

2021 LCCMR Recommendations for the Environment and Natural Resources Trust Fund (ENRTF)

As of November 18, 2020, the Legislative-Citizen Commission on Minnesota Resources (LCCMR) has selected 88 projects totaling \$70,881,000 to recommend to the 2021 Minnesota Legislature for funding from the Environment and Natural Resources Trust Fund (ENRTF). In response to LCCMR's 2021 Request for Proposal (RFP), 329 proposals requesting a total of approximately \$240 million were received and considered through a competitive, multi-stage evaluation. The following recommendations range from funding the full proposal and dollar amount requested to partial funding for specific proposal elements.

Topic Area	ENRTF \$ (\$70,881,000)	Percentage of Total
Subd. 03 Foundational Natural Resource Data and Information 14 Projects	\$10,459,000	14.76%
Subd. 04 Water Resources 10 Projects	\$4,771,000	6.73%
Subd. 05 Environmental Education 7 Projects	\$2,687,000	3.79%
Subd. 06 Aquatic and Terrestrial Invasive Species 7 Projects	\$6,148,000	8.67%
Subd. 07 Air Quality and Renewable Energy 6 Projects	\$6,205,000	8.75%
Subd. 08 Methods to Protect or Restore Land, Water, and Habitat 18 Projects	\$6,429,000	9.07%
Subd. 09 Land Acquisition, Habitat, and Recreation 22 Projects	\$32,062,000	45.23%
Subd. 10 Administrative and Emerging Issues 4 Projects	\$2,120,000	2.99%
Total Project \$	\$70,881,000	100.00%

Fund Source	ENRTF \$
FY 2022 - Environment and Natural Resources Trust Fund (ENRTF)	\$70,881,000
Total \$	\$70,881,000

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Draft Work Plan Subd.	Original Proposal ENRTF ID	Title	Total ENRTF \$ FY2022	Organization	Project Manager
Subd. 03 Foundational Natural Resource Data and Information \$10,459,000 14/88					
03a	2021-032	What's "Bugging" Minnesota's Insect-Eating Birds?	\$199,000	U of MN, Duluth - NRRI	Alexis Grinde
03b	2021-055	Protecting Minnesota's Beneficial Macroalgae: All Stoneworts Aren't Starry	\$811,000	MN DNR, Ecological and Water Resources Division	Donna Perleberg
03c	2021-071	County Groundwater Atlas	\$1,875,000	MN DNR, Ecological and Water Resources Division	Paul Putzier
03d	2021-087	Improving Resiliency And Conservation Outcomes For Minnesota Turtles	\$391,000	Minnesota Zoological Society	Tricia Markle
03e	2021-113	Minnesota Biological Survey: Setting A Future Course	\$1,500,000	MN DNR, Ecological and Water Resources Division	Bruce Carlson
03f	2021-118	2021 Groundwater Contamination Mapping Project	\$800,000	Minnesota Pollution Control Agency	Myrna Halbach
03g	2021-138	Geologic Atlases For Water Resource Management	\$3,092,000	U of MN, MN Geological Survey	Barbara Lusardi
03h	2021-140	Redwood County Rim Easement Evaluation And Public Outreach	\$197,000	Redwood Soil & Water Conservation District	Kristy Zajac
03i	2021-159	Collaborative State And Tribal Wild Rice Monitoring Program	\$644,000	MN DNR, Ecological and Water Resources Division	Josh Knopik
03j	2021-238	Morrison County Performance Drainage And Hydrology Management II	\$197,000	Morrison Soil and Water Conservation District	Shannon Wettstein
03k	2021-278	Preserving Minnesota's Wetlands: Our Resource For Future Medicine	\$210,000	U of MN, Crookston	Brian Dingmann
03l	2021-289	A Biodiversity Checkup For Minnesota's Big Woods	\$109,000	U of MN, College of Food, Agricultural and Natural Resource Sciences	Lee Frelich
03m	2021-321	Microbiome In Raptors: A New Tool For Conservation	\$129,000	U of MN, Raptor Center	Julia Ponder
03n	2021-396	Bioacoustics For Broad-Scale Species Monitoring And Conservation	\$305,000	U of MN, College of Food, Agricultural and Natural Resource Sciences	Elena West
Subtotal			\$10,459,000		
Subd. 04 Water Resources \$4,771,000 10/88					
04a	2021-050	Trout Stream Habitat Restoration Success	\$319,000	U of MN, Duluth - NRRI	Valerie Brady
04b	2021-115	Novel Nutrient Recovery Process From Wastewater Treatment Plants	\$200,000	U of MN, College of Food, Agricultural and Natural Resource Sciences	Bo Hu
04c	2021-121	Monitoring Emerging Viruses In Minnesota's Urban Water Cycles	\$416,000	U of MN, College of Biological Sciences	Sebastian Behrens
04d	2021-144	Microgeographic Impact Of Antibiotics Released From Identified Hotspots	\$508,000	U of MN, College of Veterinary Medicine	Randall Singer

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04e	2021-266	Sustainable Irrigation Management: Expanding A Statewide Web Application	\$1,139,000	U of MN, College of Food, Agricultural and Natural Resource Sciences	Bryan Runck
04f	2021-358	Assessing Membrane Bioreactor Wastewater Treatment Efficacy	\$419,000	Minnesota State Colleges and Universities, St. Cloud State University	Heiko Schoenfuss
04g	2021-364	Evaluating Coronavirus And Other Microbiological Contamination Of Drinking Water Sources From Wastewater	\$594,000	U of MN, College of Science and Engineering	Timothy LaPara
04h	2021-376	St. James Pit Water Level Control	\$259,000	City of Aurora	Becky Lammi
04i	2021-384	Long-Term Nitrate Mitigation By Maintaining Profitable Kernza Production	\$485,000	Stearns County Soil and Water Conservation District	Dennis Fuchs
04j	2021-390	Antibiotic Resistance And Wastewater Treatment: Problems And Solutions	\$432,000	University of St. Thomas	Justin Donato
		Subtotal	\$4,771,000		
Subd. 05 Environmental Education \$2,687,000 7/88					
05a	2021-042	Increasing Outdoor Learning For Young Minnesotans	\$383,000	Wolf Ridge Environmental Learning Center	Peter Smerud
05b	2021-131	Pollinator Education In The Science Classroom	\$366,000	U of MN, College of Food, Agricultural and Natural Resource Sciences	Elaine Evans
05c	2021-132	Minnesota Freshwater Quest: Environmental Education For 20000 Youth	\$699,000	Wilderness Inquiry	Julie Edmiston
05d	2021-175	Minnesota Master Naturalist: Nature For New Minnesotans	\$293,000	U of MN, College of Food, Agricultural and Natural Resource Sciences	Robert Blair
05e	2021-186	The Voyageurs Classroom Initiative	\$348,000	Voyageurs National Park Association	Christina Hausman Rhode
05f	2021-320	Restoring Land, Reviving Heritage: Conservation Through Indigenous Culture	\$420,000	Belwin Conservancy	Katie Bloome
05g	2021-323	Expanding Access To Environmental Education For Underserved Communities	\$178,000	U of MN, Raptor Center	Julia Ponder
		Subtotal	\$2,687,000		
Subd. 06 Aquatic and Terrestrial Invasive Species \$6,148,000 7/88					
06a	2021-017	Starch Allocation Patterns Of Starry Stonewort (Nitellopsis Obtusa) Harvested From Lake Koronis, MN	\$101,000	Minnesota State Colleges and Universities, Minnesota State University Mankato	Ryan Wersal

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06b	2021-091	Long-Term Efficacy Of Invasive Removal In Floodplain Forests	\$25,000	Macalester College	Mike Anderson
06c	2021-162	Oak Wilt Suppression At The Northern Edge II	\$423,000	Morrison Soil and Water Conservation District	Shannon Wettstein
06d	2021-164	Biocontrol Of Bee Lawns And Parklands	\$425,000	U of MN, College of Food, Agricultural and Natural Resource Sciences	Vera Krischik
06e	2021-188	Building Knowledge And Capacity For AIS Solutions	\$3,750,000	U of MN, MAISRC	Nicholas Phelps
06f	2021-217	Evaluating Minnesotas Last Best Chance To Stop Carp	\$424,000	U of MN, College of Food, Agricultural and Natural Resource Sciences	Peter Sorensen
06g	2021-313	Stop Starry Invasion - Community Invasive Species Containment	\$1,000,000	Minnesota Lakes and Rivers Advocates	Jeff Forester
		Subtotal	\$6,148,000		
Subd. 07 Air Quality, Climate Change, and Renewable Energy \$6,205,000 6/88					
07a	2021-010	Enhanced Thermo-Active Foundations For Space Heating In Minnesota	\$312,000	U of MN, Duluth	Aggrey Mwesigye
07b	2021-169	Storing Renewable Energy In Flow-Battery For Grid Use	\$2,408,000	U of MN, Morris	Bryan Herrmann
07c	2021-191	Agrivoltaics To Improve The Environment And Farm Resiliency	\$646,000	U of MN, WCROC	Bradley Heins
07d	2021-294	Behavioral Response Of Bald And Golden Eagles To Acoustic Stimuli	\$261,000	U of MN, St. Anthony Falls Laboratory	Christopher Feist
07e	2021-344	Create Jobs Statewide By Diverting Materials From Landfills	\$2,244,000	Better Futures Minnesota	Steve Thomas
07f	2021-402	Strengthening Minnesota's Reuse Economy To Conserve Natural Resources	\$334,000	ReUse Minnesota	Jennifer Kedward
		Subtotal	\$6,205,000		
Subd. 08 Methods to Protect, Restore, and Enhance Land, Water, and Habitat \$6,429,000 18/88					
08a	2021-022	Camp Ripley Sentinel Landscape Forest Restoration And Enhancements	\$731,000	Crow Wing Soil and Water Conservation District	Melissa Barrick
08b	2021-039	Restoring Mussels In Streams And Lakes - Continuation	\$619,000	MN DNR, Ecological and Water Resources Division	Mike Davis
08c	2021-058	Pollinator Central II: Habitat Improvement With Community Monitoring	\$631,000	Great River Greening	Rebecca Tucker
08d	2021-062	Preserving Minnesota's Only Ball Cactus Population	\$103,000	U of MN, Landscape Arboretum	David Remucal
08e	2021-065	Phase 2 - Prescribed-Fire Management For Roadside Prairies	\$217,000	Minnesota Department of Transportation	Nathan Johnson
08f	2021-084	Restoring Upland Forests For Birds	\$193,000	American Bird Conservancy	Kevin Sheppard
08g	2021-097	Minnesota Green Schoolyards	\$250,000	The Trust for Public Land	Eric Weiss

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08h	2021-137	Plumbing The Muddy Depths Of Superior Hiking Trail	\$187,000	Superior Hiking Trail Association	Lisa Luukkala
08i	2021-212	Reducing Plastic Pollution With Biodegradable Erosion Control Products	\$200,000	Agricultural Utilization Research Institute	Riley Gordon
08j	2021-223	Remote Sensing And Super-Resolution Imaging Of Microplastics	\$309,000	U of MN, St. Anthony Falls Laboratory	Ardeshir Ebtehaj
08k	2021-229	Woodcrest Trail Expansion And Prairie Restoration	\$16,000	Country Manor Campus, LLC	Sara Gabrielson
08l	2021-231	Urban Pollinator And Native American Cultural Site Restoration	\$213,000	Friends of the Mississippi River	Betsy Daub
08m	2021-280	Economic And Ecological Benefits Of Soil Health	\$288,000	Redwood Soil & Water Conservation District	Scott Wold
08n	2021-308	Creating Cost-Effective Forage And Management Actions For Pollinators	\$198,000	U of MN, College of Food, Agricultural and Natural Resource Sciences	Daniel Cariveau
08o	2021-322	Shoreline Stabilization, Fishing, ADA Improvements At Silverwood Park	\$200,000	Three Rivers Park District	Jonathan Vlaming
08p	2021-337	Lawns To Legumes Program Phase 2	\$993,000	Board of Water and Soil Resources	Dan Shaw
08q	2021-375	Reintroduction Of Bison To Spring Lake Park Reserve	\$560,000	Dakota County	Tom Lewanski
08r	2021-377	Elm Creek Habitat Restoration Final Phase	\$521,000	City of Champlin	Todd Tuominen
		Subtotal	\$6,429,000		
Subd. 09 Land Acquisition, Habitat and Recreation \$32,062,000 22/88					
09a	2021-012	Perham To Pelican Rapids Regional Trail (Mcdonald Segment)	\$2,245,000	Otter Tail County	Matthew Yavarow
09b	2021-028	Mesabi Trail Csa# 88 To Ely	\$1,650,000	St. Louis & Lake Counties Regional Railroad Authority	Robert Manzoline
09c	2021-029	SW MN Single Track Trail	\$190,000	Jackson County	Jeremy Bartosh
09d	2021-043	Local Parks, Trails And Natural Areas Grant Programs	\$2,250,000	MN DNR, Grants Unit	Audrey Mularie
09e	2021-049	Metropolitan Regional Parks System Land Acquisition- Phase 7	\$2,250,000	Metropolitan Council	Jessica Lee
09f	2021-069	Sauk Rapids Rapids Project Lions Park	\$463,000	City of Sauk Rapids	Todd Schultz
09g	2021-092	City Of Brainerd - Mississippi Landing Trailhead	\$2,850,000	City of Brainerd	David Chanski
09h	2021-105	Native Prairie Stewardship & Prairie Bank Easement Acquisition	\$1,341,000	MN DNR, Ecological and Water Resources Division	Judy Schulte
09i	2021-109	Moose Lake - Trunk Highway 73 Trail	\$330,000	City of Moose Lake	Katie Bloom
09j	2021-151	SNA Acquisition, Restoration, Citizen-Science And Outreach	\$3,336,000	MN DNR, Ecological and Water Resources Division	Molly Roske
09k	2021-154	Precision Acquisition For Restoration, Groundwater Recharge And Habitat.	\$467,000	Shell Rock River Watershed District	Courtney Phillips
09l	2021-222	Lake Brophy Trail Expansion	\$100,000	Douglas County	Brad Bonk

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09m	2021-325	Veterans On The Lake	\$553,000	Veterans on the Lake	Neil Olson
09n	2021-329	Voyageur National Park Crane Lake Visitors Center Project	\$2,700,000	Town of Crane Lake	JoAnn Pohlman
09o	2021-330	Brookston Campground, Boat Launch & Outdoor Recreational Facility Final	\$425,000	City of Brookston	Kaycee Melin
09p	2021-332	Moose/Seven Beaver Multi-Use Trail Upgrade	\$900,000	City of Hoyt Lakes	Rebecca Burich
09q	2021-338	Above The Falls Regional Park Acquisition And Restoration	\$950,000	Minneapolis Parks and Recreation Board	Adam Arvidson
09r	2021-339	Silver Lake Trail Improvement Project	\$1,071,000	City of Virginia	Britt See-Benes
09s	2021-362	Minnesota State Trails Development	\$4,266,000	MN DNR, State Parks and Trails Division	Kent Skaar
09t	2021-363	Highbanks Ravine Bat Habernaculum Project	\$825,000	City of St. Cloud	Lisa Vollbrecht
09u	2021-371	State Parks And State Trails In-Holdings	\$2,560,000	MN DNR, State Parks and Trails Division	Brandon Helm
09v	2021-380	Accessible Fishing Piers And Shore Fishing Areas	\$340,000	MN DNR, State Parks and Trails Division	Nancy Stewart
		Subtotal	\$32,062,000		SubTotal
Subd. 10 Administrative and Emerging Issues \$2,120,000 4/88					
10a	2021-027	ML 2021 Contract Agreement Reimbursement	\$135,000	MN DNR, Grants Unit	Katherine Sherman-Hoehn
10b	n/a	LCCMR Budget FY22-FY23	\$1,750,000	LCCMR	Becca Nash
10c	n/a	Emerging Issues Account	\$233,000	LCCMR	Becca Nash
10d	n/a	Legislative Coordinating Commission (LCC) Administration	\$2,000	LCC	Sally Olson
		Subtotal	\$2,120,000		
		Total	\$70,881,000		