association on surface water diversion Pine Creek 9-Key Element Plan Developed and Approved by DNR and EPA Bullhead Lake – Worked with Lakes Association to create a Lake District. Provided watershed information for watershed modeling. Wilke Lake – Worked with landowners on WASCOB Northeast Lakeshore TMDL – watershed agricultural survey and numerous meetings
• Forestry		
Forestry		Rent 2 tree planters
• Invasive		
Invasive species		Coordinated and participated in 2 meetings with Glacierland

RC&D Invasive Species Specialist Letter of support for continued position

• Wildlife

Wildlife-Wetlands-Habitat (other than forestry or invasive species)	APHIS Administration	Administer budget LCC approved landowner claims, sets harvest date and crop prices. Administers budget
Urban		
Urban issues		

Watershed

Watershed strategies	Northeast Lakeshore TMDL	Number of meetings attended/presentations given 2 TMDL meetings/ 1 presentation given TMDL Agriculture Survey
	Producer-led meetings and activities with Land and Water Stewardship Committee	Number of partnership development activities accomplished 1 Cover Crop Forum, 1 Manure Application/Cover Crop Field Day 25 Cover Crop Signs Steping Legel step and step my step
	9-Key Element Planning for Pine Creek Watershed	Day, 35 Cover Crop Signs, Storing Leachate and storm water issue conversation with DNR Meet goals defined in the Scope of Work
	Long Lake Watershed Plan Implementation	Pine Creek – DNR & EPA Approved 9 Key Element Plan
	Carstens Lake Watershed Plan	Long Lake - Identified Crop Advisors, plan 2020 winter meeting with Crop Advisors and Calumet County Verified waterway needs
		Carstens Lake - See above: water quality section Meet goals defined within watershed plans

• Other

Office Administration/Professional	Office administration and support	200 hours to maintain certifications and professional
Development	Professional development (CEU, PDH, Continuing	development
(Priority I)	education)	Development hours completed for CCA and Engineering
	New employee training	Practitioners Certification
	Technicians Meetings	New Employee DATCP Training, WI Crops Conference, WI
	200 hours to maintain certifications and	Land + Water Conference, WLIA Conference, Nutrient
	professional development	Management education, Discovery Farms Conference, Arlington
		Field Day, Lake Michigan Area Summer Tour, Nitrate Loss to
		Groundwater Workshop, Conservation Employee training,
		Advanced Nutrient Management Technology and Application
		Field Day, one-on-one training with department employees

Table 2: Planned activity related to permits and ordinances

Permits and Ordinances	Plans/application reviews anticipated	Permits anticipated to be issued
Feedlot permits		
Manure storage construction and transfer systems	2	2 issued
Manure storage closure	3	2 issued
Livestock facility siting	6	2 new 2 modifications issued
Nonmetallic/frac sand mining		
Stormwater and construction site erosion control		
Shoreland zoning		
Wetlands and waterways (Ch. 30)		
Other		

Table 3: Planned inspections

Inspections	Number of inspections planned
Total Farm Inspections	200 324 completed
For FPP	199 324 completed
For NR 151	1 2 completed
Animal waste ordinance	15 10 completed
Livestock facility siting	12 12 completed
Stormwater and construction site erosion control	
Nonmetallic mining	

Table 4: Planned outreach and education activities

Activity	Number
Tours	
Field days	4 2 completed
Trainings/workshops	6 7 completed
School-age programs (camps, field	4 completed
days, classroom)	
Newsletters	2 completed
Social media posts	50 50 completed
News release/story	10 9 completed

Table 5: Staff Hours and Expected Costs (staff can be combined or listed individually)

Staff/Support	Hours	Costs
Combine Staff (5 staff members)	9,750 9,750	\$443,444 \$443,444
Cost Sharing (can be combined)		
Bonding		\$52,250 \$52,250
SEG		\$75,000 \$75,000

Table 1: Planned activities and performance measures by category

CATEGORY	PLANNED ACTIVITIES WITH BENCHMARKS	PERFORMANCE MEASUREMENTS
(goal and objective from LWRM plan can	If applicable identify focus areas, e.g. HUC 12	(examples in italics)
be added in each category)	watershed code	
	(examples of types of "planned activities" in italics)	
 Cropland 		
Cropland, soil health and/or	1,200 additional acres in Nutrient Management	Type and units of practice(s) installed
nutrient management		
(Priority A, B, E, F, G)		Amount of cost-share dollars spent
	2 miles of gully erosion control practices(5 ac)	
		# acres of cropland in compliance with a performance standard
	24,000 gaves of evenland identified as achieving	(e.g. soil erosion, tillage setback) # of Cover crop & Soil Health Events
	34,000 acres of cropland identified as achieving conservation compliance (tillage setback, tolerable	# of Cover crop & Sou Health Events
	soil loss, high residue farming for erosion	
	controletc.)	
	control meters	
	Cover Crop & Soil Health Forum	
	Demo Farm	
	35 Cover Crop Signs	
	3 Nutrient Management Farmer Education events	
 Livestock 		
Livestock	2 manure and wastewater storage facility	Type and units of practice(s) installed
(Priority A, B, E, G)	I process wastewater (milkhouse waste and feed	Amount of cost-share dollars spent
	leachate) treatment systems	# of livestock facilities in compliance with a performance standard
	3 new livestock facility siting license	
	2 livestock facility siting license modifications	
	1 manure storage abandonment	
	12 livestock facility siting license reviews 40 livestock facility inspections FPP	
	40 livestock facility inspections FPF	
Water quality		<u>I</u>
Water quality/quantity (other than	Improve groundwater education & implement	# of FPP & groundwater participants request voluntary nitrate
activities already listed in other	management practices. Focus towns: Cato, Maple	screening
•	Grove, Franklin, Gibson, Cooperstown, Rockland,	
categories)	Schleswig, Kossuth. Sinkholes, conduits to	
	groundwater, and shallow bedrock.	# well water screenings
	160 11	
	160 well water screenings county-wide 30 landowners to be reached via 1-on-1 contacts	# of landowners to be reached via 1-on-1 meetings
	25 Nutrient Management Plan reviews	# of BMPs installed
	23 Ivan tem Management Flan reviews	# Of DIVIT'S INSTALLED

	Implement strategies with Lake Association Members- Carstens Lake, restore hydrology to Gass Lake, & Long Lake plan implementation. TMDL input.	
Forestry		
Forestry	Rent 2 tree planters	
• Invasive		
Invasive species	Provide meeting space	
• Wildlife		
Wildlife-Wetlands-Habitat (other	APHIS Administration	Administer budget
than forestry or invasive species)		
• Urban		
Urban issues		

Watershed

Watershed strategies	Provide input for the Northeast Lakeshore TMDL	Number of meetings attended/presentations given
	Producer-led meetings and activities with Land and Water Stewardship Committee, Water Quality & Soil Health Focus Groups Cover Crop & Soil Health Forum Demo Farm Network	Number of partnership development activities accomplished
	9-Key Element Implementation for Pine Creek Watershed	Meet goals defined in the Scope of Work
	Long Lake Watershed Plan Implementation	Meet goals defined within watershed plans
	Carstens Lake Watershed Plan Implementation	

• Other

Office Administration/Professional	Office administration and support	200 hours to maintain certifications and professional
Development	Professional development (CEU, PDH, Continuing	development

(Priority I)	education)	
	New employee training	
	Technicians Meetings	
	200 hours to maintain certifications and	
	professional development	

Table 2: Planned activity related to permits and ordinances

Permits and Ordinances	Plans/application reviews anticipated	Permits anticipated to be issued
Feedlot permits		
Manure storage construction and transfer systems	2	
Manure storage closure	2	
Livestock facility siting	4	
Nonmetallic/frac sand mining		
Stormwater and construction site erosion control		
Shoreland zoning		
Wetlands and waterways (Ch. 30)		
Other		

Table 3: Planned inspections

Inspections	Number of inspections planned				
Total Farm Inspections	200				
For FPP	199				
For NR 151	1				
Animal waste ordinance	10				
Livestock facility siting	12				
Stormwater and construction site erosion control					
Nonmetallic mining					

Table 4: Planned outreach and education activities

Activity	Number
Tours	
Field days	2
Trainings/workshops	6
School-age programs (camps, field	
days, classroom)	
Newsletters	4
Social media posts	50
News release/story	10

Table 5: Staff Hours and Expected Costs (staff can be combined or listed individually)

Staff/Support	Hours	Costs	
Combine Staff (5 staff members)	9,750	\$450,000	
Cost Sharing (can be combined)			
Cost Sharing (can be combined)			
Bonding		\$60,600	
SEG		\$55,000	
MDV		\$10,000	

CORRESPONDENCE/MEMORANDUM_

DATE:

January 24, 2020

TO:

Land and Water Conservation Board Members and Advisors

FROM:

Lacey Cochart, DATCP

Land and Water Resources Bureau

SUBJECT:

Recommendation to Adjust County Spending Authorities for the

Conservation Reserve Enhancement Program (CREP) in 2020

Recommended Action: This is an action item. DATCP requests that the LWCB recommend approval of the proposed adjustments to the county CREP spending authorities.

Summary: Since the last allocation adjustment in 2017, Outagamie and Door counties have seen unanticipated increases in CREP enrollment. These counties have requested an increase to their CREP spending allocation. The proposed adjustments will allow the state and counties to continue to implement CREP at the current rate without interruption.

The Wisconsin Conservation Reserve Enhancement Program (CREP) has been in place since October 2001 when Wisconsin signed a CREP agreement with USDA authorizing enrollment of 100,000 acres into CREP. In December 2018 Congress passed the 2018 Farm Bill which extended authority for enrollment in CREP to September 30, 2023. DATCP maintains State-County CREP contracts that provide specific spending authority to counties based on anticipated participation. This contract includes provisions for DATCP to amend the county spending authority. The process provides counties an opportunity to discuss the proposed spending authority with the LWCB, with the LWCB making a final recommendation to the DATCP Secretary. DATCP must follow this process to make adjustments in CREP spending authority.

Through the partnership of local, State and Federal offices, the Wisconsin CREP program has seen continued landowner participation and enrollment. Wisconsin dedicated \$28 million in spending authority for implementing the State side of CREP and to date, has paid about \$19 million to 5,600 landowners on about 65,000 acres. State CREP payments, together with \$3.6 million in county contributions to implement CREP locally, leverage over \$100 million in federal funds for CREP that will be paid out to landowners.

To maintain adequate funding at the county level for both expected new enrollments and reenrollment, the current county CREP spending authority allocations need to be increased for these counties. The attached table lists the adjusted CREP allocations for affected counties. Funding will be reallocated to these counties from previously uncommitted bonding authority. DATCP maintains uncommitted funds in case additional funding is needed for counties that successfully implement CREP. The uncommitted allocation will be reduced to \$87,000 in bonding authority.

DATCP informed all affected CREP counties about the proposed 2020 spending authority amendment via email on January 23, 2020. To date, the department has not received any comments opposed to the revised spending authorities.

Materials Provided: Table titled *CREP – Allocation Adjustment Schedule* (lists by county the current CREP spending authority allocation, current payments, current balance, proposed spending authority allocation, and the balance under the proposed allocation)

Presenter(s): Brian C. Loeffelholz & Melissa Gilmore

CREP - Allocation Adjustment Schedule

Note: based on spending as of 1/23/2020

	Current Al	location	Proposed Allocation			Adjustment	
County	Allocation	Total Payments	Balance	Allocation	Balance		
Adams	\$50,000	\$484	\$49,516	\$50,000	\$49,516		
Ashland	\$30,000	\$15,767	\$14,233	\$30,000	\$14,233		
Barron	\$60,000	\$29,871	\$30,129	\$60,000	\$30,129		
Bayfield	\$40,000	\$26,496	\$13,504	\$40,000	\$13,504		
Brown	\$240,000	\$138,541	\$101,459	\$240,000	\$101,459		
Buffalo	\$650,000	\$378,843	\$271,157	\$650,000	\$271,157		
Calumet	\$70,000	\$58,831	\$11,169	\$70,000	\$11,169		
Chippewa	\$2,500,000	\$1,831,716	\$668,284	\$2,500,000	\$668,284		
Clark	\$90,000	\$53,798	\$36,202	\$90,000	\$36,202		
Columbia	\$170,000	\$105,132	\$64,868	\$170,000	\$64,868		
Crawford	\$260,000	\$146,428	\$113,572	\$260,000	\$113,572		
Dane	\$1,800,000	\$1,378,009	\$421,991	\$1,800,000	\$421,991		
Dodge	\$470,000	\$396,589	\$73,411	\$470,000	\$73,411		
Door	\$120,000	\$99,281	\$20,719	\$130,000	\$30,719	Increase	
Douglas	\$10,000	\$0	\$10,000	\$10,000	\$10,000		
Dunn	\$230,000	\$144,266	\$85,734	\$230,000	\$85,734		
Eau Claire	\$390,000	\$218,246	\$171,754	\$390,000	\$171,754		
Fond du Lac	\$240,000	\$157,996	\$82,004	\$240,000	\$82,004		
Grant	\$1,900,000	\$1,373,531	\$526,469	\$1,900,000	\$526,469		
Green	\$810,000	\$546,997	\$263,003	\$810,000	\$263,003		
Green Lake	\$40,000	\$19,113	\$20,887	\$40,000	\$20,887		
Iowa	\$2,800,000	\$2,288,961	\$511,039	\$2,800,000	\$511,039		
Iron	\$10,000	\$0	\$10,000	\$10,000	\$10,000		
Jackson	\$20,000	\$2,413	\$17,587	\$20,000	\$17,587		
Jefferson	\$660,000	\$410,328	\$249,672	\$660,000	\$249,672		
Juneau	\$470,000	\$234,412	\$235,588	\$470,000	\$235,588		
Kewaunce	\$140,000	\$87,555	\$52,445	\$140,000	\$52,445		
La Crosse	\$65,000	\$35,589	\$29,411	\$65,000	\$29,411		
Lafayette	\$5,000,000	\$3,800,408	\$1,199,592	\$5,000,000	\$1,199,592		
Manitowoc	\$300,000	\$261,167	\$38,833	\$300,000	\$38,833		
Marathon	\$180,000	\$95,988	\$84,012	\$180,000	\$84,012		
Marquette	\$40,000	\$14,860	\$25,140	\$40,000	\$25,140		
Monroe	\$640,000	\$484,123	\$155,877	\$640,000	\$155,877		
Outagamie	\$45,000	\$46,911	-\$1,911	\$55,000	· · · · · · · · · · · · · · · · · · ·	Increase	
Ozaukee	\$60,000	\$28,489	\$31,511	\$60,000	\$31,511		
Pepin	\$220,000	\$106,588	\$113,412	\$220,000	\$113,412		
Pierce	\$120,000	\$47,504	\$72,496	\$120,000	\$72,496		
Portage	\$150,000	\$72,026	\$77,974	\$150,000	\$77,974		
Racine	\$270,000	\$201,888	\$68,112	\$270,000	\$68,112	:	
Richland	\$420,000	\$300,408	\$119,592	\$420,000	\$119,592	}	
Rock	\$2,000,000	\$1,049,142	\$950,858	\$2,000,000	\$950,858		
Saint Croix	\$210,000	\$108,482	\$101,518	\$210,000	\$101,518	*	
Sauk	\$1,700,000	\$1,151,615	\$548,385	\$1,700,000	\$548,385	!	
Shawano	\$20,000	\$2,116	\$17,884	\$20,000	\$17,884		
Sheboygan	\$40,000	\$14,203	\$25,797	\$40,000	\$25,797		
Taylor	\$60,000	\$21,136	\$38,864	\$60,000	\$38,864		
Vernon	\$250,000	\$161,729	\$88,271	\$250,000	\$88,271		
Walworth	\$650,000	\$497,104	\$152,896	\$650,000	\$152,896		
Washington*	\$8,000	\$7,418	\$582	\$8,000	\$5 <u>82</u>	1	
Waukesha	\$5,000	\$1,817	\$3,183	\$5,000	\$3,183		
Waupaca	\$370,000	\$281,748	\$88,252	\$370,000	\$88,252		
Waushara Winnehago	\$40,000	\$15,687	\$24,313	\$40,000	\$24,313	 	
Winnebago Wood	\$280,000	\$169,938	\$110,062	\$280,000	\$110,062	1	
Wood Uncommitted Balance	\$480,000 \$107,000	\$305,479 \$43,096	\$174,521 \$63,904	\$480,000 \$87,000	\$174,521	Decrease	
						}	
Totals	\$28,000,000	S19,470,265	\$8,529,735	\$28,000,000	\$8,529,735	<u> </u>	

^{*} County no longer eligible in the Federal CREP Agreement for Wisconsin.

CORRESPONDENCE/MEMORANDUM_____State of Wisconsin

DATE: January 24, 2020

TO: Land and Water Conservation Board Members and Advisors

SUBJECT: Board Submitted Programs for Consideration in Discussion of Agenda Item

6. "Gathering input from stakeholders and public regarding nonpoint funding"

1. MDA Grant Funds 11 Innovative Agriculture Projects Minnesota Department of Agriculture¹ The Minnesota Department of Agriculture (MDA) has awarded Fiscal Year 2018 Agriculture Growth, Research, and Innovation (AGRI) Sustainable Agriculture Demonstration Grants (SADG) to eleven farmers and researchers across Minnesota.

2. Lawns to Legumes MN Board of Water, Soil Resources²

BWSR recently received state funding to develop a new *Lawns to Legumes* program focused on planting residential laws with native vegetation and pollinator friendly forbs and legumes to protect a diversity of pollinators. Funding will be targeted in priority areas benefitting the Rusty Patched bumble bee and other at-risk species.

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 $^{^{1}\} https://www.mda.state.mn.us/mda-grant-funds-11-innovative-agriculture-projects$

² https://bwsr.state.mn.us/lawns-legumes

DATE: January 28, 2020

TO: Land and Water Conservation Board Members and Advisors

FROM: Susan Mockert, DATCP

Bureau of Land and Water Resources

SUBJECT: Introduction to Innovative Conservation Funding Discussion – Follow-up

Action Requested: This is not an action item.

Summary: After providing a general overview of innovative conservation funding across numerous states, Staff were asked to provide more information on the H2Ohio program and the Georgia Outdoor Stewardship Act.

H2Ohio

Stakeholder gatherings began five years ago, led by the Ohio Farm Bureau, The Nature Conservancy, and the Ohio Agribusiness Association and included Lake Erie Federation, (private landowners), Ohio Environmental Council, National Wildlife Federation, regional planning organizations and land conservancy organizations. For several years, this group focused on education, outreach and the bond issue. Ohio has a ballot initiative system, so they were able to introduce legislation this way. A new governor was elected who helped to push the legislation through. According to Tracy Freeman of The Nature Conservancy in Ohio, there were several factors that played into this legislation being partially funded:

- 1. Very public environmental crisis in the Lake Erie algal bloom.
- 2. Individuals impacted by the bloom included a wealthy landowner group.
- 3. A new governor in 2018 who was open and willing to consider bond-based spending and environmental improvements.
- 4. Significant public support demonstrated via the ballot initiative

Some changes made during negotiations include a decrease in funding from the originally requested \$1 billion to the Governor suggested \$900 million to the General Assembly approved two-year trial at \$190 million. The original plan was to focus on water quality and effective management of agricultural BMPs and wetland / floodplain restoration. A third focus was added to address community projects such as replacing lead water lines to schools and daycares and replacing contaminated wells. With the limited funds, the focus of the first two year cycle is the wetland and floodplain restoration in the Lake Erie watershed.

The General Assembly only approved the funding for two years. This seed money came from the State's budget surplus. There is a second bill (House Bill 7) going through legislative process now (currently in the Senate Finance Committee since July 2019) which would establish a Trust which would continue to be partially funded the selling state special obligation bonds, but would also be

able to accept donations, hopefully leading to an independent funding source down the line. The funding of this Trust is modeled on the State of Ohio's retirement system.

Georgia Outdoor Stewardship Act

A coalition formed in 2010 including The Georgia Conservancy, The Nature Conservancy, the Trust for Public Land, Georgia Wildlife Federation, The Conservation Fund, and Park Pride began the advocacy for dedicated conservation funding in the State of Georgia. In 2018, House Bill 332 and House Resolution 238 were passed amending the State Constitution which requires a majority confirmation in a public election. In November 2018, voters approved the measure, with 83% support.

The Act provides a dedicated funding mechanism via 40 percent of sales and use tax collected by sporting goods stores in the immediately preceding year, for an estimated \$20 million in dedicated conservation funding over the next ten years. These funds are to be used to support the protection and conservation of land and shall supplement, not supplant, department resources.

The funds in the Georgia Outdoor Stewardship Program are available to local governments, recreation authorities, State agencies and certain nongovernmental entities. The funds can be used for stewardship and acquisition in support of local parks and trails; stewardship projects that improve and maintain state-owned land and facilities; and acquisition projects in protection of critical conservation areas.

Georgia also has a transferrable Conservation Tax Credit Program, established in January 1, 2014 which allows for the exchange of tax credits for a conservation easement or a portion of the cost of conservation BMPs and gives landowners the ability to sell their tax credits to other taxpayers. Approved donors may earn tax credits equal to 25 percent of the fair market value of their donations, up to \$250,000 for individual donors and \$500,000 for corporate and partnership donors. Donations made and recorded by partnerships before January 1, 2013 may earn a credit of up to \$1 million in aggregate. Any unused portion of the credit may be carried forward for 10 succeeding years. The tax credit expires December 31, 2021.

States with Similar Constitution Amending Rules

- Amendments must be proposed by legislature
- If approved by both chambers in one session the proposed amendment must then be considered by the state legislature chosen at the next general election in the state
- Amendment must be released for public review three months before the election
- If approved by simple majority in the second session, placed on a statewide ballot
- If approved by a simple majority of the state's electorate, it becomes part of the constitution -Or-

Constitutional convention

Indiana – bill introduced in January 2020 which would fund agricultural conservation easements.

Iowa – State revolving fund, cover-crop demonstration project (active)

Natural Resources and Outdoor Recreation Trust (never funded)

New York – Conservation Easement Tax credit – refund up to \$5000 on local taxes for land under a conservation easement

Pennsylvania- REAP – landowners or businesses earn tax credits for implementing BMPs that will enhance farm production and protect natural resources. First come, first served. Received 50-75% of project cost in the form of State tax credits for up to \$250,000 per operation over 7 years. Tax credits available for use for up to 15 years and can be sold after 1 year. Landowners can work with sponsors to fund projects – sponsor reimburses landowner the cost of the project and sponsor receives the tax credits

South Carolina – Conservation Credit Exchange – tax credits offered for the preservation of farms, landscapes and other natural, cultural and recreational resources. After verification of the credits, a dollar-for-dollar tax credit equal to 25% of the deduction attributable to the gift is generated, not to exceed \$250 per acre. Unused tax credit can be held, gifted or sold.

Virginia – BMP Tax Credit Program. Landowners with approved conservation plan may take a credit against state income tax of 25 percent of the first \$100,000 of actual out-of-pocket expenses for agricultural BMPs. Unused tax credit is refunded to the tax payer

CORRESPONDENCE/MEMORANDUM_____State of Wisconsin

DATE: January 24, 2020

TO: Land and Water Conservation Board Members and Advisors

FROM: Jennifer Heaton-Amrhein, DATCP

Bureau of Land and Water Resources

SUBJECT: 2018 bond funds waiver requests and DATCP SEG reserve fund use

Recommended Action: The waiver requests are for information only and not an action item. Staff requests a recommendation for approval on use of the SEG reserve funds.

Summary:

<u>Waivers:</u> Under ATCP 50.02, Wis. Adm. Code, the department may grant a written waiver from any provision in ATCP 50 if the department finds that the waiver is necessary to achieve the objectives of this chapter. The Secretary must sign each waiver. Eight counties (a record number) applied for a one-year waiver of ATCP 50.34 (6)(a)4., Wis. Adm. Code, which limits extending funding for the same contract to one additional year. Unprecedented rainfall in two consecutive years left landowners unable to install conservation practices because of saturated fields, unharvested crops and a shortage of contractors. Staff is recommending the DATCP Secretary approve the six waiver requests that meet at least two of the three criteria the department has historically used when considering extension requests 1) weather related problem 2) contractor unavailability and 3) extenuating circumstances. DATCP is also, on a three year pilot basis, removing 2018 and 2019 extending underspending from the bonding allocation formula to not penalize counties that faced similar circumstances but did not request a waiver.

<u>SEG Reserve</u>: In the 2020 Final Joint Allocation Plan, the LWCB recommended approval of a \$350,000 DATCP SEG reserve for updates to the SWRM database to allow for geolocation of conservation practices. The allocation plan also listed other possible uses for the reserve fund including assistance to the state soil testing lab, a harvestable buffer pilot program, and "other statewide conservation priorities." The updates to the SWRM database cannot be done in 2020, so the reserve fund is available for the other listed purposes. ATCP 50.28 (5), Wis. Adm. Code requires DATCP to get a recommendation from the LWCB on any reallocation of the reserve fund. Although technically not a reallocation because these uses were broadly mentioned in the final allocation plan, DATCP is requesting a recommendation from the LWCB under ATCP 50.28 (5) to use the reserve fund for several specific projects.

Materials Provided:

♦ Additional information about the proposed reserve fund projects will be sent in a separate mailing the week of January 27-31.

Presenters: Jennifer Heaton-Amrhein, DATCP and Matt Komiskey, USGS

CORRESPONDENCE/MEMORANDUM _____ State of Wisconsin

DATE: January 28, 2020

TO: Land and Water Conservation Board Members and Advisors

FROM: Jennifer Heaton-Amrhein, DATCP

Bureau of Land and Water Resources

SUBJECT: Additional information on DATCP SEG reserve fund use

In the 2020 Final Joint Allocation Plan, the LWCB recommended approval of a \$350,000 DATCP SEG reserve for updates to the SWRM database to allow for geolocation of conservation practices. The department anticipated not being able to encumber funds for this purpose by May 2020 and included other possible uses for the reserve fund in the final allocation plan, including assistance to the state soil testing lab, a harvestable buffer pilot program, and "other statewide conservation priorities." ATCP 50.28 (5), Wis. Adm. Code requires DATCP to get a recommendation from the LWCB on any reallocation of the reserve fund. Although technically not a reallocation because "other statewide conservation priorities" was broadly mentioned in the final allocation plan, DATCP is requesting a recommendation from the LWCB under ATCP 50.28 (5) to use \$250,000 of the SEG fund reserve for an Airborne Electromagnetic (AEM) Survey of a portion of the Silurian bedrock area in Northeastern Wisconsin in order to map the 5'-20' depth to bedrock needed for implementation of the targeted performance standard. The remainder of the SEG reserve fund will be used for the other listed purposes.

DATCP has been working with the Standards Oversight Committee to develop a technical standard for verification of depth to bedrock, which is the technical standard needed to implement the Silurian bedrock targeted performance standard. Once finalized, this standard will need to be adopted into ATCP 50, and cost to comply with the technical standard will have to be cost-shared at the required 70% rate. Without accurate depth-to-bedrock maps, it is likely that DATCP, DNR and the counties will have to cost-share individual landowners to verify depth-to-bedrock in order to implement the performance standard. The proposed AEM survey will provide the 5'-20' depth to bedrock verification and maps for a portion of the counties impacted by the targeted performance standard and validate the technology for use in other areas, greatly reducing the cost burden on individual farms and increasing the long-term cost-effectiveness for the state.

The SEG reserve funding will leverage, at a minimum, an additional \$224,000 in federal funding for this project, which Senator Tammy Baldwin (D-WI) specifically requested USGS to direct and designate funding towards this type of work in Wisconsin. Phase 1 currently is projected to include 2140km flight lines. Project sponsors are seeking additional funds which will be directed entirely towards more flight lines.

Other project cooperators include the United States Geological Survey (USGS) and the Wisconsin Geologic and Natural History Survey. Additionally, DNR previously contributed \$50,000 to verify depth-to-bedrock maps in Kewaunee County; the AEM survey includes a small portion of the area in those maps in order to verify the accuracy of the AEM survey.

(See attached proposal for more information). Matt Komiskey from the USGS will be present at the LWCB meeting to explain this project in more detail.

Airborne Electromagnetic (AEM) Survey of Karst Bedrock Features in the Upper Midwest

Cooperative Grant Proposal

The U.S. Geological Survey (USGS) and Wisconsin Geological and Natural History Survey (WGNHS) are requesting Cooperative Grant funds to use as match to perform an airborne geophysical (AEM) survey to map the interface between the uppermost dolomite bedrock and overlying unconsolidated sediments within the Upper Midwest. The area of interest is in Northeastern Wisconsin where areas identified to have Silurian bedrock are subject to the WDNR targeted performance standard, Ch. NR 151.075, Wis. Adm. Code. This performance standard effects all crop and livestock producers that mechanically apply manure directly or through contact to cropland or pasture areas to follow specific guidelines based on the depth of soils to the Silurian bedrock.

Current depth to bedrock maps are based on limited data and professional judgement, often from over 40 years ago. This proposal is for the collection of airborne geophysical data that encompasses selected areas of interest in Northeastern Wisconsin and focuses on the 5 and 20ft depths identified in the performance standard (table 1). Additional depth to bedrock measurements along and between the survey area will also be collected by the WGNHS. This includes the use of a Geoprobe or similar ground-based methods to get accurate depths to help calibrate the AEM survey data. This project is intended to be a 2-phase project over a period up to 3 years; however, given funding uncertainties when projecting across multiple years, all but the first year will be considered 'optional add-on' pending availability of funds.

	Targeted Performance Standards						
Depth to bedrock	Solid manure conditions	Liquid manure conditions					
<2' Verification Required	No mechanical application	No mechanical application					
2'-3' Verification Required	Incorporate* within 72 hrs to \$4" depth and; At least one of the following: a) Rate < 15 T, b) Within 10 d planting or established crop, c) Pathogens < 500,000 CFU	Pre-tillage* and; Inject or incorporate* S4*depth within 24hr and; At least one of the following: a) Rate is lesser of UW A2809 or Table 1, b) Within 10 d planting or established crop, c) Pathogens < 500,000 CFU					
3'-5' Verification required	Same as above except 56 ° depth	Pre-tillage* and; Inject or incorporate* \$6*depth within 24hr and; Same as above					
5'-20' No Verification required	No new conditions proposed	Pre-tillage* and; Inject or incorporate* <8"depth within 24hr and; Same as above					

AEM is rapidly emerging as a cost-effective method for subsurface characterization over large areas. The use of AEM to define depth to bedrock features is an innovative use of the airborne geophysical methods, especially at the relatively shallow depths required here. This project and use of AEM is not designed to identify the depth to bedrock for the 2 and 3ft contours as identified in the performance standard. However, identifying the 5 and 20ft contours will limit private individuals from having to fund individual small-scale geophysical surveys or expensive intrusive surveys to validate those contested

areas. Additionally, use of AEM surveys will ensure that the same data is used to inform bedrock depth estimates over the entire area. This means the data collection process crosses county boundaries that are typically identified as areas of uncertainty between separately funded mapping activities. This process also provides data points in remote areas that are not evaluated from well logs or other construction reports. This project will make the new maps publicly available, so the validation exercises won't have to be repeated or complicated data sets stored long term.

The USGS will coordinate a procurement contract for the specified work through an open bidding process with private contractors. This contracting process will specifically require the ability of their instruments to resolve shallow subsurface features, ideally supported by data examples from recent surveys with the same instrumentation. USGS will be responsible for interpretation of the data, which will involve rigorous inversion and uncertainty quantification that will be used in the development of depth to Silurian/karst bedrock contours that can be incorporated into new maps and nutrient management software. This project focuses on a selected area in Northeastern Wisconsin. However, given the differences in electrically resistive Silurian bedrock areas and overlying low-resistivity unconsolidated sediments, this evaluation is expected to determine constraints that could define its application nationally.

Project Timeline and Funding

This is a 2-phase project with potential extensions based on availability of funding. The focus of the 2020 grant is on Phase 1, which is to define the bedrock depths of 20 feet or greater, in addition evaluating the suitability of the methods for determining the 5-foot bedrock depth contour. Table 2 identifies defined benchmarks, funding, and proposed timeline. Funding from this grant will be distributed to both the USGS and WGNHS based on anticipated project needs. To comply with the USGS funding match requirements and joint funding agreement (JFA), billing on the JFA will be identified as quarterly but will be based on the tasks/benchmarks that are completed within each quarter. In addition, funding for the site investigations by the WGNHS will go directly to WGNHS and not subject to USGS match dollars.

Table 2

Phase 1 Tasks		DATCP Funding to USGS	DATCP Funding to WGNHS	USGS Match	WHNHS Match	Total DATCP Funding	Total Funding	Anticipated Completion
1	AEM Contract Solicitation. Includes contract development and distribution for solicitation. The statement of work will include the MAP of the Phase 1 study area.	\$5,000		\$5,000		\$5,000	\$10,000	Feb 2020
2	AEM Contract Selection. Includes all work related to awarding the contract, coordinating outreach and soliciting for additional funds.	\$5,000		\$5,000		\$5,000	\$10,000	April 2020
3	Site Investigations. WGNHS conducts additional geo-probe and geophysical analysis in selected areas and along the flight test line of the proposed MAP.		\$26,000		\$6,000	\$26,000	\$32,000	June 2020
4	AEM Survey. Contractor completes 2140km flight lines in the targeted area.	\$165,000		\$165,000		\$165,000	\$330,000	Aug-Sept 2020
5	AEM Data Assessment: Flight data is reviewed with all partners.	\$20,000	\$9,000	\$20,000	\$3,000	\$29,000	\$52,000	Nov-Dec 2020
6	Preliminary Data Presentation: USGS presents preliminary data assessment to all cooperators.*	\$20,000		\$20,000		\$20,000	\$40,000	Dec-Feb 2020-21
	TOTAL	\$215,000	\$35,000	\$215,000	\$9000	\$250,000	\$474,000	

^{*} Publication of final maps for inclusion in SnapPlus is anticipated for completion in summer 2021.

Figure 1 defines the two areas of the State that are included in the initial AEM survey contract. The core area in Northeast Wisconsin is phase 1, where 2140km flight lines are identified as the initial targeted flight distance. The final number of flight lines will be subject to final funding amounts and actual costs determined through the competitive public bidding process for the AEM contract. If further funding is added to the project beyond this cooperative grant, those funds will be used to extend the flight lines within that core area. Figure 2 shows the approximate coverage, of the core area, through this grant funding.

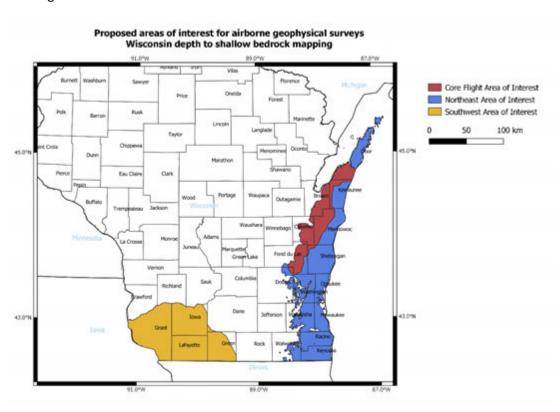


Figure 1 – AEM survey MAP



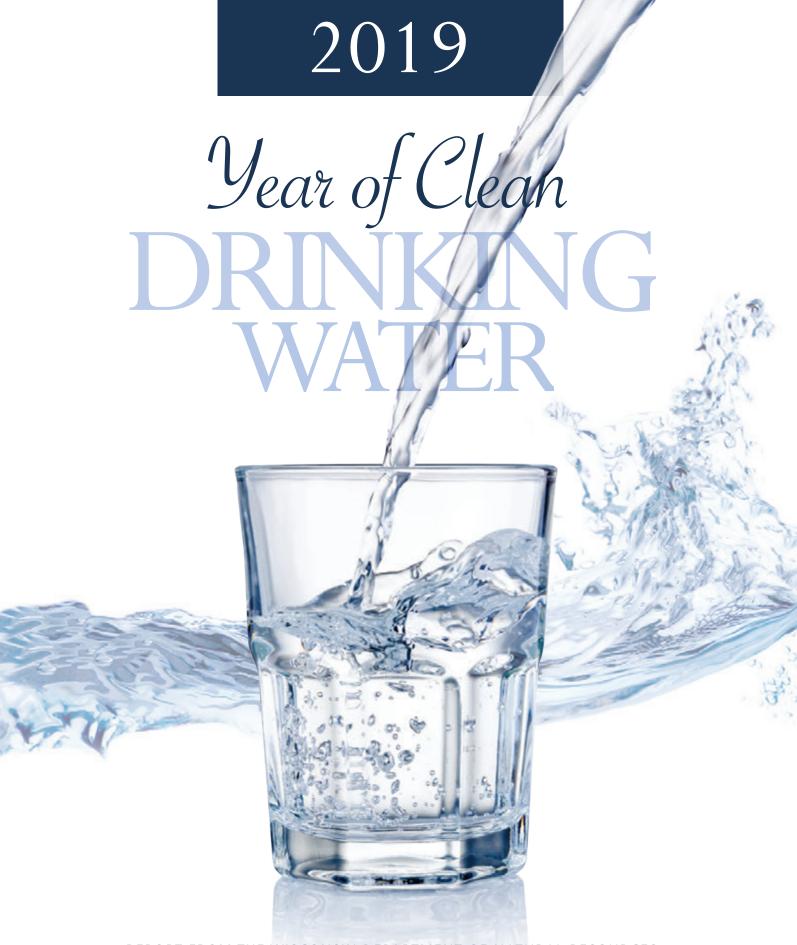
Figure 2 - AEM Phase 1 Coverage

Impact of Additional Dollars

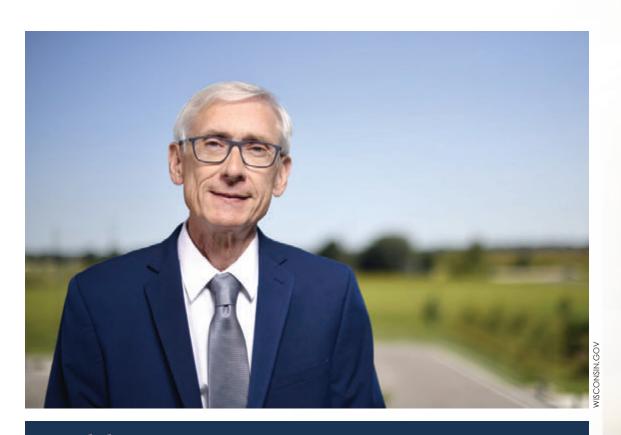
Funding for the AEM survey is based through an open procurement process to commercial vendors and equipment availability. This means that the anticipated costs are an estimate and total flight area is subject to change. As part of the AEM contract, the USGS will define a core flight line (line-kms) based on an estimate of funds and cost predictions based on previous projects. The contract will have options to execute for additional line-kms if additional funding is found. Given the cost to mobilize/demobilize the equipment, any additional funds will go directly to more line-kms.

Project Goal

For this Cooperative Grant, a presentation of the initial data collected by the AEM survey and interpreted by USGS and WGNHS will be provided to meet the contract/grant requirement. This presentation **includes a depth to bedrock map** within the AEM flight area as well as an assessment of the accuracy of the AEM survey techniques. Continued work will be conducted to finalize a collaborative publication of the data and to provide a final map to be incorporated into the DATCP nutrient management software.



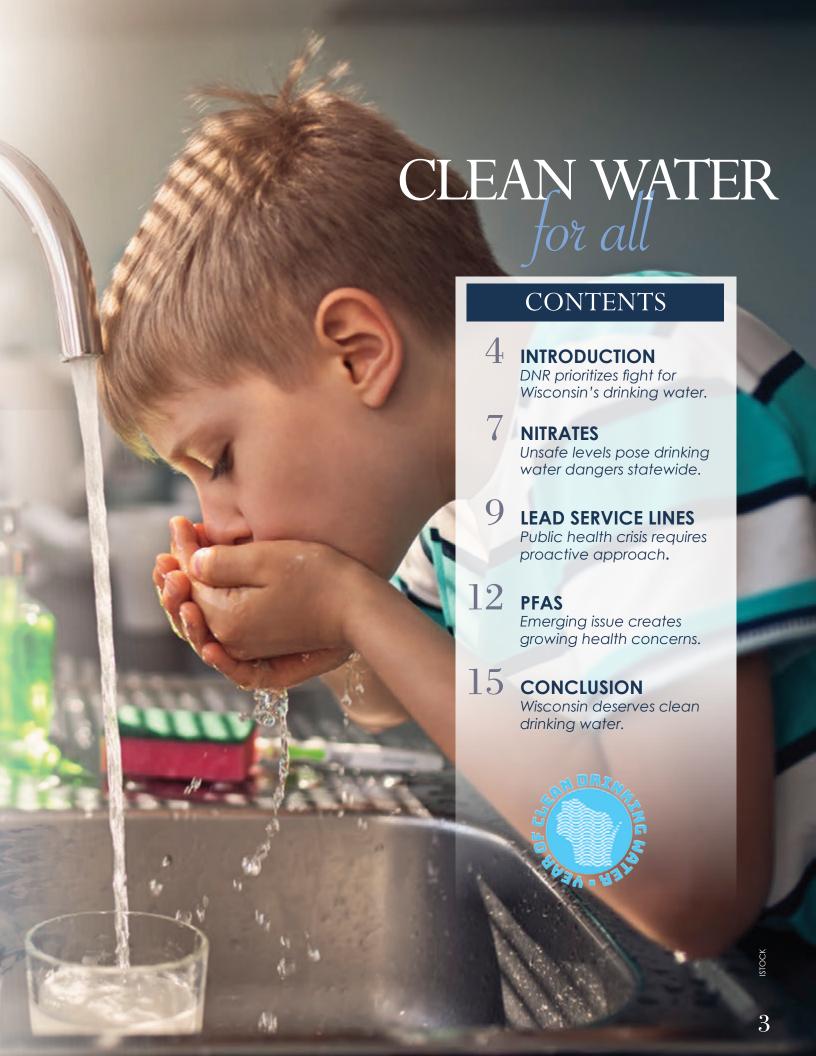
REPORT FROM THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES



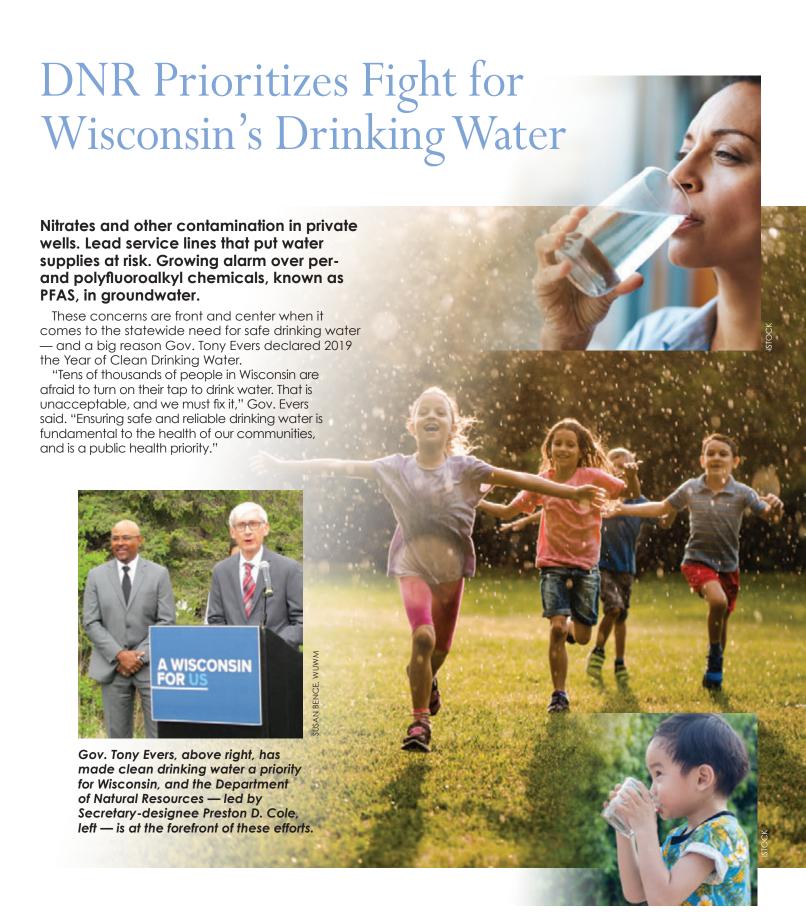
66 Everyone should be able to drink water straight from their tap.

It is time for our state to fund restoration projects, incorporate science into our natural resource policy, address widespread water contamination, and acknowledge the real and imminent threat of climate change. By investing in conservation, protecting our natural resources and taking proactive action to prevent pollution, we can ensure clean drinking water for every community in the state.

- Gov. Tony Evers



INTRODUCTION



Evers made that statement in June as he chaired a leadership summit in Milwaukee involving U.S. governors and Canadian officials from the Great Lakes region. There, he introduced and shepherded passage of two resolutions designed to protect Wisconsin's drinking water from lead contamination and the emerging hazard of PFAS.

It was but one of many actions the governor took in 2019 — the Year of Clean Drinking Water. The Wisconsin Legislature also has been active, holding numerous listening sessions statewide as part of the Speaker's Task Force on Water Quality, a bipartisan committee featuring members of both the State Assembly and Senate.

The Department of Natural Resources is entrusted with protecting Wisconsin's water resources and enforcing the federal Safe Drinking Water Act.

Fighting pollution and keeping water safe has long been at the very heart of agency endeavors.

The fact that DNR devotes such effort, energy and focus to ensuring clean drinking water throughout



Gov. Tony Evers, right, and DNR Secretary-designee Preston D. Cole, center, tour the School of Freshwater Sciences at UW-Milwaukee.

DNR TAKES ACTION TO ENSURE CLEAN DRINKING WATER

Here's a brief summary of actions taken by the Department of Natural Resources in the Year of Clean Drinking Water. Details on key issues, accomplishments and strategies going forward can be found in this report.

- PFAS RULEMAKING: As directed by Gov. Evers and using science-based recommendations from the state Department of Health Services, DNR has begun the process of creating enforceable standards for drinking water, surface water and groundwater to protect public health in the face of emerging PFAS contaminants. In October, the Natural Resources Board voted unanimously to move forward with this process, which will include further NRB oversight and public participation as a critical component of agency rulemaking. The DNR and DHS will continue working together on developing the standards needed to address PFAS contamination.
- NITRATE RULEMAKING: Following the direction of Gov. Evers, the DNR has initiated steps to pursue rulemaking through NR 151 to reduce nitrate contamination by establishing targeted performance standards for soils most likely to experience such contamination. At its December meeting, the NRB approved the agency's request for rulemaking. Working with the Department of Agriculture, Trade and Consumer Protection, these efforts are aimed at addressing harmful nitrates in groundwater and surface water.
- SOUTHWEST WISCONSIN GROUNDWATER AND GEOLOGY STUDY: The DNR has provided a portion of the funding, along with county land conservation departments, for a broad survey to evaluate the safety of drinking water in Grant, lowa and Lafayette counties. The study is testing water from hundreds of wells in counties where 44% of residents obtain drinking water from private wells. The fractured bedrock landscape found in southwest Wisconsin makes this part of the state exceptionally vulnerable to groundwater contamination.

- EXECUTIVE ORDER #36: Signed July 29, this order from Gov. Evers targets lead exposure in drinking water, creating a position in the Department of Health Services to coordinate the state's efforts. It also directs DHS to provide staffing and resources to collaborate with local health departments and community groups to inform and protect state residents against the risks of lead poisoning.
- EXECUTIVE ORDER #40: Related to and expanding on PFAS rulemaking, this Executive Order signed Aug. 22 creates a PFAS Coordinating Council staffed by DNR with assistance from other agencies. Specified tasks include developing a PFAS action plan for the state, evaluating the public health risks and natural resources impacts of PFAS, identifying PFAS sources and management strategies, and developing protocols to inform and educate the public about PFAS issues.
- FRESHWATER COLLABORATIVE: The DNR is partnering with UW-Milwaukee, the institution leading the Freshwater Collaborative, an education and research framework involving all 13 UW System campuses. The Collaborative will fill the demand for a water-focused workforce.
- SPEAKER'S TASK FORCE ON WATER QUALITY: The
 DNR participated in multiple listening sessions held
 by the Task Force around the state. In November,
 DNR joined with DHS and DATCP in forming
 recommendations to the Task Force to address
 water quality issues.
- STATE FAIR: Returning with a much bigger presence than in previous years, the DNR chose "Clean Water" for its theme at the 2019 Wisconsin State Fair. Numerous interactive exhibits and educational pieces from DNR at State Fair Park in West Allis celebrated water and put the focus squarely on water quality issues and importance during the 11-day Wisconsin tradition.

the state speaks to its crucial importance.

"We cannot live without clean drinking water," said DNR Secretarydesignee Preston D. Cole. "Water is life-giving."

Much of that work historically relates to Wisconsin's Groundwater Protection Standards, passed 35 years ago "for the protection of public health and welfare." Still more of what DNR does involves implementing and enforcing the federal Safe Drinking Water Act, signed into law in 1974.

This report highlights the work being done by DNR in critical areas, including lead service lines, nitrates in well water and PFAS. It acknowledges that, although much has been done, much work remains. While noting accomplishments, the report focuses on strategies moving forward to address continuing issues. The official Year of Clean Drinking Water may be over, but the battle marches on to make clean water in Wisconsin accessible to everyone.

DNR'S WORK RUNS GAMUT FROM LARGE PUBLIC WATER SYSTEMS TO PRIVATE WELLS

The Wisconsin Department of Natural Resources is responsible for implementing and enforcing the federal Safe Drinking Water Act (SDWA) to safeguard the quality of the state's drinking water. The SDWA sets limits (called maximum contaminant levels, or MCLs) on allowable levels for bacteriological and chemical contaminants in drinking water as well as monitoring and reporting requirements.

PUBLIC WATER SYSTEMS

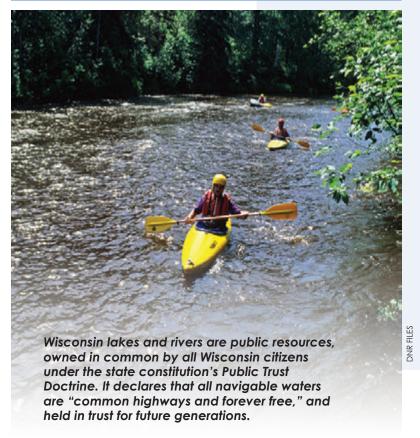
Wisconsin has 11,451 public water systems, the most of any state. About three-quarters of Wisconsin residents get their water from public water systems.

A public water system is defined by the DNR and the U.S. Environmental Protection Agency as a system that provides the public with piped water for human consumption.

All public water systems are required to meet safe drinking water regulations, maintain adequate records and receive regular sanitary inspections by DNR or contracted county health department staff.

Community water systems — public systems that serve water where people live versus to restaurants, schools or places of work — are annually required to provide a Consumer Confidence Report to all customers.

PUBLIC TRUST: WISCONSIN'S WATERS BELONG TO EVERYONE



PRIVATE WELLS

Approximately 1.7 million people rely on private wells (800,000 in Wisconsin) for their water source. Unlike public water systems, protection and maintenance of a private well is largely the responsibility of the well owner.

The DNR sets and enforces standards for well construction, pump installation and well filling and sealing; however, unlike public water systems, private wells in Wisconsin are not required to be regularly tested or treated.

Determining the safety of the drinking water from private wells is up to the homeowner. Wisconsin groundwater surveys find that only 10% to 16% of private well owners have tested their well water for any contaminant.

Private wells should be tested annually for bacteria and nitrates, plus other contaminants as indicated by the DNR or health department professionals. Wells should be tested more frequently if there is a change in taste, odor or appearance of the water. Wells should be tested at least once for arsenic.

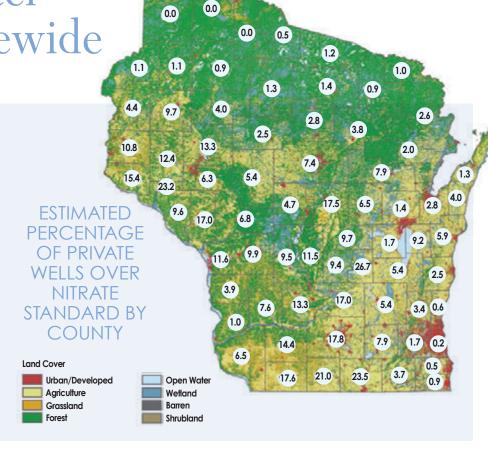
NITRATES

Unsafe Levels Pose Drinking Water Dangers Statewide

Nitrate (NO3) is Wisconsin's most widespread groundwater contaminant. It poses an acute risk to infants and women who are preanant. a possible risk to the developing fetus during very early stages of pregnancy, and a chronic risk of serious disease in adults. Since the early 1990s, it has been well-accepted that around 90% of nitrogen inputs to groundwater in Wisconsin can be traced to agricultural sources including manure spreading and fertilizer application.

Studies show that nitrate contamination is increasing in extent and severity in the state, leading to estimates that at least 10% of private wells in Wisconsin have high levels of nitrate. Increasing nitrate levels have also been observed in an additional 74 municipal systems.

In some concentrated agricultural areas, such as the highly cultivated regions in south central Wisconsin, an estimated 20% to 30% of private well samples exceed the maximum contaminant levels. The DNR estimates more than 40,000 (maybe as many as 80,000) private wells



and approximately 300 public water systems exceed the health standard for nitrate of 10 mg/L. The total cost estimate of abandonina these contaminated wells and replacing with a new safe water supply exceeds \$440 million. It is estimated that private well owners have spent more than \$9 million to replace wells with elevated nitrate to date. 🤇

HOW MUCH IS TOO MUCH AND WHAT ARE THE RISKS?

Wisconsin's health-based groundwater enforcement standard (ES) and maximum contaminant level (MCL) for nitrate are set at 10 mg/liter (ppm). Everyone should avoid long-term consumption of water containing nitrate above this level.

Infants below the age of 6 months who drink water containing nitrate in excess of the MCL are especially at risk and could become seriously ill with a condition called methemoglobinemia or "bluebaby syndrome." This condition deprives the infant of oxygen and in extreme cases can cause death.

Birth defects have also been linked to nitrate exposure. Several epidemiological studies over the past decade have examined statistical links between nitrate exposure and neural tube birth defects.

Studies collectively indicate an ongoing need for caution in consumption of nitrates by pregnant women and support the continuation of private well testing programs for these women.

In the human body, nitrate can convert to nitrite (NO2) and then to N-nitroso compounds (NOCs), which are some of the strongest known carcinogens. As a result, additional human health concerns related to nitratecontaminated drinking water include increased risk of non-Hodgkin's lymphoma, gastric cancer, and bladder and ovarian cancer in older women.

NITRATES

ACCOMPLISHMENTS

GOING FORWARD

SOME OF THE DNR'S ACTIONS TO REDUCE NITRATES IN DRINKING WATER INCLUDE:

- The DNR's Drinking Water and Groundwater (DG) Program is working with the University of Wisconsin to build a Nitrate Fertilizer Decision Support Tool that will help farmers identify practices to reduce nitrate leaching into groundwater while maintaining an economically viable crop. Work has begun on the project and the projected completion date is 2024.
- Began implementing new Silurian bedrock performance standards under Wis. Admin. Codes NR 151.075 on July 1, 2018. Full implementation of the standard will likely take five years. Ground-water monitoring will help the DNR track progress of the targeted performance standards over time.

THE DNR IS MOVING AHEAD ON SEVERAL INITIATIVES:

- Develop NR 151 targeted performance standards in areas of the state susceptible to nitrate contamination (the Wisconsin Natural Resources Board approved a rule scope statement in December).
- This begins the public process where health officials, researchers, safe drinking water advocates and the agriculture community assist in the development of rulemaking focused on solutions that improve drinking water for Wisconsinites living within our most sensitive landscapes.
- Revise NR 812 to expand well construction requirements to better protect groundwater in sensitive geologic formations.

ADDITIONAL RECOMMENDATIONS:

The DNR made recommendations to the Governor following the 2019 Water Quality Task Force hearings, includina:

- Require groundwater monitoring at all agricultural operations and land application sites.
- Increase permit fees for Concentrated Animal Feeding Operations, or CAFOs, to fund the department's Agricultural Runoff Program to support permitting and oversight

- Modify well compensation program to allow for funding private well replacement for low-income well owners where nitrates exceed 10 mg/L.
- Provide funding to county health departments to expand testing of privately owned wells.
- Increase funding to complete statewide mapping and investigation of geology and groundwater resources in each county.
- Establish and fund routine statewide nitrate groundwater monitoring (and reporting to DNR's database) using the network of private wells periodically sampled by DATCP to generate maps, trends and five-year report on nitrate in groundwater.
- Fund and staff an upgrade/ overhaul of existing DNR geospatial groundwater data system to incorporate well construction, groundwater age data, aquifer characteristics, area soils/geology, and area land use information.
- Provide funding for additional essential research through the Wisconsin Groundwater Coordinating Council (GCC) joint solicitation.



Manure spreading, especially on vulnerable soils, contributes to nitrogen inputs in groundwater.

LEAD SERVICE LINES

There is no safe level of lead in the body. Even low levels of lead can slow brain development in children, impacting their learning and behavior. We have to get lead service lines out of the ground if we are going to ensure drinking water is safe for all. Today more than 130 cities, towns and villages across Wisconsin still have lead service lines.

- DNR Secretary-designee Preston D. Cole

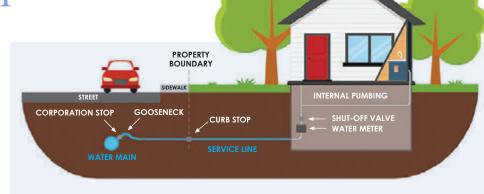
Public Health Crisis Requires Proactive Approach

Lead contamination in public water supplies is a health concern. As the crisis in Flint, Michigan, demonstrated, exposure to lead from aging water pipes is an urgent issue that requires an immediate and proactive approach.

According to the Environmental Protection Agency, lead — a highly poisonous metal — can enter drinking water when plumbing materials (pipes, faucets and fixtures) that contain lead corrode. EPA and the Centers for Disease Control and Prevention note that there is no known safe level of lead in a child's blood. Lead poisoning can slow brain development in children and leads to lifelong health effects.

Lead plumbing is more likely to be found in apartments and homes constructed before 1986. There is a higher risk of lead corrosion where the water has high acidity or low mineral content. According to the Wisconsin Department of Health Services (DHS), because of the number of older homes in Wisconsin — and aging faucets, fixtures and pipes — children living in Wisconsin are at higher risk for lead poisoning than children in many other states.

Exposure to lead has been linked to adverse health effects, including developmental delays, behavior and learning problems, lower IQ and



LEAD SERVICE LINES AT HOME

Water service lines consist of two sections. Public lines from the water main to the curb stop are the responsibility of the utility (utility-side lines). Private lines from the curb stop to the home are the responsibility of the property owner (customer-side lines).

hyperactivity, hearing problems, and anemia in infants and young children.

Lead exposure is also linked to cardiovascular effects, increased blood pressure and incidence of hypertension, impaired kidney function, and reproductive problems in adults and can result in serious health impacts to pregnant mothers. DNR estimates that drinking water can make up 20% or more of a person's total exposure to lead.

In older homes, lead service lines (LSLs), the pipes that connect homes to the drinking water main in the street, may contribute as much as

75% of the lead found in drinking water and cause serious health problems. In most communities, LSLs are owned partially by the water utility (from the water main in the street to the curb) and partially by the property owner (from the curb to the meter inside the property).

Cost estimates to replace all LSLs in Wisconsin are around \$2 billion. Until all plumbing materials containing lead are replaced, there will be a risk of lead exposure from drinking water. According to EPA, average costs range from \$1,200-\$12,300 per line replaced. It is reasonable to assume that as communities scale up for

LEAD SERVICE LINE COLLABORATIVE

replacement, greater efficiencies will assist in bringing costs down.

The Safe Drinking Water Act (SDWA) establishes and enforces standards that public water systems are required to follow.

In 1991, Congress passed the federal Lead and Copper Rule, which establishes maximum contaminant levels (MCLs) and requires water systems to identify the materials used in their water distribution systems. Under the rule, some communities are required to treat water to reduce its corrosivity and lessen the risk of lead dissolving into water. Corrosion control

treatment is achieved by the addition of an inhibitor chemical to form an insoluble protective scale and/or by adjusting the pH of the water to reduce the corrosivity. The DNR also follows up on lead action level exceedances as part of the state's drinking water program.

Treatments serve as an interim step to protecting consumers while water systems continue to remove all leaded material in the drinking water system.

It is estimated that there are over 200,000 LSLs in Wisconsin community water systems. But a growing number of local governments in

Wisconsin are showing that removing all leaded material in the drinking water system can be done.

Madison was the first city in the nation to replace all of its LSLs (both utility and property owner portions). Starting in 2000, the city developed a systematic program using municipal funds to replace LSLs on private property.

Now at least 10 other Wisconsin communities — Kenosha,
Manitowoc, Menasha, Kaukauna,
Green Bay, Oshkosh, Two Rivers,
Milwaukee, Kewaunee and Waterloo
— are moving ahead, each in their own way, by adopting ordinances,

LEAD SERVICE LINES

ACCOMPLISHMENTS

SOME OF THE DNR'S ACTIONS TO REDUCE LEAD IN DRINKING WATER INCLUDE:

- Expanded project eligibility in the Safe Drinking Water Loan Program to include private LSL replacements in municipalities that have gone through the PSC approval process.
- Prohibited the use of SDWLP funding for water main replacements that result in partial replacement of a lead service line. Partial replacements can actually increase lead concentrations in drinking water.
- Evaluated and implemented corrosion control treatment optimization at large water systems (those serving over 50,000 people).
- Required all small and medium municipal water systems (those serving less than 50,000 people) with LSLs to develop and implement optimized corrosion control treatment until all lead is removed from their system.
- Assisted the PSC in requiring municipal water systems to report their public and private water service quantity and materials annually.
- Assisting DHS on a new program to reduce lead in drinking water at schools and day cares. The Lead Testing in School and Child Care Grant Program, funded by EPA utilizes the "3T's in Drinking Water Toolkit" — train, test and take action.

GOING FORWARD

THE DNR IS MOVING AHEAD ON SEVERAL INITIATIVES:

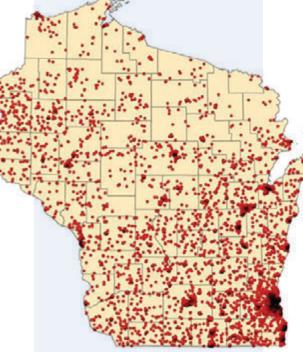
- Launch a statewide "Get the Lead Out" education and outreach plan, sharing information with municipalities for what they can do to remove lead service lines and identify funding to do so.
- Utilizing the authority granted by the recent Water Infrastructure Financing Transfer Act (WIFTA), DNR is developing a new, statewide private LSL replacement principal forgiveness program utilizing a onetime transfer of Clean Water Fund Program monies to the Safe Drinking Water Loan Program. The funding will complement PSC-approved program utilizing ratepayer funds.
- Partner with the Wisconsin Department of Workforce Development (DWD) and the Technical College System on a program to incentivize plumbing apprenticeships, increasing the number of available plumbers and increase the speed of LSL replacements.
- Develop a statewide inventory, in partnership with public water systems, to identify the number and location of LSLs and ensure adequate treatment measures are in place to protect consumers until they can be replaced.
- Prioritize LSL replacement in scoring applications for the SDWLP through a rule revision to Ch. NR 166.
- Strengthen protections for children by ensuring that whenever elevated blood lead levels are detected in a Wisconsin child, the drinking water system contribution is evaluated and addressed.
- Request additional funding for training, sampling, point-of-use filters, educational materials, etc.

accessing funds and developing timelines for replacing LSLs.

In recent years, the DNR created a private-side LSL replacement program, using \$26 million in Safe Drinking Water Loan Program funds as "principal forgiveness." Forty-two communities participated. Communities have three years to pay for the customer-side LSL replacement. The Evers Administration and the DNR continue to seek additional state and federal moneys to fund this program.

In 2018, the Legislature enacted 2017 Wisconsin Act 137, which allows a utility to provide financial assistance to property owners for LSL replacement of the property-owner side, through water utility rates if certain conditions are met, including approval by the Wisconsin Public Service Commission.





Each dot represents the address of a child diagnosed with lead poisoning, 1996-2016.

WISCONSIN COMMUNITIES WITH 15% OR MORE LEAD SERVICE LINES

\wedge		2	盏	1_
()	WWW	α	LSL &	Шζ
UTILITY	POPULATION SERVED	TOTAL LINES	(ESTIMATED)	HOMES WITH LSL*
Glendale Waterworks	12,883	4,504	4,447	99%
Fox Point Waterworks	6,808	7,865	7,429	94%
Shorewood Waterworks	13,189	3,518	3,191	91%
Linden Waterworks	547	238	211	89%
Lake Mills Waterworks	5,300	1,761	1,117	63%
Whitefish Bay Waterworks	14,272	4,868	2,836	58%
Wauwatosa Waterworks	49,064	16,743	8,706	52%
Superior Water Light & Power Co.	29,571	9,432	4,850	51%
Kohler Waterworks	2,114	853	434	51%
Schofield Waterworks	2,117	932	473	51%
Milwaukee Waterworks	647,290	168,848	77,387	46%
Mellen Water Utility	731	395	175	44%
Kewaunee Waterworks	2,951	1,262	554	44%
Two Rivers Waterworks	12,600	5,249	2,261	43%
Walworth Waterworks	2,304	1,084	443	41%
Neenah Waterworks	25,892	9,738	3,901	40%
West Allis Waterworks	63,240	19,677	7,429	38%
Wausau Waterworks	39,106	15,716	5,875	37%
Little Chute Waterworks	11,040	3,318	1,238	37%
Manitowoc Waterworks	34,500	15,077	5,179	34%
Chilton Waterworks	3,933	1,578	533	34%
Galesville Waterworks	1,496	669	220	33%
Oshkosh Waterworks	63,000	20,582	6,678	32%
South Milwaukee Waterworks	21,340	5,934	1,902	32%
Athens Waterworks	1,102	401	126	31%
Frederic Waterworks	1,241	557	175	31%
Rio Waterworks	1,058	539	164	30%
Racine Waterworks	105,100	37,201	11,135	30%
Edgerton Waterworks	5,512	2271	668	29%
Kenosha Water Utility	99,218	30,412	8,809	29%
Cudahy Waterworks	18,659	5,484	1,588	29%
Thorp Waterworks	1,565	779	214	27%
Sheboygan Falls Utilities	7,837	2,711	708	26%
Sheboygan Water Utilities	48,725	19,572	5,094	26%
Cedarburg L & W Commission	11,900	4,023	952	24%
Plymouth Utilities	8,477	3,221	758	24%
Fond du Lac Waterworks	42,000	13,515	3,162	23%
Port Washington Waterworks	11,439	4,014	881	22%
Ashland Water Utility	9,115	3,363	720	21%
Delavan Waterworks	8,128	2,646	566	21%
Oconomowoc Waterworks	15,805	5,819	1,181	20%
Clintonville Utilities	4,635	2,355	444	19%
Niagara Waterworks	1,615	851	157	18%
Watertown Waterworks	23,127	7,663	1,398	18%
City of Beloit	37,110	17,329	3,144	18%
Omro Waterworks Kiel Waterworks	3,558	1,264	223 270	18% 17%
Reeseville Waterworks	3,630 707	1,551	46	17%
Beaver Dam Water Utility	16,200	268 5,857	1,004	17%
Columbus Water & Light Department	5,036	2,199	373	17%
Baraboo Waterworks	11,505	4,287	720	17%
Kimberly Waterworks	6,451	2,435	405	17%
Markesan Waterworks	1,496	654	98	15%
Stoughton Waterworks	12,698	4,377	652	15%
Kaukauna Utilities	13,430	6,274	922	15%
Radikatia tililios	10,-100	0,2/ 7	122	10/0

^{*} This table shows Wisconsin public utilities where lead service lines are estimated to affect at least 15% of the homes. The LSL percentage is figured by dividing a utility's total estimated LSLs by the estimated number of homes served.

PFAS

Emerging Issue Creates Growing Health Concerns

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a large group of human-made chemicals (there are thousands) that have been used in many consumer and commercial products: non-stick cookware; water repellent clothing; stain resistant fabrics such as Teflon, Scotchgard and GORE-TEX; and some firefighting foams.

There is a growing public health concern over PFAS — which do not occur naturally and are widespread in the environment. They are found in people, wildlife and fish all over the world. Because PFAS do not break down easily in the environment, and some PFAS can stay in the body for a long time, they are referred to as "forever chemicals."

PFAS chemicals can move through soil, seep into groundwater, or be carried through the air and bioaccumulate in the food chain.

Scientists are still learning about the health effects from PFAS exposure, but studies indicate that some PFAS can cause adverse reproductive and developmental, liver and kidney, and immunological effects. More limited findings show links to cancer and thyroid hormone disruption.

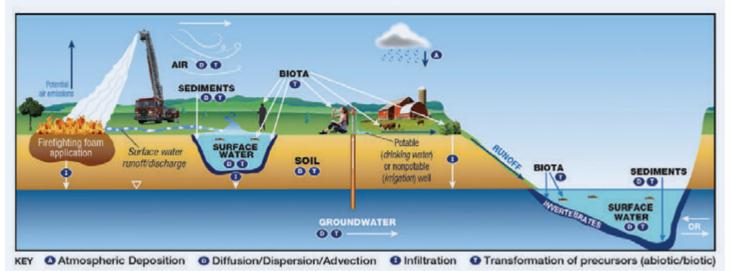
The Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry are conducting human exposure assessments in more than 30 communities across the U.S. to help communities better understand the relationship between the levels



source of PFAS.

Firefighting foam is one

HOW PFAS ENTERS GROUNDWATER THROUGH FIREFIGHTING FOAM



PFAS can enter groundwater in other ways as well, including through industrial sites, landfills and wastewater treatment plants.

of PFAS in individuals' bodies and their drinking water. The selected sites are related to drinking water contamination associated with PFAS production facilities or fire training areas where firefighting foam was used.

Testing by the DNR, communities and federal agencies has detected PFAS in groundwater and surface water at several sites throughout Wisconsin.

In Wisconsin, persons who own properties that are the source of PFAS contamination, or who are responsible for discharges of PFAS to the environment, are responsible for taking appropriate actions. This includes immediately notifying the state, conducting a site investigation, determining the appropriate cleanup standards for the PFAS compounds, and conducting the necessary response actions.

PFAS SITES IN WISCONSIN

> Map shows areas — as of 2019 where DNR is investigating contamination of PFAS.



PFAS

ACCOMPLISHMENTS

SOME OF THE DNR'S ACTIONS TO REDUCE PFAS IN DRINKING WATER INCLUDE:

Wisconsin's 2019-21 biennial budget provided two fulltime (FTE) researcher positions to focus on PFAS and other emerging contaminants, and \$200,000 in FY 2020 for emerging contaminants research, including:

- \$150,000 to develop a model to identify and prioritize sites with likely PFAS contamination.
- \$50,000 to conduct a survey of local and state emergency responders regarding the use of PFAS-containing firefighting foam.

In addition, the DNR has:

- Required PFAS sampling at open remediation sites where PFAS is likely to be present.
- Created procedures for when a public water system exceeds the federal PFOS/PFOA health advisory level.
- Created procedures for when a private well exceeds the federal PFOS/PFOA health advisory level.
- Developed initial criteria for determining when to request PFAS or other emerging contaminant sampling at open Environmental Repair Program (ERP) and Leaking Underground Storage Tank (LUST) sites.
- Conducted public meetings seeking input on PFAS investigation, contamination and cleanup issues.

- Gov. Evers' Executive Order #40 directed the DNR to create the PFAS Coordinating Council, now known as the Wisconsin PFAS Action Council (WisPAC), in partnership with other state agencies. WisPac will develop and coordinate statewide initiatives to address the growing public health and environmental concerns regarding PFAS.
- Convened a PFAS Technical Advisory Group to discuss PFAS-related concerns. The group does not have an appointed membership; any interested party may attend.
- Launched a statewide monitoring project to sample fish tissue and water chemistry at select sites around the state near known or probable sources of PFAS.
 This project will help develop a baseline of PFAS contamination within the state, help to identify action areas, and provide the necessary data for the appropriate response.
- Collected water chemistry and fish tissue samples from six waterbodies near known or suspected PFAS contamination sites. The sites included fire suppression training grounds, wells where PFAS had been detected, and two locations where elevated fish tissue levels had been found.

PFAS GOING FORWARD

THE DNR IS MOVING AHEAD ON SEVERAL INITIATIVES:

- Continue to coordinate with Great Lakes states on PFAS research and regulatory approaches.
- Pursue rule-making to establish a groundwater standard, surface water standards and a drinking water maximum contaminant level (MCL) for select PFAS.
- Establish standard procedures for sampling, lab analysis, site screening, cleanup standards and cleanup options.
- Continue to evaluate impacts of PFAS to Wisconsin's natural resources, including wildlife and fisheries.
- Expand monitoring of PFAS in the development of fish consumption advisories to protect human health.
- Continue to review data to determine where PFAS is likely to be found in groundwater based on historical uses.

- Work with stakeholders to develop source reduction strategies and/or limitations in Wisconsin Pollutant Discharge Elimination System permits for identified facilities.
- Investigate the potential to develop a wastewater biosolids management program.
- Identify PFAS products and manufacturers.
- Develop a joint communication and outreach plan with DATCP and DHS, and continue to inform and educate the public about PFAS.
 - Explore funding for state and local government and private party PFAS efforts.
 - Engage with academic institutions and other experts to identify and collaborate on joint research projects to gain a better understanding of PFAS impacts on human health and the environment.



CONCLUSION

Wisconsin Deserves Clean Drinking Water

Gov. Evers' act of declaring 2019 the "Year of Clean Drinking Water" has generated support among the state's citizens to ensure that all Wisconsinites have access to clean drinking water.

In 2019, citizens throughout the state and across the political spectrum expressed their deep concerns about drinking water quality and voiced their expectations that the state do more to protect drinking water.

The Governor and the DNR will build on the momentum generated in 2019 to ensure safe drinking water for all Wisconsinites. The DNR will pursue actions listed here and will continue to seek opportunities to partner with others—including local governments and the water technology sector—to safeguard Wisconsin's water supplies.





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The DNR has source material for all facts and figures used in this document.

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NRCS Wisconsin Quarterly Update



Environmental Quality Incentives Program

EQIP is the primary program available to farmers for farm and woodland conservation work, offering payments for over 90 basic conservation practices. Applications are accepted on a continuous year-round basis. Applications selected for funding have been obligated and practice implementation is underway.

Special Opportunities

Some of the special funding opportunities available through EQIP include:

Soil Health: NRCS works with producers to improve soil health through sound principles and systems. For example, no-till, cover crops, diversifying the crop rotation, and managing nutrients and pesticide applications. Increasing soil health allows for improved soil organic matter, increased water infiltration, as well as better profits and crop yields.

On-Farm Energy: NRCS and producers develop Agricultural Energy Management Plans (AgEMP) or farm energy audits that assess energy consumption on an operation. Audit data is used to develop energy conservation recommendations.

Organic: NRCS helps certified organic growers, and producers working to achieve organic certification, install conservation practices to address resource concerns on organic operations.

Seasonal High Tunnel (Hoop House): NRCS helps producers plan and implement high tunnels - steel-framed, polyethylene-covered structures that extend growing seasons in an environmentally safe manner. High tunnel benefits include better plant and soil quality, fewer nutrients and pesticides in the environment, and better air quality due to fewer vehicles being needed to transport crops. Supporting conservation practices such as grassed waterways, and diversions are available to address resource concerns on operations with Seasonal High Tunnel structures.

Honey Bee: The upper Midwest is the resting ground for over 65 percent of commercially managed honey bees in the country. The NRCS is helping farmers and landowners implement conservation practices that will provide safe and diverse food sources for honey bees. Pasture management, wildlife habitat, and appropriate cover crops are used as tools to improve the health of our honey bees, which support more than \$15 billion worth of agricultural production.

NRCS Programs Financial Update					
Program		FY19	FY20 ^a		
Environmental Quality Incentives Program (EQIP)	Financial Assistance Allocation	\$38.2 mil. ^b	\$17.1 mil. ^c		
	Contracts	1,661ª	-		
Conservation Stewardship Program (CSP)	Financial Assistance Allocation	\$18.2 mil.	\$21.7 mil.		
	New Contracts	580	-		
	Renewal Contracts	0	-		
	Total Active Contracts	3,696	3,524		
	New Acres	120,280	-		
	Total Acres		-		
Agricultural Conservation Easement Program Agricultural Land Easements (ACEP-ALE)	Financial Assistance Allocation	\$1.9 mil.	\$343,000		
	Agreements	13	-		
	Parcels	13	-		
	Acres	1,051	-		
Agricultural Conservation Easement Program- Wetland Reserve Easements (ACEP-WRE)	Financial Assistance Allocation	\$1.1 mil.	\$3.4 mil.		
	Easements	6	-		
	Acres	451	-		
Regional Conservation Partnership Program (RCPP)	Agreements	0	-		

^aAllocations are advisory and subject to change.

^bIncludes initiatives and special funding.

^cInitiatives and special funding allocations have not been determined yet.

Landscape Initiatives

NRCS is targeting conservation assistance to critical resources through a number of landscape scale initiatives. Applications for initiatives can be submitted at any time and are evaluated periodically for funding.

Great Lakes Restoration Initiative: Through GLRI, NRCS offers financial assistance to agricultural producers for implementing practices that improve water quality in selected watersheds. Financial assistance is available through EQIP and focuses on reducing nutrient and sediment delivery to surface water as well as controlling invasive species and improving wildlife habitat.

National Water Quality Initiative: NWQI is designed to help individual agricultural producers take actions to reduce the runoff of sediment, nutrients, and pathogens into waterways where water quality is a critical concern. The goal is to implement conservation practices in focused watersheds in a concentrated area so that agriculture no longer contributes to the impairment of water bodies within these priority watersheds. Eligible watersheds include Bear Lake - Little Wolf River in Waupaca County; and North Brach Little River in Oconto County.

Mississippi River Basin Healthy Watershed: Through MRBI, NRCS and its partners will help producers in selected watersheds in the Mississippi River Basin voluntarily implement conservation practices that avoid, control, and trap nutrient runoff; improve wildlife habitat; and maintain agricultural productivity. Designated subwatersheds within the Rush River basin in Pierce County are eligible.

Regional Conservation Partnership Program: RCPP promotes coordination between NRCS and its partners to deliver conservation assistance to producers and landowners. NRCS provides assistance to producers through partnership agreements and through program contracts or easement agreements. Current active projects for water quality improvement are located within the Oconomowoc River watershed, the Baraboo River watershed, the Milwaukee River watershed, and the Yahara River watershed. A project to improve water quantity and quality is located within the Little Plover River watershed. Projects to improve fish and wildlife habitat include monarch habitat statewide, stream and riparian habitat in the Driftless Area, as well as a project to improve young forest habitat for Golden-winged warblers in 20 northern Wisconsin counties. USDA is currently investing up to \$300 million in partner-driven conservation through RCPP. Eligible partners can currently submit proposals that will improve the nation's water quality, combat drought, enhance soil health, support wildlife habitat and protect agricultural viability. Partners may request between \$250,000 and \$10 million through this funding announcement. Proposals are due December 3, 2019.

Agricultural Conservation Easement Program

With easement rules yet to be released for the 2018 Farm Bill, our focus has been on Emergency Watershed Protection Program Floodplain Easement (EWPP-FPE) rollout. WI was allocated \$7.8 million to acquire easements and our first application deadline was September 30th. We have 98 applications for over \$40 million in requests. Project selection will occur in mid-November.

Conservation Stewardship Program

CSP provides assistance to landowners who practice good stewardship on their land and are willing to take additional steps over the next five years to further enhance their stewardship efforts. Applications are accepted on a continuous year-round basis.

Demonstration Farm Networks

NRCS in collaboration with federal, state, and local partners have established four demonstration farm networks located throughout Wisconsin. The projects showcase and demonstrate leading edge conservation practices that improve water quality by reducing phosphorus runoff. The four network areas include: Lower Fox Watershed; Door-Kewaunee Watershed, Ozaukee County; and Upper Fox—Wolf Basin. A new network for 2020 is planned called Between the Lakes. The agreement is planned with Calumet County in partnership with Fond du Lac, Manitowoc and Sheboygan Counties.

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Program Rule Input Requested

The NRCS is seeking public comment on its interim rules for the following programs. Visit the *Federal Register* links to provide comment. The rules – now available on the *Federal Register* – takes effect upon publication and includes changes to the program prescribed by the 2018 Farm Bill.

- For the Agricultural Conservation Easement Program, comment through March 6: https://www.federalregister.gov/ documents/2020/01/06/2019-27883/agricultural-conservationeasement-program
- For the Conservation Stewardship Program, comment through January 13: https://www.regulations.gov/docket?D=NRCS-2019-0020
- For the Environmental Quality Incentives Program, comment through February 17: https://www.regulations.gov/docket? D=NRCS-2019-0009

Wisconsin **Natural** Resources Conservation Service

