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Board of Water and Soil Resources Board

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bwsr.state.mn.us/

AT A GLANCE

- Small agency of conservation professionals
- Local conservation delivery system
- Governing board of local officials, citizens, and agency partners
- Focus on conservation of private lands (78 percent of Minnesota)
- Transition to comprehensive watershed plans by 2025 (61 plans in total). Since 2014:
 - 12 approved *One Watershed, One Plan* plans
 - 18 *One Watershed, One Plan* plans in progress
- Collaborative model for results including, since 1987:
 - 57,201 conservation practices installed
 - 8,168 easements funded
 - 18,508 wetland credits deposited into the state’s wetland bank
- 238 local government accountability assessments completed annually

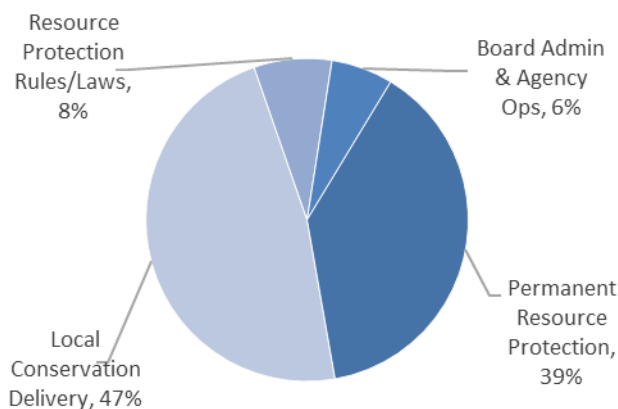
PURPOSE

The Board of Water and Soil Resources’ (BWSR’s) mission is to improve and protect Minnesota’s water and soil resources by working in partnership with local organizations and private landowners. The agency has a unique business model that is designed to:

- Operate as an efficient state-level source of technical and financial assistance to the local government delivery system.
- Target implementation of conservation practices and projects that support local goals and meet state objectives.
- Focus on Minnesota’s private lands.

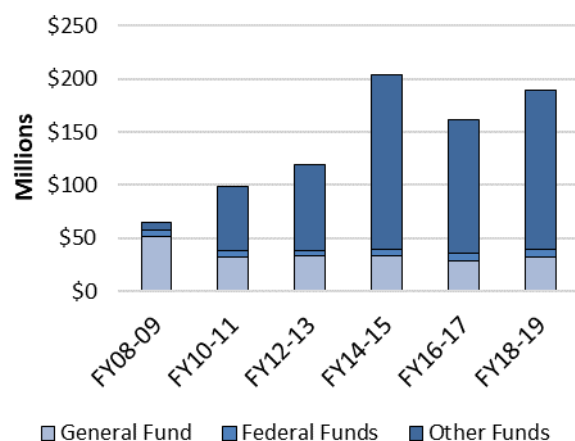
BUDGET

**Spending by Program
FY 2019 Actual**



Source: Budget Planning and Analysis System (BPAS)

Historical Spending



Other Funds includes BWSR’s CWF and OHF Legacy appropriations
Source: Consolidated Fund Statement

Funding for agency operations and conservation activities comes from a mix of state and federal funds. General fund support has largely been on a downward trajectory since FY08-09, with an exception in past biennium with some important one-time IT and specific base funding. Today the clean water fund (CWF) and outdoor heritage fund (OHF) make up the majority of BWSR's budget. The other funds category is made up of these two legacy funds in addition to transfers from other agencies, the environment and natural resources trust fund, and special revenue funds.

Approximately 83 percent of BWSR's budget is distributed to local governments and landowners for conservation programs, projects, and easements. The remaining 17 percent is retained for agency programs and agency operations, of which personnel is the largest expenditure.

STRATEGIES

BWSR's mission is implemented through the following core functions:

- Serve as the statewide soil conservation agency
- Direct private land soil and water conservation programs through the actions of soil and water conservation districts, counties, cities, townships, watershed districts, and other water management organizations
- Link water resource planning with comprehensive land use planning
- Provide resolution of water policy conflicts and issues
- Oversee comprehensive local water management
- Provide a forum (through the board) for local issues, priorities, and opportunities to be incorporated into state public policy
- Coordinate state and federal resources to realize local priorities
- Administer implementation of the Wetland Conservation Act and Riparian Protection laws

BWSR accomplishes its mission through these key strategies:

- Developing programs that address priority state and local resource concerns (such as keeping water on the land, maintaining healthy soils, reducing pollutants in ground and surface water, assuring biological diversity, and reducing flood potential)
- Prioritizing on-the-ground conservation projects in the best locations to achieve multiple benefits and measurable improvements to water and habitat resources
- Ensuring compliance with environmental laws, rules, and regulations
- Implementing agency operations through board and administrative leadership, internal business systems, planning and effectiveness evaluation, and operational support, including the board and board management, financial and accounting services, legislative and public relations, communications, and human resources

The legal authority for the Board of Water and Soil Resources comes from the following Minnesota Statutes:

M.S. 103A <https://www.revisor.mn.gov/statutes/?id=103A>

M.S. 103B <https://www.revisor.mn.gov/statutes/?id=103B>

M.S. 103C <https://www.revisor.mn.gov/statutes/?id=103C>

M.S. 103D <https://www.revisor.mn.gov/statutes/?id=103D>

M.S. 103E <https://www.revisor.mn.gov/statutes/?id=103E>

M.S. 103F <https://www.revisor.mn.gov/statutes/?id=103F>

M.S. 103G <https://www.revisor.mn.gov/statutes/?id=103G>

(Dollars in Thousands)

	Actual FY18	Actual FY19	Actual FY20	Estimate FY21	Forecast Base		Governor's Recommendation	
					FY22	FY23	FY22	FY23
<u>Expenditures by Fund</u>								
1000 - General	23,280	8,943	21,096	9,163	14,872	14,872	19,220	19,315
2000 - Restrict Misc Special Revenue	868	1,517	1,115	3,972	1,685	1,547	1,685	1,547
2001 - Other Misc Special Revenue	4,324	4,532	4,853	6,978	6,533	6,539	6,533	6,539
2050 - Environment & Natural Resources	2,674	6,146	7,938	5,287				
2300 - Outdoor Heritage	13,777	21,179	19,462	34,976				
2302 - Clean Water	41,514	52,434	75,884	101,469	9,420		78,036	67,408
3000 - Federal	3,105	4,706	3,723	4,021	4,048	3,917	4,048	3,917
Total	89,542	99,456	134,070	165,866	36,558	26,875	109,522	98,726
Biennial Change				110,938		(236,503)		(91,688)
Biennial % Change				59		(79)		(31)
Governor's Change from Base								144,815
Governor's % Change from Base								228

Expenditures by Program

Local Conservation Delivery	46,760	45,856	59,690	59,994	13,543	6,350	73,176	65,983
Resource Protection Rules and Law	13,296	6,889	13,303	9,594	12,507	12,371	12,507	12,371
Board Administration & Agency Operations	6,768	6,065	6,074	6,752	5,241	5,241	6,694	6,789
Permanent Resource Protection	22,719	40,645	55,003	89,526	5,267	2,913	17,145	13,583
Total	89,542	99,456	134,070	165,866	36,558	26,875	109,522	98,726

Expenditures by Category

Compensation	11,500	12,149	12,447	14,734	9,898	7,099	16,597	13,679
Operating Expenses	7,546	4,670	6,789	6,047	3,404	2,177	4,994	3,735
Grants, Aids and Subsidies	49,600	47,566	63,503	62,454	16,824	12,579	70,862	66,617
Capital Outlay-Real Property	14,797	26,936	46,816	79,815	6,417	5,006	15,847	13,736
Other Financial Transaction	6,100	8,136	4,514	2,816	15	14	1,222	959
Total	89,542	99,456	134,070	165,866	36,558	26,875	109,522	98,726

Full-Time Equivalent

	115.34	115.52	112.05	114.89	76.14	50.39	131.79	105.04
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Water and Soil Resources, Board of

Agency Financing by Fund

(Dollars in Thousands)

	Actual FY18	Actual FY19	Actual FY20	Estimate FY21	Forecast Base		Governor's Recommendation	
					FY22	FY23	FY22	FY23
1000 - General								
Balance Forward In	3,812	2,795	180	2,130				
Direct Appropriation	22,149	6,337	23,046	7,033	14,872	14,872	19,220	19,315
Transfers Out	8	8						
Cancellations	9	73	0					
Balance Forward Out	2,664	108	2,129					
Expenditures	23,280	8,943	21,096	9,163	14,872	14,872	19,220	19,315
Biennial Change in Expenditures				(1,964)		(515)		8,276
Biennial % Change in Expenditures				(6)		(2)		27
Governor's Change from Base								8,791
Governor's % Change from Base								30
Full-Time Equivalents	43.53	39.07	36.64	36.19	34.35	33.11	38.60	38.06

2000 - Restrict Misc Special Revenue

Balance Forward In	286	1,159	1,715	1,918	1,259	909	1,259	909
Receipts	783	776	681	2,653	665	665	665	665
Transfers In	942	1,178	745	745	745	745	745	745
Transfers Out			109	85	75	75	75	75
Balance Forward Out	1,143	1,596	1,916	1,259	909	697	909	697
Expenditures	868	1,517	1,115	3,972	1,685	1,547	1,685	1,547
Biennial Change in Expenditures				2,702		(1,855)		(1,855)
Biennial % Change in Expenditures				113		(36)		(36)
Governor's Change from Base								0
Governor's % Change from Base								0
Full-Time Equivalents	5.13	8.05	8.16	7.12	6.98	6.84	6.98	6.84

2001 - Other Misc Special Revenue

Balance Forward In	740	1,823	2,783	3,314	2,051	2,119	2,051	2,119
Receipts	4,246	4,390	6,455	6,637	6,601	6,601	6,601	6,601
Transfers In	1,023	949	922	887				
Transfers Out		19	1,992	1,809				
Balance Forward Out	1,685	2,612	3,315	2,051	2,119	2,181	2,119	2,181
Expenditures	4,324	4,532	4,853	6,978	6,533	6,539	6,533	6,539
Biennial Change in Expenditures				2,975		1,241		1,241

(Dollars in Thousands)

	Actual	Actual	Actual	Estimate	Forecast Base		Governor's Recommendation	
	FY18	FY19	FY20	FY21	FY22	FY23	FY22	FY23
Biennial % Change in Expenditures				34		10		10
Governor's Change from Base								0
Governor's % Change from Base								0
Full-Time Equivalents	3.94	3.88	5.49	5.88	5.73	5.58	5.73	5.58

2050 - Environment & Natural Resources

Balance Forward In	3,626	12,773	13,318	5,287				
Direct Appropriation	12,311	6,406	94					
Transfers In		750						
Transfers Out	33	691	169					
Cancellations	541		20					
Balance Forward Out	12,689	13,092	5,286					
Expenditures	2,674	6,146	7,938	5,287				
Biennial Change in Expenditures				4,405		(13,225)		(13,225)
Biennial % Change in Expenditures				50		(100)		(100)
Governor's Change from Base								0
Governor's % Change from Base								
Full-Time Equivalents	4.00	3.39	2.89	1.81				

2300 - Outdoor Heritage

Balance Forward In	34,394	39,509	38,164	24,202				
Direct Appropriation	17,260	17,154	5,963	11,661	0	0	0	0
Transfers Out	906	748	457	887				
Cancellations	200	266	5					
Balance Forward Out	36,771	34,470	24,203					
Expenditures	13,777	21,179	19,462	34,976				
Biennial Change in Expenditures				19,482		(54,438)		(54,438)
Biennial % Change in Expenditures				56		(100)		(100)
Governor's Change from Base								0
Governor's % Change from Base								
Full-Time Equivalents	6.92	10.68	12.12	8.18				

2302 - Clean Water

Water and Soil Resources, Board of

Agency Financing by Fund

(Dollars in Thousands)

	Actual	Actual	Actual	Estimate	Forecast Base		Governor's Recommendation	
	FY18	FY19	FY20	FY21	FY22	FY23	FY22	FY23
Balance Forward In	40,074	45,964	48,634	44,405	9,420		9,420	
Direct Appropriation	45,911	53,847	71,950	66,484	0	0	68,616	67,408
Receipts	10	280						
Transfers In	5,017	2,897	2,851	12,618	11,963		11,963	
Transfers Out	5,101	2,988	3,146	12,618	11,963		11,963	
Cancellations	379	47						
Balance Forward Out	44,016	47,519	44,405	9,420				
Expenditures	41,514	52,434	75,884	101,469	9,420		78,036	67,408
Biennial Change in Expenditures				83,405		(167,933)		(31,909)
Biennial % Change in Expenditures				89		(95)		(18)
Governor's Change from Base								136,024
Governor's % Change from Base								
Full-Time Equivalents	47.93	44.43	41.13	48.44	21.96		73.36	49.70

3000 - Federal

Balance Forward In	129	113	289	262	1,398	1,007	1,398	1,007
Receipts	3,089	4,827	3,695	5,157	3,657	3,632	3,657	3,632
Balance Forward Out	113	234	262	1,398	1,007	722	1,007	722
Expenditures	3,105	4,706	3,723	4,021	4,048	3,917	4,048	3,917
Biennial Change in Expenditures				(67)		221		221
Biennial % Change in Expenditures				(1)		3		3
Governor's Change from Base								0
Governor's % Change from Base								0
Full-Time Equivalents	3.89	6.02	5.62	7.27	7.12	4.86	7.12	4.86

Water and Soil Resources, Board of

Agency Change Summary

(Dollars in Thousands)

	FY21	FY22	FY23	Biennium 2022-23
Direct				
Fund: 1000 - General				
FY2021 Appropriations	7,033	7,033	7,033	14,066
Base Adjustments				
Biennial Appropriations		7,839	7,839	15,678
Forecast Base	7,033	14,872	14,872	29,744
Change Items				
Climate Mitigation and Soil Health via Agricultural Cover Crop Initiative		2,750	2,750	5,500
Climate Water Storage and Treatment		1,500	1,500	3,000
Operating Adjustment		98	193	291
Total Governor's Recommendations	7,033	19,220	19,315	38,535
Fund: 2300 - Outdoor Heritage				
FY2021 Appropriations	11,661	11,661	11,661	23,322
Base Adjustments				
One-Time Legacy Fund Appropriations		(11,661)	(11,661)	(23,322)
Forecast Base	11,661	0	0	0
Total Governor's Recommendations	11,661	0	0	0
Fund: 2302 - Clean Water				
FY2021 Appropriations	66,484	66,484	66,484	132,968
Base Adjustments				
One-Time Legacy Fund Appropriations		(66,484)	(66,484)	(132,968)
Forecast Base	66,484	0	0	0
Change Items				
Clean Water Legacy - Watershed Based Implementation		21,782	21,782	43,564
Clean Water Legacy - Surface and Drinking Water Protection Restoration		11,133	11,133	22,266
Clean Water Legacy - Accelerated Implementation		4,841	4,841	9,682
Clean Water Legacy - Measures Results and Accountability		1,355	1,355	2,710
Clean Water Legacy - Watershed Management Transition		2,904	2,904	5,808
Clean Water Legacy - Soil Health and Adoption of Cover Crops		2,033	2,033	4,066
Clean Water Legacy - Conservation Drainage Management and Assistance		850	850	1,700
Clean Water Funds – Tillage and Erosion Evaluation		362	362	724
Clean Water Legacy - Wetland Restoration Easements		5,000	5,000	10,000
Clean Water Legacy - Working Lands Floodplain		1,936	1,936	3,872
Clean Water Legacy - Shoreland Buffer Compliance		1,936	1,936	3,872
Clean Water Legacy - Targeted Wellhead Drinking Water Source Protection		2,500	2,500	5,000
Clean Water Legacy - Critical Shoreland Protection		1,234	1,234	2,468
Clean Water Legacy - Conservation Reserve Enhancement Program (CREP)		1,208		1,208
Clean Water Legacy - Watershed Partners Legacy		500	500	1,000

Water and Soil Resources, Board of

Agency Change Summary

(Dollars in Thousands)

	FY21	FY22	FY23	Biennium 2022-23
Clean Water Legacy - Technical Evaluation		42	42	84
Clean Water Legacy - Levy Authority and Operating Support for Soil and Water Conservation Districts		9,000	9,000	18,000
Total Governor's Recommendations	66,484	68,616	67,408	136,024
<i>Dedicated</i>				
Fund: 2000 - Restrict Misc Special Revenue				
Planned Spending	2,987	700	562	1,262
Forecast Base	2,987	700	562	1,262
Total Governor's Recommendations	2,987	700	562	1,262
Fund: 2001 - Other Misc Special Revenue				
Planned Spending	6,977	6,533	6,539	13,072
Forecast Base	6,977	6,533	6,539	13,072
Total Governor's Recommendations	6,977	6,533	6,539	13,072
Fund: 2302 - Clean Water				
Planned Spending	14			
Forecast Base	14			
Total Governor's Recommendations	14			
Fund: 3000 - Federal				
Planned Spending	4,021	4,048	3,917	7,965
Forecast Base	4,021	4,048	3,917	7,965
Total Governor's Recommendations	4,021	4,048	3,917	7,965
<i>Revenue Change Summary</i>				
<i>Dedicated</i>				
Fund: 2000 - Restrict Misc Special Revenue				
Forecast Revenues	2,653	665	665	1,330
Total Governor's Recommendations	2,653	665	665	1,330
Fund: 2001 - Other Misc Special Revenue				
Forecast Revenues	6,637	6,601	6,601	13,202
Total Governor's Recommendations	6,637	6,601	6,601	13,202
Fund: 3000 - Federal				
Forecast Revenues	5,157	3,657	3,632	7,289
Total Governor's Recommendations	5,157	3,657	3,632	7,289

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy - Watershed Based Implementation

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	21,782	21,782	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	21,782	21,782	0	0
FTEs	8	8	0	0

Request:

The Governor recommends \$43,564,000 from the Clean Water Fund (as recommended by the Clean Water Council) for the FY2022 - 2023 biennium. This recommendation is a \$16,598,000 increase from the FY2020-2021 appropriation. The recommendation includes 8.0 FTE staff time, which is a decrease of 0.5 FTE compared to the FY2020-2021 appropriation.

Rationale/Background:

Comprehensive watershed based implementation plans, developed under the One Watershed, One Plan program provide the best mechanism possible to build off current state investments being made in Watershed Restoration and Protection Strategies (WRAPS) and Groundwater Restoration and Protection Strategies (GRAPS) as well as other state studies and plans to inform the building of a focused watershed implementation plan that is science-based, spatially and numerically explicit, with an implementation plan that is prioritized, targeted and capable of achieving measurable improvement in water quality, flood control, and groundwater protection.

Providing systematic Clean Water funding for local water management authorities on a watershed basis will increase achievement of Minnesota’s water quality goals in addition to other water management outcomes. The efficiencies created by this change will benefit both organizations and landowners by streamlining processes, which will allow more projects to be implemented in a timely manner and ensure limited resources are spent where they are needed most. This funding may also provide greater opportunities for local governments to leverage federal and private funding.

This effort addresses the Clean Water Council’s strategic plan:

Goal 1, Strategy 4: Implement the Nitrogen Fertilizer Management Plan (NFMP) to promote vegetative cover and advanced nitrogen fertilizer management tools to protect private wells in vulnerable areas

Goal 2, Strategy 6: Adopt BMPs for water efficiency, water use reduction, and irrigation water management, , and prioritize them in areas of high water use intensity by agricultural irrigators, highly sensitive areas, Groundwater Management Areas (GWMAs), and highly vulnerable Drinking Water Source Management Areas (DWSMAs).

Goal 3, Strategy 1: Fund the completion of Watershed Restoration and Protection Strategies (WRAPS) for all 80 major watersheds by 2023.8

Goal 3, Strategy 10: Fund the completion of Watershed Restoration and Protection Strategies (WRAPS) for all 80 major watersheds by 2023.8.

Goal 3, Strategy 12: Support in-lake treatment and restoration activities that only address water quality impairments and are supported by comprehensive plans, including One Watershed One Plan.

Goal 3, Strategy 13: Support state-federal cooperative programs, actions, and priorities outlined in the Great Lakes Restoration Initiative's Action Plan.

Goal 4, Strategy 4: Plan for program resilience after expiration of Legacy Amendment in 2034 and discourage Clean Water Fund applicants from relying on 100% CWF funding.

Proposal:

This program is a continuation of a Clean Water grant program where projects are identified in a water or comprehensive watershed plan developed by local governments and approved by the Board of Water and Soil Resources. This includes state-approved plans under the One Watershed, One Plan or under the Metropolitan Surface Water Management frameworks, metro conservation district plans, and county groundwater plans. The planning requirement ensures that state funded projects are targeted to address water quality restoration or protection needs most effectively. The State's investment will leverage local and federal funds as the grants require a match.

Watershed-based funding is an alternative to the current project-by-project competitive grant processes used to fund water quality improvement projects. The watershed-based funding approach depends on comprehensive watershed management plans developed by local partnerships under the One Watershed, One Plan program or the Metropolitan Surface Water or Groundwater Management framework to provide assurance that actions are prioritized, targeted, and measurable. BWSR is moving toward watershed-based funding to accelerate water management outcomes, enhance accountability, improve consistency and efficiency across the state, and to provide predictable funding for implementation of local priorities. This approach allows more projects to be implemented and helps local governments spend limited resources where they are most needed.

As Minnesota transitions to comprehensive watershed management planning through One Watershed, One Plan, the proportion of competitive funding available decreases and the proportion of watershed-based funding increases. In order to meet the One Watershed, One Plan implementation goals, the total funds available as a combination of competitive and watershed-based funds must increase overtime, to an estimated \$120 million in FY 28-29.

Watershed-Based Implementation Funding Trajectory: The Clean Water Council recommends spending a minimum of available Clean Water Fund revenue for implementation of priorities in approved comprehensive watershed management plans:

- 30 percent in FY22-23
- 40 percent in FY24-25
- 50 percent in FY26-27
- 55 percent in FY28-29
- 60 percent in FY30-31
- 60 percent in FY32-33

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. This funding will continue to improve water quality by providing grants to local governments that will increase the implementation of water quality improvement practices. Short term success will be measured by the number of projects and activities that are completed with appropriated funds. We also will measure progress against the long-term goals outlined in the Clean Water Roadmap.

Impact on Children and Families:

Water that is fishable, swimmable, and drinkable benefits all Minnesotans.

Equity and Inclusion:

This proposal would not disproportionately impact any ethnic, racial or other minority group in either a negative or positive way, nor would it eliminate or reduce any disparities.

IT Related Proposals:

Not applicable.

Results:

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. This funding will continue to improve water quality by providing grants to local governments that will increase the implementation of water quality improvement practices. Short term success will be measured by the number of projects and activities that are completed with appropriated funds. We also will measure progress against the long-term goals outlined in the Clean Water Roadmap.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Results	Percentage of lakes with good water quality, as measured by acceptable Trophic State Index	62%	70%	By 2034
Results	Percentage of rivers and streams with healthy fish communities, as measured by the Index of Biotic Integrity	60%	67%	By 2034

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy – Surface and Drinking Water Protection Restoration

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	11,133	11,133	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	11,133	11,133	0	0
FTEs	9.0	9.0	0	0

Recommendation:

The Governor recommends \$22,266,000 from the Clean Water Fund (as recommended by the Clean Water Council) for the FY2022-2023 biennium for Surface and Drinking Water Protection and Restoration Grants. The recommendation is a decrease of \$9,734,000 as compared to the FY2020-2021 CWF appropriation. The recommendation includes 9.0 FTE for this effort which is a 2.0 FTE decrease from actual staff time during the FY2020-2021 biennium.

Rationale/Background:

With more than 10,000 lakes, 100,000 river and stream miles, and extensive groundwater systems, water is a major part of Minnesota’s culture, economy, and natural ecosystems. Today, about half of Minnesota’s surface waters have been assessed for water quality, and of those, about 40% do not meet basic water quality standards.

Protecting and restoring Minnesota’s waters is a collaborative effort between federal, state, and local partners. The goal for this proposal is to accelerate the state’s objectives for clean water through partnerships with local government, which in turn enter into agreements with private landowners to implement conservation practices and projects to make progress towards state goals and address high priority local resource concerns

This program provides Clean Water Funds to local governments to support the implementation of high priority projects derived from state approved, locally adopted water management plans. Local governments use these funds to plan, design and install conservation practices targeted to protect and restore water quality. Practices installed are designed to address water quality problems specific to the targeted water body, but generally retain rainfall and runoff on the land, and reduce the transport of sediment and nutrients to surface and ground waters.

Local governments have been aggressive in identifying projects to address water quality needs. For FY2020 local governments proposed more than \$29 million in projects under this program, while \$13 million of State Clean Water Funds were available, resulting in funding only 45% of project requests. Historically, BWSR requested water management project information from local government under a process called the Biennial Budget Request (BBR). In the FY2020-2021 BBR, completed in May 2018, local governments requested \$239 million in Clean Water Funds for priority projects. Both the applications received and the BBR data indicate that local governments are ready and able to deliver on significantly more water management projects than BWSR has been able to fund. Continued and increased funding for grants to finance local government led restoration and protection projects will provide the necessary support for their efforts, and make progress toward state water quality goals.

Short term success will be measured by the number of projects and activities that are completed with appropriated funds. Long term success will be measured by how many lakes and stream are meeting water quality standards and drinking water supplies protected.

On a statewide level, the Clean Water Road Map has set long term goals for lakes, rivers, streams, and groundwater. BWSR will be using this as one milepost measure for the expected outcome of accelerated water management activities.

Proposal:

This continues the highly successful Clean Water grant program, where demand for dollars far exceeds the dollars available. Funds are used to protect, enhance and restore water quality in lakes, river and streams and to protect groundwater and drinking water. Activities include structural and vegetative practices to reduce runoff and retain water on the land, feedlot water quality projects, SSTS abatement grants, and stream bank, stream channel and shoreline protection projects.

Eligibility for these funds is contingent on a state approved and locally adopted water management plan. The plans that link scientific information and citizen priorities include county comprehensive local water management plans, watershed district management plans and city surface water management plans. The planning requirement ensures that state funded projects are targeted to address water quality restoration or protection needs most effectively. The State's investment leverages local and federal funds as the grants require a 25% match. The program will be administered at the same time as the agency does with its other Clean Water Funds Programs which is a once a year competitive application process that is open to soil and water conservation districts, counties, watershed districts, cities and joint powers boards.

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. This funding will continue to improve water quality by providing grants to local governments that will increase the implementation of water quality improvement practices. Short term success will be measured by the number of projects and activities that are completed with appropriated funds.

The FTEs requested for this program cover not only the grants awarded this biennium, but also provides accountability for grants awarded in past biennia that are still active.

This program addresses the following goals and strategies in the Clean Water Council's strategic plan:

Goal 1, Strategy 4: Implement the Nitrogen Fertilizer Management Plan (NFMP) to promote vegetative cover and advanced nitrogen fertilizer management tools to protect private wells in vulnerable areas.

Goal 3, Strategy 1: Fund the completion of Watershed Restoration and Protection Strategies (WRAPS) for all 80 major watersheds by 2023.

Goal 3, Strategy 10: Enroll 6,500,000 acres and 5,100 Minnesota farms in the Minnesota Agricultural Water Quality Certification Program (MAWQCP) by 2030.

Goal 3, Strategy 12: Support in-lake treatment and restoration activities that only address water quality impairments and are supported by comprehensive plans, including One Watershed One Plan.

Goal 3, Strategy 13: Support state-federal cooperative programs, actions, and priorities outlined in the Great Lakes Restoration Initiative's Action Plan.

Goal 4, Strategy 4: Plan for program resilience after expiration of Legacy Amendment in 2034 and discourage Clean Water Fund applicants from relying on 100% CWF funding.

Impact on Children and Families:

The benefits (climate change mitigation, landscape resiliency, water quality and soil health) of targeted conservation practice implementation are long-lasting and thus accrue to multiple generations of Minnesota children and families. The scale and scope of this initiative’s impact will be dependent on voluntary landowner participation.

Equity and Inclusion:

This proposal would not disproportionately impact any ethnic, racial or other minority group in either a negative or positive way, nor would it eliminate or reduce any disparities.

IT Related Proposals:

Not applicable.

Results:

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. This funding will continue to improve water quality by providing grants to local governments that will increase the implementation of water quality improvement practices. Short term success will be measured by the number of projects and activities that are completed with appropriated funds. We also will measure progress against the long-term goals outlined in the Clean Water Roadmap.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quantity	Number of conservation practices installed	15,218	~16,000	By 2024
Results	Amount of nutrients removed compared to state goals (Reference: 2020 Clean Water Fund Performance Report) Phosphorus (pounds)	116,000 (10%)	189,726 (16%)	By 2024
Results	Percentage of lakes with good water quality, as measured by acceptable Trophic State Index	62%	70%	By 2034
Results	Percentage of rivers and streams with healthy fish communities, as measured by the Index of Biotic Integrity	60%	67%	By 2034

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy – Accelerated Implementation

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	4,841	4,841	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	4,841	4,841	0	0
FTEs	7.4	7.4	0	0

Recommendation:

The Governor recommends \$9,682,000 million from the Clean Water Fund (as recommended by the Clean Water Council) for the FY2022-2023 biennium. This recommendation represents a \$1,682,000 million increase from the FY2020-2021 appropriation. The recommendation includes 7.4 FTE for this program which is a decrease of 0.6 FTE staff time from the FY2020-2021 biennium.

Rationale/Background:

Most of the water management implementation activity is conducted by local governments. It is in the State's interest for local governments to have the technical skill and capacity to develop and implement priority water management projects. An existing gap this program is addressing is providing technical assistance and a training delivery program to ensure the local government staff have these necessary skills. Current Clean Water goals are very ambitious. The State will struggle to achieve these goals unless we increase capacity to deliver meaningful and measurable projects implemented by local governments in partnership with private landowners. This activity is the primary means for the State to accomplish these goals.

Ensuring the work of local government has the on-the-ground impact and resulting environmental outputs desired from implementation funds granted to local governments there is a need for advanced inventories, diagnostic and feasibility studies, and targeting tools to assist in building prioritized, targeted, and measurable strategies into water management or comprehensive plan amendment/revisions or otherwise be incorporated into routine implementation activities to increase the effectiveness of water quality protection or accelerated water quality restoration.

Proposal:

This program is a continuation and expansion of a highly successful Clean Water grant program. Under the continuation component of this program, funds are used to enhance the capacity of local governments to accelerate implementation of projects and activities that supplement or exceed current state standards for protection, enhancement, and restoration of water quality in lakes, rivers, streams, and groundwater. Activities include 1) increasing technical assistance through regional technical service areas (TSAs), 2) technical training and certification, 3) inventories of potential restoration or protection sites, and 4) developing and using analytical targeting tools that fill an identified gap. The proposed appropriation will support critical infrastructure of the agency such the targeting tool Prioritize, Target, and Measure Application (PTMApp) and eLINK as well as funding to local governments to support staff participation in training and increased capacity to deliver priority water quality projects.

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. This funding will continue to improve water quality by providing grants to local governments that will increase the implementation of water quality improvement practices. We also will measure progress against the long-term goals outlined in the Clean Water Roadmap.

Impact on Children and Families:

The benefits (climate change mitigation, landscape resiliency, water quality and soil health) of targeted conservation practice implementation are long-lasting and thus accrue to multiple generations of Minnesota children and families. The scale and scope of this initiative’s impact will be dependent on voluntary landowner participation.

IT Related Proposals:

Not applicable.

Results:

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. This funding will continue to improve water quality by implementing comprehensive technical training and certification on conservation practices to local governments, providing technical service grants to local governments to accelerate engineering design and construction oversight, building and maintaining modeling and accountability tools. Together this accelerates the implementation of water quality improvement practices. We also will measure progress against the long-term goals outlined in the Clean Water Roadmap.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Results	Percentage of lakes with good water quality, as measured by acceptable Trophic State Index	62%	70%	By 2034
Results	Percentage of rivers and streams with healthy fish communities, as measured by the Index of Biotic Integrity	60%	67%	By 2034

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy – Measures Results and Accountability

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	1,355	1,355	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	1,355	1,355	0	0
FTEs	7.8	7.8	0	0

Recommendation:

The Governor recommends \$2,710,000 from the Clean Water Fund (as recommended by the Clean Water Council) for the FY2022-2023 biennium to implement a comprehensive program of conservation quality control and assurance through oversight, assessment, assistance, and reporting and communication of local government performance and results. This is a \$710,000 increase as compared to the FY2020-2021 biennium and an increase of 0.8 FTE. The recommendation includes 7.8 FTE to implement this component of the Clean Water Fund. The increase is to help meet actual need and ensure functionality of our oversight tools (such as the eLINK database).

Rationale/Background:

With more than 10,000 lakes, 100,000 river and stream miles, and extensive groundwater systems, water is a major part of Minnesota’s culture, economy, and natural ecosystems. Today, about half of Minnesota’s surface waters have been assessed for water quality, and of those, about 40% do not meet basic water quality standards.

Local governments are foundational to delivering the results of the state’s conservation programs that implement water quality solutions. BWSR provides accountability to the state while supporting and providing assistance to local governments implementing Clean Water projects by:

1. Building strong technical skills within the local government delivery system
2. Providing assistance to local governments for improved program implementation, streamlining reporting requirements, and providing transparency regarding local government performance in meeting clean water program goals
3. Evaluating the success and value of on-the-ground restoration and protection activities in order to better target implementation funds
4. Communicating information about its grants to local governments and the environmental outcomes achieved through multiple media venues.

Proposal:

This proposal is a continuation of BWSR’s previous efforts to provide oversight and accountability for grants to local governments and to measure, track, and communicate results of projects funded with Clean Water funds. Central to BWSR’s effort is the agency’s eLINK, an online conservation tracking system, which features grants tracking from application to reporting, contract management, tracking of water plans goals and outcomes, including estimates of pollution reductions.

Another component of this proposal is BWSR's grant reconciliation process, through which BWSR staff conducts field visits with local governments to ensure compliance with state policies, guidance and fiscal best management practices.

Finally, BWSR communicates information about its grants to local governments and the outcomes achieved through a "Clean Water Stories" program and by working with local units of government to highlight work in their community newspapers and other media.

This program tracks and evaluates all CWF-supported programs and grants to local governments funded through the Clean Water Fund, thereby helping to measure the performance of projects in meeting water quality goals. Grant and program outcomes are reported to the legislature and Legislative Coordinating Commission.

Impact on Children and Families:

This proposal does not significantly impact children, youth, and families.

Equity and Inclusion:

This proposal would not disproportionately impact any ethnic, racial or other minority group in either a negative or positive way, nor would it eliminate or reduce any disparities.

IT Related Proposals:

Not applicable.

Results:

This program tracks and evaluates grants to local governments funded through the Clean Water Fund, thereby helping to measure the performance of projects in meeting water quality goals.

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy – Watershed Management Transition

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	2,904	2,904	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	2,904	2,904	0	0
FTEs	5.7	5.7	0	0

Recommendation:

The Governor recommends \$5,808,000 from the Clean Water Fund (as recommended by the Clean Water Council) for the FY2022-2023 biennium to implement the permanent One Watershed, One Plan program. This recommendation is a \$1,808,000 increase from the FY20-21 biennium. The recommendation includes 5.0 FTE for this effort, which represents a 0.7 increase in FTE from the FY20-21 biennium. The FTE increase is to accommodate the increase in areas transitioning to coordinated watershed management.

Rationale/Background:

In 2012 the Minnesota Legislature enacted one of the most significant overall water policy reforms since the mid-1980s. The watershed approach unites the water planning efforts of counties, soil and water conservation districts, and watershed districts by allowing water management plans to be completed on a watershed scale. Continued Clean Water Fund investment in One Watershed - One Plan allowed BWSR to move from a pilot program in FY2014-2015 to a permanent program in FY2016-2017. The permanent program will continue work with local units of government on the transition to watershed-based plans, leading to 1) a reduction from 200+ geo-political boundary plan to 60+ comprehensive watershed management plans, 2) future efficiencies that are both scientifically and economically sound, and 3) targeting of private, local and state investments towards water quality and quantity problems that can demonstrate success.

The current system of local water management in greater Minnesota is largely done along county boundaries yet we know that water is defined not by political boundaries but natural boundaries that we call watersheds. If we are serious about restoring those waters (both surface water and groundwater) that are impaired and protecting those waters that are threatened but not yet impaired, we need to employ a holistic and comprehensive watershed planning and implementation approach. The One Watershed, One Plan builds off exiting studies and assessments being done by MPCA, DNR, MDH & MDA and create focused watershed implementation plans that are prioritized, targeted and capable of achieving measurable results.

Short term success will be measured by the number of state-approved plan that are completed with the goal of having all greater Minnesota completed by 2025. Long term success will be measured by how many lakes and stream are meeting water quality standards and drinking water supplies protected.

The One Watershed, One Plan recognizes that the single biggest source of the problem and single biggest solution are the citizens of this state that make the land use and land management decisions on 78% of the land in Minnesota. One Watershed, One Plans developed and implemented by local government working with citizens is

the most direct, efficient, and effective means to implement the projects and programs needed to achieve the goals of clean water, clean air and abundant fish and wildlife habitat.

On a statewide level the Clean Water Road Map has set long term goals for lakes, rivers, streams, and groundwater. BWSR will be using these as milepost measures for the expected outcome with full scale development, adoption and implementation of One Watershed, One Plans state-wide.

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. This program specifically works to achieve the Clean Water Council Strategic Plan Goal 1 - *Drinking water is safe for everyone, everywhere in Minnesota*; Goal 2 – *Groundwater is clean and available to all* and Goal 3 - *Surface waters are swimmable and fishable throughout the State*.

Proposal:

The One Watershed, One Plan program was initiated in FY 2014 with Clean Water Funds with the development of guiding principles, operating procedures, required plan content and piloting in five major watershed areas. The current proposal is implementation of the permanent program. The proposed funding will be used to develop and approve 6 to 10 plans each year with all greater Minnesota watersheds completed by 2025. Counties, soil and water conservation districts, and watershed districts are the principal partners and will be the main local governments that will organize and collaborate on the development of watershed implementation plans. The DNR, PCA, MDA, and MDH will also be partners and will participate through the establishment of a formal agency team assigned to work with each watershed area.

Focused watershed based implementation plans (One Watershed, One Plan) provide the best mechanism possible to build off current state investments being made in Watershed Restoration and Protection strategies (WRAP) as well as other state studies and plans to inform the building of a focused watershed implementation plan that is science based, spatially and numerically explicit, with an implementation plan that is prioritized, targeted and capable of achieving measurable improvement in water quality, flood control, and groundwater protection. The agency has implemented four water management planning and implementation authorities dating back to 1956, as such it is well positioned to undertake this activity.

Impact on Children and Families:

This proposal does not significantly impact children, youth, and families.

Equity and Inclusion:

This proposal would not disproportionately impact any ethnic, racial, or other minority group in either a negative or positive way, nor would it eliminate or reduce any disparities.

IT Related Proposals:

Not Applicable.

Results:

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. This funding will continue to improve water quality by providing grants to local governments to collaboratively work with their upstream and downstream neighbors to develop a comprehensive watershed management plan and take action for clean water. Short term success will be measured against the One Watershed, One Plan transition plan that outlines expectations in the development and implementation of comprehensive watershed management plans statewide by 2025. We also will measure progress against the long-term goals outlined in the Clean Water Roadmap.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quantity	Number of One Watershed, One Plans in development	38	58	By 2025
Quality	State approved based on established plan content requirements	20	38	By 2025
Results	Percentage of lakes with good water quality, as measured by acceptable Trophic State Index	62	70%	By 2034
Results	Percentage of rivers and streams with healthy fish communities, as measured by the Index of Biotic Integrity	60%	67%	By 2034

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy –Soil Health and Adoption of Cover Crops

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	2,033	2,033	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	2,033	2,033	0	0
FTEs	1.6	1.6	0	0

Recommendation:

The Governor recommends \$4,066,000 from the Clean Water Fund (as recommended by the Clean Water Council) for the FY2022-2023 biennium for grants to enhance landowner adoption of cover crops in areas where there are direct benefits to public water supplies. The recommendation includes 1.6 FTE for this effort.

Rationale/Background:

This program contributes to part of a comprehensive clean water strategy to reduce nutrients and sediment from entering drinking water supplies. Incorporating cover crops into row crop rotations can improve water quality by decreasing nitrogen losses, reducing runoff and improving soil health.

Vulnerabilities of drinking water systems have come into the spotlight over the last several years. While Minnesota has not experienced a large scale drinking water crisis, the risk of drinking water contamination is of particular concerns in some areas of Minnesota. Several Minnesota communities have seen increased water treatment rates due to contamination of ground water from excess nitrate coming from agricultural areas. These incidents are indicative of the widespread vulnerability of many rural communities because much of Minnesota’s rural landscape is heavily dominated by intensive row-crop agriculture.

Reports, such as the MPCA Nutrient Reduction Strategy, indicate that despite widespread best management practice (BMP) adoption, nitrate levels in Minnesota are not decreasing. Even perfect timing, rate, and placement of nitrogen fertilizer won’t stop all the leaks in the current cropping systems. For a good portion of each spring and fall, large portions of our landscape are bare. Given the significant influence of land uses on water quality, this study and several other reports, such as the EQB Water Policy Report and the Clean Water Council’s Living Cover for Drinking Water Protection policy, indicate that to reduce nitrate from leaching into our groundwater and running off into our surface waters, a shift in the cropping systems will be required. One component of this shift is the recommended use of cover crops to scavenge excess nitrogen from the soil.

Cover crops are known to be an effective means to reduce nitrogen loss. A recent report from the Freshwater Society *The Water Underground* cites that cover crops have been shown to reduce nitrogen loads by 30% compared to 15% for nitrogen fertilizer management alone.

Proposal:

This program provides both applied research by the Minnesota Office for Soil Health (MOSH) and implementation of soil health practices to improve groundwater and surface water quality. The MOSH is a collaboration between BWSR and the University of Minnesota Water Resources Center and works towards healthy farms and ecosystems

by delivering soil education, promoting grower networks, and researching best practices. MOSH's role in applied research and education on Minnesota's agroecosystems and soil health management systems is critical to demonstrating the water quality benefits of soil health practices and helping producers adopt soil health practices.

The new cover crop initiative is a targeted effort to increase cover crop adoption and related soil health practices on highly erodible lands or in drinking water management areas. This program provides an opportunity for a large acre and participant increase in cover crop and soil health practice adoption. Cover crop adoption improves groundwater and surface water quality and benefits drinking water supply areas. Clean Water Funds will be made to eligible landowners and retailers to plant cover crops, provide payments to reduce risk, and purchase specialized inter-seeding equipment in one or two targeted areas within the state.

This initiative can leverage existing NRCS financial assistance programs and will be implemented by soil and water conservation districts (SWCDs). Short term success will be measured by the number of acres of cover crops installed with appropriated funds.

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters and addresses the following Clean Water Council's Strategic Plan Goals:

Goal 1, Strategy 4: Implement the Nitrogen Fertilizer Management Plan (NFMP) to promote vegetative cover and advanced nitrogen fertilizer management tools to protect private wells in vulnerable areas.

Goal 3, Strategy 10: Enroll 6,500,000 acres and 5,100 Minnesota farms in the Minnesota Agricultural Water Quality Certification Program (MAWQCP) by 2030.

Goal 3, Strategy 11: Fund technical assistance and local demonstration sites to assure that application of crop fertilizer uses the best available science

Goal 3, Strategy 12: Support in-lake treatment and restoration activities that only address water quality impairments and are supported by comprehensive plans, including One Watershed One Plan.

Goal 3, Strategy 13: Support state-federal cooperative programs, actions, and priorities outlined in the Great Lakes Restoration Initiative's Action Plan.

Impact on Children and Families:

This program protects drinking water supplies by reducing nutrients and sediment entering drinking water supplies. Widespread cover crop adoption can improve groundwater and surface water quality and benefits Minnesota children and families who rely on those water resources for their drinking water. The scale and scope of this initiative's impact will be dependent on voluntary landowner participation.

Equity and Inclusion:

This proposal would not disproportionately impact any ethnic, racial or other minority group in either a negative or positive way, nor would it eliminate or reduce any disparities.

IT Related Proposals:

Not applicable.

Results:

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quantity	Acres of Cover Crop Practices Installed	NA	15,000 Acres	By 2024
Results	Percentage of lakes with good water quality, as measured by acceptable Trophic State Index	62%	70%	By 2034
Results	Percentage of rivers and streams with healthy fish communities, as measured by the Index of Biotic Integrity	60%	67%	By 2034

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy – Conservation Drainage Management and Assistance

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	850	850	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	850	850	0	0
FTEs	0.2	0.2	0	0

Recommendation:

The Governor recommends \$1,700,000 from the Clean Water Fund for the FY2020-2023 biennium to provide funding for Minnesota drainage authorities under M.S. 103 E to plan and construct drainage water quality management practices into drainage system projects. The recommendation includes 0.2 FTE for this program which is a decrease of 1.6 FTE from the FY20-21 biennium.

Rationale/Background:

Studies indicate that the observed increase in stream flows in Minnesota can be attributed to changes in land use, particularly in association with agricultural practices. Some of these influential changes include wetland drainage and expansion of artificial drainage networks. These land use changes have drastically altered natural hydrological processes leading to decreased surface water storage and decreased total annual evapotranspiration from fields through crop conversion. (Schilling and Helmers 2008; Schilling 2008; Tomer and Schilling 2009; Lenhart et al. 2011a; Wang and Hejazi 2011; Schottler et al. 2013).

Together those changes have resulted in increased river flows and increased erosion, sedimentation, and delivery of nutrients to downstream waters. Regardless of the exact cause of increased river flow, strategies that increase water residence time on the landscape will have a positive impact on controlling stream flows. Similarly, widespread expansion of water storage mechanisms will be particularly important in the future if increasing precipitation patterns continue with ongoing climate change.

Studies, such as the MPCA Sediment Reduction Strategy for the Minnesota River Basin, identify that public and private drainage infrastructure can affect peak channel flows, soil erosion, and water quality, including both surface ditches and subsurface tile. In recent years, several new best management practices (BMPs) have been identified and developed under the umbrella of “conservation drainage” to better enable multipurpose drainage management. Providing technical and financial assistance to local drainage authorities will help achieve the public benefit of clean water alongside the private and public benefit of maintaining these public drainage systems/infrastructures. These BMPs are based on research and demonstration projects in Minnesota and other states having extensive drainage infrastructure.

Proposal:

This program is a continuation from FY2020-2021 and provides for financial and technical assistance to Minnesota’s Public Drainage Authorities and Soil and Water Conservation Districts to facilitate planning, design and installation of conservation practices on drainage systems that will result in water quality improvements. These practices promote retention of rainfall and runoff on the land, soil erosion reduction, and water quality

improvement in drainage systems and receiving waters while maintaining agricultural production. The program is implemented through partnering with the State’s public drainage system authorities, principally counties and watershed districts. The State’s investment leverages local investment as the grants require a 25% local match. The program will be administered at the same time as the agency does with its other Clean Water Funds Programs, which is a once a year competitive application process.

Impact on Children and Families:

This proposal does not significantly impact children, youth, and families.

Equity and Inclusion:

This proposal would not disproportionately impact any ethnic, racial, or other minority group in either a negative or positive way, nor would it eliminate or reduce any disparities.

IT Related Proposals:

Not applicable.

Results:

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quantity	Number of systems with Drainage Water Quality practices implemented	30	40	By 2025
Results	Percentage of lakes with good water quality, as measured by acceptable Trophic State Index	62%	70%	By 2034
Results	Percentage of rivers and streams with healthy fish communities, as measured by the Index of Biotic Integrity	60%	67%	By 2034

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Funds – Tillage and Erosion Evaluation

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	362	362	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	362	362	0	0
FTEs	0.5	0.5	0	0

Recommendation:

The Governor recommends \$724,000 from the Clean Water Fund (as recommended by the Clean Water Council) for the FY202 - 2023 biennium to continue to systematically collect data and produce statically valid estimates of the rate of soil erosion state-wide and tracking the adoption of high residue cropping systems in the 67 counties with greater than 30% of land in agricultural row crop production. The recommendation is a \$126,000 reduction from FY2020-2021 appropriation. The recommendation includes 0.5 FTE to accomplish this component of the Clean Water Fund

Rationale/Background:

Soil erosion, and the nutrients it carries with it, is a significant environmental pollutant in Minnesota. Soil erosion on cropland has on-site impacts to soil quality and crop productivity as well as off-site impacts on water quantity and quality, air quality and infrastructure maintenance. Tillage is the most widespread land use practice that influences erosion and one of the least expensive options to avoid and mitigate the onsite and offsite impacts of erosion.

The Tillage and Soil Erosion Survey is a comprehensive long-term program to systematically collect data and produce county, watershed, and state-wide estimates of soil erosion caused by water and wind along with tracking adoption of high residue cropping systems and implementation of cover crops. Tillage and cover crop trend data and soil erosion data are critical to measuring progress towards goals and recommendations set forth in Minnesota’s Statewide Nutrient Reduction Strategy (2013,2020), Sediment Reduction Strategy for the Minnesota River and South Metro Mississippi River (2014), WRAPS, and TMDL’s. This data allows tracking of local trends in adoption of conservation practices, effectiveness of local targeting efforts and to help set local and State priorities.

This effort addresses the Clean Water Council’s strategic plan:

Goal 3, Strategy 5 - Include climate impacts as one of multiple benefits of protection and restoration and incorporate climate resilience into comprehensive watershed management plans.

Goal 3, Strategy 6 - Support effective science-based responses to emerging threats or contaminants of emerging concern.

Goal 3, Strategy 10 - Enroll 6,500,000 acres and 5,100 Minnesota farms in the Minnesota Agricultural Water Quality Certification Program (MAWQCP) by 2030.

This critical data is not collected anywhere else. The current trend in soil erosion statewide has largely gone unchanged, since 1982 and is over twice the amount considered to be tolerable as established by the United States Department of Agriculture.

Proposal:

This is a continuation of a program that implements a tillage, cover crop and soil erosion survey to systematically collect data and produce county, watershed, and state-wide estimates of soil erosion caused by water and wind along with tracking adoption of high residue cropping systems and cover crops. Tillage, cover crop and soil erosion data will be collected in the 67 Minnesota counties with greater than 30% of land dedicated to agricultural row crop production.

The principle result of the program is statistically valid numeric estimates, produced on a county-level, for soil loss from both wind and water erosion and the annual adoption rate of high residue tillage management systems and cover crops. Providing county and watershed-level statistically accurate data requires annual and statewide data collection over the long-term.

Tillage and residue data enhance existing watershed water quality models. The improved models are better able to identify critical areas for conservation best management practice (BMP) implementation and better estimate pollutant load reductions for both planned and applied conservation practices. Up to date tillage and erosion data can aid local government staff in reaching WRAPS/TMDL (water quality goals by comparing current conditions with potential management scenarios designed to reach sediment and nutrient reduction goals. These efforts will help address the following statewide goals:

- *Minnesota Nutrient Reduction Strategy* - Achieving phosphorus phase 1 milestones:
 - Field Erosion Control – conservation tillage adoption rate of 85% in available area.
 - Increase and Target Living Cover – cover crop adoption rate of 10%.
- *Minnesota Nutrient Reduction Strategy* – Achieving nitrogen phase 1 milestones:
 - Increase and Target Living Cover – cover crop adoption rate of 10%.
- *Minnesota Statewide Conservation and Preservation Plan* – Land Use Recommendation 7: Enable improved design and targeting of conservation through improved and timely data collection and distribution
 - A periodic detailed survey of benchmark sampling sites to determine trends in soil erosion, as was carried out by the NRCS for the Natural Resources Inventory.
- *Minnesota Sediment Reduction Strategy for the Minnesota River and South Metro Mississippi River* – Priority Initiatives, Flow Duration and Magnitude Goals:
 - Increase Living Cover.
- *Minnesota Sediment Reduction Strategy for the Minnesota River and South Metro Mississippi River* – Example Tools for Prioritizing and Targeting Watershed Restoration Efforts:
 - Tracking Systems – Tools such as eLINK and the Tillage Transect Survey for use in tracking upland implementation practices.

Impact on Children and Families:

This program does not significantly impact children, youth, and families.

Equity and Inclusion:

This proposal would not disproportionately impact any ethnic, racial or other minority group in either a negative or positive way, nor would it eliminate or reduce any disparities.

IT Related Proposals:

Not applicable.

Results:

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. To measure the success of this program, we will look at soil erosion rates by county and by watershed. We also will measure progress against the long-term goals outlined in the Clean Water Roadmap.

The Minnesota Nutrient Reduction Strategy (NRS) will be utilized to report changes in crop residue rates, agricultural field soil erosion rates, and cover crop and soil health adoption rates and trends. Information and analysis from this program was incorporated into the 2020 five year update to NRS sections 4.2.3 and 4.2.4: <https://www.pca.state.mn.us/water/five-year-progress-report>.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quantity	Soil erosion rates by county/watershed	7.28 tons/acre/yr	3 to 5 tons/acre/yr	By 2034
Results	Percentage of lakes with good water quality, as measured by acceptable Trophic State Index	62%	70%	By 2034
Results	Percentage of rivers and streams with healthy fish communities, as measured by the Index of Biotic Integrity	60%	67%	By 2034

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy – Wetland Restoration Easements

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	5,000	5,000	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	5,000	5,000	0	0
FTEs	2	2	0	0

Recommendation:

The Governor recommends \$10,000,000 from the Clean Water Fund for the FY2022-2023 biennium. This recommendation is for a new Clean Water Fund program and represents an increase from the FY2020-2021 appropriation. The recommendation includes 2 FTE each year for this program.

Rationale/Background:

Minnesota has lost an estimated 42% of its original 16 million acres of wetlands to drainage or fill activities. The loss of wetlands is most severe in the prairie regions of the state (approximately 90% loss). Prairies once comprised nearly 20 million acres in Minnesota. Less than 1% of this native prairie remains.

The proposed program enrolls drained and farmed wetlands and associated uplands that offer no water quality benefits, little habitat and ecological benefits in their current state. Through a combination of eligibility screening and a scoring and ranking process, the program evaluates applications and selects the applications that provide the greatest environmental and habitat benefits after protection and restoration for enrollment in a BWSR RIM Reserve easement. The RIM Reserve wetlands program protects and restores wetlands and adjacent upland areas. These restored wetlands and grassland complexes will provide water quality improvements, and habitat for wetland dependent wildlife species. RIM is a local-state partnership delivered by SWCDs and BWSR. BWSR staff provide program oversight and manage the easement acquisition process and restoration design. Local staff promote RIM Reserve easements, assist with easement processing and provide technical assistance and project management services.

Proposal:

This program using Clean Water funding is new, however the RIM Reserve program has been successfully protecting and restoring degraded wetlands for almost 30 years.

The program funding will be used to restore wetlands and purchase permanent conservation easements on restored wetlands. . This program is part of a comprehensive habitat and clean water strategy to prevent sediment and nutrients from entering Minnesota’s lakes, rivers and streams; enhance fish and wildlife habitat; and protect wetlands.

This program is part of a comprehensive clean water strategy to reduce pollutants entering Minnesota waters. Acres protected as well as progress toward the long-term water quality goals for surface water will be tracked.

Program enrollment will begin in fall/winter of 2021, with easements secured by summer 2023. Restoration/implementation of conservation plan will be implemented after easements are secured. Plantings will be completed by 2025. As easements will be permanent, the benefits will be retained in perpetuity. We anticipate enrolling approximately 400 acres with 7 easements.

IT Related Proposals:

Not Applicable.

Results:

This new program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. We will track the acres of wetlands and associated uplands protected and restored. Wetland restoration and protection easements funded by the Clean Water Legacy funds is new for this biennium. We also will measure progress against the long-term goals outlined in the Clean Water Roadmap.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quantity	Acres protected in easements	0	850	By 2024
Results	Percent of lakes with good water quality measured by TSI	62%	70%	By 2034

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy – Working Lands Floodplain

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	1,936	1,936	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	1,936	1,936	0	0
FTEs	2	2	0	0

Recommendation:

The Governor recommends \$3,872,000 from the Clean Water Fund (as recommended by the Clean Water Council) for the FY2022-2023 for developing a pilot Working Lands Floodplain Easements program (formerly Riparian Buffer-Permanent Conservation Easements.) The recommendation is a \$5,628,000 million decrease from the FY2020-2021 appropriation for Riparian Buffer-Permanent Conservation Easements. The recommendation includes 2 FTE to complete this component of the Clean Water Fund.

Rationale/Background:

With more than 10,000 lakes and 100,000 river and stream miles, water is a major part of Minnesota’s culture, economy and ecosystems. Today, about half of Minnesota’s surface waters have been assessed for water quality, and of those, about 40% do not meet basic water quality standards. This problem is largely a result of changes in land use that directly affect the quality of our water. Minnesota currently is experiencing a significant loss of grasslands. Unless action is taken to protect the most environmentally sensitive acres, they will likely be converted into cropland, and the benefits to both water quality and wildlife will be lost. Protecting and restoring riparian areas are one of the most effective and proven methods to address surface water quality degradation and environmentally sensitive or highly erodible soils along rivers and streams.

In addition, major riparian river corridors tend to have wide swaths of flat farmable ground that has the potential to be both productive and frequently flooded. When flood waters deposit debris into farm fields it can make for a difficult harvest if crops aren’t wiped out completely. The fertile ground can be highly productive in years when it doesn’t flood and provides a critical source of income for many farmers.

The framework for this program has been developed in consultation with The Nature Conservancy and program concepts have been discussed with agency partners as a means to reduce the annual row crop impacts in riparian areas. Finding ways to offer continued economic activities in these lands is a key component to incentivizing landowner interest when looking at setting aside land that can be quite productive under some circumstances.

The purpose of this program is to remove riparian and frequently flooded lands from row crop production. These areas will either be placed into traditional RIM Reserve conservation easements or an easement that will allow farmers to utilize these landscapes to provide a reasonable source of income through silviculture while at the same time preventing additional water quality impacts which can occur in frequently flooded row crops.

Proposal:

The Working Lands Floodplain Easement program is an expansion of the Riparian Buffer-Permanent Conservation Easement program previously funded by CWF. This newly expanded program will continue to allow for enrollment of traditional lands that meet the riparian buffer criteria but will also allow for larger whole field enrollment. The whole field enrollment option allows landowners to continue income-producing conservation practices (e.g., silviculture, grazing, and/or haying) under a reduced easement payment rate or a traditional conservation easement.

The FY22-23 funding will be used to develop the new program and implement a pilot. In the first six months of funding availability, BWSR staff will establish a tiered payment structure to pilot a new working lands conservation model that includes whole field enrollment and flexible land management. Staff will also develop scoring and ranking criteria based on current land use, erodibility, priority in approved comprehensive water management plans, and water quality impairment. After the payment and scoring criteria are defined, BWSR will pilot the new easement program and work with landowners to acquire whole field and riparian buffer easements. CWF funding will be used to purchase conservation easements on riparian lands adjacent to public waters. Funding will also be used for restoration where appropriate. Many other agencies (DNR, MDA, and federal NRCS and USFWS) and NGOs are working toward similar goals of water quality protection, but the specific design of working with landowners on this type of private lands easement program is unique to BWSR.

This program is part of a comprehensive clean water strategy to prevent sediment and nutrients from entering Minnesota’s lakes, rivers and streams; reduce aquatic impairments as measured by the Index of Biological Integrity; and protect wetlands. Studies show that buffers in riparian areas reduce sediment and nutrients entering waterways, stabilize streambanks, and provide food and habitat for many species of wildlife. Through the Reinvest in Minnesota (RIM) Reserve Program and in partnership with soil and water conservation districts and private landowners, permanent conversation easements are purchased, and native vegetated buffers are established. For whole field enrollment, row crop agriculture will be replaced with perennial, managed vegetation (trees, shrubs, native grasses).

The program addresses the Clean Water Council’s Strategic Plan Goal 3, Strategy 6 - *Support effective science-based responses to emerging threats or contaminants of emerging concern.*

IT Related Proposals:

Not applicable.

Results:

This new program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. We will track the acres of floodplains, buffers and riparian areas protected. As this is a modification to the previous buffers funding, the acres under this program are assumed to be zero. We also will measure progress against the long-term goals outlined in the Clean Water Roadmap.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quantity	Acres protected in easements	0	810	By 2024
Results	Percent of rivers and streams with healthy fish communities measured by IBI	60%	67%	By 2034

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy – Shoreland Buffer Compliance

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	1,936	1,936	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	1,936	1,936	0	0
FTEs	3.0	3.0	0	0

Recommendations:

The Governor recommends \$3,872,000 from the Clean Water Fund (as recommended by the Clean Water Council) for the FY2022-2023 biennium to support local government work to implement compliance with the riparian buffer or alternative best manage practice requirements for state required buffers and soil erosion enacted into law in 2015. This is a decrease of \$1,128,000 and 1.0 FTE compared to the FY2020-2021 appropriation. The recommendation includes 3.0 FTE to implement this component of the Clean Water Fund.

Rationale/Background:

With more than 10,000 lakes, 100,000 river and stream miles, and extensive groundwater systems, water is a major part of Minnesota’s culture, economy, and natural ecosystems. Today, about half of Minnesota’s surface waters have been assessed for water quality, and of those, about 40% do not meet basic water quality standards.

Too often our lakes, streams and ditches do not have sufficient riparian buffers. Minnesota’s buffer initiative, which was signed into law in 2015, will help protect the state’s water resources from erosion and runoff pollution by establishing roughly 110,000 acres of buffer along waterways. The law established a November 1, 2017 timeline for establishing buffers on public waters and a November 1, 2018 timeline for establishing buffers on public drainage systems. As of January 2020, statewide compliance for public waters is 99.5% and 96% for public ditches.

Proposal:

This existing program is part of a comprehensive clean water strategy to prevent sediment and nutrients from entering Minnesota’s lakes, rivers, streams and ditches. Funding supports soil and water conservation district’s technical assistance to landowners, on-going monitoring and tracking of compliance and assistance in local enforcement of the buffer law. Funding availability is dependent on the existence of the Clean Water Fund and Legacy Amendment. BWSR reports on outcomes and performance annually to the Legislative Coordinating Commission and biennially to the Legislature. Overall, these are high compliance numbers. However, there remains thousands of parcels that are listed as not compliant and enforcement work is just beginning.

The CWF Shoreland Buffer Compliance funding is used for grantmaking to SWCDs and to support SWCD implementation. BWSR works to develop and maintain various aspects of program implementation guidance and support documents. In addition, BWSR provided training and outreach to local government staff and landowners on these aspects of the program. BWSR also plays a role in assisting facilitation between local governments at the request of those looking for agency or state perspective. One key aspect of this role is acting as a repository for what local governments are doing that is working so they can be used as resources by others in similar situations

or with similar programmatic hurdles. BWSR maintains and hosts a statewide implementation tracking system used by SWCDs to monitor landowner progress toward compliance with the law and to meet their statutory obligation to track progress.

IT Related Proposals:

Not applicable.

Results:

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quality	Percentage of lakes with good water quality, as measured by acceptable Trophic State Index	62%	70%	By 2034
Quality	Percentage of rivers and streams with healthy fish communities, as measured by the Index of Biotic Integrity	60%	67%	By 2034
Results	Number of parcels in compliance with Mn. Stat. 103F.48	99%	>99%	Current and Ongoing

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy – Targeted Wellhead Drinking Water Source Protection

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	2,500	2,500	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	2,500	2,500	0	0
FTEs	1.1	1.1	0	0

Recommendation:

The Governor recommends \$5,000,000 from the Clean Water Fund for the FY2022-2023 biennium to implement best management practices, land acquisition, or permanent conservation easements in wellhead or source water protection areas where the action needed to protect drinking water are known. The recommendation includes 1.1 FTE to implement the program, a decrease of 1.4 FTE.

Rationale/Background:

With more than 10,000 lakes, 100,000 river and stream miles, and extensive groundwater systems, water is a major part of Minnesota’s culture, economy, and natural ecosystems. As noted by our interagency water discussions, groundwater in Minnesota is at risk of overuse and contamination.

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota’s drinking water. This effort addresses the Clean Water Council’s Strategic Plan Goal 1, Strategy 5 - *Protect the approximately 400,000 acres of vulnerable land surrounding drinking water wellhead areas statewide by 2034.*

Proposal:

This proposal is a continuation of a successful Clean Water Fund easement and grant program. The purpose of this highly targeted program is to convert agricultural land to grasslands or install other water quality practices in drinking water areas that are vulnerable to contamination.

Priority is placed on land located where the vulnerability of the drinking water supply is designated as high or very high by the commissioner of health, where the drinking water supply is identified as Mitigation Level 1 or 2 by the Minnesota Groundwater Rule, where monitoring has shown elevated nitrate levels, where drinking water protection plans have identified specific activities that will achieve long-term protection, and/or on lands with expiring Conservation Reserve Program contracts.

We will continue to work with Minnesota Department of Health, Minnesota Department of Agriculture, and the Minnesota Rural Water Association to determine the list of targeted areas. We then will work with soil and water conservation districts (SWCDs) or other community partners in those areas to implement the needed solutions and reduce nutrients entering drinking water supplies. This work may include conservation easements, as has been the focus in past phases, as well as grants for land acquisition completed locally.

IT Related Proposals:

N/A.

Results:

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. We will track the acres of wellhead and source water protection areas protected as well as track progress toward the long-term goals for groundwater set forth in the Clean Water Roadmap.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quantity	Acres protected	745	955	By 2024
Results	Nitrate levels in groundwater reduced by 20%			By 2034
	Wells meeting standards in SE MN	89%	95%	
	Wells meeting standards in Central Sands	96%	98%	

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy– Critical Shoreland Protection

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	1,234	1,234	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	1,234	1,234	0	0
FTEs	1.1	1.1	0	0

Recommendation:

The Governor recommends \$2,468,000 from the Clean Water Fund (as recommended by the Clean Water Council) for the FY2022-2023 biennium to purchase permanent conservation easements on lands adjacent to public waters with good water quality but threatened with degradation. The recommendation includes 1.1 FTEs, representing a decrease of \$532,000 and 1.9 FTE as compared to the FY2020-2021 appropriation.

Rationale/Background:

With more than 10,000 lakes, 100,000 river and stream miles, and extensive groundwater systems, water is a major part of Minnesota’s culture, economy, and natural ecosystems. Today, about half of Minnesota’s surface waters have been assessed for water quality, and of those, about 40% do not meet basic water quality standards.

Lakes and rivers in the forest are very susceptible to the impacts of shoreline development. The alteration of shoreline vegetation, construction of impervious surfaces, placement of in-lake structures, and increased boat and water based recreation can result in a reduction in emergent and floating plant abundance; mixing of bottom sediments, increased nutrient loading (including substantial changes in phosphorous) and shoreline erosion. The impact of development is cumulative, and over time, such changes can severely reduce water quality of these important water bodies.

Proposal:

This is a continuation of an easement program that fills the need for shoreland protection on key water bodies. Beyond public ownership, current shoreline protection is limited to county shoreland ordinances and limited conservation efforts by non-governmental organizations. Even the most stringent shoreland ordinances still allow for some subdivision and development that can be detrimental to water quality. Voluntary, incentive-based conservation protection options for shoreland landowners are few. Unlike the prairie portion of the state where state funded easement options exist for conservation-minded landowners, private land protection options are limited for shoreland in the forest due to funding constraints. Further, many easement programs are targeted for restoration and not protection.

Using the Reinvest in Minnesota (RIM) program, conservation easements are acquired on critical shoreland areas, targeting the highest priority areas through science-based conservation methods. Conservation activities are prioritized based on a methodology that determines the areas where dollars spent maximize return on investment. Agency staff provide the necessary administrative, legal, and engineering expertise to secure perpetual conservation easements with private landowners through local soil and water conservation districts (SWCDs). Dollars are primarily used for easement payments to landowners and program implementation.

Effective long-term easement management requires documenting baseline conditions at the time of acquisition as well as regular ongoing monitoring, and enforcement when necessary, to ensure compliance. Local SWCDs perform regular monitoring of all conservation easements. We maintain baseline, monitoring, and geospatial data.

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. To measure the success of this program, we will look at the number of acres protected, with the goal being 600 acres over the biennium. The Critical Shorelands Protection program works to achieve the following Clean Water Council Strategic Plan goals:

Goal 1 - Drinking water is safe for everyone, everywhere in Minnesota

Goal 3, Strategy 3 - Protect 100,000 priority acres in the Upper Mississippi River headwaters basin with a combination of public and private funding to ensure high quality water.

Impact on Children and Families:

The benefits (climate change mitigation, landscape resiliency, water quality and soil health) of permanent land protection program are long-lasting and thus accrue to multiple generations of Minnesota children and families. The scale and scope of this initiative’s impact will be dependent on voluntary landowner participation.

Equity and Inclusion:

This proposal would not disproportionately impact any ethnic, racial or other minority group in either a negative or positive way, nor would it eliminate or reduce any disparities.

IT Related Proposals:

Not applicable.

Results:

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. To measure the success of this program, we will look at the number of acres protected, with the goal being 1,470 acres over the biennium. We also will measure progress against the long-term goals outlined in the Clean Water Roadmap.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quantity	Acres protected in easements	2490	3960	By 2024
Results	Percent of lakes with good water quality measured by TSI	62%	70%	By 2034
Results	Percent of rivers and streams with healthy fish communities measured by IBI	60%	67%	By 2034

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy – Conservation Reserve Enhancement Program (CREP)

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	1,208	0	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	1,208	0	0	0
FTEs	1.7	0	0	0

Recommendation:

The Governor recommends \$1,208,000 from the Clean Water Fund (as recommended by the Clean Water Council) for the FY2022-2023 biennium to implement a Conservation Reserve Enhancement Program (CREP) in partnership with the United States Department of Agriculture (USDA) and other state agencies. The recommendation includes 1.7 FTE, representing a decrease of \$16,042,000 and 8 FTE compared to the FY2020-2021 biennium.

Rationale/Background:

With more than 10,000 lakes, 100,000 river and stream miles, and extensive groundwater systems, water is a major part of Minnesota’s culture, economy, and natural ecosystems. Today, about half of Minnesota’s surface waters have been assessed for water quality, and of those, about 40% do not meet basic water quality standards.

This problem is further compounded by changes in land use that affect the quality of our water. Minnesota currently is experiencing a significant loss of grasslands – further complicated by the expiration of over 500,000 acres of Minnesota Conservation Reserve (CRP) contracts over the next five years. Unless action is taken to continue protection of the most environmentally sensitive acres, they will likely be converted back into cropland, and the benefits to both water quality and wildlife will be lost.

We propose to use the MN CREP to benefit water quality by protecting critical riparian areas and restoring wetlands to address water quality impairments as a result of modifications in hydrology, sedimentation, and nutrient transport. This effort will leverage State and Local technical expertise, strategic planning, and fiscal resources to assure that projects are cost effective and provide significant environmental benefits for both water quality and habitat.

Proposal:

This effort is a partnership of five state agencies – the Board of Water and Soil Resources (BWSR), Department of Natural Resources (DNR), Department of Agriculture (MDA), Pollution Control Agency (PCA), and Department of Health (MDH) – as well as USDA Farm Service Agency (FSA), local soil and water conservation districts, and several nongovernmental organizations. On January 17, 2017, Governor Mark Dayton signed an agreement with the USDA-FSA to enact the MN CREP initiative.

MN CREP is aimed to address state water quality and habitat goals by focusing on priorities established in local and statewide management -plans, such as the state Nutrient Reduction Strategy, Watershed Restoration and Protection Strategies, and the Minnesota Prairie Conservation Plan. The geography for MN CREP includes counties that have phosphorus or nitrogen problems as determined by the Minnesota Nutrient Reduction Strategy and/or

WRAPS completion in FY 2014-15. This geography also includes the MN Prairie Plan Corridor . MN CREP will achieve water quality and habitat goals through implementation of Conservation Reserve Program (CRP) practices such as vegetated buffers and wetland restorations, along with the state’s Reinvest in Minnesota (RIM) program, which provides permanent conservation easements.

With approximately 31,000 acres already enrolled, we are well-positioned to continue to deliver this program. USDA, local soil and water conservation districts, state agencies, and non-governmental organizations have a strong field-based presence through coordinated efforts including the Prairie Plan Implementation Teams and many watershed-based planning projects.

Impact on Children and Families:

The benefits (climate change mitigation, landscape resiliency, water quality and soil health) of permanent land protection program are long-lasting and thus accrue to multiple generations of Minnesota children and families. The scale and scope of this initiative’s impact will be dependent on voluntary landowner participation.

Equity and Inclusion:

MN CREP provisions offer eligibility waivers to landowners who are socially disadvantaged, limited resource or beginning farmer or rancher (all as defined by the USDA) so that their application will be included in this scoring process. Other groups are not impacted negatively by the CREP.

IT Related Proposals:

Not applicable.

Results:

This program is part of a comprehensive clean water strategy to reduce the amount of pollutants that enter Minnesota waters. To measure the success of this program, we will look at the number of acres permanently protected. We also will measure progress against the long-term goals outlined in the Clean Water Roadmap.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quantity	Acres protected under MN CREP	31,000 acres protected by all funding sources.	Additional 260 acres	By 2024
Results	Percent of rivers and streams with healthy fish communities measured by IBI	60%	67%	By 2034

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy – Watershed Partners Legacy

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	500	500	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	500	500	0	0
FTEs	0.3	0.3	0	0

Recommendation:

The Governor recommends \$1 million from the Clean Water Fund for the FY2022 - 2023 biennium for a small grants program that expands partnerships for clean water. The recommendation includes 0.3 FTE staff time to develop the program and provide additional administration and oversight of grants with the expansion of the program to include granting of funds directly to non-governmental organizations.

Rationale/Background:

With more than 10,000 lakes, 100,000 river and stream miles, and extensive groundwater systems, water is a major part of Minnesota’s culture, economy, and natural ecosystems. Today, about half of Minnesota’s surface waters have been assessed for water quality, and of those, about 40% do not meet basic water quality standards.

Achieving the long-term goals of clean lakes, rivers and drinking water is not attainable without active and engaged citizens and communities. This proposal will use existing program delivery mechanisms to address a current funding gap and allow citizens to act in managing and protecting their local water resources.

The Water Legacy Grants Program increases citizen participation in implementing water quality projects and programs to increase long term sustainability of water resources. The efforts and resources of active and engaged community groups, such as lake associations, non-profits, conservation groups and tribal government, will be supported through this program. This effort will be delivered through local collaboration using a ‘small grants partners’ program.

Proposal:

This proposal is a Clean Water Council priority for a new program based on a previous Clean Water Fund grant program for small projects (Community Partners Program). This new program will broaden the scope to ensure that community groups such as non-governmental organizations wishing to implement projects, programs, community service and education can be direct recipients of the funds.

This program provides competitive grants or contracts to governmental, non-governmental, and tribal organizations for implementation projects that protect, enhance, and restore water quality or protect groundwater and drinking water sources from degradation. The State’s investment leverages local and federal funds as the grants requires a match. The program will be administered at the same time as the agency does with its other Clean Water Funds Programs which is a once a year competitive application process.

Impact on Children and Families:

This program does not have a significant impact on children and families.

Equity and Inclusion:

This proposal would not disproportionately impact any ethnic, racial or other minority group in either a negative or positive way, nor would it eliminate or reduce any disparities.

IT Related Proposals:

Not applicable.

Results:

This new program will be part of a comprehensive clean water strategy to ensure that community groups such as non-governmental organizations wishing to implement projects, programs, community service and education can be direct recipients of the funds. Short term success will be measured by the number of projects and activities that are completed with appropriated funds.

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy – Technical Evaluation

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Clean Water Fund				
Expenditures	42	42	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	42	42	0	0
FTEs	0	0	0	0

Recommendation:

The Governor recommends \$84,000 from the Clean Water Fund (as recommended by the Clean Water Fund) for the FY2022-2023 biennium for the evaluation of a sample of habitat restoration projects completed with Clean Water Funding, as required by M.S. 114D.50, Subd.6. The agency also contributes* to a joint position with the DNR to lead the evaluation effort, which is the same as the past biennium. This recommendation is a \$84,000 decrease as compared to the FY2020-2021 Clean Water Fund appropriation.

Rationale/Background:

State law requires restoration evaluations be conducted on habitat restoration projects completed with funds from the Clean Water Fund (M.S. 114D.50), Outdoor Heritage Fund (M.S. 97A.056), and Parks and Trails Fund (M.S. 85.53). As provided by law, BWSR is the responsible agency for Clean Water Fund restoration evaluations; DNR is the responsible agency for Parks and Trails Fund restoration evaluations; and DNR and BWSR are jointly responsible for Outdoor Heritage Fund restoration evaluations (M.L. 2010, Ch. 361, Art.1). These evaluations assess project performance to ensure and improve conservation outcomes across the State.

Proposal:

This proposal is a continuation of the required restoration evaluations that were initiated in 2012. DNR and BWSR elected to combine administration and reporting for the three statutory requirements in a single Legacy Fund Restoration Evaluation program. Accordingly, one restoration evaluation panel was created, and one report will be produced on an annual basis.

The evaluation panel is responsible for:

- Evaluating restorations relative to the law, current science, and the stated goals and standards in the restoration plans; and
- Providing findings on the evaluations, determining whether restorations are meeting planned goals, identifying problems with implementation of restorations, and, if necessary, providing recommendations on improving restorations.

This program evaluates the effectiveness of habitat restorations funded through the Clean Water Fund, thereby helping to measure the performance of projects in meeting habitat goals and providing recommendations to improve the effectiveness of future projects. The findings of the evaluation panel are summarized in an annual report to the legislature and governing councils. Initial findings of these evaluations have found that all projects evaluated were determined to have been implemented in compliance with applicable appropriation laws and reporting requirements, including presenting measurable outcomes and planning to evaluate results.

Recommendations for the future include: 1) All project narratives should include site specific outcome based goals; 2) Project reporting should include essential information on project implementation for ongoing management; 3) Current knowledge of applied restoration practice, including lessons learned from field practice and restoration evaluations, should be disseminated through Statewide restoration training programs; 4) Selected subset of evaluated projects should be reevaluated in future years to track critical aspects of project effectiveness; and 5) The use of more comprehensive, multidisciplinary project teams.

Impact on Children and Families:

This proposal does not significantly impact children, youth, and families.

Equity and Inclusion:

This proposal would not disproportionately impact any ethnic, racial, or other minority group in either a negative or positive way, nor would it eliminate or reduce any disparities.

IT Related Proposals:

Not applicable.

Results:

This program evaluates up to 10 projects each year for the effectiveness of habitat restorations funded through the Clean Water Fund, thereby helping to measure the performance of projects in meeting habitat goals and providing recommendations to improve the effectiveness of future projects. The findings of the evaluation panel are summarized in an annual report to the legislature and governing councils. Initial findings of these evaluations have found that all projects evaluated were determined to have been implemented in compliance with applicable appropriation laws and reporting requirements, including presenting measurable outcomes and planning to evaluate results. Recommendations for the future include: 1) All project narratives should include site specific outcome based goals; 2) Project reporting should include essential information on project implementation for ongoing management; 3) Current knowledge of applied restoration practice, including lessons learned from field practice and restoration evaluations, should be disseminated through Statewide restoration training programs; 4) Selected subset of evaluated projects should be reevaluated in future years to track critical aspects of project effectiveness; and 5) The use of more comprehensive, multidisciplinary project teams.

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Climate Mitigation and Soil Health via Agricultural Cover Crop Initiative

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	2,750	2,750	2,750	2,750
Revenues	0	0	0	0
Other Funds				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	2,750	2,750	2,750	2,750
FTEs	1.75	1.75	1.75	1.75

Recommendation:

The Governor recommends \$5,500,000 from the General Fund for a Climate Mitigation and Soil Health via Agricultural Cover Crop Initiative. This includes 1.75 FTE for the initiative.

Rationale/Background:

One of the most effective ways to improve soil health is to keep farmland covered with vegetation for much of the year. Practices such as cover crops and incorporation of perennial vegetation (known as continuous living cover), protect soil from water and wind erosion and reduce nutrient loss. The Clean Water Council Strategic Plan identifies a goal of five million acres of row crop agriculture using cover crops or continuous living cover by 2034. Minnesota’s Nutrient Reduction strategy identifies cover crop needs of 1.9 million new acres by 2025 and over 10 million acres by 2040. The MPCA study, “Greenhouse Gas Reduction Potential of Agricultural Best Management Practices,” estimates a reduction of .205 US tons per acre per year – (20,474 tons per 100,000 acres) for cover crop implementation.

Cover crops are grown mainly for soil health purposes rather than as a primary commodity crop and can take time and resources to establish. USDA farm census data indicates that less than 2% of Minnesota producers use cover crops on their land. Some common hurdles to cover crop implementation addressed by this program are: 1) lack of information specific to northern climates, 2) underfunded conservation programs, 3) community and industry support, 4) funding to sufficiently offset risk, and 5) access to equipment and support.

Proposal:

This climate mitigation and water quality proposal will improve soil health via cover crops and related tillage practices on sensitive lands to slow and hold water and nutrient movement through the landscape while increasing carbon sequestration.

This effort builds upon a Cover Crop Demonstration Grant pilot to increase cover crop adoption on highly erodible lands or in drinking water management areas. The model for increasing cover crop adoption is to provide short-term financial incentives for producers to incorporate cover crops in their farm operation. This financial incentive is a short-term payment to offset the costs and uncertainties associated with adopting a new cropping system. This experience indicates there is tremendous interest (we were able to fund only five of 18 applications received) in using cover crops to address multiple environmental and climate change issues.

Increased intensity and duration of rain due to climate change can reduce surface and groundwater quality from nutrient and sediment runoff. Healthy soil contains high levels of organic matter that 1) retains water, reducing

the speed and volume of runoff and the need for structural water storage; 2) increases the availability of water to plants, which can increase yield and improve resilience to dry spells, 3) reduces the need for supplemental irrigation, 4) reduces nutrient losses into surface water and groundwater, and 5) may allow for reduced use of fertilizers or pesticides without negative impacts for crop production. Additionally, healthy soil practices can store large amounts of carbon offsetting greenhouse gas emissions.

Agricultural best management practices that contribute to soil health include no till or reduced tillage, cover crops, crop rotations that incorporate perennials, and installation of vegetative buffers along streambanks and lakeshores. Minnesota’s Nutrient Reduction Strategy calls for one or more of these practices to be newly adopted on approximately one-third of cultivated lands to achieve interim goals for water quality.

Impact on Children and Families:

Feedback from community conversations, Legislative Subcommittee on Minnesota Water Policy hearings, and local government hosted community meetings indicates a high level of interest in pursuing this kind of conservation work on a larger scale. The benefits of such a program are long-lasting and thus accrue to multiple generations of Minnesota children and families. The scale and scope of this initiative’s impact will be dependent on voluntary landowner participation.

Equity and Inclusion:

This proposal would not disproportionately impact any ethnic, racial or other minority group in either a negative or positive way, nor would it eliminate or reduce any disparities. The program could be structured to prioritize projects that include emerging farmers as identified by MDA (including historically underserved communities).

IT Related Proposals:

Not applicable.

Results:

- The current demonstration grant program (see Clean Water Legacy - Soil Health and Adoption of Cover Crops) is geared toward water quality improvement through improvements in soil health. The new program will use similar practices but is focused primarily on climate change mitigation via retention of carbon in soils and reduction of inputs such as fuel and fertilizer.
- The MPCA report, “Greenhouse Gas Reduction Potential of Agricultural BMPs” estimates that each acre of cover crops captures an average of 0.2 US tons of CO2 equivalent per year. Carbon storage increases if cover crops are combined with reduced tillage.
- Program results will also be assessed in partnership with the Minnesota Office for Soil Health, which is compiling data on the impacts of cover crops and other conservation practices on soil health and carbon storage.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quantity	Acres of land in key practices	N/A	25,000 acres	By 2025
Results	Practice durability; permanence; peer-to-peer learning and adoption; leverage additional funding	2.2% of MN Farmland in cover crops	2.7% of MN Farmland in cover crops	By 2034

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Climate Adaptation - Water Storage and Treatment

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	1,500	1,500	1,500	1,500
Revenues	0	0	0	0
Other Funds				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	1,500	1,500	1,500	1,500
FTEs	0.75	0.75	0.75	0.75

Recommendation:

The Governor recommends \$3,000,000 from the General Fund for a Climate Adaptation Water Storage and Treatment program. This includes 0.75 FTE to support this effort.

Rationale/Background:

This statewide climate mitigation and water quality proposal is to develop and implement durable projects that will leverage local, federal and private sector funds to slow and hold water via retention basins, wetlands, ponds, and other practices. This proposal aligns with the Governor’s priority of addressing climate change through mitigation and resiliency.

A key next step to accelerate climate adaptation and resiliency is providing additional options for retaining water to address hydrologic impacts due to land development and drainage activities, increasing climate-driven rainfalls and storm event intensity. Key concepts for this proposed program are identified in numerous reports and watershed plans and has also been identified by the Legislative Subcommittee on Minnesota Water Policy as a key topic for the 2021 legislative session.

In order to enable and enhance agricultural production, the construction of drainage ditches began before Minnesota became a state. Ditches connected natural stream networks to previously unconnected depressions and wetlands. The network of ditches has been augmented by installation of subsurface drainage tiles. With the development of drainage pipe and mechanized installation equipment, drainage systems have expanded to systematically remove excess soil profile water from watersheds across much of the state. While the drainage of Minnesota’s croplands provides production benefits, there may be downstream issues with unmanaged or uncontrolled water flow, which in combination with increased storm intensity, may increase flooding, affect available water recharge to wetlands, impact migrating waterfowl populations in the spring, and degrade downstream water quality (see: <https://www.pca.state.mn.us/water/minnesota-river-basin>).

Proposal:

Increasing the use of water storage and flood retention structures of various sizes can provide an opportunity to mitigate the impacts of uncontrolled or unmanaged agricultural drainage and climate-driven increased runoff. However, a program primarily aimed at multi-scale water storage does not exist in state law. This proposed program (policy + funding) is an opportunity to capitalize on One Minnesota by addressing two important Minnesota needs: climate mitigation and water quality. We propose this program to be statewide in scope through targeted watershed implementation to deliver climate mitigation, resiliency, and water quality and improvements.

Impact on Children and Families:

Feedback from Climate Subcabinet and stakeholder conversations, Legislative Subcommittee on Minnesota Water Policy hearings, and local government hosted community meetings indicate a high level of interest in pursuing this kind of conservation work on the larger scale a statewide program could provide. The benefits of such a program will be long-lasting and thus accrue to multiple generations of Minnesota children and families. Participation will be dependent on voluntary local government and landowner participation.

Equity and Inclusion:

This proposal would not disproportionately impact any ethnic, racial or other minority group in either a negative or positive way, nor would it eliminate or reduce any disparities.

IT Related Proposals:

Not applicable.

Results:

- This new program is part of a comprehensive approach to water management at the watershed scale. The program will enable strategic implementation of water storage practices within Minnesota’s watersheds based on multipurpose watershed goals. Success of this program will be measured by the amount of water storage implemented and the strategic placement of the water storage to meet watershed hydrology and nutrient reduction goals.
- Storage projects will be implemented by SWCDs and watershed districts through a cost-share or grant program, with criteria developed by BWSR and local partners. Results will be monitored through grant agreements and reporting in BWSR’s eLINK system, which will capture number of practices, acre-feet of storage, and sediment and nutrient reductions.
- Storage projects will be used to model peak flow, reduction, sediment and nutrient load reduction, integration into watershed planning efforts and decreased downstream flooding, infrastructure protection, and aquatic life improvements.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quantity	Acre-feet of storage, at an average cost of \$1,000 per acre-foot	NA	2,500 acre-feet of storage	2022-2030 (allowing for practice establishment)

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Operating Adjustment

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	98	193	193	193
Revenues	0	0	0	0
Other Funds				
Expenditures	0	0	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	98	193	193	193
FTEs	0	0	0	0

Recommendation:

The Governor recommends \$98,000 in FY 2022 and \$193,000 in each subsequent year from the General Fund to maintain the current level of service delivery at the Board of Water and Soil Resources. This represents a 1% increase year one and 1% increase year two to the General Fund base.

Rationale/Background:

The operating increases recommended in FY 2022 and FY 2023 fund a portion of the projected cost increases in the upcoming biennium. Each year, the cost of doing business rises—including growing costs for employer-paid health care contributions and other salary and compensation-related costs. Other operating costs, like rent and lease, fuel and utilities, IT and legal services also grow. This cost growth puts pressure on agency operating budgets that remain flat from year to year without enacted increases.

Agencies face challenging decisions to manage these costs within existing budgets, while maintaining the services Minnesotans expect. To manage costs, most agencies find ways to become more efficient with existing resources. For the Board of Water and Soil Resources, efficiencies have already been implemented to produce savings in FY 2021 and these efficiencies will continue into FY 2022 and FY 2023 along with additional efficiencies including:

- Holding position vacancies open
- Significantly reduced travel costs
- Review of lease square footage and determining feasibility for office sharing

Efficiencies will continue in the next biennium; however, cost growth continues putting pressure on budgets and without additional resources, service delivery erodes. For the Board of Water and Soil Resources, this means: decreasing ability to meet statutory obligations and requirements as defined in Minnesota Statutes 103A – 103G.

Proposal:

The Governor recommends increasing agency operating budgets to support the delivery of current services. This increase is below the assumed level of inflation, acknowledging continued efficiencies achieved by the Board of Water and Soil Resources. For the Board of Water and Soil Resources, this funding will cover expected and anticipated employee compensation growth, along with known cost increases in rent and IT services.

Impact on Children and Families:

Not applicable.

Equity and Inclusion:

Not applicable.

Results:

This proposal is intended to allow the Board of Water and Soil Resources to continue to provide current levels of service and information to the public.

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy – Appropriation Extension due to COVID

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
Clean Water Fund				
Revenues	0	0	0	0
Expenditures	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	0	0	0	0
FTEs	0	0	0	0

Recommendation:

The Governor recommends that appropriations temporarily reduced to prevent a clean water fund deficit in July 2020 have their availability extended for one year beyond their original date of cancellation. The table provided under the Proposal section identifies the impacted appropriations and the year of appropriation.

Rationale/Background:

In 2020, Minnesota Management and Budget informed several agencies and the legislature that because of a projected deficit in the clean water fund in fiscal year 2021, agencies receiving appropriations from the fund would need to delay some spending until fiscal year 2022. The affected agencies, on average, reduced their fiscal year appropriation by 14 percent. This holdback prevented a deficit in the fund and created a 5 percent reserve in accordance with M.S. Chapter 114D.

The delays in spending from these appropriations impacted the abilities of agencies to conduct water monitoring, issue grants, and complete other important work. Extending their availability by one year will allow agencies to follow-through with planned spending.

Proposal:

The Governor recommends that the below appropriations from the clean water fund in Laws of 2017, Chapter 91, Article 2 and Laws of 2019, First Special Session, Article 2 be extended one year beyond their original availability.

Department of Health

Name	Appropriation ID	Legal Cite
Contaminants of Concern	H12161P	191 002 02 08a 000
Contaminants of Concern	H12151P	17 091 02 008 00a
Source Water Protection	H12152P	17 091 02 008 00b
Virus Study	H12157R	17 091 02 008 00f
Drinking Water & Lead Study	H12156P	17 091 02 008 00g

Public Facilities Authority

Name	Appropriation ID	Legal Cite
Point Source Implementation Grants	B241270	191 002 02 004 a
Small Community Wastewater Treatment	B241280	191 002 02 004 b

Department of Agriculture

Name	Appropriation ID	Legal Cite
Nitrate in Groundwater	B041W02	17 091 002 03 b
Clean Water Research	B041W03	17 091 002 03 e
Technical Assistance	B041W06	17 091 002 03 d
Technical Assistance	B041W06	191 002 02 03 d
Research Database	B041W07	191 002 02 03 e
U of M Forever Green	B041W11	191 002 02 03 h
Private Well Pesticide Testing	B041W18	17 091 002 03 j
Private Well Pesticide Testing	B041W18	191 002 02 03 i

Board of Water and Soil Resources

Name	Appropriation ID	Legal Cite
Watershed-based Implementation Funding	R9P CPB9	191 002 02 07 a
Projects and Practices	R9P CPP9	191 002 02 07 b
Watershed Management Transition	R9P C1W9	191 002 02 07 i
Conservation Drainage Management	R9P CDP9	191 002 02 07 j
Shoreland Buffer Compliance	R9P CRB9	191 002 02 07 e
Riparian Buffers	R9P CBE9	191 002 02 07 f
Targeted Wellhead Protection	R9P CWP9	191 002 02 07 g
Conservation Reserve Enhancement Program	R9P CCE9	191 002 02 07 k
Critical Shoreline Protection	R9P CT17	191 002 02 07 l
Tillage and Erosion Transects	R9P CET9	191 002 02 07 m

Pollution Control Agency

Name	Appropriation ID	Legal Cite
Chloride Reduction Efforts	R32D139	191 002 02 005 00I
Drinking Water Protection	R32E105	17 091 02 005 00C
Drinking Water Protection	R32E140	17 091 02 005 00C
Subsurface Sewage Treatment System Programs	R32B103	17 091 02 005 00G
Subsurface Sewage Treatment System Programs	R32D103	17 091 02 005 00G
Subsurface Sewage Treatment System Programs	R32B120	191 002 02 005 00F
National Pollutant Discharge Elimination Systems	R32E103	17 019 02 005 00F
National Pollutant Discharge Elimination Systems	R32B119	191 002 02 005 00E

Name	Appropriation ID	Legal Cite
St. Louis Harbor Restoration	R32R112/G119	17 091 02 005 00D
St. Louis Harbor Restoration	R32G156	191 002 02 005 00D
Total Maximum Daily Load Development	R32R115	17 091 02 005 00B
Total Maximum Daily Load Development	R32R126	191 002 02 005 00B
Voyagers National Park	R32B121	191 002 02 005 00H
Water Quality Assessment	R32E104	17 091 02 005 00A
Water Quality Assessment	R32E139	191 002 02 005 00A

Metropolitan Council

Name	Appropriation ID	Legal Cite
Metropolitan Area Water Supply Sustainability Support Program	T9B2MWS	191 002 02 009 00A
Water Demand Reduction- Efficiency - Grant Program	T9B3050	191 002 02 009 00B

Department of Natural Resources

Name	Appropriation ID	Legal Cite
Aquifer Monitoring for Water Supply Planning	R292K17	191 002 02 006 00e
Buffer Map Maintenance	R292K24	191 002 02 006 00i
Buffer Map Maintenance	R292K25	191 002 02 006 00i
Lake Index of Biological Integrity Assessments	R296199	191 002 02 006 00b
Stream Flow Monitoring	R292K09	191 002 02 006 00a
Watershed Restoration and Protection Strategies	R296169	17 091 02 06d
Watershed Restoration and Protection Strategies	R292K14	191 002 02 006 00d
Applied Research and Tools	R292K20	191 002 02 006 00g
County Geologic Atlases	R292K22	191 002 02 006 00h
Fish Contamination Assessment	R296K01	191 002 02 006 00c
County Geologic Atlases	R292K21	191 002 02 006 00h

Impact on Children and Families:

Maintaining the ability to use these funds as intended supports work to ensure Minnesota's waters meet standards and allow children and families the opportunity to safely fish, swim and ensure clean and safe drinking water.

Equity and Inclusion:

Maintaining the ability to use these funds as appropriated ensures that all Minnesotans are provided clean water for drinking and recreational uses.

Results:

The Clean Water Council submits a biennial report to the Legislature by December 1 of each even-numbered year on:

- the activities for which money has been or will be spent for the current biennium;
- the activities for which money is recommended to be spent in the next biennium;
- the impact on economic development of the implementation of efforts to protect and restore groundwater and the impaired waters program;
- an evaluation of the progress made in implementing the CWLA and the provisions of Article XI, Section 15, of the Minnesota Constitution relating to clean water;
- the need for funding of future implementation; and
- recommendations for the sources of funding.

IT Related Proposals:

Not applicable.

Board of Water and Soil Resources

FY 2022-23 Biennial Budget Change Item

Change Item Title: Clean Water Legacy - Levy Authority and Operating Support for Soil and Water Conservation Districts

Fiscal Impact (\$000s)	FY 2022	FY 2023	FY 2024	FY 2025
General Fund				
Expenditures	0	540	1,000	1,210
Revenues	0	(220)	(410)	(490)
Clean Water Fund				
Expenditures	9,000	9,000	0	0
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	9,000	9,760	1,410	1,700
FTEs	2.5	2.5	0	0

Recommendation:

The Governor recommends \$18 million from the Clean Water Fund for the FY 2022-23 biennium to support the local capacity and operating expenses of the state’s Soil and Water Conservation Districts (SWCDs); and recommends providing Minnesota’s SWCD property tax levy authority. Levy authority for each SWCD will be capped at 0.048 percent of the estimated market value of property or \$1 million, whichever is less. The state estimates SWCDs will levy about \$10.5 million in calendar year 2023, \$19.5 million in calendar year 2024, and \$23.7 million in calendar year 2025. The levy authority in this proposal impacts property tax refunds, resulting in a net impact to the general fund of \$760,000 in FY 2023, and \$3.11 million in FY 2024-25.

Rationale/Background:

SWCDs are the front lines of the state’s conservation delivery system. They use their considerable knowledge, expertise and trust to help landowners target clean water and conservation practices where they can provide the greatest benefit. SWCDs are the only local unit of government with the express statutory charge to work with private landowners to plan and implement soil and water conservation practices, yet they do not have the ability to independently raise revenue to support implementation of land and water treatment practices and programs at a level necessary to achieve the broad goals of clean water, clean air, and abundant fish and wildlife habitat.

Stable and predictable funding is necessary considering many of our current State goals for clean water are not presently being met. These goals are articulated in many places including the Federal Government Clean Water Act and Minnesota’s Clean Water Legacy Act. Numeric goals have been established in the State such as reducing phosphorous & nitrogen levels by 45% in the Mississippi River Basin (MN Nutrient Reduction Strategy) and reducing sediment loading by 90% in the Minnesota River Basin (MN Sediment Reduction Strategy). Equally important is protecting those waters in the state that are currently meeting water quality standards from becoming polluted.

The February 2021 State Budget Forecast indicated \$256 million of Clean Water Funds available for the FY 2022-23 biennium, \$36 million above the Clean Water Council recommendations of \$220 million, making this recommendation feasible. Levy authority is important to meet ongoing local funding needs.

Proposal:

This proposal is a request to fund Soil and Water Conservation Districts via two mechanisms:

- 1) Clean Water Funds to support local capacity for conservation implementation. These funds are awarded in the form of grants to our State’s 88 SWCDs and will not require an increase in FTE to administer these grants.
- 2) Levy authority will give each SWCD authority to independently levy property taxes on property owners.

BWSR defines “local capacity” as the readiness of soil and water conservation districts to plan, identify, and successfully accomplish locally led water quality solutions to identified local resource concerns related to the protection and/or restoration of surface water and groundwater.

This investment in SWCD Capacity aids in:

- Funding a base level of technical capacity in every SWCD.
- Funding the cost of implementing land and water treatment practices and programs.
- Organizing, planning and implementing soil and water conservation practices with landowners on a watershed scale.
- Leveraging federal conservation programs, such as EQIP & CRP.
- Local prioritization and targeting of CWF dollars leveraged with landowner & SWCD investments.
- Delivering land & water treatment projects and programs that are prioritized, targeted, and measurable.
- Measuring and reporting progress and outcomes.
- Community outreach and engagement.

Levy authority will allow taxpayers to deduct more property taxes against their state income tax and receive larger property tax refunds. Because of this, the net cost to the general fund will be \$760,000 in FY 2022-23 and \$3.11 million FY 2024-25.

Impact on Children and Families:

NA

Equity and Inclusion:

This proposal would not disproportionately impact any ethnic, racial or other minority group in either a negative or positive way, nor would it eliminate or reduce any disparities.

IT Related Proposals:

NA

Results:

When funded, SWCD capacity supports continued efforts to improve water quality protection and improvement practices. This funding will continue to improve water quality by providing grants to SWCDs that will increase the implementation of water quality protection and improvement practices. Short term success will be measured by the number of projects and activities that are completed with appropriated funds. We also will measure progress against the long-term goals outlined in the Clean Water Roadmap.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Results	Percentage of lakes with good water quality, as measured by acceptable Trophic State Index	62%	70%	By 2034
Results	Percentage of rivers and streams with healthy fish communities, as measured by the Index of Biotic Integrity	60%	67%	By 2034

Program: Local Conservation Delivery

bwsr.state.mn.us/

AT A GLANCE

- 12 approved *One Watershed, One Plan* plans, 18 plans in process
- 90 Conservation Delivery grants issued in FY20, totaling \$1.7 million
- 37 clean water fund (CWF) Projects and Practices grants, totaling \$11 million, issued in FY20
- \$8.6 million in grants for watershed-based implementation funding
- \$11 million in capacity funding annually for soil and water conservation districts statewide
- Delivered conservation programs through local governments, in cooperation with private landowners
- Implemented high priority erosion control, native buffers, feedlot, and weed management projects

PURPOSE & CONTEXT

The goal of this program is to meet state objectives for clean water, productive soil, and abundant fish and wildlife habitat and maintain local capacity to protect and enhance Minnesota’s water and soil resources via the state partnerships with local governments. The Board of Water and Soil Resources (BWSR) works to achieve this goal by implementing targeted projects and practices on private lands to prevent soil erosion and pollution from entering surface and ground water. BWSR ensures adequate technical resources and capacity are in place at the local level by providing training, oversight, and accountability.

BWSR has oversight responsibilities to ensure that local water plans are prepared and coordinated with existing local and state efforts and that plans are implemented effectively with a focus on priority concerns, targeted response, and measurable outcomes. Projects are implemented through grants to local governments, including soil and water conservation districts, counties, cities, watershed districts, and watershed management organizations.

SERVICES PROVIDED

Conservation Projects Cost Share Program

This program “shares” the cost of implementation between the state, local governments, and landowners. Grants to local governments provide funding for a variety of on-the-ground projects that address state conservation objectives. Specifically, these projects:

- *Keep water on the land:* natural hydrology restoration and runoff reduction is achieved by restoring wetlands, installing raingardens, constructing stormwater treatment ponds, and implementing conservation drainage practices.
- *Maintain healthy soils:* healthy soils are supported through conservation tillage, cover cropping, and erosion control projects.
- *Reduce pollutants in surface and ground water:* reducing pollution in sensitive ecological areas is accomplished by upgrading feedlots and subsurface sewage treatment systems and sealing abandoned wells.
- *Ensure biological diversity:* protection of native plants and animals and their habitats is accomplished through installation of permanent native vegetation buffers and cooperative weed management programs addressing invasive species management.
- *Maintain stream integrity:* healthy stream hydrology and abundant fish populations are achieved through streambank and shore stabilization.

BWSR works through local government partners to ensure private landowners have access to a local, trusted natural resource professional that can help address conservation needs. BWSR provides funds to local governments for the costs of constructing conservation projects and practices in addition to the costs of project design, construction oversight, and fiscal and outcomes reporting. Eligibility for funding is contingent on a state-approved and locally adopted water management plan that links scientific information with local priorities to ensure state funds are targeted to the most critical needs. Local governments also leverage local and federal funds for these projects.

Conservation Delivery Grants

These General Fund grants represent a long-standing partnership between state, local, and federal governments to provide base-level resources for operating expenses associated with the local delivery of state conservation programs by providing each soil and water conservation district (SWCD) with a certain degree of funding stability. These funds help provide shared engineering and technical assistance for SWCDs through eight regional Technical Service Areas. They also provide resources for SWCD staff to monitor Reinvest in Minnesota (RIM) Reserve conservation easements to ensure compliance with those easements.

Water Management Planning

Protecting and restoring Minnesota's water resources relies on the knowledge, authorities, partnerships, commitment, and resources of state and local governments. Working with local governments on their water management plans ensures the water resources of the state will be effectively managed. Specifically, BWSR supports local government staff and boards as they develop comprehensive water management plans that address local priorities while meeting state requirements and goals. Local water plans include Comprehensive Local Water Management Plans (County Water Plans), Watershed District Watershed Management Plans, Metro Watershed Management Plans, Metro County Groundwater Management Plans, and Soil and Water Conservation Comprehensive Plans. BWSR's Board reviews and approves local water plans. Agency staff provide overall program guidance, process affiliated grants, and provide plan review and comments.

Watershed-Based Implementation

The watershed-based implementation funding model provides local governments throughout Minnesota with efficient, transparent and stable funding. To achieve this, BWSR is transitioning from project-by-project competitive grants to a coordinated watershed funding approach designed to increase water management outcomes, enhance accountability, and improve consistency and efficiency across the state. This approach depends on plans developed under the 1W1P Program or the Metropolitan Surface Water Management Act to provide assurance that actions are prioritized, targeted, and measurable. The efficiencies benefit both organizations and landowners by streamlining processes, shortening implementation timelines, and ensuring limited resources are spent where they are needed most. Watershed-based funding provides greater opportunities for local governments to leverage federal and private funding.

Water Quality Projects Implementation

Working through the local conservation delivery system, BWSR provides grants for local governments to execute water quality projects that are prioritized and targeted to the most critical source areas. These grants include projects and practices that protect and restore surface and drinking water, water quality-focused easements, conservation drainage, and other work that accelerates implementation. This strategic approach helps to meet locally identified water quality goals within the larger scope of Minnesota's clean water efforts, helping to meet statewide water quality goals through the prevention and reduction of non-point source pollution.

Grant Management

BWSR uses a comprehensive grant management system to track the use of state funds in the most efficient manner possible. It establishes eligibility criteria, determines grant program policies, reviews work plans, issues

grant agreements, and conducts close-out reviews upon project completion. This grant management system is compliant with the policies adopted by the Department of Administration and the Office of Grants Management.

Pass-Through Grant Management

This area includes pass-through funding for two local water entities: Area II Minnesota River Basin Projects and the Red River Basin Commission. Area II was formed in 1978 as a non-profit organization and works to alleviate the recurrent flood problems in southwestern Minnesota—specifically in Brown, Cottonwood, Lac qui Parle, Lincoln, Lyon, Murray, Pipestone, Redwood, and Yellow Medicine counties. The Red River Basin Commission works toward comprehensive and integrated natural resource planning, management and implementation in the Red River Basin.

RESULTS

This program aims to ensure that SWCDs have a base level of capacity to address water and soil resource concerns. Since 2007 BWSR has been methodically assessing the performance of the local units of government that constitute Minnesota’s delivery system for conservation of water and soils resources through the Performance Review and Assistance Program.

The measures in the table below represent BWSR’s two key goals of this budget program: to reduce water pollutants to improve water quality and to deliver services that encourage trust in government. Specifically, projects funded under this program contribute toward meeting the state’s pollution reduction goals for sediment, phosphorus, and nitrogen. It is important that landowners have access to a trusted local resource that is responsive to conservation needs. Experience and research supports the notion that landowners trust local government more than state government and, therefore, are more likely to engage in a conservation activity if they have access to a valued and credible resource within their local community. For example, data from an annual Pew Report shows that trust in local government has largely been stable at 70 percent, while trust in state and federal government has shown considerably more variation, with the current level at 57 percent trusting in state government, and 28 percent trusting in the legislative branch of the federal government.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Previous</i>	<i>Current</i>	<i>Dates</i>
Result	Amount of phosphorus removed. <i>compared to state goals*</i>	446,120 pounds annually	497,769 pounds annually	2010-2017, 2010-2019
Result	Amount of nitrogen removed <i>compared to state goals*</i>	946,302 pounds annually	1,052,606 pounds annually	2010-2017, 2010-2019
Quality	SWCDs meeting basic performance and accountability requirements	90%	96%	2017, 2019
Quantity	Number of overdue water plans	3	0	2017, 2019

**Statewide goals for phosphorus and nitrogen reduction as found in the Nutrient Reduction Strategy*

<https://www.pca.state.mn.us/water/nutrient-reduction-strategy> MPCA’s Nutrient Reduction Strategy indicates a goal of Phosphorus reduction statewide by 1.4 million pounds, and Nitrogen reduction statewide by 42.5 million pounds.

The legal authority for Land and Water Conservation projects comes from Minnesota Statutes, chapter 103C.501 <https://www.revisor.mn.gov/statutes/?id=103C.501> and Minnesota Administrative Rules, chapter 8400 <https://www.revisor.mn.gov/rules/?id=8400>.

Local Conservation Delivery

Program Expenditure Overview

(Dollars in Thousands)

	Actual FY18	Actual FY19	Actual FY20	Estimate FY21	Forecast Base		Governor's Recommendation	
					FY22	FY23	FY22	FY23
<u>Expenditures by Fund</u>								
1000 - General	10,986	3,070	8,216	2,274	5,156	5,156	9,406	9,406
2000 - Restrict Misc Special Revenue	43	37	46	111	60	60	60	60
2001 - Other Misc Special Revenue	172	132	427	308	279	287	279	287
2050 - Environment & Natural Resources	213		893	7				
2302 - Clean Water	34,500	42,087	49,088	56,369	7,064		62,447	55,383
3000 - Federal	846	531	1,020	925	984	847	984	847
Total	46,760	45,856	59,690	59,994	13,543	6,350	73,176	65,983
Biennial Change				27,068		(99,791)		19,475
Biennial % Change				29		(83)		16
Governor's Change from Base								119,266
Governor's % Change from Base								600

Expenditures by Activity

Local Conservation Delivery	46,760	45,856	59,690	59,994	13,543	6,350	73,176	65,983
Total	46,760	45,856	59,690	59,994	13,543	6,350	73,176	65,983

Expenditures by Category

Compensation	3,407	3,622	3,620	4,347	2,775	570	7,416	5,211
Operating Expenses	2,439	975	3,732	2,319	1,316	324	2,370	1,378
Grants, Aids and Subsidies	37,926	40,921	52,333	53,286	9,451	5,456	63,389	59,394
Capital Outlay-Real Property	1,082	336		36				
Other Financial Transaction	1,906	2	5	6	1		1	
Total	46,760	45,856	59,690	59,994	13,543	6,350	73,176	65,983

Full-Time Equivalent

	31.50	32.77	30.62	34.24	22.86	4.12	62.06	43.27
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Local Conservation Delivery

Program Financing by Fund

(Dollars in Thousands)

	Actual FY18	Actual FY19	Actual FY20	Estimate FY21	Forecast Base		Governor's Recommendation	
					FY22	FY23	FY22	FY23
1000 - General								
Balance Forward In	3,795	2,439	177	1,534				
Direct Appropriation	9,571	740	9,572	740	5,156	5,156	9,406	9,406
Cancellations	9	3						
Balance Forward Out	2,370	106	1,533					
Expenditures	10,986	3,070	8,216	2,274	5,156	5,156	9,406	9,406
Biennial Change in Expenditures				(3,566)		(178)		8,322
Biennial % Change in Expenditures				(25)		(2)		79
Governor's Change from Base								8,500
Governor's % Change from Base								82
Full-Time Equivalents	1.74	0.81	0.05				3.50	3.45

2000 - Restrict Misc Special Revenue

Balance Forward In	9	10	21	84	34	35	34	35
Receipts	44	43	108	61	61	61	61	61
Balance Forward Out	10	16	83	34	35	36	35	36
Expenditures	43	37	46	111	60	60	60	60
Biennial Change in Expenditures				78		(37)		(37)
Biennial % Change in Expenditures				98		(24)		(24)
Governor's Change from Base								0
Governor's % Change from Base								0
Full-Time Equivalents			0.01	0.13	0.12	0.11	0.12	0.11

2001 - Other Misc Special Revenue

Balance Forward In	32	53	128	144	287	423	287	423
Receipts	159	119	444	451	415	415	415	415
Balance Forward Out	19	40	145	287	423	551	423	551
Expenditures	172	132	427	308	279	287	279	287
Biennial Change in Expenditures				431		(169)		(169)
Biennial % Change in Expenditures				142		(23)		(23)
Governor's Change from Base								0
Governor's % Change from Base								0
Full-Time Equivalents	0.90	0.90	1.96	1.95	1.88	1.81	1.88	1.81

Local Conservation Delivery

Program Financing by Fund

(Dollars in Thousands)

	Actual FY18	Actual FY19	Actual FY20	Estimate FY21	Forecast Base		Governor's Recommendation	
					FY22	FY23	FY22	FY23

2050 - Environment & Natural Resources

Balance Forward In	787		806	7				
Direct Appropriation		1,406	94					
Transfers Out	33	600						
Cancellations	541							
Balance Forward Out		806	7					
Expenditures	213		893	7				
Biennial Change in Expenditures				687		(900)		(900)
Biennial % Change in Expenditures						(100)		(100)
Governor's Change from Base								0
Governor's % Change from Base								
Full-Time Equivalents	0.18	0.02	0.15	0.04				

2302 - Clean Water

Balance Forward In	4,548	8,402	9,818	12,187	9,420		9,420	
Direct Appropriation	36,836	38,522	51,450	51,234	0	0	55,383	55,383
Receipts	10	280						
Transfers In	3,739	1,990	2,031	11,218	8,951		8,951	
Transfers Out	3,739	1,990	2,024	8,850	11,307		11,307	
Cancellations	226	47						
Balance Forward Out	6,668	5,070	12,186	9,420				
Expenditures	34,500	42,087	49,088	56,369	7,064		62,447	55,383
Biennial Change in Expenditures				28,871		(98,393)		12,373
Biennial % Change in Expenditures				38		(93)		12
Governor's Change from Base								110,766
Governor's % Change from Base								
Full-Time Equivalents	28.04	27.64	25.71	29.35	18.16		53.86	35.70

3000 - Federal

Balance Forward In	129	113	163	168	1,323	919	1,323	919
Receipts	830	580	1,025	2,080	580	555	580	555
Balance Forward Out	113	163	168	1,323	919	627	919	627

Local Conservation Delivery

Program Financing by Fund

(Dollars in Thousands)

	Actual	Actual	Actual	Estimate	Forecast Base		Governor's Recommendation	
	FY18	FY19	FY20	FY21	FY22	FY23	FY22	FY23
Expenditures	846	531	1,020	925	984	847	984	847
Biennial Change in Expenditures				568		(114)		(114)
Biennial % Change in Expenditures				41		(6)		(6)
Governor's Change from Base								0
Governor's % Change from Base								0
Full-Time Equivalents	0.64	3.40	2.74	2.77	2.70	2.20	2.70	2.20

Program: Resource Protection Rules and Lawbwsr.state.mn.us**AT A GLANCE**

- Assists and oversees with the implementation of state laws by local governments, including rules concerning the Wetland Conservation Act, Shoreland Management, Drainage Law, Subsurface Sewage Treatment Systems, and Riparian Protection.

PURPOSE & CONTEXT

The Resource Protection Rules and Law program supports state and local implementation of and compliance with environmental protection laws, rules, and regulations such as the Wetland Conservation Act, drainage law, and riparian protection.

Local implementation of state laws and resource management programs allows for regulation to occur in close proximity to the program activity and is more efficient and effective than state implementation alone. The Board of Water and Soil Resources (BWSR) provides important coordination, program development, implementation assistance, and oversight to ensure that local governments have current knowledge as well as financial and staff capacity to properly implement state programs.

SERVICES PROVIDED**Oversight of the Wetland Conservation Act**

The purpose of Minnesota's Wetland Conservation Act (WCA) is to retain the benefits of wetlands and prevent the net loss of wetlands. WCA requires anyone proposing to drain, fill, or excavate a wetland first to try to avoid disturbing the wetland; second, to try to minimize any impact on the wetland; and, finally, to replace any lost wetland acres, functions, and values. Local governments—cities, counties, watershed management organizations, soil and water conservation districts, and townships—implement the act locally; BWSR administers the act statewide, and it is enforced by the Department of Natural Resources.

BWSR supports local implementation of WCA by providing:

- technical and administrative assistance.
- oversight through project review and annual reporting.
- administering the state wetland banking system; approving applications and managing credit accounting.
- providing an appeals process when disputes occur regarding local decisions.

BWSR also implements the Local Government Roads Wetland Replacement Program, a statutory mandate that requires the state to replace wetlands impacted as part of local transportation improvement projects. This approach consolidates the necessary technical, financial, and record-keeping components to provide high quality, cost-effective wetland replacement. Underfunding has impacted local road authorities' assurance of wetland mitigation for their road projects.

Riparian Protection

The purposes of Minnesota Statutes 103F.48, Riparian Protection and Water Quality Practices—commonly referred to as the Buffer Law—is to:

- Protect state water resources from erosion and runoff pollution.
- Stabilize soils, shores, and banks.
- Protect or provide riparian corridors (the land area adjacent to water).

As of summer 2020, nearly 99 percent of land adjacent to public waters and public ditches was in compliance with the law.

Drainage Management

BWSR provides essential support to public drainage authorities and stakeholders through:

- Advisory review of watershed district engineers’ reports and plans for drainage, flood damage reduction, water quality, and other natural resource enhancement projects.
- Collection of Ditch Buffer Strip Annual Reports, a requirement of public drainage authorities, of miles of buffer strips established in accordance with statute, as well as inspections and enforcement actions.
- Facilitation of the Drainage Work Group (agency and stakeholder representatives) to develop recommendations of updates to drainage law and of the Public Drainage Manual, to promote uniformity in interpretation and implementation of drainage law; and facilitation of the Drainage Management Team, which coordinates local government information and technical assistance.

Natural Resources Block Grants

As required by statute, some state resource management programs are implemented by counties. To create efficiency, BWSR coordinates and packages the financial support for these programs in cooperation with the Department of Natural Resources (DNR) and the Pollution Control Agency (PCA). These programs include:

- Comprehensive Local Water Management.
- Wetland Conservation Act.
- Shoreland Management.
- Subsurface Sewage Treatment Systems.

RESULTS

The measures detailed below represent the key goal of this budget program, which is to ensure effective local implementation of state resource management laws, rules, and programs. Specifically, BWSR aims to:

- maintain and protect Minnesota’s wetlands and the benefits they provide;
- ensure that Minnesota has an effective stakeholder forum (the Drainage Work Group) through which consensus can be achieved on issues related to drainage law and policy
- strive for agency coordination and efficiency through a composite of grants to local governments that helps reduce the administrative costs of these state natural resource programs.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Previous</i>	<i>Current</i>	<i>Dates</i>
Result	Percent gain over date range of wetland acres in Minnesota*	0.02%	0.04%	2006-2011, 2009-2014
Quality	Number of wetland appeals made of local Technical Evaluation Panel decisions**	7	7	2017, 2019
Quantity	Percent of drainage authorities reporting on ditch buffers	100% counties 100% WDs	100% counties 100% WDs	2017, 2019
Quantity	Number of block grants issued to local governments for state resource management programs	87	87	2018, 2020
Result	Percent of Public Waters buffers compliance statewide	98.5%	99.5%	2018, 2020
Result	Percent of Public Ditches buffer preliminary compliance statewide	76%	96%	2018, 2020

****The number of wetland appeals can be used as one measure of the effectiveness of local Technical Evaluation Panels implementing the Wetland Conservation Act (a low number of appeals is desirable).**

The legal authority for the Resource Protection Rules and Laws program comes from Minnesota Statutes, Chapter 103E <https://www.revisor.mn.gov/statutes/?id=103E> and 103G, <https://www.revisor.mn.gov/statutes/?id=103G> Minnesota Administrative Rules, chapter 8420 <https://www.revisor.mn.gov/rules/?id=8420>

[Monitoring Changes in Minnesota Wetland Area and Type from 2006 to 2014](https://files.dnr.state.mn.us/eco/wetlands/monitoring-wetland-changes.pdf). Minnesota Department of Natural Resources. September 2017. <https://files.dnr.state.mn.us/eco/wetlands/monitoring-wetland-changes.pdf>

Resource Protection Rules and Law

Program Expenditure Overview

(Dollars in Thousands)

	Actual FY18	Actual FY19	Actual FY20	Estimate FY21	Forecast Base		Governor's Recommendation	
					FY22	FY23	FY22	FY23
<u>Expenditures by Fund</u>								
1000 - General	7,788	904	7,741	961	4,350	4,350	4,350	4,350
2000 - Restrict Misc Special Revenue	564	1,473	992	1,651	1,625	1,487	1,625	1,487
2001 - Other Misc Special Revenue	4,105	4,318	4,347	6,486	6,068	6,064	6,068	6,064
2050 - Environment & Natural Resources	622	8	11					
3000 - Federal	216	185	213	496	464	470	464	470
Total	13,296	6,889	13,303	9,594	12,507	12,371	12,507	12,371
Biennial Change				2,713		1,981		1,981
Biennial % Change				13		9		9
Governor's Change from Base								0
Governor's % Change from Base								0

Expenditures by Activity

Resource Protection Rules and Law	13,296	6,889	13,303	9,594	12,507	12,371	12,507	12,371
Total	13,296	6,889	13,303	9,594	12,507	12,371	12,507	12,371

Expenditures by Category

Compensation	1,845	2,079	2,174	2,528	2,508	2,499	2,508	2,499
Operating Expenses	153	353	310	443	373	246	373	246
Grants, Aids and Subsidies	10,296	3,271	9,946	4,120	7,123	7,123	7,123	7,123
Capital Outlay-Real Property	1,000	1,186	871	2,500	2,500	2,500	2,500	2,500
Other Financial Transaction	1	1	4	3	3	3	3	3
Total	13,296	6,889	13,303	9,594	12,507	12,371	12,507	12,371

Full-Time Equivalent

	17.86	19.84	20.39	20.07	19.75	17.75	19.75	17.75
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Resource Protection Rules and Law

Program Financing by Fund

(Dollars in Thousands)

	Actual FY18	Actual FY19	Actual FY20	Estimate FY21	Forecast Base		Governor's Recommendation	
					FY22	FY23	FY22	FY23
1000 - General								
Balance Forward In	18	4	2	34				
Direct Appropriation	7,773	927	7,773	927	4,350	4,350	4,350	4,350
Cancellations		25	0					
Balance Forward Out	3	2	34					
Expenditures	7,788	904	7,741	961	4,350	4,350	4,350	4,350
Biennial Change in Expenditures				10		(2)		(2)
Biennial % Change in Expenditures				0		(0)		(0)
Governor's Change from Base								0
Governor's % Change from Base								0
Full-Time Equivalents	7.85	7.01	6.90	6.69	6.61	6.53	6.61	6.53

2000 - Restrict Misc Special Revenue

Balance Forward In	22	1,090	1,503	1,612	1,225	874	1,225	874
Receipts	674	713	465	604	604	604	604	604
Transfers In	942	1,178	745	745	745	745	745	745
Transfers Out			109	85	75	75	75	75
Balance Forward Out	1,074	1,508	1,611	1,225	874	661	874	661
Expenditures	564	1,473	992	1,651	1,625	1,487	1,625	1,487
Biennial Change in Expenditures				606		469		469
Biennial % Change in Expenditures				30		18		18
Governor's Change from Base								0
Governor's % Change from Base								0
Full-Time Equivalents	5.13	8.05	8.15	6.99	6.86	6.73	6.86	6.73

2001 - Other Misc Special Revenue

Balance Forward In	621	689	662	2,247	1,761	1,693	1,761	1,693
Receipts	4,069	4,209	5,932	6,000	6,000	6,000	6,000	6,000
Balance Forward Out	584	579	2,247	1,761	1,693	1,629	1,693	1,629
Expenditures	4,105	4,318	4,347	6,486	6,068	6,064	6,068	6,064
Biennial Change in Expenditures				2,409		1,299		1,299
Biennial % Change in Expenditures				29		12		12
Governor's Change from Base								0
Governor's % Change from Base								0

Resource Protection Rules and Law

Program Financing by Fund

(Dollars in Thousands)

	Actual	Actual	Actual	Estimate	Forecast Base		Governor's Recommendation	
	FY18	FY19	FY20	FY21	FY22	FY23	FY22	FY23
Full-Time Equivalents	2.50	2.53	2.78	2.54	2.48	2.42	2.48	2.42

2050 - Environment & Natural Resources

Balance Forward In	110	28	31					
Direct Appropriation	540							
Cancellations			20					
Balance Forward Out	28	19						
Expenditures	622	8	11					
Biennial Change in Expenditures				(620)		(11)		(11)
Biennial % Change in Expenditures				(98)				
Governor's Change from Base								0
Governor's % Change from Base								
Full-Time Equivalents	0.10	0.03	0.03					

3000 - Federal

Balance Forward In			126	94	75	88	75	88
Receipts	216	256	180	477	477	477	477	477
Balance Forward Out		71	93	75	88	95	88	95
Expenditures	216	185	213	496	464	470	464	470
Biennial Change in Expenditures				307		225		225
Biennial % Change in Expenditures				77		32		32
Governor's Change from Base								0
Governor's % Change from Base								0
Full-Time Equivalents	2.28	2.22	2.53	3.85	3.80	2.07	3.80	2.07

Program: Board Administration and Agency Operationsbwsr.state.mn.us/**AT A GLANCE**

- 20-member governing board includes local officials, citizens, and agency partners
- 126 staff in ten offices
- 1,498 grants to local governments issued in FY18/19
- 296 easements recorded on 17,070 acres in FY18/19

PURPOSE & CONTEXT

The goal of the Administration and Agency Operations program at the Board of Water and Soil Resources (BWSR) is to provide high-quality, timely, and cost-effective services.

In addition to providing resources to agency staff, it provides direct support to the 20-member Board, as well as support and information to external partners such as local governments, non-governmental and other community groups, businesses, legislators, and citizens.

SERVICES PROVIDED**Administrative Services**

Administrative Services provides budgeting, payroll, purchasing, contracting, accounting, facilities management, human resources, labor relations, fleet service, and financial reporting services to the agency.

Board Operations

The Board, as appointed by the Governor, provides direction and governance on policy development and grants to implement the BWSR's conservation and regulatory programs. The Board membership comprises of three citizens, representatives from local governments (two city, three county, one township, three watershed district, and three soil and water conservation district), and a state agency representative from the Department of Agriculture, Department of Natural Resources, Pollution Control Agency, Department of Health, and University of Minnesota. Staff provides operational and logistical support to the Board.

Agency Leadership and External Relations

BWSR's Executive Team provides leadership and direction for the agency, develops and implements Board policies, manages regulatory and legislative affairs, and represents the agency in interactions with stakeholders and local, state, and federal agencies. Agency leadership values and therefore prioritizes the Increasing Diversity in Environmental Careers program, tribal relations training, and affirmative action.

Internal Controls/Evaluation

Per Minnesota Statute 103B.101, BWSR is required to provide oversight and accountability for agency programs and grants to local governments. Internal Controls provides appropriate internal control policies and related oversight and accountability for agency programs, financial oversight and verification of grants to local governments, and assessment of local government performance.

Information Technology

Information Technology provides direction to MN.IT@BWSR and the business-side expertise to develop and implement essential programming systems, coordinate geographic information systems, and manage telecommunication and network infrastructure.

Communications

Communications provides for strategic agency communication, including implementing the Governor’s directive to use social media as part of the agency’s External Communications Plan. Communications staff tell the story via print and social media to the informed public and legislators on the work of locally led conservation outcomes.

Training

BWSR provides high quality and intentional training for both its staff and local government partners to increase their effectiveness in implementing their work to improve and protect the state’s soil and water resources. During the last biennium, BWSR provided over 8,000 hours of technical training to more than 1,500 local government partners through the Technical Training and Certification Program.

RESULTS

To understand the impact of this budget program, BWSR reviews agency operations for efficiency and adequate internal controls. This includes completing an agency Risk Management Plan and implementing an annual internal control self-assessment certification. BWSR also seeks to understand the public’s awareness of the agency’s work. BWSR’s communications work is directed by an External Communications Plan. Finally, BWSR reviews the efficiency and program effectiveness of its local government grantees. Since 2007, BWSR has been methodically assessing the performance of the local units of government that constitute Minnesota’s delivery system for conservation of water and soil resources. BWSR also reviews grants for full compliance with the Office of Grants Management policy and other management best practices.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Previous</i>	<i>Current</i>	<i>Dates</i>
Quality	Percent of total budget spent on local program implementation (grants and projects)	83%	83%	2017, 2019
Quantity	Number of overdue local water plans	3	0	2017, 2019
Quantity	Print Media Coverage	41 million aggregated people reached	37.2 million aggregate people reached	2018, 2019
Quantity	Social Media Coverage	2,380 Facebook and Twitter followers	5,773 Facebook, Twitter, Instagram, YouTube followers	2018, 2019
Quantity	Social Media Impressions	-	24,067 YouTube impressions	2019
Quality	Percent grant funds subject to reconciliation to local governments (at least 10% per Office of Grants Management)	16%	23%	2017, FY 17-19

The legal authority for the Board of Water and Soil Resources comes from Minnesota Statutes Chapter 103B <https://www.revisor.mn.gov/statutes/?id=103B>.

Board Administration & Agency Operations

Program Expenditure Overview

(Dollars in Thousands)

	Actual FY18	Actual FY19	Actual FY20	Estimate FY21	Forecast Base		Governor's Recommendation	
					FY22	FY23	FY22	FY23
<u>Expenditures by Fund</u>								
1000 - General	4,474	4,750	5,091	5,726	5,241	5,241	5,339	5,434
2001 - Other Misc Special Revenue	10	0						
2302 - Clean Water	2,283	1,315	983	1,026			1,355	1,355
Total	6,768	6,065	6,074	6,752	5,241	5,241	6,694	6,789
Biennial Change				(7)		(2,344)		657
Biennial % Change				(0)		(18)		5
Governor's Change from Base								3,001
Governor's % Change from Base								29

Expenditures by Activity

Board Administration & Agency Operations	6,768	6,065	6,074	6,752	5,241	5,241	6,694	6,789
Total	6,768	6,065	6,074	6,752	5,241	5,241	6,694	6,789

Expenditures by Category

Compensation	4,059	4,131	4,263	4,518	3,660	3,660	4,730	4,824
Operating Expenses	2,602	1,910	1,798	2,223	1,570	1,570	1,953	1,954
Grants, Aids and Subsidies	24	19						
Capital Outlay-Real Property	80							
Other Financial Transaction	3	5	13	11	11	11	11	11
Total	6,768	6,065	6,074	6,752	5,241	5,241	6,694	6,789

Full-Time Equivalent

	42.40	38.89	37.56	34.86	26.85	25.70	35.40	35.00
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Board Administration & Agency Operations

Program Financing by Fund

(Dollars in Thousands)

	Actual FY18	Actual FY19	Actual FY20	Estimate FY21	Forecast Base		Governor's Recommendation	
					FY22	FY23	FY22	FY23
1000 - General								
Balance Forward In		258		485				
Direct Appropriation	4,680	4,545	5,576	5,241	5,241	5,241	5,339	5,434
Transfers Out	8	8						
Cancellations		45						
Balance Forward Out	198		485					
Expenditures	4,474	4,750	5,091	5,726	5,241	5,241	5,339	5,434
Biennial Change in Expenditures				1,592		(335)		(44)
Biennial % Change in Expenditures				17		(3)		(0)
Governor's Change from Base								291
Governor's % Change from Base								3
Full-Time Equivalents	33.94	31.25	29.69	28.00	26.85	25.70	27.60	27.20

2001 - Other Misc Special Revenue

Balance Forward In	12	0	0					
Balance Forward Out	1	0	0					
Expenditures	10	0						
Biennial Change in Expenditures				(10)		0		0
Biennial % Change in Expenditures				(100)				
Governor's Change from Base								0
Governor's % Change from Base								
Full-Time Equivalents	0.21	0.05						

2302 - Clean Water

Balance Forward In	1,751	374	9	26				
Direct Appropriation	950	950	1,000	1,000	0	0	1,355	1,355
Cancellations	46							
Balance Forward Out	373	9	26					
Expenditures	2,283	1,315	983	1,026			1,355	1,355
Biennial Change in Expenditures				(1,589)		(2,009)		701
Biennial % Change in Expenditures				(44)		(100)		35
Governor's Change from Base								2,710
Governor's % Change from Base								
Full-Time Equivalents	8.25	7.59	7.87	6.86			7.80	7.80

Program: Permanent Resource Protectionbwsr.state.mn.us/**AT A GLANCE**

- Uses science-based conservation methods to achieve multiple benefits:
 - Creates and restores wildlife habitat
 - Improves hunting and fishing
 - Reduces soil erosion and improves water quality
 - Provides flood retention
 - Enhances groundwater recharge
 - Creates and sustains Minnesota jobs
- Funded more than 8,168 easements, protecting more than 333,000 acres since 1986

PURPOSE & CONTEXT

The Permanent Resource Protection program is a critical component of the state's goals to protect and improve water quality, protect and enhance wildlife habitat, and reduce flooding. Through the Reinvest in Minnesota (RIM) Reserve program, the Board of Water and Soil Resources (BWSR) acquires conservation easements to permanently protect, restore, and manage resources while keeping the land in private ownership. Specifically, RIM Reserve easements protect the state's water and soil resources by:

- Retiring marginal agricultural lands.
- Restoring drained wetlands and associated buffers.
- Acquiring buffers in sensitive landscapes.
- Reducing flood potential by expanding flood retention areas along rivers.

Today, RIM Reserve is the largest non-federal private lands permanent protection program in the country. Anchored in the work of local soil and water conservation districts, the program uses an effective system of local delivery and key federal and non-governmental organization partnerships.

SERVICES PROVIDED**Conservation Easement Acquisition**

The RIM Reserve program consists of several sub-programs aimed at protecting and restoring wetlands, wild rice lakes, and areas along lakes, rivers, and streams. RIM is the state program that supports the Minnesota Conservation Reserve Enhancement Program (MN CREP), a federal-state partnership launched in 2017 that has permanently protected 31,000 acres of environmentally sensitive land in a 54-county area in western and southern Minnesota. The MN CREP will leverage up to \$350 million dollars in federal payments directly to landowners. BWSR also works to protect lands from intensive development within a three-mile radius around Camp Ripley, ensuring both the protection of high quality wildlife habitat and continued use of Camp Ripley as a National Guard training facility. RIM Reserve targets the highest priority areas through science-based conservation methods. Conservation activities are prioritized based on a methodology that determines the areas where dollars spent maximize return on investment. Agency staff provide the necessary administrative, legal, and engineering expertise to secure perpetual conservation easements with private landowners through local soil and water conservation districts (SWCDs). The State of Minnesota holds conservation easements on restored wetlands, adjacent native grassland and buffers while the land remains in private ownership. RIM Reserve dollars are primarily used for easement payments to landowners, project construction costs associated with restoring

wetland basins and establishing native vegetation, and program implementation (surveying, engineering designs, and realty transactions).

Conservation Easement Management

Effective long-term easement management requires documenting baseline conditions at the time of acquisition as well as regular ongoing monitoring, and enforcement when necessary, to ensure compliance. Local SWCDs perform regular monitoring inspections of all conservation easements. BWSR maintains baseline, monitoring, and geospatial data.

RESULTS

Measuring performance of this program is guided by progress toward goals outlined in state habitat and water quality plans and strategies, like the Minnesota Prairie Conservation Plan and Nutrient Reduction Strategy, which call for increasing connected areas of wildlife habitat and using conservation easements in strategic locations to reduce the amount of pollutants reaching Minnesota’s waters. For example, according to the Minnesota Pollution Control Agency study on Nitrogen in Minnesota Surface Waters, the two most significant treatments for reducing nitrogen are putting riparian land that is currently in corn into grass and putting into perennials those areas where corn grows only marginally. BWSR aims to create and sustain Minnesota jobs. A federal economic assessment by David Buland, USDA-NRCS Regional Economist, found that for every \$107,000 spent on easement-based conservation projects, one job is created or maintained. Applying this model to the \$81.3 million in conservation easement funding in FY18/19, approximately 758 jobs were created or maintained. Finally, in order to make sure this program is effective into the future, BWSR needs to ensure the long-term integrity of conservation easements. BWSR accomplishes this through regular easement monitoring.

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Previous</i>	<i>Current</i>	<i>Dates</i>
Quantity	Acres protected under RIM Reserve	290,500	307,881	2017, 2020
Quality	Percent easements monitored on schedule	100%	100%	2017, 2019
Results	Percent of easements with compliance issues (should be <5%)	0.5%	0.7%	2017, 2019

The legal authority for the Permanent Resource Protection Program is found in Minnesota Statutes, Chapter 103F.501-103F.535 <https://www.revisor.leg.state.mn.us/statutes/?id=103F>

References for this assessment and other USDA-NRCS IMPLAN analyses are available at <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/econ/>

Permanent Resource Protection

Program Expenditure Overview

(Dollars in Thousands)

	Actual FY18	Actual FY19	Actual FY20	Estimate FY21	Forecast Base		Governor's Recommendation	
					FY22	FY23	FY22	FY23
<u>Expenditures by Fund</u>								
1000 - General	31	219	48	202	125	125	125	125
2000 - Restrict Misc Special Revenue	261	8	77	2,210				
2001 - Other Misc Special Revenue	36	81	79	184	186	188	186	188
2050 - Environment & Natural Resources	1,839	6,137	7,033	5,280				
2300 - Outdoor Heritage	13,777	21,179	19,462	34,976				
2302 - Clean Water	4,732	9,032	25,813	44,074	2,356		14,234	10,670
3000 - Federal	2,043	3,990	2,491	2,600	2,600	2,600	2,600	2,600
Total	22,719	40,645	55,003	89,526	5,267	2,913	17,145	13,583
Biennial Change				81,164		(136,349)		(113,801)
Biennial % Change				128		(94)		(79)
Governor's Change from Base								22,548
Governor's % Change from Base								276

Expenditures by Activity

Permanent Resource Protection	22,719	40,645	55,003	89,526	5,267	2,913	17,145	13,583
Total	22,719	40,645	55,003	89,526	5,267	2,913	17,145	13,583

Expenditures by Category

Compensation	2,190	2,316	2,391	3,341	955	370	1,943	1,145
Operating Expenses	2,352	1,432	950	1,062	145	37	298	157
Grants, Aids and Subsidies	1,354	3,354	1,225	5,048	250		350	100
Capital Outlay-Real Property	12,634	25,415	45,945	77,279	3,917	2,506	13,347	11,236
Other Financial Transaction	4,190	8,128	4,492	2,796			1,207	945
Total	22,719	40,645	55,003	89,526	5,267	2,913	17,145	13,583

Full-Time Equivalent

	23.58	24.02	23.48	25.72	6.68	2.82	14.58	9.02
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Permanent Resource Protection

Program Financing by Fund

(Dollars in Thousands)

	Actual FY18	Actual FY19	Actual FY20	Estimate FY21	Forecast Base		Governor's Recommendation	
					FY22	FY23	FY22	FY23
1000 - General								
Balance Forward In		94		77				
Direct Appropriation	125	125	125	125	125	125	125	125
Balance Forward Out	94		77					
Expenditures	31	219	48	202	125	125	125	125
Biennial Change in Expenditures				0		0		0
Biennial % Change in Expenditures				0		(0)		(0)
Governor's Change from Base								0
Governor's % Change from Base								0
Full-Time Equivalents				1.50	0.89	0.88	0.89	0.88

2000 - Restrict Misc Special Revenue

Balance Forward In	255	59	191	222				
Receipts	65	20	108	1,988				
Balance Forward Out	59	71	222					
Expenditures	261	8	77	2,210				
Biennial Change in Expenditures				2,017		(2,287)		(2,287)
Biennial % Change in Expenditures				750		(100)		(100)
Governor's Change from Base								0
Governor's % Change from Base								

2001 - Other Misc Special Revenue

Balance Forward In	75	1,081	1,993	923	3	3	3	3
Receipts	19	62	79	186	186	186	186	186
Transfers In	1,023	949	922	887				
Transfers Out		19	1,992	1,809				
Balance Forward Out	1,081	1,993	923	3	3	1	3	1
Expenditures	36	81	79	184	186	188	186	188
Biennial Change in Expenditures				146		111		111
Biennial % Change in Expenditures				125		42		42
Governor's Change from Base								0
Governor's % Change from Base								0
Full-Time Equivalents	0.33	0.40	0.75	1.39	1.37	1.35	1.37	1.35

Permanent Resource Protection

Program Financing by Fund

(Dollars in Thousands)

	Actual FY18	Actual FY19	Actual FY20	Estimate FY21	Forecast Base		Governor's Recommendation	
					FY22	FY23	FY22	FY23
2050 - Environment & Natural Resources								
Balance Forward In	2,729	12,745	12,482	5,280				
Direct Appropriation	11,771	5,000						
Transfers In		750						
Transfers Out		91	169					
Balance Forward Out	12,661	12,267	5,279					
Expenditures	1,839	6,137	7,033	5,280				
Biennial Change in Expenditures				4,337		(12,313)		(12,313)
Biennial % Change in Expenditures				54		(100)		(100)
Governor's Change from Base								0
Governor's % Change from Base								
Full-Time Equivalents	3.72	3.34	2.71	1.77				

2300 - Outdoor Heritage

Balance Forward In	34,394	39,509	38,164	24,202				
Direct Appropriation	17,260	17,154	5,963	11,661	0	0	0	0
Transfers Out	906	748	457	887				
Cancellations	200	266	5					
Balance Forward Out	36,771	34,470	24,203					
Expenditures	13,777	21,179	19,462	34,976				
Biennial Change in Expenditures				19,482		(54,438)		(54,438)
Biennial % Change in Expenditures				56		(100)		(100)
Governor's Change from Base								0
Governor's % Change from Base								
Full-Time Equivalents	6.92	10.68	12.12	8.18				

2302 - Clean Water

Balance Forward In	33,774	37,188	38,807	32,192				
Direct Appropriation	8,125	14,375	19,500	14,250	0	0	11,878	10,670
Transfers In	1,278	907	820	1,400	3,012		3,012	
Transfers Out	1,362	998	1,122	3,768	656		656	
Cancellations	108							

Permanent Resource Protection

Program Financing by Fund

(Dollars in Thousands)

	Actual	Actual	Actual	Estimate	Forecast Base		Governor's Recommendation	
	FY18	FY19	FY20	FY21	FY22	FY23	FY22	FY23
Balance Forward Out	36,975	42,440	32,192					
Expenditures	4,732	9,032	25,813	44,074	2,356		14,234	10,670
Biennial Change in Expenditures				56,123		(67,531)		(44,983)
Biennial % Change in Expenditures				408		(97)		(64)
Governor's Change from Base								22,548
Governor's % Change from Base								
Full-Time Equivalents	11.64	9.20	7.55	12.23	3.80		11.70	6.20

3000 - Federal

Receipts	2,043	3,990	2,491	2,600	2,600	2,600	2,600	2,600
Expenditures	2,043	3,990	2,491	2,600	2,600	2,600	2,600	2,600
Biennial Change in Expenditures				(942)		109		109
Biennial % Change in Expenditures				(16)		2		2
Governor's Change from Base								0
Governor's % Change from Base								0
Full-Time Equivalents	0.97	0.40	0.35	0.65	0.62	0.59	0.62	0.59

Board of Water and Soil Resources

Federal Funds Summary

(Dollars in Thousands)

Federal Agency and CFDA #	Federal Award Name and Brief Purpose	New Grant	FY 2020 Actuals	FY 2021 Budget	FY 2022 Base	FY 2023 Base	Required State Match or MOE?	FTEs
Dept. Ag / NRCS 10.902	1. Board Admin and Agency: Expand technical training and certification of conservation professionals.	Yes	\$ -	\$ 336	\$ 337	\$ 338	50% match. No MOE	2.40
Dept. Ag / NRCS 10.902	2. Board Admin and Agency: Expand technical training and certification of conservation professionals.	No	\$ 256	\$ 55	\$ -	\$ -	50% match. No MOE	0.00
Dept. Ag / NRCS 10.902	3. Watershed Conservation Planning: establish partnership on activities that involve the planning and implementation of conservation activities on eligible lands.	No	\$ 729	\$ 500	\$ 500	\$ 500	50% match. No MOE	0.00
Dept. Ag / NRCS 10.902	4. Targeted Stories: To increase conservation practice adoption in MN. To increase awareness of NRCS programs and part. And lead change in social landscape by normalizing the adoption of conservation practices and demonstrating the success of local landowners.	No	\$ 21	\$ 25	\$ 25	\$ -	50% match. No MOE	0.30
Dept. Ag / NRCS 10.924	5. Soil Health Assistance: Build knowledge and skills associated with soil health principles and conservation practices.	Yes	\$ 13	\$ 9	\$ 9	\$ 9	52% match. No MOE	0.00
Dept. Ag / NRCS 10.912	6. MN Ag Water Quality program.	No	\$ -	\$ -	\$ 113	\$ -	50% match.No MOE	0.00
	Program Total: Local Conservation Delivery		\$ 1,019	\$ 925	\$ 984	\$ 847		2.70
U.S. Army Corps of Engineers (COE) 10.912	7. COEI Cooperative Agreement: Work with US Army Corps of Engineers t to administer and implement water resource protection in MN per the Clean Water Act, Section 404 program, and MN Wetland Conservation Act	No	\$ 26	\$ 36	\$ 28	\$ 28	No match No MEO	0.48
U.S. Environmental Protection Agency (EPA) 66.461	8. Wetland Development (EPA): To assess the long - term condition of wetland mitigation sites.	No	\$ 2	\$ 30	\$ -	\$ -	25% match. No MOE	0.00
U.S. Environmental Protection Agency (EPA) 66.461	9. Clean Water Act Section 404 Assumption: undertake efforts associated with preparing a package for assuming the Clean Water Act Section 404 program.	Yes	\$ 95	\$ 95	\$ 46	\$ 46	25% match. No MOE	0.35
U.S. Environmental Protection Agency (EPA) 66.461	10. Compensation Planning Framework Development of the Mississippi River Headwaters Bank Service Area	Yes	\$ -	\$ 70	\$ 90	\$ 90	25% match. No MOE	0.65
U.S. Environmental Protection Agency (EPA) 66.461	11. Assessment of Baseline Vegetative Quality on Wetland Compensatory Mitigation Sites - will provide a status on wetland mitigation condition to compare to statewide monitoring results.	Yes	\$ -	\$ 50	\$ 85	\$ 91	25% match. No MOE	0.63
Dept. Ag / NRCS 10.933	12. Wetland Banking - Develop a wetland mitigation bank with credits acceptable for use in USDA wetland compliance.	No	\$ 90	\$ 215	\$ 215	\$ 215	9.3% match. No MOE	1.69

Federal Agency and CFDA #	Federal Award Name and Brief Purpose	New Grant	FY 2020 Actuals	FY 2021 Budget	FY 2022 Base	FY 2023 Base	Required State Match or MOE?	FTEs
	Program Total: Resource Protection Rules and Law		\$ 213	\$ 496	\$ 464	\$ 470		3.80
U.S. Army (ARNG) (ACUB) 12.401	13. Easement Program in which easements are approved and funded by U.S. Army	No	\$ 2,491	\$ 2,600	\$ 2,600	\$ 2,600	No match No MEO	0.62
	Program Total: Permanent Resource Protection		\$ 2,491	\$ 2,600	\$ 2,600	\$ 2,600		0.62
	Federal Fund – Agency Total		\$ 3,723	\$ 4,021	\$ 4,048	\$ 3,917		7.12

Narrative

Federal funds use is intermittent in the agency. Current federal partners consist of:

- Natural Resource Conservation Service (NRCS).
- U.S Army Compatible Use Buffer (ACUB)
- U.S Army Corp of Engineers (COE)
- Environmental Protection Agency (EPA)

1. The Technical Training and Certification program agreement with NRCS was renewed in FY21 and carries primarily the same requirements and deliverables as the one that ended in FY20. (see #2). It will continue training efforts of local government conservation employees who work in partnership with BWSR in conservation efforts. There is a 50% state match that is supported through Clean Water Funds and carries no MOE. The expenditure estimates are based on the state/federal agreement's budget and is incorporated into BWSR's annual spending plan. The staffing for this program were shifted from the former agreement in FY21.
2. The Technical Training and Certification program agreement with NRCS ended in FY20. Its purpose was to increase training efforts of local government conservation employees who work in partnership with BWSR in conservation efforts. There was a 50% state match and no MOE. The funding estimates had been based on the state/federal agreement.
3. The Targeted Watershed Based Conservation Planning Program is an agreement with NRCS to provide landowners of eleven sub-watersheds in MN additional technical and financial assistance to conduct on-farm environmental assessment, conservation plans. These assessments and plans will lead to accelerated enrollment in federal and state conservation assistance programs in the targeted watersheds with the goal of scaling up the adopting and implementation of soil and water conservations practices that will have a measureable effect on improving water quality and soil health. The majority of funds in this federal award are reissued as grants to SWCD recipients, and a smaller portion that serves as administration of the program. There is a 50% state match that is supported through Clean Water Funds and carries no MOE.
4. The Targeted Stories NRCS agreement is a program to increase awareness of NRCS programs and promotes conservation practice adoption. Both BWSR and NRCS have a mutual interest in the furtherance of USDA conservation programs administered by the NRCS to assure they are effectively implemented and address federal, state, and local priorities. The agreement for a targeted communication effort funds an information officer to create and share stories on successful partnership and NRCS projects that improve soil and water resources and create wildlife habitat while maintaining farming operations. There is a 50% state match that is supported through Clean Water Funds and carries no MOE.
5. The Soil Health Assistance agreement with NRCS is for the purpose of building knowledge and skills associated with soil health principles and associated conservation practices amongst the conservation delivery workforce. The agreement works to emphasize the importance of soil health and identifying the water quality and economic impacts of applied land and water management practices. A match of approximately 52% is required supported through Clean Water Funds and carries no MOE.
6. The Minnesota Ag Water Quality Program ended in FY2017. It was a cooperative agreement with the MN Department of Agriculture and the U.S. Department of Ag. The BWSR contribution was from the Clean Water Fund. Efforts are being made to close out the agreement.
7. The U.S. Army Corp of Engineers (COE) contracts with BWSR to do federal portion of work that is in shared federal/state programs. BWSR already has staff doing the state side of the work, and sometimes the COE enters into Interpersonal Agreements for state staff to do some federal project work. Agreements are short term and estimates are based on history. There is no state match required and the federal work offsets state work time. There is no MOE.
8. The Environmental Protection Agency (EPA) agreement for the purposes of assessing Wetland Mitigation Quality to Refine Restorations Requirements and strategies ended on 06/30/2020. Staff funded in part from this agreement were shifted to other wetland banking projects and initiatives in State Fiscal Year 2021. The state and federal government are partners in wetland mitigation and wetland restoration. This agreement held a 25% match and no MOE.
9. This is a new agreement with the EPA that supports BWSR with efforts associated with the Section 404 assumption program. It builds upon previous efforts to evaluate and coordinate effort to enable the state of Minnesota to assume the section 404 permitting program of the Federal Clean Water act. The expenditure estimates are based on the state/federal agreement's budget and incorporated into BWSR's annual spending plan. The match requirement is supported by a cooperative agreement with the MN Environmental Quality Board. This agreement has a 25% match and there is no MOE.
10. This is a new agreement with the EPA to establish a Compensation Planning Framework (CPF) Development of the Mississippi Headwaters Bank Service Area. BWSR will produce the framework to enable identification and prioritization of wetland restoration opportunities. The expenditure estimates are based on the state/federal agreement's budget and incorporated into BWSR's annual spending plan. The match requirement is supported by a cooperative agreement with the MN Department of Transportation. This agreement has a 25% match and there is no MOE.
11. This is a new agreement with the EPA to provide an Assessment of Baseline Vegetative Quality on Wetland Compensatory Mitigation Sites. The project goal is to provide a status of wetland mitigation condition statewide and establish baseline data for trend analysis. The expenditure estimates are based on the state/federal agreement's budget and incorporated into BWSR's annual spending plan. The match requirement is supported by a cooperative agreement with the MN Department of Transportation. This agreement has a 25% match and there is no MOE.
12. The Wetland Banking Mitigation Program is an agreement with NRCS to help agricultural producers to meet wetland conservation requirements necessary to remain eligible for USDA Programs. The goal of the partnership is to increase quality wetland mitigation opportunities for Minnesota producers through the State Agricultural Wetland Bank administered by BWSR. The funding estimate is based on the state/federal agreement. There is no state match requirement and carries no MOE.
13. The U.S. Army Compatible Use Buffer (ACUB) Program provides ongoing funds for purchases of easements. The program is ongoing and entirely dependent on federal fund availability year to year. FY2022 and beyond are estimates only. There is no state match requirement and no MOE.