

II. Projects Funded Preceding Biennium

“a description of each project receiving money from the trust fund during the preceding biennium;”

The following documents include:

- Summaries and descriptions of the adopted appropriations for projects funded in FY2020 (beginning July 1, 2019).
 - Research projects have been marked as such in the description.
 - Full work plans are available at the LCCMR, Room 65, State Office Building and on the LCCMR website <http://www.lccmr.leg.mn/> (click on the tab titled “Projects Funded”).
- Summaries and descriptions of the adopted appropriations for projects funded in FY2021 (beginning July 1, 20XX).
 - Not included, as no FY21 funding was passed in law during this biennium. LCCMR’s tentative recommendations for FY21 are still pending with the legislature as of 1/15/21.
- Legal Citations
 - FY2020 - M.L. 2019, First Special Session, Chapter 4, Article 2, Sec. 2 (65 projects for a total of \$64,476,000 - \$149,000 FY16, \$2,940,000 FY19, and \$61,387,000 FY20)

**1. FY2020 - MN Laws 2019, First Special Session,
Chapter 4, Article 2, Section 2**

M.L. 2019 Environment and Natural Resources Trust Fund (ENRTF)

Appropriations by Subdivision

Process for M.L. 2019

For the FY 2020 and FY 2021 biennium (July 1, 2019 - June 30, 2021), approximately \$61 million is available each year (total = \$121 million) for funding from the Environment and Natural Resources Trust Fund (ENRTF). The Legislative-Citizen Commission on Minnesota Resources (LCCMR) selected 68 projects totaling \$53,696,000 from the ENRTF to recommend to the 2019 Minnesota Legislature (\$7.84 of the \$61 million had been previously legislatively dedicated for debt service on appropriation bonds). The recommendations were the result of the LCCMR's 2019 Request for Proposal (RFP) process, in which 273 proposals requesting a total of approximately \$191 million were received and considered through a competitive, multi-stage evaluation process. The recommendations ranged from funding the full proposal and dollar amount requested to partial funding for specific proposal elements. On May 24, 2019, the legislature adopted 65 LCCMR recommendations as recommended, provided additional funds to two recommendations and modified one other. They also added 14 additional appropriations, primarily using funds freed up (\$2.94 million FY19; \$7.84 million FY20) following the repeal of M.L. 2018, Chapter 214, Article 6, Section 4 appropriation bonds. On May 31, 2019, 82 appropriations were signed into law by the Governor as M.L. 2019, First Special Session, Chapter 4, Article 2, for \$64,476,000 total appropriations (\$149,000 FY16, \$2,940,000 FY19, and \$61,387,000 FY20)

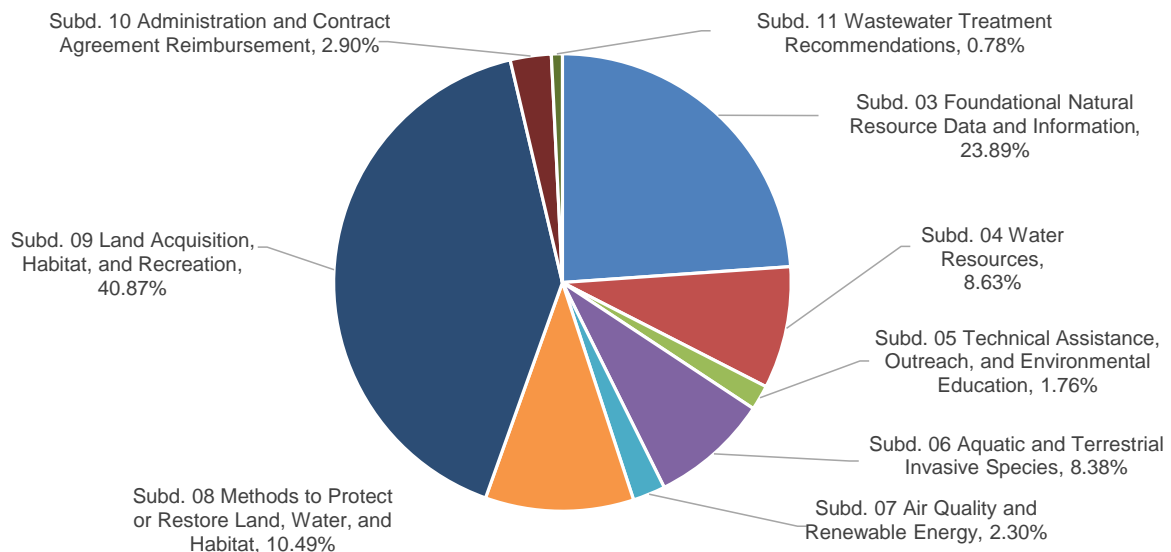
January 3, 2018	2019 RFP Issued
April 11, 2018	2019 RFP Proposal Deadline (Received 273 Proposals totaling approx. \$191 million)
June 5-6, 2018	2019 Selection of Proposals for Presentations
June 19-21 & 25-27, 2018	2019 Proposal Presentations
July 17-18, 2018	2019 Allocation Recommendations
August - November, 2018	Recommended Research Projects Undergo Peer Review
November 13, 2018 & December 4, 2018	2019 Appropriation Language Review & Adoption
January 4, 2019	2020 RFP Issued
January 8, 2019	2019 Minnesota Legislative Session Begins
May 31, 2019	Appropriations Signed into Law by Governor

Summary of Appropriations by Subdivision

Subdivision	\$ Appropriations	\$ Percent	# Appropriations	# Percent
03 Foundational Natural Resource Data and Information	\$15,405,000	23.89%	20	24.69%
04 Water Resources	\$5,565,000	8.63%	20	24.69%
05 Technical Assistance, Outreach, and Environmental Education	\$1,136,000	1.76%	4	4.94%
06 Aquatic and Terrestrial Invasive Species	\$5,400,000	8.38%	4	4.94%
07 Air Quality and Renewable Energy	\$1,485,000	2.30%	4	4.94%
08 Methods to Protect or Restore Land, Water, and Habitat	\$6,766,000	10.49%	7	8.64%
09 Land Acquisition, Habitat, and Recreation	\$26,351,000	40.87%	17	20.99%
10 Administration and Contract Agreement Reimbursement	\$1,868,000	2.90%	4	3.70%
11 Wastewater Treatment Recommendations*	\$500,000	0.78%	2	2.47%
TOTAL	\$64,476,000	100.00%	82	100%

*Subd. 11a "Water Infrastructure Funding Program" - Up to \$5,000,000 of the money in the trust fund is available to the State Board of Investment to invest in loans through the Public Facilities Authority's clean water revolving fund under Minnesota Statutes, section 446A.07. This project will be reflected in the overall appropriations count, but the loan money will not be included in the total dollars.

% of Total \$ Appropriations by Subdivision



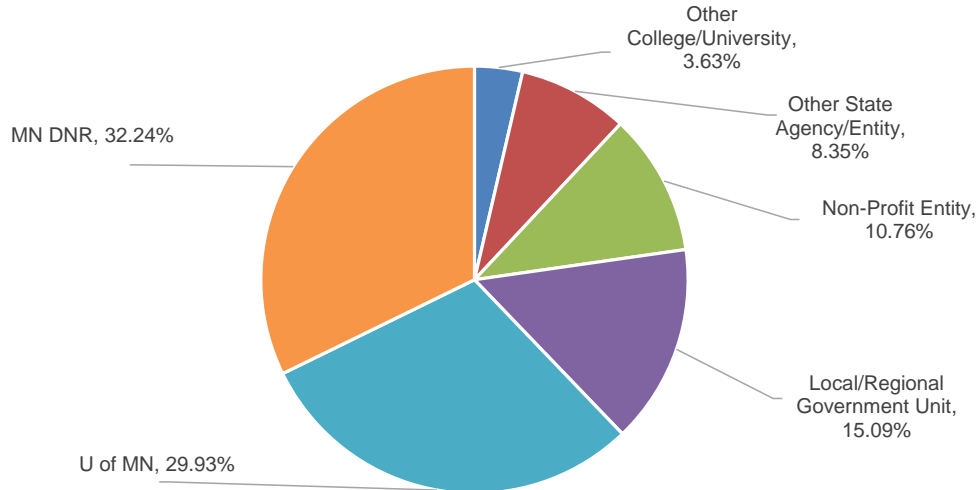
**M.L. 2019 Environment and Natural Resources Trust Fund (ENRTF)
Appropriations by Affiliation and Area of Impact**

Summary of Appropriations by Proposer Affiliation*

Affiliation Type by Proposer Affiliation	\$ Appropriations	\$ Percent	# Appropriations	# Percent
Other College/University	\$2,341,000	3.63%	2	2.47%
Other State Agency/Entity	\$5,382,000	8.35%	10	11.11%
Non-Profit Entity	\$6,936,000	10.76%	12	14.81%
Local/Regional Government Unit	\$9,729,000	15.09%	13	16.05%
U of MN	\$19,299,000	29.93%	30	37.04%
MN DNR	\$20,789,000	32.24%	15	18.52%
TOTAL	\$64,476,000	100.00%	82	100.00%

*Dollar amounts based on project manager affiliation listed in the proposal; some proposals have multiple partners with multiple affiliations and dollars requested distributed between them.

% of Total \$ Appropriations by Proposer Affiliation



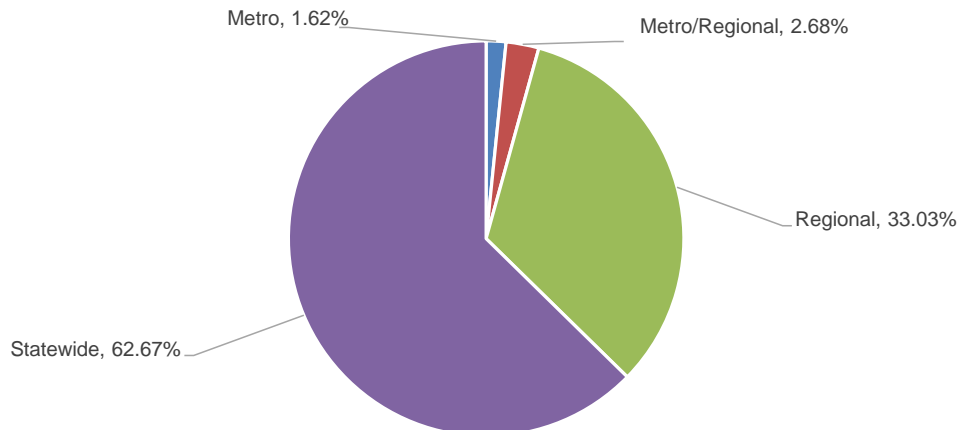
Summary of Appropriations by Area of Impact

Area of Impact	\$ Appropriations	\$ Percent	# Appropriations	# Percent
Metro*	\$1,042,000	1.62%	4	4.94%
Metro*/Regional**	\$1,731,000	2.68%	3	3.70%
Regional**	\$21,299,000	33.03%	30	38.27%
Statewide	\$40,404,000	62.67%	45	53.09%
TOTAL	\$64,476,000	100.00%	82	100.00%

* "Metro" region includes the 11 counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright.

** "Regional" means area of impact is less than "Statewide" but includes one or more regions of the state ("Northwest", "Northeast", "Central", "Southwest", or "Southeast") other than the 11-county "Metro" region.

% Total \$ Appropriations by Area of Impact



M.L. 2019 Environment and Natural Resources Trust Fund (ENRTF)
LCCMR Appropriations for FY 2020

On May 24, 2019, the legislature adopted 65 LCCMR recommendations as recommended, provided additional funds to two recommendations and modified one other. They also added 14 additional appropriations, primarily using funds freed up (\$2.94 million FY19; \$7.84 million FY20) following the repeal of M.L. 2018, Chapter 214, Article 6, Section 4 appropriation bonds. On May 31, 2019, 82 appropriations were signed into law by the Governor as M.L. 2019, First Special Session, Chapter 4, Article 2, for \$64,476,000 total appropriations (\$149,000 FY16, \$2,940,000 FY19, and \$61,387,000 FY20).

Topic Area	Total LCCMR \$ Appropriated	FY2016 Reallocated \$	FY2019 Trust Fund \$	FY2020 Trust Fund \$	Percentage of Total Appropriations
Subd. 03 Foundational Natural Resource Data and Information 20 Appropriations	\$15,405,000	\$0	\$1,804,000	\$13,601,000	23.89%
Subd. 04 Water Resources 20 Appropriations	\$5,565,000	\$149,000	\$0	\$5,416,000	8.63%
Subd. 05 Technical Assistance, Outreach, and Environmental Education 4 Appropriations	\$1,136,000	\$0	\$0	\$1,136,000	1.76%
Subd. 06 Aquatic and Terrestrial Invasive Species 4 Appropriations	\$5,400,000	\$0	\$0	\$5,400,000	8.38%
Subd. 07 Air Quality and Renewable Energy 4 Appropriations	\$1,485,000	\$0	\$0	\$1,485,000	2.30%
Subd. 08 Methods to Protect or Restore Land, Water, and Habitat 7 Appropriations	\$6,766,000	\$0	\$806,000	\$5,960,000	10.49%
Subd. 09 Land Acquisition, Habitat, and Recreation 17 Appropriations	\$26,351,000	\$0	\$0	\$26,351,000	40.87%
Subd. 10 Administration and Contract Agreement Reimbursement 4 Appropriations	\$1,868,000	\$0	\$330,000	\$1,538,000	2.90%
Subd. 11 Wastewater Treatment Recommendations 2 Appropriations	\$500,000	\$0	\$0	\$500,000	0.78%
Total Appropriations	\$64,476,000	\$149,000	\$2,940,000	\$61,387,000	100.00%

Fund Source	\$ Amount
FY 2020 - Environment and Natural Resources Trust Fund (ENRTF)	\$61,387,000
FY 2019 - Environment and Natural Resources Trust Fund (ENRTF)	\$2,940,000
ENRTF Dollars Reallocated from 2016 Appropriations	\$149,000
Total \$	\$64,476,000

2019 Environment and Natural Resources Trust Fund (ENRTF) Appropriations
M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2

Subd.	Title	Total LCCMR \$ Appropriated	FY2016 Reallocated \$	FY2019 Trust Fund \$	FY2020 Trust Fund \$	Project Manager	Organization	Region of Impact*
Subd. 03 Foundational Natural Resource Data and Information (20 Appropriations - Subtotal = \$15,405,000)								
03a	Minnesota Biological Survey	\$ 1,500,000	\$ -	\$ -	\$ 1,500,000	Bruce Carlson	MN DNR	Statewide
03b	Restoring Native Mussels in Streams and Lakes	\$ 500,000	\$ -	\$ -	\$ 500,000	Mike Davis	MN DNR	Statewide
03c	Quantifying Exposure of Minnesota's Raptors to Mercury and PFAS	\$ 250,000	\$ -	\$ -	\$ 250,000	Matthew Etterson	Hawk Ridge Bird Observatory	NE
03d	Minnesota Trumpeter Swan Migration Ecology and Conservation	\$ 300,000	\$ -	\$ -	\$ 300,000	David Andersen	U of MN	Statewide
03e	Spruce Grouse as Indicators for Boreal Forest Connectivity	\$ 350,000	\$ -	\$ -	\$ 350,000	Julia Ponder	U of MN - Raptor Center	NE, NW
03f	Understanding Brainworm Transmission to Find Solutions for Minnesota Moose Decline	\$ 400,000	\$ -	\$ -	\$ 400,000	Tiffany Wolf	U of MN	NE
03g	Mapping Habitat Use and Disease of Urban Carnivores	\$ 500,000	\$ -	\$ -	\$ 500,000	Nicholas McCann	U of MN	Metro
03h	Accelerated Aggregate Resource Mapping	\$ 700,000	\$ -	\$ -	\$ 700,000	Heather Arends	MN DNR	SW
03i	Den Boxes for Fishers and other Nesting Wildlife	\$ 190,000	\$ -	\$ -	\$ 190,000	Michael Joyce	U of MN - Duluth NRRI	Central, Metro, NE, NW
03j	Red-headed Woodpeckers as Indicators of Oak Savanna Health	\$ 171,000	\$ -	\$ -	\$ 171,000	David Andersen	U of MN	Central
03k	Implementing Conservation Plans for Avian Species of Concern	\$ 124,000	\$ -	\$ -	\$ 124,000	Nathaniel Miller	Audubon Minnesota	Statewide
03l	Mapping Aquatic Habitats for Moose	\$ 199,000	\$ -	\$ -	\$ 199,000	Joseph Bump	U of MN	NE
03m	Improving Statewide GIS Data by Restoring the Public Land Survey	\$ 135,000	\$ -	\$ -	\$ 135,000	Patrick Veraguth	Minnesota Association of County Surveyors	Central
03n	County Geologic Atlases - Part A, Mapping Geology	\$ 2,000,000	\$ -	\$ -	\$ 2,000,000	Barbara Lusardi	U of MN - MN Geological Survey	Statewide
03o	County Geologic Atlases - Part B, Mapping Aquifer Hydrology	\$ 2,400,000	\$ -	\$ -	\$ 2,400,000	Paul Putzier	MN DNR	Statewide
03p	Unlocking the Science of Minnesota's Moose Decline	\$ 199,000	\$ -	\$ -	\$ 199,000	Nicole Mattson	Minnesota Zoological Garden	Statewide
03q	Forest and Bioeconomy Research	\$ 2,200,000	\$ -	\$ -	\$ 2,200,000	Rolf Weberg	U of MN - Duluth NRRI	Statewide
03r	Minerals and Water Research	\$ 883,000	\$ -	\$ -	\$ 883,000	Rolf Weberg	U of MN - Duluth NRRI	Statewide
03s	Native Bee Survey	\$ 600,000	\$ -	\$ -	\$ 600,000	Jessica Peterson	MN DNR	Central, NE, NW
03t	Diagnostic Test for Chronic Wasting Disease	\$ 1,804,000	\$ -	\$ 1,804,000	\$ -	Peter Larsen	U of MN	Statewide
Foundational Natural Resource Data and Information		\$ 15,405,000	\$ -	\$ 1,804,000	\$ 13,601,000			
Subd. 04 Water Resources (20 Appropriations - Subtotal = \$5,565,000)								
04a	Determining Influence of Insecticides on Algal Blooms	\$ 350,000	\$ -	\$ -	\$ 350,000	William Arnold	U of MN	Statewide

2019 Environment and Natural Resources Trust Fund (ENRTF) Appropriations
M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2

Subd.	Title	Total LCCMR \$ Appropriated	FY2016 Reallocated \$	FY2019 Trust Fund \$	FY2020 Trust Fund \$	Project Manager	Organization	Region of Impact*
04b	Benign Design: Environmental Studies Leading to Sustainable Pharmaceuticals	\$ 415,000	\$ -	\$ -	\$ 415,000	William Arnold	U of MN	Statewide
04c	Wastewater Nutrient Reduction through Industrial Source Reduction Assistance	\$ 200,000	\$ -	\$ -	\$ 200,000	Laura Babcock	U of MN	Statewide
04d	Quantifying Microplastics in Minnesota's Inland Lakes	\$ 200,000	\$ -	\$ -	\$ 200,000	Kathryn Schreiner	U of MN - Duluth	Statewide
04e	Improving Nitrogen Removal in Greater Minnesota Wastewater Treatment Ponds	\$ 325,000	\$ -	\$ -	\$ 325,000	Paige Novak	U of MN	Statewide
04f	Improving Drinking Water for Minnesotans through Pollution Prevention	\$ 345,000	\$ -	\$ -	\$ 345,000	Raymond Hozalski	U of MN	Metro
04g	Protecting Minnesota Waters by Removing Contaminants from Wastewater	\$ 250,000	\$ -	\$ -	\$ 250,000	Matt Simcik	U of MN	Statewide
04h	Reducing Municipal Wastewater Mercury Pollution to Lake Superior	\$ 250,000	\$ -	\$ -	\$ 250,000	Scott Kyser	Minnesota Pollution Control Agency	NE
04i	Extracting Deicing Salt from Roadside Soils with Plants	\$ 360,000	\$ -	\$ -	\$ 360,000	Bo Hu	U of MN	Statewide
04j	Transformation of Plastic Waste into Valued Resource	\$ 225,000	\$ -	\$ -	\$ 225,000	Brett Barney	U of MN	Statewide
04k	Accelerating Perennial Crop Production to Prevent Nitrate Leaching	\$ 440,000	\$ -	\$ -	\$ 440,000	Dennis Fuchs	Stearns County Soil and Water Conservation District	Central
04l	Farm-Ready Cover Crops for Protecting Water Quality	\$ 741,000	\$ -	\$ -	\$ 741,000	Keith Olander	Central Lakes College - Ag and Energy Ctr	Central, Metro, NW, SE, SW
04m	Setting Realistic Nitrate Reduction Goals in Southeast Minnesota	\$ 350,000	\$ -	\$ -	\$ 350,000	John Nieber	U of MN	SE
04n	Mapping Unprofitable Cropland for Water and Wildlife	\$ 100,000	\$ -	\$ -	\$ 100,000	Jason Ulrich	Science Museum of Minnesota - St. Croix Research Station	Statewide
04o	Evaluating Locally Sourced Materials for Road Salt Reduction	\$ 162,000	\$ -	\$ -	\$ 162,000	Chanlan Chun	U of MN - Duluth NRRI	Statewide
04p	Minnesota Spring Inventory Final Phase	\$ 71,000	\$ -	\$ -	\$ 71,000	Paul Putzier	MN DNR	Statewide
04q	Restoring Impaired Lakes through Citizen-Aided Carp Management	\$ 106,000	\$ -	\$ -	\$ 106,000	Andrew Dickhart	Carver County Water Management Organization	Metro
04r	Spring Biological Nitrate Removal to Protect Drinking Water	\$ 175,000	\$ -	\$ -	\$ 175,000	Troy Nemmers	City of Fairmont	SW
04s	Degrading Chlorinated Industrial Contaminants with Bacteria	\$ 150,000	\$ 149,000	\$ -	\$ 1,000	Paige Novak	U of MN	Statewide

2019 Environment and Natural Resources Trust Fund (ENRTF) Appropriations
M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2

Subd.	Title	Total LCCMR \$ Appropriated	FY2016 Reallocated \$	FY2019 Trust Fund \$	FY2020 Trust Fund \$	Project Manager	Organization	Region of Impact*
04t	Managed Aquifer Recharge	\$ 350,000	\$ -	\$ -	\$ 350,000	John Bilotta	U of MN - Water Resources Center	Statewide
Water Resources Subtotal = \$ 5,565,000 \$ 149,000 \$ - \$ 5,416,000								
Subd. 05 Technical Assistance, Outreach, and Environmental Education (4 Appropriations - Subtotal = \$1,136,000)								
05a	Expanding Camp Sunrise Environmental Program	\$ 237,000	\$ -	\$ -	\$ 237,000	Lori Arnold	YouthCARE MN	Metro
05b	Connecting Students to the Boundary Waters	\$ 450,000	\$ -	\$ -	\$ 450,000	Chris Knopf	Friends of the Boundary Waters Wilderness	Statewide
05c	Mississippi National River and Recreation Area Forest Restoration	\$ 199,000	\$ -	\$ -	\$ 199,000	Mary Hammes	Mississippi Park Connection	Metro
05d	Increasing Diversity in Environmental Careers	\$ 250,000	\$ -	\$ -	\$ 250,000	Mimi Daniel	MN DNR	Statewide
Technical Assistance, Outreach, and Environmental Education \$ 1,136,000 \$ - \$ - \$ 1,136,000								
Subd. 06 Aquatic and Terrestrial Invasive Species (4 Appropriations - Subtotal = \$5,400,000)								
06a	Building Knowledge and Capacity to Solve AIS Problems	\$ 4,000,000	\$ -	\$ -	\$ 4,000,000	Nicholas Phelps	U of MN - MAISRC	Statewide
06b	Oak Wilt Suppression at its Northern Edge	\$ 100,000	\$ -	\$ -	\$ 100,000	Shannon Wettstein	Morrison Soil and Water Conservation District	Central
06c	Noxious Weed Detection and Eradication	\$ 1,000,000	\$ -	\$ -	\$ 1,000,000	Mark Abrahamson	Minnesota Department of Agriculture	Statewide
06d	Emerald Ash Borer Response Grants	\$ 300,000	\$ -	\$ -	\$ 300,000	Valerie McClannahan	MN DNR	Statewide
Aquatic and Terrestrial Invasive Species Subtotal = \$ 5,400,000 \$ - \$ - \$ 5,400,000								
Subd. 07 Air Quality and Renewable Energy (4 Appropriations - Subtotal = \$1,485,000)								
07a	Development of Clean Energy Storage Systems for Farms	\$ 650,000	\$ -	\$ -	\$ 650,000	William Northrop	U of MN - WCROC	Statewide
07b	White Earth Nation Community Solar for Economic Resilience	\$ 500,000	\$ -	\$ -	\$ 500,000	Vicki O'Day	Rural Renewable Energy Alliance	NE, NW
07c	Sustainable Solar Energy from Agricultural Plant By-Products	\$ 185,000	\$ -	\$ -	\$ 185,000	Ted Pappenfus	U of MN - Morris	Statewide
07d	Morris Energy and Environment Community Resilience Plan	\$ 150,000	\$ -	\$ -	\$ 150,000	Blaine Hill	City of Morris	Statewide
Air Quality and Renewable Energy Subtotal = \$ 1,485,000 \$ - \$ - \$ 1,485,000								
Subd. 08 Methods to Protect or Restore Land, Water, and Habitat (7 Appropriations - Subtotal = \$6,766,000)								
08a	Saving Endangered Pollinators through Data-Driven Prairie Restoration	\$ 800,000	\$ -	\$ -	\$ 800,000	Erik Runquist	Minnesota Zoological Garden	Central, Metro, NW, SW
08b	Promoting and Restoring Oak Savanna Using Silvopasture	\$ 750,000	\$ -	\$ -	\$ 750,000	Diomy Zamora	U of MN	Statewide

2019 Environment and Natural Resources Trust Fund (ENRTF) Appropriations
M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2

Subd.	Title	Total LCCMR \$ Appropriated	FY2016 Reallocated \$	FY2019 Trust Fund \$	FY2020 Trust Fund \$	Project Manager	Organization	Region of Impact*
08c	Sauk River Dam Removal and Rock Rapids Replacement	\$ 2,768,000	\$ -	\$ -	\$ 2,768,000	Tessa Beuning	City of Melrose	Central
08d	Conserving and Monitoring of Minnesota’s Rare Arctic Plants	\$ 135,000	\$ -	\$ -	\$ 135,000	Briana Gross	U of MN - Duluth	NE
08e	Nongame Wildlife Program Acceleration	\$ 513,000	\$ -	\$ -	\$ 513,000	Cynthia Osmundson	MN DNR	Statewide
08f	Lawns to Legumes	\$ 900,000	\$ -	\$ 806,000	\$ 94,000	Angie Becker-Kudelka	BWSR	Statewide
08g	Agricultural Weed Control Using Autonomous Mowers	\$ 900,000	\$ -	\$ -	\$ 900,000	Eric Buchanan	U of MN - Morris	Central
Methods to Protect or Restore Land, Water, and Habitat		\$ 6,766,000	\$ -	\$ 806,000	\$ 5,960,000			
Subd. 09 Land Acquisition, Habitat, and Recreation (17 Appropriations - Subtotal = \$26,351,000)								
09a	Minnesota Scientific and Natural Areas	\$ 3,500,000	\$ -	\$ -	\$ 3,500,000	Judy Schulte	MN DNR	Statewide
09b	Grants for Local Parks, Trails and Natural Areas	\$ 3,000,000	\$ -	\$ -	\$ 3,000,000	Audrey Mularie	MN DNR	Statewide
09c	Minnesota State Parks and State Trails In-Holdings	\$ 2,000,000	\$ -	\$ -	\$ 2,000,000	Jennifer Christie	MN DNR	Statewide
09d	Minnesota State Trails Development	\$ 5,000,000	\$ -	\$ -	\$ 5,000,000	Kent Skaar	MN DNR	Statewide
09e	National Loon Center	\$ 4,000,000	\$ -	\$ -	\$ 4,000,000	Leah Heggerston	National Loon Center Foundation	Central
09f	Accessible Fishing Piers	\$ 320,000	\$ -	\$ -	\$ 320,000	Nancy Stewart	MN DNR	Statewide
09g	Mesabi Trail Extensions	\$ 3,000,000	\$ -	\$ -	\$ 3,000,000	Bob Manzoline	St. Louis & Lake Counties Regional Railroad Authority	NE
09h	Birch Lake Recreation Area Campground	\$ 350,000	\$ -	\$ -	\$ 350,000	Cathy Bissonette	City of Babbitt	NE
09i	Britton Peak to Lutsen Mountain Bike Trail	\$ 350,000	\$ -	\$ -	\$ 350,000	Tim Kennedy	Superior Cycling Association	NE
09j	Preserving the Avon Hills with Reverse-Bidding Easements	\$ 1,600,000	\$ -	\$ -	\$ 1,600,000	John Geissler	Saint Johns University	Central
09k	Bailey Lake Trail and Fishing Pier	\$ 550,000	\$ -	\$ -	\$ 550,000	Britt See-Benes	City of Virginia	NE
09l	Vergas Long Lake Trail	\$ 290,000	\$ -	\$ -	\$ 290,000	Julie Lammers	City of Vergas	NW
09m	Glacial Edge Trail and Downtown Pedestrian Bridge	\$ 600,000	\$ -	\$ -	\$ 600,000	Ryan Miller	City of Fergus Falls	NW
09n	Crane Lake to Vermilion Falls Trail	\$ 400,000	\$ -	\$ -	\$ 400,000	Bruce Beste	Voyageur Country ATV	NE
09o	Restoring Five Sections of the Superior Hiking Trail	\$ 191,000	\$ -	\$ -	\$ 191,000	Denny Caneff	Superior Hiking Trail Association	NE
09p	Rainy Lake Recreational Access and Boat Wash Station	\$ 200,000	\$ -	\$ -	\$ 200,000	Sherril Gautreaux	City of Ranier	NE
09q	Historic Bruce Mine Park and Mesabi Trailhead	\$ 1,000,000	\$ -	\$ -	\$ 1,000,000	Bob Manzoline	St. Louis & Lake Counties Regional Railroad Authority	NE

2019 Environment and Natural Resources Trust Fund (ENRTF) Appropriations
M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2

Subd.	Title	Total LCCMR \$ Appropriated	FY2016 Reallocated \$	FY2019 Trust Fund \$	FY2020 Trust Fund \$	Project Manager	Organization	Region of Impact*
Land Acquisition, Habitat, and Recreation Subtotal =		\$ 26,351,000	\$ -	\$ -	\$ 26,351,000			
Subd. 10 Administration and Contract Agreement Reimbursement (4 Appropriations - Subtotal = \$1,868,000)								
10a	Contract Agreement Reimbursement	\$ 135,000	\$ -	\$ -	\$ 135,000	Katherine Sherman-Hoehn	MN DNR	Statewide
10b	LCCMR Administration	\$ 1,400,000	\$ -	\$ -	\$ 1,400,000	Becca Nash	Legislative-Citizen Commission on Minnesota Resources	Statewide
10c	LCC Administration	\$ 3,000	\$ -	\$ -	\$ 3,000	Sally Olson	Legislative Coordinating Commission	Statewide
10d	Grants Management System	\$ 330,000	\$ -	\$ 330,000	\$ -	Becca Nash	Legislative-Citizen Commission on Minnesota Resources	Statewide
Administration and Contract Agreement Reimbursement		\$ 1,868,000	\$ -	\$ 330,000	\$ 1,538,000			
Subd. 11 Wastewater Treatment Recommendations (2 Appropriations - Subtotal = \$500,000)								
11a**	Water Infrastructure Loans	\$ -	\$ -	\$ -	\$ -	Jeff Freeman	Public Facilities Authority	Statewide
11b	Optimizing Local Mechanical and Pond Wastewater-Treatment Plants	\$ 500,000	\$ -	\$ -	\$ 500,000	Joel Peck	MPCA	Statewide
Wastewater Treatment Recommendations Subtotal =		\$ 500,000	\$ -	\$ -	\$ 500,000			
Total \$ Appropriated =		\$ 64,476,000	\$ 149,000	\$ 2,940,000	\$ 61,387,000			

* Region of Impact designated in the State include Statewide, Central, Metro, NE, NW, SE, SW. Metro region includes the 11 counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott,

** Subd. 11a "Water Infrastructure Funding Program" - Up to \$5,000,000 of the money in the trust fund is available to the State Board of Investment to invest in loans through the Public Facilities Authority's clean water revolving fund under Minnesota Statutes, section 446A.07. This project will be reflected in the overall appropriations count, but the loan money will not be included in the total dollars.

M.L. 2019 Projects

On May 24, 2019, the legislature adopted 65 LCCMR recommendations as recommended, provided additional funds to two recommendations and modified one other. They also added 14 additional appropriations, primarily using funds freed up (\$2.94 million FY19; \$7.84 million FY20) following the repeal of M.L. 2018, Chapter 214, Article 6, Section 4 appropriation bonds. On May 31, 2019, 82 appropriations were signed into law by the Governor as M.L. 2019, First Special Session, Chapter 4, Article 2, for \$64,476,000 total appropriations (\$149,000 FY16, \$2,940,000 FY19, and \$61,387,000 FY20).

Minnesota Session Laws - 2019 , First Special Session, Chapter 4, Article 2 (beginning July 1, 2019)

Other Formats of the M.L. 2019 projects adopted by the Legislature and signed by the Governor:

- [PDF list](#) (without summary)
- [PDF list](#) (with summary)
- [Table](#) (web)
- [Summary](#) of appropriations and expected outcomes

When available, we have provided links to web sites related to the project. The sites linked to this page are not created, maintained, or endorsed by the LCCMR office or the Minnesota Legislature.

MN Laws 2019 First Special Session, Chapter 4, Article 2, Section 2

Subd. 03 Foundational Natural Resource Data and Information

Minnesota Biological Survey

Subd. 03a \$1,500,000 TF (FY2020)

Bruce Carlson

MN DNR

500 Lafayette Road, Box 25

St. Paul, MN 55155

Phone: (651) 259-5083

Email: bruce.carlson@state.mn.us

Web: <https://www.dnr.state.mn.us/mbs/index.html>

Appropriation Language

\$1,500,000 the first year is from the trust fund to the commissioner of natural resources for the Minnesota biological survey to complete the statewide field surveys begun in 1987 to provide a foundation for conserving biological diversity by systematically collecting, interpreting, and delivering data on native and rare species, pollinators, and native plant communities throughout Minnesota. Any revenues generated through the publication of books or other resources created through this appropriation may be reinvested as described in the work plan approved by the Legislative-Citizen Commission on Minnesota Resources according to Minnesota Statutes, section 116P.10.

Project due to be completed: 6/30/2022 [Work Plan](#)

Restoring Native Mussels in Streams and Lakes

Subd. 03b \$500,000 TF (FY2020)

Mike Davis

MN DNR

2109 North Lakeshore Drive

Lake City, MN 55041

Phone: (651) 314-6302

Email: mike.davis@state.mn.us

Appropriation Language

\$500,000 the first year is from the trust fund to the commissioner of natural resources to restore native freshwater mussel assemblages, and the ecosystem services they provide, in the Mississippi, Cedar, and Cannon Rivers and to inform the public on mussels and mussel conservation. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Project due to be completed: 6/30/2021 [Work Plan](#)

Quantifying Exposure of Minnesota's Raptors to Mercury and PFAS

Research Project

Subd. 03c \$250,000 TF (FY2020)

Matthew Etterson

Hawk Ridge Bird Observatory

6770 Haugen Lane

Duluth, MN 55803

Phone: (218) 590-7029

Email: metterso@d.umn.edu

Web: <https://www.hawkridge.org/>

Appropriation Language

\$250,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Hawk Ridge Bird Observatory to quantify the exposure and health risk of two environmental neurotoxins to Minnesota raptors.

Project due to be completed: 6/30/2022 [Work Plan](#)

Minnesota Trumpeter Swan Migration Ecology and Conservation

Research Project

Subd. 03d \$300,000 TF (FY2020)

David E. Anderson

U.S. Geological Survey, Minnesota Cooperative Fish and Wildlife Research Unit and University of Minnesota

200 Hodson Hall, 1980 Folwell Avenue

St. Paul, MN 55108

Phone: (612) 626-1222

Email: dea@umn.edu

Web: <http://mncoopunit.cfans.umn.edu/>

Appropriation Language

\$300,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to document the movement and habitat use of Minnesota trumpeter swans to provide foundational information necessary for trumpeter swan management and conservation. This appropriation is available until June 30, 2023, by which time the project must be completed and final products delivered.

Project due to be completed: 6/30/2023 [Work Plan](#)

Spruce Grouse as Indicators for Boreal Forest Connectivity**Research Project**

Subd. 03e \$350,000 TF (FY2020)

Julia Ponder

U of MN - Raptor Center

1920 Fitch Avenue

St. Paul, MN 55108

Phone: (612) 624-3431

Email: ponde003@umn.edu

Web: <https://www.raptor.umn.edu/>

Appropriation Language

\$350,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Raptor Center to evaluate how to best harvest timber in the boreal forest to enable wildlife with small home ranges, such as spruce grouse, to thrive in a changing landscape. This appropriation is available until June 30, 2023, by which time the project must be completed and final products delivered.

Project due to be completed: 6/30/2023 [Work Plan](#)

Understanding Brainworm Transmission to Find Solutions for Minnesota Moose Decline**Research Project**

Subd. 03f \$400,000 TF (FY2020)

Tiffany Wolf

U of MN

495 Animal Science/Veterinary Medicine, 1988 Fitch Ave.

St. Paul, MN 55108

Phone: (612) 625-0492

Email: wolfx305@umn.edu

Appropriation Language

\$400,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to identify key habitats and vectors of brainworm transmission between deer and moose that may be targeted by resource management to mitigate moose exposure to this deadly condition.

Project due to be completed: 6/30/2022 [Work Plan](#)

Mapping Habitat Use and Disease of Urban Carnivores

Research Project

Subd. 03g \$500,000 TF (FY2020)

Nicholas McCann

U of MN

B52 Skok Hall, 2003 Upper Buford Circle

St. Paul, MN 55108

Phone: (763) 286-2215

Email: mccan062@umn.edu

Appropriation Language

\$500,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to map habitat use and diseases of urban foxes and coyotes, evaluate risks these animals may pose to people and pets, and generate information needed to reduce human-wildlife conflicts.

Project due to be completed: 6/30/2022 [Work Plan](#)

Accelerated Aggregate Resource Mapping

Subd. 03h \$700,000 TF (FY2020)

Heather Arends

MN DNR

500 Lafayette Road Box 45

St. Paul, MN 55155

Phone: (651) 259-5376

Email: heather.arends@dnr.state.mn.us

Web: https://www.dnr.state.mn.us/lands_minerals/aggregate_maps/index.html

Appropriation Language

\$700,000 the first year is from the trust fund to the commissioner of natural resources to map the aggregate resource potential for four counties and make this information available in print and electronic format to local units of government for use in planning and zoning.

Project due to be completed: 6/30/2022 [Work Plan](#)

Den Boxes for Fishers and Other Nesting Wildlife

Research Project

Subd. 03i \$190,000 TF (FY2020)

Michael Joyce

U of MN - Duluth NRRI

5013 Miller Trunk Hwy

Duluth, MN 55811

Phone: (218) 788-2656

Email: joyc0073@d.umn.edu

Appropriation Language

\$190,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to build, install, and evaluate den boxes as habitat enhancement for fishers and other cavity-nesting wildlife in managed forests where a lack of large trees may be threatening population survival. The final outcome for the project must include guidelines and best practices for use of den boxes for fisher habitat.

Project due to be completed: 6/30/2022 [Work Plan](#)

Red-Headed Woodpeckers as Indicators of Oak Savanna Health**Research Project**

Subd. 03j \$171,000 TF (FY2020)

David E. Andersen

U of MN

1980 Folwell Avenue, 200 Hodson Hall

St. Paul, MN 55108

Phone: (612) 626-1222

Email: dea@umn.edu

Web: <http://mncoopunit.cfans.umn.edu/>

Appropriation Language

\$171,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to evaluate red-headed woodpecker survival and habitat needs and to use this data to develop and disseminate a long-term oak savanna management plan that supports red-headed woodpeckers and other oak savanna habitat-dependent species.

Project due to be completed: 6/30/2022 [Work Plan](#)

Implementing Conservation Plans for Avian

Subd. 03k \$124,000 TF (FY2020)

Nathaniel Miller

Audubon Minnesota

1 Water St. #200

St. Paul, MN 55107

Phone: (651) 739-9332

Email: nmiller@audubon.org

Web: <http://mn.audubon.org/>

Appropriation Language

\$124,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the National Audubon Society, Minnesota office, to establish benchmark survey sites for implementing and tracking outcomes of collaborative restoration and enhancement activities within Important Bird Areas for three bird species of conservation concern.

Project due to be completed: 6/30/2022 [Work Plan](#)

Mapping Aquatic Habitats for Moose

Research Project

Subd. 03l \$199,000 TF (FY2020)

Joseph Bump

U of MN

FWCB 135 Skok Hall, Upper Buford Circle

St. Paul, MN 55108

Phone: (612) 624-2255

Email: bump@umn.edu

Web: <https://fwcb.cfans.umn.edu/personnel/joseph-bump>

Appropriation Language

\$199,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to determine key water habitats used by moose in northern forested regions of Minnesota, measure the effects of moose foraging on aquatic plant and fish diversity, and provide educational programming materials for the public.

Project due to be completed: 6/30/2022 [Work Plan](#)

Improving Statewide GIS Data by Restoring the Public Land Survey

Subd. 03m \$135,000 TF (FY2020)

Patrick Veraguth

Minnesota Association of County Surveyors

526 Willow Drive, PO Box 398

Alexandria, MN 56308

Phone: (320) 762-2964

Email: patv@co.douglas.mn.us

Web: <http://macsinfo.org/>

Appropriation Language

\$135,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Minnesota Association of County Surveyors to conduct a pilot project with Grant County to remonument and certify the public land survey corners in Lawrence Township. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Project due to be completed: 06/30/2021 [Work Plan](#)

County Geologic Atlases - Part A, Mapping

Subd. 03n \$2,000,000 TF (FY2020)

Barbara Lusardi

U of MN - MN Geological Survey

2609 Territorial Road

St. Paul, MN 55114

Phone: (612) 626-5119
Email: lusar001@umn.edu
Web: <https://www.mngs.umn.edu/>

Appropriation Language

\$2,000,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, Minnesota Geological Survey, to continue producing county geologic atlases to inform management of surface water and groundwater resources. This appropriation is to complete Part A, which focuses on the properties and distribution of earth materials to define aquifer boundaries and the connection of aquifers to the land surface and surface water resources.

Project due to be completed: 6/30/2022 [Work Plan](#)

County Geologic Atlases - Part B, Mapping Aquifer Hydrology

Subd. 03o \$2,400,000 TF (FY2020)

Paul Putzier

MN DNR

Box 25, 500 Lafayette Rd N.

St. Paul, MN 55155

Phone: (651) 259-5692

Email: paul.putzier@state.mn.us

Web: http://www.dnr.state.mn.us/waters/groundwater_section/mapping

Appropriation Language

\$2,400,000 the first year is from the trust fund to the commissioner of natural resources to continue producing county geologic atlases to inform management of surface water and groundwater resources for drinking water and other purposes. This appropriation is for Part B, which uses the geologic formations mapped in Part A of the county geologic atlases to characterize the potential water yields of aquifers and the aquifers' sensitivity to contamination.

Project due to be completed: 6/30/2022 [Work Plan](#)

Unlocking Science of Minnesota's Moose Decline

Subd. 03p \$199,000 TF (FY2020)

Nicole Mattson

Minnesota Zoological Garden

13000 Zoo Blvd.

Apple Valley, MN 55124

Phone: (952) 431-9540

Email: nicole.mattson@state.mn.us

Web: <http://mnzoo.org/>

Appropriation Language

\$199,000 the first year is from the trust fund to the Minnesota Zoological Garden to develop educational displays, interactive exhibits, and engaging online programs that summarize and share scientific findings

about moose decline in Minnesota. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Project due to be completed: 6/30/2021 [Work Plan](#)

Forest and Bioeconomy Research

Subd. 03q \$2,200,000 TF (FY2020)

Rolf Weberg

U of MN - Duluth NRRI

1049 University Dr.

Duluth, MN 55812

Phone: (218) 788-2697

Email: rtweberg@d.umn.edu

Web: <https://www.d.umn.edu/>

Appropriation Language

\$2,200,000 the first year is to the Board of Regents of the University of Minnesota for academic and applied research through MnDRIVE at the Natural Resources Research Institute to develop and demonstrate technologies that enhance the long-term health of Minnesota's forests, extend the viability of current forest-based industries, and accelerate emerging industry opportunities. Of this amount, \$500,000 is to support development of a forest optimization tool for Minnesota forest resources, \$800,000 is for maintenance and expansion of the Natural Resource Atlas to statewide coverage, \$400,000 is to the Minnesota Forest Resource Council for continued advancement of biochar development and application to forest health, and \$500,000 is to advance emerging Minnesota technologies to produce clean syngas to drive high-value markets for forest biomass feedstocks.

Project due to be completed: 6/30/2022 [Work Plan](#)

Minerals and Water Research

Subd. 03r \$883,000 TF (FY2020)

Rolf Weberg

U of MN - Duluth NRRI

1049 University Dr.

Duluth, MN 55812

Phone: (218) 788-2697

Email: rtweberg@d.umn.edu

Web: <https://www.d.umn.edu/>

Appropriation Language

\$883,000 the first year is to the Board of Regents of the University of Minnesota for academic and applied research through MnDRIVE at the Natural Resources Research Institute to develop and demonstrate technologies that enhance long-term Minnesota mineral opportunities. Of this amount:

- (1) \$300,000 is to support continued applied research to advance new technologies to improve water quality;
- (2) \$275,000 is to initiate the characterization of western Mesabi iron resources and development of

next-generation Minnesota iron products;

(3) \$158,000 is to develop emerging hydrometallurgy technology to support high-value mineral product development in Minnesota; and

(4) \$150,000 is to support efforts of the Natural Resources Research Institute to accelerate demonstration of high-capacity, cost-effective energy storage using Minnesota's historical auxiliary mine lands.

This research must be conducted in consultation with the Minerals Coordinating Committee established under Minnesota Statutes, section 93.0015.

Project due to be completed: 6/30/2022 [Work Plan](#)

Native Bee Survey

Subd. 03s \$600,000 TF (FY2020)

Jessica Peterson

MN DNR

500 Lafayette Road, Box 25

St. Paul, MN 55155

Phone: (651) 259-5130

Email: jessica.d.petersen@state.mn.us

Web: <https://www.dnr.state.mn.us/pollinators/index.html>

Appropriation Language

\$600,000 the first year is from the trust fund to the commissioner of natural resources to continue to assess the current status and distribution of native bee pollinators in Minnesota by expanding surveys into the coniferous-deciduous forest region of Minnesota and facilitating interagency collaboration and public outreach on pollinators.

Project due to be completed: 6/30/2022 [Work Plan](#)

Diagnostic Test for Chronic Wasting Disease

Subd. 03t \$1,804,000 TF (FY2019)

Peter Larsen

MN DNR

300B Veterinary Science Building

1971 Commonwealth Avenue

St. Paul, MN 55108

Phone: (612) 626-1694

Email: plarsen@umn.edu

Web: <https://www.vetmed.umn.edu/bio/veterinary-and-biomedical-science/peter-larsen>

Appropriation Language

\$1,804,000 in fiscal year 2019 is from the trust fund to the Board of Regents of the University of Minnesota to develop diagnostic testing for chronic wasting disease that can be used to perform animal testing and environmental monitoring. This appropriation is subject to Minnesota Statutes, section 116P.10.

Project due to be completed: 6/30/2022 [Work Plan](#)

Subd. 04 Water Resources

Determining Influence of Insecticides on Algal Blooms

Research Project

Subd. 04a \$350,000 TF (FY2018)

William Arnold

U of MN

500 Pillsbury Dr. SE

Minneapolis, MN 55455

Phone: (625) 625-8582

Email: arnol032@umn.edu

Web: <https://williamarnold.org/>

Appropriation Language

\$350,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to quantify the occurrence of neonicotinoid insecticides in Minnesota's surface waters and groundwaters and assess if the insecticides are contributing to the formation of algal blooms.

Project due to be completed: 6/30/2022 [Work Plan](#)

Benign Design: Environmental Studies Leading to Sustainable Pharmaceuticals

Subd. 04b \$415,000 TF (FY2018)

William Arnold

U of MN

500 Pillsbury Dr. SE

Minneapolis, MN 55455

Phone: (625) 625-8582

Email: arnol032@umn.edu

Web: <https://williamarnold.org/>

Appropriation Language

\$415,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to determine how to best remove harmful fluorinated pharmaceuticals during wastewater treatment and to develop alternate versions of these compounds that are medically useful but environmentally harmless. This appropriation is subject to Minnesota Statutes, section 116P.10.

Project due to be completed: 6/30/2022 [Work Plan](#)

Wastewater Nutrient Reduction through Industrial Source Reduction Assistance

Subd. 04c \$200,000 TF (FY2018)

Laura Babcock

U of MN

200 Oak St. SE, Suite 350-1
Minneapolis, MN 55455
Phone: (612) 624-4678
Email: lbabcock@umn.edu
Web: <http://www.mntap.umn.edu/>

Appropriation Language

\$200,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to provide technical assistance for industrial facilities to optimize their processes, reduce nutrient loads to wastewater treatment facilities, and improve water quality. The economic savings and water quality improvements achieved through this work must be documented.

Project due to be completed: 6/30/2022 [Work Plan](#)

Quantifying Microplastics in Minnesota's Inland Lakes

Research Project

Subd. 04d \$200,000 TF (FY2018)

Kathryn Schreiner

U of MN - Duluth
2205 E 5th St
Duluth, MN 55812
Phone: (218) 726-8680
Email: kschrein@d.umn.edu

Appropriation Language

\$200,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to quantify the amount, type, and source of microplastics in the water, sediment, and fishes of a range of Minnesota lakes.

Project due to be completed: 6/30/2022 [Work Plan](#)

Improving Nitrogen Removal in Greater Minnesota Wastewater Treatment Ponds

Research Project

Subd. 04e \$325,000 TF (FY2018)

Paige Novak

U of MN
122 Civil Engineering Building, 500 Pillsbury Drive SE
Minneapolis, MN 55455
Phone: (612) 626-9846
Email: novak010@umn.edu

Appropriation Language

\$325,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to assess cold weather nitrogen cycling and different aeration methods to improve the efficacy of Minnesota's underperforming wastewater treatment ponds.

Project due to be completed: 6/30/2022 [Work Plan](#)

Improving Drinking Water for Minnesotans through Pollution Prevention

Research Project

Subd. 04f \$345,000 TF (FY2018)

Raymond Hozalski

U of MN

500 Pillsbury Drive SE

Minneapolis, MN 55455

Phone: (612) 626-9650

Email: hozalski@umn.edu

Web: <http://www.cege.umn.edu/directory/faculty-directory/hozalski.html>

Appropriation Language

\$345,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to reduce exposure of Minnesotans to a toxic, cancer-causing chemical by identifying key pollutant precursor sources in the upper Mississippi River watershed and assessing options to reduce the formation of this chemical during drinking water treatment.

Project due to be completed: 6/30/2022 [Work Plan](#)

Protecting Minnesota Waters by Removing Contaminants from Wastewater

Research Project

Subd. 04g \$250,000 TF (FY2018)

Matt Simcik

U of MN

MMC 807, 420 Delaware Street SE

Minneapolis, MN 55455

Phone: (612) 626-6269

Email: msimcik@umn.edu

Appropriation Language

\$250,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to develop methods for treatment plants to remove harmful polyfluoroalkyl substances and microplastics from wastewater before the wastewater is released to the environment. This appropriation is subject to Minnesota Statutes, section 116P.10.

Project due to be completed: 6/30/2022 [Work Plan](#)

Reducing Municipal Wastewater Mercury Pollution to Lake Superior

Research Project

Subd. 04h \$250,000 TF (FY2018)

Scott Kyser

Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155
Phone: (651) 757-2665
Email: scott.kyser@state.mn.us
Web: <https://www.pca.state.mn.us/>

Appropriation Language

\$250,000 the first year is from the trust fund to the commissioner of the Minnesota Pollution Control Agency to evaluate and summarize current technologies to help municipal wastewater plants in the Lake Superior basin save money and reduce mercury pollution to Lake Superior and other Minnesota waters.

Project due to be completed: 6/30/2022 [Work Plan](#)

Extracting Deicing Salt from Roadside Soils with Plants**Research Project**

Subd. 04i \$360,000 TF (FY2018)

Bo Hu

U of MN
1390 Eckles Ave
St. Paul, MN 55108
Phone: (612) 625-4215
Email: bhu@umn.edu
Web: <https://bbe.umn.edu/directory/faculty/bohu>

Appropriation Language

\$360,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to collaborate with the Department of Transportation to evaluate potential native plants that can be grown on roadsides to adsorb and remove toxic salts accumulated from deicing roads and assess uses for the harvested material.

Project due to be completed: 6/30/2022 [Work Plan](#)

Transformation of Plastic Waste into Valued Resource**Research Project**

Subd. 04j \$225,000 TF (FY2018)

Brett Barney

U of MN
1390 Eckles Ave.
St. Paul, MN 55108
Phone: (612) 626-8751
Email: bbarney@umn.edu
Web: <http://barneybioproductslab.cfans.umn.edu/>

Appropriation Language

\$225,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to develop technologies that use microbes to convert plastic waste into useful chemical compounds and fuels, lowering the likelihood that these materials end up in the environment. This appropriation is subject to Minnesota Statutes, section 116P.10.

Project due to be completed: 6/30/2022 [Work Plan](#)

Accelerating Perennial Crop Production to Prevent Nitrate Leaching

Subd. 04k \$440,000 TF (FY2018)

Dennis Fuchs

Stearns County Soil and Water Conservation District
110 Second Street S. Suite 128
Waite Park, MN 56387
Phone: (320) 345-6477
Email: dennis.fuchs@mn.nacdnet.net

Appropriation Language

\$440,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Stearns County Soil and Water Conservation District to reduce nitrate leaching on sandy soils of central Minnesota by developing water-efficient production methods, supply chains, and end-use markets for three perennial crops: Kernza, prairie species, and alfalfa. Net income from the sale of products or assets developed or acquired through this project may be reinvested as described in the work plan approved by the Legislative-Citizen Commission on Minnesota Resources according to Minnesota Statutes, section 116P.10.

Project due to be completed: 6/30/2022 [Work Plan](#)

Farm-Ready Cover Crops for Protecting Water Quality**Research Project**

Subd. 04l \$741,000 TF (FY2018)

Keith Olander

Central Lakes College - Ag and Energy Ctr
1830 Airport Road
Staples, MN 56479
Phone: (763) 257-2881
Email: kolander@clcmn.edu
Web: <http://www.clcmn.edu/ag-energy-center/>

Appropriation Language

\$741,000 the first year is from the trust fund to the Minnesota State Colleges and Universities System for Central Lakes College to demonstrate conservation benefits of using camelina and kura clover as continuous living cover with corn-soybean rotations and to develop secondary markets to increase farmer adoption of this practice for protecting water quality in vulnerable wellhead protection areas. This appropriation is subject to Minnesota Statutes, section 116P.10.

Project due to be completed: 6/30/2022 [Work Plan](#)

Setting Realistic Nitrate Reduction Goals in Southeast Minnesota

Research Project

Subd. 04m \$350,000 TF (FY2018)

John Nieber

U of MN

1390 Eckles Ave.

St. Paul, MN 55108

Phone: (612) 625-6724

Email: nieber@umn.edu

Web: <https://bbe.umn.edu/directory/faculty/johnnieber>

Appropriation Language

\$350,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to develop advanced water-flow and age-dating tools to improve the ability of state agencies to assess how well nitrate reduction best management practices are working in southeastern Minnesota.

Project due to be completed: 6/30/2022 [Work Plan](#)

Mapping Unprofitable Cropland for Water and Wildlife

Research Project

Subd. 04n \$100,000 TF (FY2018)

Jason Ulrich

Science Museum of Minnesota - St. Croix Research Station

16910 152nd St N

Marine on St Croix, MN 55047

Phone: (651) 433-5953

Email: julrich@smm.org

Web: <https://www.smm.org/scwrs>

Appropriation Language

\$100,000 the first year is from the trust fund to the Science Museum of Minnesota for the St. Croix Watershed Research Station to conduct the first statewide analysis that maps the extent of Minnesota's unprofitable cropland and estimates both the water-quality and habitat benefits of converting these lands to perennial crops and vegetation. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Project due to be completed: 6/30/2021 [Work Plan](#)

Evaluating Locally Sourced Materials for Road Salt Reduction

Research Project

Subd. 04o \$162,000 TF (FY2018)

Chanlan Chun

U of MN - Duluth NRRI

5013 Miller Trunk Hwy

Duluth, MN 55811

Phone: (218) 788-2613

Email: chun0157@d.umn.edu

Web: <https://scse.d.umn.edu/about/departments-and-programs/civil-engineering-department>

Appropriation Language

\$162,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to evaluate the effectiveness and benefits of using locally sourced wood chips, corncobs, and iron-bearing minerals as alternative abrasive materials to lower salt use for protecting Minnesota's water resources. This appropriation is subject to Minnesota Statutes, section 116P.10. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Project due to be completed: 6/30/2021 [Work Plan](#)

Minnesota Spring Inventory Final Phase

Subd. 04p \$71,000 TF (FY2018)

Paul Putzier

MN DNR

Box 25, 500 Lafayette Rd N.

St. Paul, MN 55155

Phone: (651) 259-5692

Email: paul.putzier@state.mn.us

Web: https://www.dnr.state.mn.us/waters/groundwater_section/mapping/springs.html

Appropriation Language

\$71,000 the first year is from the trust fund to the commissioner of natural resources to complete the Minnesota Spring Inventory that identifies, catalogs, and assists resource managers in monitoring, assessing, and protecting important and threatened statewide water springs. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Project due to be completed: 6/30/2021 [Work Plan](#)

Restoring Impaired Lakes through Citizen-Aided Carp Management

Subd. 04q \$106,000 TF (FY2018)

Andrew Dickhart

Carver County Water Management Organization

600 E. 4th Street

Chaska, MN, 55318

Phone: (952) 361-1871

Email: adickhart@co.carver.mn.us

Web: <https://www.co.carver.mn.us/departments/public-services/planning-water-management/water-management>

Appropriation Language

\$106,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Carver County Water Management Organization to quantify water quality improvements and the cost-effectiveness of a new citizen-aided carp management method for restoring impaired lakes in Minnesota.

Project due to be completed: 6/30/2022 [Work Plan](#)

Spring Biological Nitrate Removal to Protect Drinking Water

Subd. 04r \$175,000 TF (FY2018)

Troy Nemmers

City of Fairmont

100 Downtown Plaza

Fairmont, MN 56031

Phone: (507) 238-9461

Email: tnemmers@fairmont.org

Appropriation Language

\$175,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Fairmont to build and demonstrate the effectiveness of an experimental passive biological treatment system to reduce nitrates that enter the city's springtime water supply source.

Project due to be completed: 6/30/2022 [Work Plan](#)

Degrading Chlorinated Industrial Contaminants with Bacteria

Subd. 04s \$150,000 TF (\$149,000 FY2016 reallocation / \$1,000 FY2020)

Paige Novak

U of MN

122 Civil Engineering Building, 500 Pillsbury Drive SE

Minneapolis, MN 55455

Phone: (612) 626-9846

Email: novak010@umn.edu

Appropriation Language

\$1,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to determine the best way to stimulate bacteria to more quickly and completely remove industrial chlorinated pollutants from contaminated sites. On the day following final enactment, the following amounts from unobligated appropriations to the Board of Regents of the University of Minnesota are transferred and added to this appropriation: \$75,000 in Laws 2016, chapter 186, section 2, subdivision 4, paragraph (l), and \$74,000 in Laws 2016, chapter 186, section 2, subdivision 6, paragraph (b).

Project due to be completed: 6/30/2022 [Work Plan](#)

Managed Aquifer Recharge

Subd. 04t \$150,000 TF (FY2020)

John Bilotta

U of MN - Water Resources Center
173 McNeal Hall
1985 Buford Avenue
St. Paul, MN 55108
Phone: (612) 624-7708
Email: bilot002@umn.edu
Web: <https://www.wrc.umn.edu/>

Appropriation Language

\$350,000 the first year is to the Board of Regents of the University of Minnesota, Water Resources Center, for a comprehensive study of the economic benefits of managed aquifer recharge and to make recommendations to enhance and replenish Minnesota's groundwater resources. The study must include, but is not limited to:

- (1) examining the potential benefits of enhancing groundwater recharge in water-stressed areas;
- (2) assessing the relationship to changing seasonality and intensity of precipitation on groundwater recharge rates;
- (3) reviewing the approaches to manage recharge in geologically appropriate areas;
- (4) identifying policy options, costs, and barriers to recharging groundwater; and
- (5) assessing the economic returns of options for groundwater recharge.

In conducting the study, the Water Resources Center must convene a stakeholder group and provide for public participation.

Project due to be completed: 6/30/2022 [Work Plan](#)

Subd. 05 Environmental Education

Expanding Camp Sunrise Environmental Program

Subd. 05a \$237,000 TF (FY2020)

Lori Arnold

YouthCARE MN
2701 University Ave SE, Suite 205
Minneapolis, MN 55414
Phone: (612) 338-1233
Email: larnold@youthcaremn.org
Web: <http://www.youthcaremn.org/>

Appropriation Language

\$237,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with YouthCare Minnesota to expand camp opportunities to more school districts and implement improved hands-on environmental education programs for economically disadvantaged youth.

Project due to be completed: 6/30/2022 [Work Plan](#)

Connecting Students to Boundary Waters

Subd. 05b \$450,000 TF (FY2020)

Chris Knopf

Friends of the Boundary Waters Wilderness
401 N Third St, Suite 290
Minneapolis, MN 55401
Phone: (612) 332-9630
Email: chris@friends-bwca.org
Web: <https://www.friends-bwca.org/>

Appropriation Language

\$450,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Friends of the Boundary Waters Wilderness to connect approximately 6,500 students to the boundary waters through classroom education and wilderness canoe experiences for diverse and underserved populations across Minnesota. This appropriation is available until June 30, 2023, by which time the project must be completed and final products delivered.

Project due to be completed: 6/30/2023 [Work Plan](#)

Mississippi National River and Recreation Area Forest Restoration

Subd. 05c \$199,000 TF (FY2020)

Mary Hammes

Mississippi Park Connection
111 Kellogg Blvd E, Suite 105
St. Paul, MN 55101
Phone: (651) 291-9119
Email: mhammes@parkconnection.org
Web: <https://parkconnection.org/>

Appropriation Language

\$199,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Mississippi Park Connection to work with Conservation Corps Minnesota, local communities, and volunteers to address the loss of ash trees to emerald ash borer by planting approximately 15,000 native trees and plants in affected areas in the Mississippi National River and Recreation Area.

Project due to be completed: 6/30/2022 [Work Plan](#)

Increasing Diversity in Environmental Careers

Subd. 05d \$250,000 TF (FY2020)

Mimi Daniel

MN DNR
500 Lafayette Rd
St. Paul, MN 55155
Phone: (651) 259-5308
Email: mimi.daniel@state.mn.us

Web: <http://www.dnr.state.mn.us/index.html>

Appropriation Language

\$250,000 the first year is from the trust fund to the commissioner of natural resources in cooperation with Conservation Corps Minnesota and Iowa to encourage a diversity of students to pursue careers in environment and natural resources through internships and mentorships with the Department of Natural Resources, the Board of Water and Soil Resources, and the Pollution Control Agency. This appropriation is available until June 30, 2024, by which time the project must be completed and final products delivered.

Project due to be completed: 6/30/2024 [Work Plan](#)

Subd. 06 Aquatic and Terrestrial Invasive Species

Building Knowledge and Capacity to Solve AIS Problems

Subd. 06a \$4,000,000 TF (FY2020)

Nicholas Phelps

U of MN – MAISRC

135 Skok Hall

2003 Upper Buford Circle

St. Paul, MN 55108

Phone: (612) 624-7450

Email: phelp083@umn.edu

Web: <https://www.maisrc.umn.edu/>

Appropriation Language

\$4,000,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to support the Minnesota Aquatic Invasive Species Research Center in developing solutions to Minnesota's aquatic invasive species problems through research, control, prevention, outreach, and early detection of existing and emerging aquatic invasive species threats. This appropriation is available until June 30, 2023, by which time the project must be completed and final products delivered.

Project due to be completed: 6/30/2023 [Work Plan](#)

Oak Wilt Suppression at its Northern Edge

Subd. 06b \$100,000 TF (FY2020)

Shannon Wettstein

Morrison Soil and Water Conservation District

16776 Heron Rd

Little Falls, MN 56345

Phone: (320) 631-3553

Email: shannon.wettstein@morrisonswcd.org

Web: <http://morrisonswcd.org/about-us>

Appropriation Language

\$100,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Morrison Soil and Water Conservation District to eradicate the northern-most occurrences of oak

wilt in the state through mechanical means on select private properties to prevent oak wilt's spread to healthy state forest habitats.

Project due to be completed: 6/30/2022 [Work Plan](#)

Noxious Weed Detection and Eradication

Subd. 06c \$1,000,000 TF (FY2020)

Mark Abrahamson

Minnesota Department of Agriculture

625 Robert St N

St. Paul, MN 55155

Phone: (651) 201-6505

Email: mark.abrahamson@state.mn.us

Web: <https://www.mda.state.mn.us/plants-insects/noxious-and-invasive-weed-program>

Appropriation Language

\$1,000,000 the first year is from the trust fund to the commissioner of agriculture to continue to monitor, detect, and eradicate noxious weeds, including Palmer Amaranth, primarily in conservation plantings and to develop and implement methods to prevent infestation and protect prairies, other natural areas, and agricultural crops. Of this amount, \$650,000 is for grants to local communities to help combat infestations.

Project due to be completed: 6/30/2022 [Work Plan](#)

Emerald Ash Borer Response Grants

Subd. 06d \$300,000 TF (FY2020)

Valerie McClannahan

MN DNR

500 Lafayette Rd

St. Paul, MN 55155

Phone: (651) 259-5283

Email: valerie.mcclannahan@state.mn.us

Web: <https://www.dnr.state.mn.us/grants/forestmgmt/managing-ash.html>

Appropriation Language

\$300,000 the first year is from the trust fund to the commissioner of natural resources for grants to local units of government to replace ash trees removed from public lands in response to emerald ash borer with ecologically appropriate trees.

Project due to be completed: 6/30/2022 [Work Plan](#)

Subd. 07 Air Quality, Climate Change, and Renewable Energy

Development of Clean Energy Storage Systems for Farms

Research Project

Subd. 07a \$650,000 TF (FY2020)

William Northrop

U of MN – WCROC

111 Church Street

Minneapolis, MN 55455

Phone: (612) 625 6854

Email: wnorthro@umn.edu

Appropriation Language

\$650,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the West Central Research and Outreach Center at Morris to develop and test novel clean energy storage systems for farms using wind-generated ammonia to displace fossil fuels and reduce greenhouse gas emissions. This appropriation is subject to Minnesota Statutes, section 116P.10.

Project due to be completed: 6/30/2022 [Work Plan](#)

White Earth Nation Community Solar for Economic Resilience

Subd. 07b \$500,000 TF (FY2020)

Vicki O'Day

Rural Renewable Energy Alliance

3963 8th Street SW

Backus, MN 56435

Phone: (218) 947-3779

Email: Nicole@rreal.org

Web: <https://www.rreal.org/cs4ca>

Appropriation Language

\$500,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Rural Renewable Energy Alliance to install a 200-kW White Earth community-owned solar garden to reduce greenhouse gas emissions, increase economic development through environmental education and solar workforce training, and improve energy resilience.

Project due to be completed: 6/30/2022 [Work Plan](#)

Sustainable Solar Energy from Agricultural Plant Byproducts

Research Project

Subd. 07c \$185,000 TF (FY2020)

Ted Pappenfus

U of MN – Morris

600 E 4th Street

Morris, MN 56267

Phone: (320) 589-6340

Email: pappe001@morris.umn.edu

Web: <http://cda.morris.umn.edu/~pappe001/>

Appropriation Language

\$185,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, Morris, to use regional plant-based agricultural by-products to fabricate solar cells for creating renewable and affordable energy.

Project due to be completed: 6/30/2022 [Work Plan](#)

Morris Energy and Environment Community Resilience Plan

Subd. 07d \$150,000 TF (FY2020)

Blaine Hill

City of Morris

610 Oregon Ave

Morris, MN 56267

Phone: (320) 589-3141

Email: bhill@ci.morris.mn.us

Web: <https://www.ci.morris.mn.us/>

Appropriation Language

\$150,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Morris to develop and begin implementing community resilience plans for energy and the environment and to create a model guide for other Minnesota communities to create and implement their own plans.

Project due to be completed: 6/30/2022 [Work Plan](#)

Subd. 08 Methods to Protect, Restore, and Enhance Land, Water, and Habitat

Saving Endangered Pollinators through Data-Driven Prairie Restoration**Research Project**

Subd. 08a \$800,000 TF (FY2020)

Erik Runquist

Minnesota Zoological Garden

13000 Zoo Blvd

Apple Valley, MN 55124

Phone: (952) 431-9200

Email: erik.runquist@state.mn.us

Appropriation Language

\$800,000 the first year is from the trust fund. Of this amount, \$630,000 is to the Minnesota Zoological Garden and \$170,000 is to the commissioner of natural resources to reestablish populations of Minnesota's imperiled butterflies through reintroductions and prairie restorations and by developing foundational habitat recommendations for preventing future extinctions. This appropriation is available until June 30, 2023, by which time the project must be completed and final products delivered.

Project due to be completed: 06/30/2023 [Work Plan](#)

Promoting and Restoring Oak Savanna Using Silvopasture

Subd. 08b \$750,000 TF (FY2020)

Rebecca Montgomery

U of MN

1530 Cleveland Ave N

St. Paul, MN 55108

Phone: (612) 624-7249

Email: rebeccam@umn.edu

Appropriation Language

\$750,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to demonstrate, evaluate, and increase adoption of the combined use of intensive tree, forage, and livestock management as a method to restore threatened oak savanna habitats.

Project due to be completed: 06/30/2022 [Work Plan](#)

Sauk River Dam Removal and Rock Rapids Replacement

Subd. 08c \$2,768,000 TF (FY2020)

Colleen Winter

City of Melrose

225 First St NE

Melrose, MN 56352

Phone: (320) 256-4278

Email: cwinter@cityofmelrose.com

Web: <https://www.cityofmelrose.com/>

Appropriation Language

\$2,768,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Melrose to remove an existing fixed-elevation dam, construct a rock arch rapids, and conduct in-stream and shoreline habitat restoration to improve water quality and native fish passage in the Sauk River. This project requires a match of at least \$1,400,000 that must be secured before trust fund money is spent. At least \$700,000 of this match must come from the city of Melrose. City of Melrose expenses for the Sauk River dam removal and rock rapids replacement incurred before July 1, 2019, may be counted toward the match.

Project due to be completed: 06/30/2022 [Work Plan](#)

Conserving and Monitoring of Minnesota's Rare Arctic Plants

Research Project

Subd. 08d \$135,000 TF (FY2020)

Briana Gross

U of MN – Duluth

207 SSB, 1035 Kirby Dr

Duluth, MN, 55812

Phone: (218) 726-7722

Email: blgross@d.umn.edu

Web: <https://scse.d.umn.edu/biology-department/faculty-staff/dr-briana-gross>

Appropriation Language

\$135,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to provide monitoring and invasive species removal to conserve rare and endangered arctic plants on Minnesota's North Shore. This appropriation is available until June 30, 2023, by which time the project must be completed and final products delivered.

Project due to be completed: 06/30/2023 [Work Plan](#)

Nongame Wildlife Program Acceleration

Subd. 08e \$513,000 TF (FY2020)

Kristin Hall

MN DNR

500 Lafayette Rd

St. Paul, MN 55155

Phone: (651) 259-5444

Email: kristin.hall@state.mn.us

Web: <https://www.dnr.state.mn.us/>

Appropriation Language

\$513,000 the first year is from the trust fund to the commissioner of natural resources to accelerate the nongame wildlife program, including rare wildlife data collection, habitat management, collaborative land protection, conservation education, and a new emphasis on promoting nature tourism to benefit wildlife, visitors, and rural communities.

Project due to be completed: 06/30/2022 [Work Plan](#)

Lawns to Legumes

Subd. 08f \$900,000 TF (\$806,000 FY2019 / \$94,000 FY2020)

Dan Shaw

BWSR

520 Lafayette Road

St Paul, MN 55155

Phone: (612) 236-6219

Email: dan.shaw@state.mn.us

Web: <https://bwsr.state.mn.us/>

Appropriation Language

\$806,000 in fiscal year 2019 and \$94,000 the first year are from the trust fund to the Board of Water and Soil Resources for demonstration projects that provide grants or payments to plant residential lawns with native vegetation and pollinator-friendly forbs and legumes to protect a diversity of pollinators. The board must establish criteria for grants or payments awarded under this section. Grants or payments awarded under this section may be made for up to 75 percent of the costs of the project, except that in areas identified by the United States Fish and Wildlife Service as areas where there is a high potential for

rusty patched bumble bees to be present, grants may be awarded for up to 90 percent of the costs of the project.

Project due to be completed: 06/30/2022 [Work Plan](#)

Agricultural Weed Control Using Autonomous Mowers

Subd. 08g \$900,000 TF (FY2020)

Eric Buchanan

U of MN - West Central Research and Outreach Center

46352 State HWY 329

Morris, MN 56267

Phone: (320) 589-1711

Email: buch0123@morris.umn.edu

Web: <https://wcroc.cfans.umn.edu/>

Appropriation Language

\$900,000 is from the trust fund to the Board of Regents of the University of Minnesota for the West Central Research and Outreach Center at Morris to design, integrate, and field-test new technology mowers to control weeds, reduce herbicide use, reduce energy costs, and improve native vegetation and forage quality on agricultural lands. This appropriation is subject to Minnesota Statutes, section 116P.10.

Project due to be completed: 06/30/2022 [Work Plan](#)

Subd. 09 Land Acquisition, Habitat and Recreation

Minnesota Scientific and Natural Areas

Subd. 09a \$3,500,000 TF (FY2020)

Molly Roske

MN DNR

500 Lafayette Rd

St. Paul, MN 55155

Phone: (651) 259-5094

Email: molly.roske@state.mn.us

Web: <https://www.dnr.state.mn.us/>

Appropriation Language

\$3,500,000 the first year is from the trust fund to the commissioner of natural resources for the scientific and natural areas (SNA) program to restore and enhance wildlife habitat on SNAs, increase public involvement and outreach, and strategically acquire high-quality lands that meet criteria for SNAs under Minnesota Statutes, section 86A.05, from willing sellers. A list of proposed acquisitions and restorations is required in the work plan.

Project due to be completed: 06/30/2022 [Work Plan](#)

Grants for Local Parks, Trails, and Natural Areas

Subd. 09b \$3,000,000 TF (FY2020)

Audrey Mularie

MN DNR

500 Lafayette Rd

St. Paul, MN 55155

Phone: (651) 259-5549

Email: audrey.mularie@state.mn.us

Web: <https://www.dnr.state.mn.us/>

Appropriation Language

\$3,000,000 the first year is from the trust fund to the commissioner of natural resources to solicit, rank, and fund competitive matching grants for local parks, trail connections, and natural and scenic areas under Minnesota Statutes, section 85.019. The appropriation is for local nature-based recreation, connections to regional and state natural areas, and recreation facilities and not for athletic facilities such as sport fields, courts, and playgrounds.

Project due to be completed: 06/30/2022 [Work Plan](#)

Minnesota State Parks and State Trails In-Holdings

Subd. 09c \$2,000,000 TF (FY2020)

Shelby Kok

MN DNR

500 Lafayette Rd

St. Paul, MN 55155

Phone: (651) 259-5590

Email: Shelby.Kok@state.mn.us

Web: <https://www.dnr.state.mn.us/>

Appropriation Language

\$2,000,000 the first year is from the trust fund to the commissioner of natural resources to acquire high-priority in-holdings from willing sellers within the legislatively authorized boundaries of state parks and trails to protect Minnesota's natural heritage, enhance outdoor recreational opportunities, and improve the efficiency of public land management. Priorities include but are not limited to Minneopa, St. Croix, Frontenac, and Crow Wing State Parks. A list of proposed acquisitions is required in the work plan.

Project due to be completed: 06/30/2022 [Work Plan](#)

Minnesota State Trails Development

Subd. 09d \$5,000,000 TF (FY2020)

Kent Skaar

MN DNR

500 Lafayette Rd

St. Paul, MN 55155

Phone: (651) 259-5636

Email: kent.skaar@state.mn.us

Web: <https://www.dnr.state.mn.us/>

Appropriation Language

\$5,000,000 the first year is from the trust fund to the commissioner of natural resources to expand high-priority recreational opportunities on Minnesota's state trails by developing new trail segments and rehabilitating, improving, and enhancing existing state trails. High-priority trail bridges to rehabilitate or replace include, but are not limited to, those on the Arrowhead, Central Lakes, Harmony-Preston Valley, Matthew Lourey, and North Shore State Trails. High-priority trail segments to develop and enhance include, but are not limited to, the Paul Bunyan, Gateway, Heartland, Gitchi Gami, and Minnesota Valley State Trails. A proposed list of trail projects on legislatively authorized state trails is required in the work plan. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Project due to be completed: 06/30/2021 [Work Plan](#)

National Loon Center

Subd. 09e \$4,000,000 TF (FY2020)

Leah Heggerston

National Loon Center Foundation

35770 Allen Ave

Suite 1 PO Box 642

Crosslake, MN 56442

Phone: (218) 839-9042

Email: fishes@crosslake.net

Web: <https://www.nationallooncenter.org/>

Appropriation Language

\$4,000,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the National Loon Center Foundation, in partnership with a fiscal agent to be approved by the Legislative-Citizen Commission on Minnesota Resources, to construct an approximately 15,000-square-foot National Loon Center in Cross Lake dedicated to loon survival, loon habitat protection and research, and recreation. Of this amount, up to \$1,449,000 is for planning, design, and construction of approximately six outdoor demonstration learning kiosks, interpretive trails, boardwalks and boat docks, a fishing dock, and native landscaping along approximately 3,100 feet of shoreline. Any remaining funds are for planning, engineering, and constructing the building and indoor exhibits. A land lease commitment of at least 25 years and fiscal sponsorship must be secured before any trust fund money is spent. This project requires a match of at least \$6,000,000. At least \$2,000,000 of this match must come from nonstate sources. If naming rights will be conveyed, the National Loon Center Foundation must include a plan for this in the work plan. All matching funds must be legally committed before any trust fund money may be spent on planning activities for or construction of the building and indoor exhibits. Net income generated from admissions, naming rights, and memberships to the National Loon Center as a result of trust fund contributions may be reinvested in the center's long-term loon conservation efforts as described in the work plan approved by the Legislative-Citizen Commission on Minnesota Resources according to Minnesota Statutes, section 116P.10.

Project due to be completed: 06/30/2022 [Work Plan](#)

Accessible Fishing Piers

Subd. 09f \$320,000 TF (FY2020)

Nancy Stewart

MN DNR

500 Lafayette Rd

St. Paul, MN 55155

Phone: nancy.stewart@state.mn.us

Email: (651) 259-5616

Web: <https://www.dnr.state.mn.us/>

Appropriation Language

\$320,000 the first year is from the trust fund to the commissioner of natural resources to provide accessible fishing piers in locations that have a high potential to serve new angling communities, underserved populations, and anglers with physical disabilities. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Project due to be completed: 06/30/2021 [Work Plan](#)

Mesabi Trail Extensions

Subd. 09g \$3,000,000 TF (FY2020)

Bob Manzoline

St. Louis & Lake Counties Regional Railroad Authority

111 Station 44 Rd

Eveleth, MN 55734

Phone: (218) 744-2653

Email: bmanzoline@rrauth.com

Web: <https://www.mesabitrail.com/>

Appropriation Language

\$3,000,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the St. Louis and Lake Counties Regional Railroad Authority for environmental assessment, permitting, right-of-way easements or other acquisition as needed, and engineering for and construction of four trail segments beginning and ending at the following approximate locations: Darwin Meyers Wildlife Management Area to County Road 21, Embarrass to Kugler, County Road 128 to the Eagles Nest Town Hall, and Wolf Creek to the Highway 169 underpass.

Project due to be completed: 06/30/2022 [Work Plan](#)

Birch Lake Recreation Area Campground

Subd. 09h \$350,000 TF (FY2020)

Cathy Bissonette

City of Babbitt

71 South Dr

Babbitt, MN 55706

Phone: (218) 827-3646

Email: cathy@babbitt-mn.com

Appropriation Language

\$350,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Babbitt to expand Birch Lake Recreation Area by adding a new campground for recreational vehicles and tent campers. This project requires a match of at least \$2,800,000 that must be secured before trust fund money is spent. At least \$800,000 of this match must come from the city of Babbitt. Net income generated from admissions to the campground created as a result of trust fund contributions may be reinvested into the campground's long-term operations as described in the work plan approved by the Legislative-Citizen Commission on Minnesota Resources according to Minnesota Statutes, section 116P.10.

Project due to be completed: 06/30/2022 [Work Plan](#)

Britton Peak to Lutsen Mountain Bike Trail

Subd. 09i \$350,000 TF (FY2020)

Tim Kennedy

Superior Cycling Association

PO Box 1032

Grand Marais, MN 55604

Phone: (218) 370-0955

Email: tkennedy@boreal.org

Web: <https://superiorcycling.org/>

Appropriation Language

\$350,000 the first year are from the trust fund to the commissioner of natural resources for an agreement with the Superior Cycling Association to create a sustainably designed single-track mountain bike trail connecting trail clusters and trailheads between Britton Peak in Tofte and Lutsen Mountains as part of northeast Minnesota's effort to become a national recreation destination. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Project due to be completed: 06/30/2021 [Work Plan](#)

Preserving the Avon Hills with Reverse-Bidding Easements

Subd. 09j \$1,600,000 TF (FY2020)

John Geissler

Saint John's University

104 New Science Building

Collegeville, MN 56321-3000

Phone: (320) 363-3126

Email: jgeissler001@csbsju.edu

Web: <https://www.csbsju.edu/outdooru>

Appropriation Language

\$1,600,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Saint John's University in cooperation with Minnesota Land Trust to restore and

enhance protected lands, provide public outreach, and prepare management plans for and use a reverse-bid ranking system to secure permanent conservation easements on high-quality natural habitat in the Avon Hills area of Stearns County. Of this amount, up to \$168,000 is for use by Minnesota Land Trust in a monitoring fund as approved in the work plan and subject to Minnesota Statutes, section 116P.20. An annual financial report is required for any monitoring, management, and enforcement fund, including expenditures from the fund. A proposed list of acquisitions and restorations must be provided in the work plan. This appropriation is available until June 30, 2024, by which time the project must be completed and final products delivered.

Project due to be completed: 06/30/2024 [Work Plan](#)

Bailey Lake Trail and Fishing Pier

Subd. 09k \$550,000 TF (FY2020)

Britt See-Benes

City of Virginia

327 1st Street S

Virginia MN 55792

Phone: (218) 748-7500

Email: britts@virginiamn.us

Web: <http://www.virginiamn.us/>

Appropriation Language

\$550,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Virginia to reconstruct the existing Bailey Lake Trail and construct a new fishing pier on Bailey Lake that is accessible from the trail.

Project due to be completed: 06/30/2022 [Work Plan](#)

Vergas Long Lake Trail

Subd. 09I \$290,000 TF (FY2020)

Julie Lammers

City of Vergas

PO Box 32

Vergas, MN 56587-0032

Phone: (218) 342-2091

Email: cityofvergas@arvig.net

Web: <https://www.cityofvergas.com/>

Appropriation Language

\$290,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Vergas to construct a bicycle and pedestrian bridge, trail, and floating boardwalk along Long Lake including shoreline restoration and stabilization with native plants. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Project due to be completed: 06/30/2021 [Work Plan](#)

Glacial Edge Trail and Downtown Pedestrian Bridge

Subd. 09m \$600,000 TF (FY2020)

Andrew Bremseth

City of Fergus Falls

112 Washington Avenue W

Fergus Falls, MN 56537

Phone: (218) 332-5403

Email: Andrew.Bremseth@ci.fergus-falls.mn.us

Web: <https://www.ci.fergus-falls.mn.us/>

Appropriation Language

\$600,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Fergus Falls to acquire easements for and construct a trail along the Otter Tail River in downtown Fergus Falls and a bicycle and pedestrian bridge crossing the river. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Project due to be completed: 06/30/2021 [Work Plan](#)

Crane Lake to Vermilion Falls Trail

Subd. 09n \$400,000 TF (FY2020)

Bruce Beste

Voyageur Country ATV

Box 414

Crane Lake, MN 55725

Phone: (218) 391-5108

Email: voyageurcountryatv@gmail.com

Web: www.VoyageurCountryATV.com

Appropriation Language

\$400,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with St. Louis County in cooperation with Voyageur Country ATV Club to designate and improve a wooded trail from Crane Lake to Vermilion Falls to accommodate all-terrain vehicle and snowmobile users. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Project due to be completed: 06/30/2021 [Work Plan](#)

Restoring Five Sections of the Superior Hiking Trail

Subd. 09o \$191,000 TF (FY2020)

Lisa Luukkala

Superior Hiking Trail Association

731 7th Avenue, Suite 2

Two Harbors, MN 55616

Phone: (218) 834-2700

Email: lluukkala@superiorhiking.org

Web: <https://superiorhiking.org/>

Appropriation Language

\$191,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Superior Hiking Trail Association to restore and repair the most damaged parts of five sections of the Superior Hiking Trail and restore an abandoned route to a natural footpath for hikers.

Project due to be completed: 06/30/2022 [Work Plan](#)

Rainy Lake Recreational Access and Boat Wash Station

Subd. 09p \$200,000 TF (FY2020)

Sherril Gautreaux

City of Ranier

PO Box 186

Ranier, MN 56668

Phone: 218-286-3311

Email: cityofranier@frontiernet.net

Appropriation Language

\$200,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Ranier to enhance and increase public access to Rainy Lake by constructing an Americans with Disabilities Act (ADA)-compliant recreational parking lot, an ADA-compliant public restroom, and an aquatic invasive species boat wash station.

Project due to be completed: 06/30/2022 [Work Plan](#)

Historic Bruce Mine Park and Mesabi Trailhead

Subd. 09q \$1,000,000 TF (FY2020)

Bob Manzoline

St. Louis & Lake Counties Regional Railroad Authority

111 Station 44 Rd

Eveleth, MN 55734

Phone: (218) 744-2653

Email: bmanzoline@rrauth.com

Web: <https://www.mesabitrail.com/>

Appropriation Language

\$1,000,000 the first year is from the trust fund to the commissioner of natural resources for a grant to the St. Louis and Lake Counties Regional Railroad Authority to engineer, design, renovate, and construct the Historic Bruce Mine Park and Mesabi Trailhead and access in the city of Chisholm. This appropriation is available until June 30, 2023, by which time the project must be completed and final products delivered.

Project due to be completed: 06/30/2023 [Work Plan](#)

Subd. 10 Administration and Contract Agreement Reimbursement

Contract Agreement Reimbursement

Subd. 10a \$135,000 TF (FY2020)

Katherine Sherman-Hoehn

MN DNR

500 Lafayette Road

St. Paul, MN 55155-4010

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Web: <https://www.dnr.state.mn.us/>

Appropriation Language

\$135,000 the first year is from the trust fund to the commissioner of natural resources, at the direction of the Legislative-Citizen Commission on Minnesota Resources, for expenses incurred for preparing and administering contracts for the agreements specified in this section. The commissioner must provide documentation to the Legislative-Citizen Commission on Minnesota Resources on the expenditure of these funds. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Project due to be completed: 06/30/2021 [Work Plan](#)

LCCMR Administration

Subd. 10b \$1,400,000 TF (FY2020)

Becca Nash

Legislative-Citizen Commission on Minnesota Resources

100 Rev. Dr. Martin Luther King Jr. Blvd.

Room 65 State Office Bldg

St. Paul, MN 55155

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Web: <https://www.lccmr.leg.mn/>

Appropriation Language

\$1,400,000 the first year is from the trust fund to the Legislative-Citizen Commission on Minnesota Resources for administration in fiscal years 2020 and 2021 as provided in Minnesota Statutes, section 116P.09, subdivision 5.

Project due to be completed: 06/30/2021

Legislative Coordinating Commission (LCC) Administration

Subd. 10c \$3,000 TF (FY2020)

Sally Olson

Legislative Coordinating Commission

100 Rev. Dr. Martin Luther King Jr. Blvd.

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Email: Sally.Olson@lcc.leg.mn

Appropriation Language

\$3,000 the first year is from the trust fund to the Legislative Coordinating Commission for the website required in Minnesota Statutes, section 3.303, subdivision 10.

Project due to be completed: 06/30/2022

Grants Management System

Subd. 10d \$330,000 TF (FY2019)

Becca Nash

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Appropriation Language

\$330,000 in fiscal year 2019 is from the trust fund to the Legislative-Citizen Commission on Minnesota Resources to develop, enhance, and maintain a management system for project records.

Project due to be completed: 06/30/2021

Subd. 11 Wastewater Treatment Recommendations

Water Infrastructure Loans

Subd. 11a \$0 TF (FY2020)

Jeff Freeman

Public Facilities Authority
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Web: <https://mn.gov/deed/pfa/>

Appropriation Language

Up to \$5,000,000 of the money in the trust fund is available to the State Board of Investment to invest in loans through the Public Facilities Authority's clean water revolving fund under Minnesota Statutes, section 446A.07. Notwithstanding Minnesota Statutes, section 446A.07, repayments of principal and interest and any investment income must be credited to the trust fund and are available for reinvestment in the clean water revolving fund.

Project due to be completed: 06/30/2022

Optimization Local Mechanical and Pond Wastewater-Treatment Plants

Subd. 11b \$500,000 TF (FY2020)

Joel Peck

Minnesota Pollution Control Agency

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Web: <https://www.pca.state.mn.us/>

Appropriation Language

\$500,000 the first year is from the trust fund to the commissioner of the Pollution Control Agency for the pilot program created under Laws 2018, chapter 214, article 4, section 2, subdivision 4, paragraph (a). This appropriation is available until June 30, 2021, by which time projects must be completed and final products delivered.

Project due to be completed: 06/30/2021 [Work Plan](#)