



Legislative Fiscal Bureau

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May 18, 2023

Joint Committee on Finance

Paper #186

Nitrogen Management, Cover Cropping, and Producer-Led Watershed Protection Grants (Agriculture, Trade and Consumer Protection -- Environment)

[LFB 2023-25 Budget Summary: Page 67, #2 & 3]

CURRENT LAW

The Department of Agriculture, Trade and Consumer Protection (DATCP) soil and water resource management (SWRM) program, in coordination with the Department of Natural Resources (DNR), administers grants and technical assistance related to prevention and control of nonpoint source water pollution. As part of its program, DATCP administers the producer-led watershed protection grant program, the nitrogen optimization pilot program, and the cover crop insurance rebate program that seek to continue development of agricultural best management practices to improve their effectiveness, lower their cost, and identify new methods so that their implementation is less burdensome on agricultural producers and better protects the environment.

DATCP administers the producer-led watershed protection grant program under section 93.59 of the statutes, and the nitrogen optimization pilot program and cover crop insurance rebate program under s. 92.14 of the statutes. Funding for each program is derived from DATCP's SWRM grants appropriation. Other grants funded from the appropriation include nutrient management planning cost-share grants, nutrient management planning education grants, and nonpoint project cooperator grants.

SWRM financial assistance programs are funded primarily by the nonpoint account of the segregated environmental fund (SEG), which derives mostly from tipping fees paid by landfills for each ton of solid waste disposed of in the landfill. In 2022-23, the appropriation is authorized \$7,075,000 nonpoint SEG, including \$1,000,000 for producer-led watershed protection grants, \$1,600,000 for nitrogen optimization grants, \$800,000 for cover crop rebates, and the remaining \$3,675,000 for previously described cost-sharing grants, and contracts with cooperating agencies.

Base funding for the appropriation is \$4,425,000 in each year of the 2023-25 biennium.

DISCUSSION POINTS

Nitrogen Optimization Pilot Program

1. Nitrogen is a common component of nutrients applied to agricultural fields. Although nitrogen is critical to plant growth, excess nitrogen applications in agricultural processes is known to produce nonpoint source water pollution, which may have adverse impacts on surface water quality as high nutrient loads in water bodies increase the concentration of algae, threaten native species, reduce water clarity, and deplete oxygen concentrations. Nitrogen in the form of nitrate may also have negative human health effects, and state and federal nitrate drinking water standards limit nitrate concentrations to no more than 10 parts per million (ppm). In the Wisconsin Groundwater Coordinating Council Report to the Legislature in 2021, it was estimated that the number of private wells exceeding the health standard for nitrate in Wisconsin is over 42,000, or around 6% of private wells.

2. DATCP and DNR operate a variety of nonpoint source water pollution abatement programs that seek to reduce soil and water runoff in urban and agricultural settings. In particular, nonpoint prevention efforts in agricultural settings often seek to optimize nutrient application used to improve crop yields by reducing total applications of nutrients, or improving timing and placement of nutrients. 2021 Wisconsin Act 223 created the commercial nitrogen optimization pilot program for grants to agricultural producers that operate projects over at least two growing seasons to study the optimal application of commercial nitrogen fertilizers. Recipient producers are required to collaborate with a UW System institution to monitor the project on-site. The maximum grant is \$50,000, up to 20% of which could be provided to the UW institution for a given project. DATCP is to allocate grants to various areas of the state with different soil and geologic characteristics, and prioritize projects that are innovative, of a longer term, and not receiving other state or federal funds.

3. DATCP promulgated an emergency rule on July 11, 2022, to implement the commercial nitrogen optimization pilot program. The Joint Committee on Finance approved supplemental funding of \$1,600,000 nonpoint SEG in 2022-23 for the SWRM management aids appropriation for the implementation of the commercial nitrogen optimization pilot program. Assembly Bill 43/Senate Bill 70 would provide \$1,600,000 in ongoing funding for the commercial nitrogen optimization pilot program in each year of the 2023-25 biennium.

4. The first grant round for the nitrogen optimization pilot program received 31 applications requesting a total of \$2,144,507 in January, 2023. DATCP will award funding to 20 projects totaling \$1,583,713. Applications were prioritized based on criteria set in the statutes. Priorities include serving a geographical area that is in need and having a longer duration of study. DATCP also notes that though matching funds were not required under statute or rule, staff determined that projects offering a match requirement may be a better investment for grant funds. While DATCP notes that this was a minor consideration, 11 of the 18 awardees are providing a total of \$182,772 in matching funds for their respective projects.

5. DATCP is currently using existing staff to manage the nitrogen optimization pilot program and collaborating with UW-Madison Division of Extension. Extension has hired a full-time staff member to coordinate between different entities within the UW System, including the UW Soils Lab. The UW Soils Lab has also hired a full-time staff member to lead data collection and review for the program.

Cover Crop Rebate Program

6. Farmers grow cover crops for their potential production and soil health benefits, rather than for sale or direct use of the crop. Cover crops can slow soil erosion, improve soil health, enhance water availability, suppress weeds, and increase moisture and nutrient content of soil. Cover crops include grasses, legumes, or other non-grass or non-woody plants and are planted seasonally to cover soil in between the planting of other crops. Producers are required to self-report all cropland on each farm to the U.S. Department of Agriculture (USDA) Farm Service Agency (FSA) annually. According to crop acreage data, Wisconsin farmers planted approximately 409,000 acres and 475,000 acres in each of 2021 and 2022, compared to 69,000 acres of cover crops in 2020.

7. 2021 Act 223 created the cover crop insurance rebate program administered by DATCP. The program provides rebates of \$5 per acre of a cover crop planted for crop insurance premiums paid on those acres. The rebate amount of \$5 matches that of: (a) the USDA Pandemic Cover Crop Program (PCCP), which provided cover crop rebates to producers nationwide for the 2021 and 2022 growing seasons; and (b) corresponding rebate programs operated in Iowa and Illinois.

8. DATCP promulgated an emergency rule on July 11, 2022, to implement the cover crop rebate program. The Joint Committee on Finance approved supplemental funding of \$800,000 nonpoint SEG in 2022-23 for the SWRM management aids appropriation for the program. Assembly Bill 43/Senate Bill 70 would provide \$800,000 in ongoing funding in each year of the 2023-25 biennium for cover crop rebates.

9. Wisconsin producers applied for the first round of state-funded cover crop rebates in January, 2023. DATCP is collaborating with USDA's Risk Management Agency to review applications for 2023 rebates. DATCP is anticipating awarding approximately \$714,000 in rebates. Emergency rules allow up to 10% of funds allocated for cover crop rebates to be used to support DATCP's administration process. DATCP staff is currently evaluating options for use of the remaining funds.

10. A total of 142,937 acres are enrolled in the program following the first round of rebate applications. On average, each producer enrolled 312 acres, for a total of \$1,560 in rebates per producer. DATCP planned to award rebates on a first-come, first-serve basis. However, for 2022-23 there was more available funding than enrolled acres, allowing all producers who applied and are eligible to receive rebates for all enrolled acres.

11. Prior to creation of a state program, many Wisconsin producers were receiving cover crop rebates through a federal relief program, the PCCP. The PCCP was established by USDA during the COVID-19 pandemic to help farmers maintain their cover crop systems while the agriculture industry was experiencing financial stress. This program provides premium support to eligible

producers who insured a spring crop planted on acreage where a qualifying cover crop was planted. The premium support is up to \$5 per acre. Funding was available for the 2021 and 2022 cropping years, and has yet to be offered for 2023. In 2022, Wisconsin farmers received rebates of \$1.66 million for their crop insurance through PCCP. Wisconsin farmers receiving PCCP benefits were ineligible to apply for cover crop rebates through the new state program. DATCP anticipates increases in demand for rebate requests in coming years, regardless of the continuation or end of PCCP.

12. DATCP notes that following the first state cover crop insurance rebate application round, the Department received feedback from some farmers that they were unaware of the funding opportunity. DATCP intends to continue promoting the program and working with partners to spread more awareness for the program to encourage stronger uptake in future cycles. While DATCP anticipates increasing demand, staff do not expect for demand to reach the level of PCCP because of more restrictive eligibility requirements for the state program, including a number of programs in which participation disqualifies a person from cover crop insurance rebates by statute. Excluded state programs include: (a) producer-led watershed protection grants; (b) soil and water resource management cost-sharing aids; (c) lake management planning grants; (d) lake management grants; and (e) river protection grants.

Producer-Led Watershed Protection Grants

13. The producer-led watershed protection grant program provides matching grants of 50% up to a total of \$40,000 per year to producer groups that collaborate to conduct nonpoint source water pollution prevention and control activities. Producer-led groups are eligible if they have five members meeting certain minimum thresholds for farm income, are in one watershed, and collaborate with a state, county, or nonprofit conservation organization. Activities by producer-led groups include education and outreach, development and sharing of best management practices, and water quality monitoring and soil testing. Producer-led groups often offer incentives to landowners to implement conservation practices for the first time, in order to reduce the risk and uncertainty associated with a new activity and encourage greater uptake by farmers in their watershed.

14. Producer-led watershed protection grants have been provided since 2015. Under 2021 Act 58, the statutory cap on annual producer-led watershed protection grant awards was increased from \$750,000 to \$1,000,000 and an additional \$250,000 nonpoint SEG each year was appropriated on a one-time basis during the 2021-23 biennium to provide a total of \$1,000,000 in each year of the biennium. Assembly Bill 43/Senate Bill 70 would provide an additional \$250,000 nonpoint SEG each year for producer-led watershed protection grants. Funding for grants in each year of the 2023-25 biennium would be \$1,000,000 nonpoint SEG.

15. Priorities include projects that: (a) expand cost-share programming to promote innovative practices and management; (b) promote conservation systems that increase continuous living cover throughout the year; (c) are educational efforts to learn conservation systems through on-farm demonstrations or research with a plan to share results; and (d) target outreach promoting environmental, financial, and community benefits of conservation to farmers, agricultural industry professionals, students, non-farming landowner, or other community members.

16. The table shows funding for producer-led grants since their inception in 2015-16, and

the attachment lists recipients in the 2021-23 biennium. As seen in the table, demand for grants has exceeded allocations in recent years, suggesting the proposed \$1,000,000 annual funding level would be fully allocated if the proposal is approved.

Producer-Led Watershed Protection Grants by Year

	Available <u>Funding</u>	<u>Applicants</u>	<u>Requested</u>	<u>Recipients</u>	<u>Awarded</u>
2016	\$250,000	15	\$262,500	14	\$242,550
2017	250,000	11	197,065	11	197,065
2018	750,000	21	619,721	17	558,246
2019	750,000	27	869,815	24	750,000
2020	750,000	27	1,051,871	24	750,000
2021	750,000	33	1,043,910	30	750,000
2022	1,000,000	36	1,194,543	36	1,000,000
2023	1,000,000	45	1,525,889	45	1,000,000

17. Producer-led watershed protection grants seek to expand implementation of agricultural conservation standards to reduce erosion, improve soil health, and prevent nonpoint runoff to protect water quality while maintaining or improving agricultural yields. While other grant programs offer traditional incentive payments to encourage implementation of conservation practices, DATCP offers block grants to groups, which gives them flexibility to conduct outreach and education, research and develop best practices, encourage neighboring farmers to try new practices, or conduct other conservation activities suited to local conditions and membership interest or expertise.

18. The program was created in part from the perspective that producers may be more responsive to conservation efforts in collaboration with peers than as a result of state or local grant or regulatory programs. As a result, producer-led groups have implemented, tested, and refined use of a variety of conservation practices including: (a) cover crops; (b) harvestable buffers; (c) grassed waterways; (d) no-till and strip-till farming; (e) low-disturbance manure injection; (f) nutrient management; (g) calibration of manure spreaders; and (h) soil testing. In addition, DATCP reports that groups are often expanding offerings and experimenting with innovative practices.

19. Producer-led groups also conduct various outreach activities to improve farmer networking, learning, and relationships. In 2022, producer-led groups hosted 94 field days, 49 pop-up workshops, 43 trainings, and nine farm tours for just over 8,000 participants. Between all awarded groups, approximately \$42,400 was spent on field days, \$44,800 was spent on demonstration plots, and \$25,500 was spent on other outreach activities. DATCP reports that these figures are subject to change, as 2022 data has not been finalized.

20. Producer-led watershed protection groups are also required to collaborate with a state, local, or nonprofit conservation-focused organization to be eligible for a grant. Grant recipients primarily collaborate with their county land conservation department, but also collaborate with UW-Madison Division of Extension, or other nonprofit organizations. Collaboration with partner organizations allows for education and technical assistance, and improves best practices sharing and

allows for research and statewide implementation of successful projects.

Funding and Alternatives

21. Provision of nonpoint SEG funding for producer-led watershed protection grants, nitrogen optimization grants, and cover crop rebates is dependent on availability of funding in the nonpoint account. Under the adjusted base and Committee action on May 2, 2023, affecting standard budget adjustments and debt service, the nonpoint account is anticipated to have a June 30, 2025, available balance of \$9.9 million, an increase of approximately \$2.3 million in 2023-25 biennium. However, expenditures and revenues are anticipated to be approximately equal under base funding in 2024-25. Thus, the Committee could not provide ongoing funding for nonpoint programs in 2023-25 while maintaining a balance with available revenues. The Committee could consider allocating a portion of the fund balance as one-time funding, but any ongoing funding allocations that exceed available annual revenues could limit future availability of funding for nonpoint programs.

22. Given oversubscription for the first grant cycle of the nitrogen optimization pilot program and benefits provided to the state's soil and water by nitrogen management projects, the Committee could consider providing \$1,600,000 annually in the 2023-25 biennium for the program [Alternative A1]. Similarly, the Committee could consider providing \$800,000 annually for the cover crop rebate program, as first round applications nearly reached the initial funding allocation and DATCP has intentions of increasing demand through outreach in future grant cycles [Alternative B1].

23. Given consistent demand for producer-led watershed protection grants since program inception, and the potential benefits of producer-led groups improving implementation of nonpoint prevention and control practices, encouraging collaboration amongst farmers and conservation organizations, and spurring innovation and development in agricultural conservation, the Committee could consider increasing funding for producer-led watershed protection grants. The Committee could provide an additional \$250,000 nonpoint SEG each year for producer-led watershed protection grants [Alternative C1].

24. DATCP is not anticipating any change in demand for producer-led watershed protection grants despite the creation of the nitrogen optimization pilot program and the cover crop rebate program. DATCP reports that while some producer-led watershed groups have used their grant funding for nitrogen efficiency trials, these trials represent a small percentage of overall program spending. The Committee may choose to deny the proposed additional \$250,000 annually in the 2023-25 biennium due to overlapping program goals between nonpoint source water pollution abatement programs to assess how demand for producer-led watershed protection grants is affected by additional available funding opportunities for conservation projects.

25. To ensure future availability of funding for nonpoint programs, the Committee could provide funding on a one-time basis for producer-led watershed protection grants during the 2023-25 biennium [Alternative C2]. The Committee could also choose to provide funding on a one-time basis for the nitrogen optimization pilot program [Alternative A2] and the cover crop rebate program [Alternative B2] in the 2023-25 biennium. Funding for the nitrogen optimization and cover crop rebate programs may be appropriate to continue on a one-time basis while program implementation and demand continue to develop.

ALTERNATIVES

A. Nitrogen Optimization Pilot Program

1. Provide 1,600,000 nonpoint SEG in each year of the 2023-25 biennium to DATCP for nitrogen optimization pilot program grants.

ALT A1	Change to Base
SEG	\$3,200,000

2. Specify that funding be provided on a one-time basis during the 2023-25 biennium. (This alternative could be selected in addition to Alternative A1 above.)

3. Take no action.

B. Cover Crop Rebate Program

1. Provide \$800,000 nonpoint SEG in each year of the 2023-25 biennium to DATCP for cover crop rebates.

ALT B1	Change to Base
SEG	\$1,600,000

2. Specify that funding be provided on a one-time basis during the 2023-25 biennium. (This alternative could be selected in addition to Alternative B1 above.)

3. Take no action.

C. Producer-Led Watershed Protection Grants

1. Provide an additional \$250,000 nonpoint SEG each year for producer-led watershed protection grants. Funding for the program would be \$1,000,000 nonpoint SEG in each year of the 2023-25 biennium.

ALT C1	Change to Base
SEG	\$500,000

2. Specify that funding be provided on a one-time basis during the 2023-25 biennium. (This alternative could be selected in addition to Alternative C1 above.)

3. Take no action. (Funding allocated for producer-led watershed protection grants would be \$750,000 in each year of the 2023-25 biennium.)

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ATTACHMENT

Producer-Led Watershed Protection Grants 2022 and 2023

<u>Recipient</u>	<u>2022</u>	<u>2023</u>
Bad Axe	\$33,600	\$20,000
Bear Creek/Chippewa Farmer Groundwater Group	20,100	17,300
Biological Farming and Friends	19,100	21,200
Buffalo-Trempealeau Farmer Network	33,600	30,800
Calumet County Agricultural Stewardship Alliance	22,900	18,300
Central Wisconsin Farmers' Collaborative	33,600	20,000
Chippewa Valley Producer-Led Watershed	0	10,000
Cedar Creek Farmers	3,250	4,500
Coon Creek	20,100	30,800
Dry Run Farmer-Led Watershed Council	0	10,000
Dodge County Farmers for Healthy Soil & Healthy Water	33,200	38,000
Eau Pleine Partnership for Integrated Conservation	0	38,000
Farmers for Lake Country	23,600	17,000
Farmers of the Sugar River	22,000	24,000
Farmers for Tomorrow	33,600	24,400
Farmers of Barron County	0	20,000
Farmers of Lemonweir Valley	33,600	30,800
Farmers of Mill Creek	40,000	30,800
Farmers of Roche-A-Cri	7,500	14,600
Farmers on the Rock	33,600	30,800
Green County Clean Waters	0	21,600
Flambeau Valley Watershed Group	0	10,000
Farmers for the Upper Sugar River	40,000	30,800
Hay River Watershed Council	14,700	20,000
Iowa County Uplands Watershed Group	0	25,000
Horse Creek Farmer-Led Watershed Council	16,800	10,000
Jefferson County Soil Builders	18,500	30,800
Kenosha County Regenerative Producers	0	10,000
Lafayette Ag Stewardship Alliance	40,000	30,800
Lake Wisconsin Farmer Watershed Council	40,000	30,800
Milwaukee River Watershed Clean Farm Families	0	38,000
Ozaukee County Clean Farm Families	33,600	0
Peninsula Pride Farms	40,000	38,000
Producers of Lake Redstone	33,600	24,400
Red Cedar Conservation Farmers	33,600	24,400

<u>Recipient</u>	<u>2022</u>	<u>2023</u>
Rock River Regenerative Grazers	\$39,400	\$30,800
Sauk Soil and Water Improvement Group	25,000	25,000
Sheboygan River Progressive Farmers	29,200	30,800
Shell Lake - Yellow River Farmer-Led Watershed Council	21,300	13,200
South Kinni Farmer-Led Watershed Council	10,100	10,300
Tainter Creek Farmer-Led Watershed Council	33,600	24,400
Uplands Watershed Group	10,000	0
Watershed Protection Committee of Racine County	40,000	30,800
Western Wisconsin Conservation Council	33,600	20,000
Yahara Pride Farms	<u>33,600</u>	<u>20,000</u>
Total	\$999,950	\$1,001,200