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

Draft Work	Original Proposal		Total ENRTF \$		
Plan Subd.	ENRTF ID	Title	FY2022	Organization	Project Manager
Subd. 03 Found	dational Natu	rral 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
		Protecting Minnesota's Beneficial Macroalgae: All Stoneworts		MN DNR, Ecological and Water	
03b	2021-055	Aren't Starry	\$811,000	Resources Division	Donna Perleberg
				MN DNR, Ecological and Water	
03c	2021-071	County Groundwater Atlas	\$1,875,000	Resources Division	Paul Putzier
		Improving Resiliency And Conservation Outcomes For			
03d	2021-087	Minnesota Turtles	\$391,000	Minnesota Zoological Society	Tricia Markle
				MN DNR, Ecological and Water	
03e	2021-113	Minnesota Biological Survey: Setting A Future Course	\$1,500,000	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
		Redwood County Rim Easement Evaluation And Public		Redwood Soil & Water Conservation	
03h	2021-140	Outreach	\$197,000	District	Kristy Zajac
				MN DNR, Ecological and Water	, ,
03i	2021-159	Collaborative State And Tribal Wild Rice Monitoring Program	\$644,000	Resources Division	Josh Knopik
		Morrison County Performance Drainage And Hydrology		Morrison Soil and Water	
03j	2021-238	Management II	\$197,000	Conservation District	Shannon Wettstein
		Preserving Minnesota's Wetlands: Our Resource For Future			
03k	2021-278	Medicine	\$210,000	U of MN, Crookston	Brian Dingmann
			4400.000	U of MN, College of Food, Agricultural	
031		A Biodiversity Checkup For Minnesota's Big Woods	\$109,000		Lee Frelich
03m	2021-321	Microbiome In Raptors: A New Tool For Conservation	\$129,000	U of MN, Raptor Center	Julia Ponder
		Bioacoustics For Broad-Scale Species Monitoring And	4	U of MN, College of Food, Agricultural	
03n	2021-396	Conservation	\$305,000	and Natural Resource Sciences	Elena West
		A	\$10,459,000		
		\$4,771,000 10/88	44.4		
04a	2021-050	Trout Stream Habitat Restoration Success	\$319,000	U of MN, Duluth - NRRI	Valerie Brady
		Novel Nutrient Recovery Process From Wastewater Treatment	4	U of MN, College of Food, Agricultural	
04b	2021-115	Plants	\$200,000		Bo Hu
		Monitoring Emerging Viruses In Minnesota's Urban Water		U of MN, College of Biological	
04c	2021-121	Cycles	\$416,000		Sebastian Behrens
		Microgeographic Impact Of Antibiotics Released From		U of MN, College of Veterinary	
04d	2021-144	Identified Hotspots	\$508,000	Medicine	Randall Singer

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Draft Work Plan Subd.	Proposal ENRTF ID	Title	Total ENRTF \$ FY2022	Organization	Project Manager
0.4 -	2024 200	Sustainable Irrigation Management: Expanding A Statewide	¢1 120 000	U of MN, College of Food, Agricultural	Davie e Diversit
04e	2021-266	Web Application	\$1,139,000	and Natural Resource Sciences  Minnesota State Colleges and	Bryan Runck
		Assessing Membrane Bioreactor Wastewater Treatment		Universities, St. Cloud State	
04f	2021-358	Efficacy	\$419,000	· ·	Heiko Schoenfuss
041	2021-336	Lineacy	3419,000	University	Heiko Schoeniuss
		Evaluating Coronavirus And Other Microbiological		U of MN, College of Science and	
04g	2021-364	Contamination Of Drinking Water Sources From Wastewater	\$594,000	_	Timothy LaPara
04h	2021-376	St. James Pit Water Level Control	\$259,000	<u> </u>	Becky Lammi
		Long-Term Nitrate Mitigation By Maintaining Profitable Kernza	,,	Stearns County Soil and Water	
04i	2021-384	Production	\$485,000		Dennis Fuchs
		Antibiotic Resistance And Wastewater Treatment: Problems			
04j	2021-390	And Solutions	\$432,000	University of St. Thomas	Justin Donato
			\$4,771,000		
Subd. 05 Envir	onmental Ed	ucation \$2,687,000 7/88			
				Wolf Ridge Environmental Learning	
05a	2021-042	Increasing Outdoor Learning For Young Minnesotans	\$383,000	Center	Peter Smerud
				U of MN, College of Food, Agricultural	
05b	2021-131	Pollinator Education In The Science Classroom	\$366,000	and Natural Resource Sciences	Elaine Evans
		Minnesota Freshwater Quest: Environmental Education For			
05c	2021-132	20000 Youth	\$699,000	Wilderness Inquiry	Julie Edmiston
05.4	2024 475	NAISSE STATE NAISSE NICKE STATE STAT	¢202.000	U of MN, College of Food, Agricultural	Dalaant Diata
05d	2021-175	Minnesota Master Naturalist: Nature For New Minnesotans	\$293,000	and Natural Resource Sciences	Robert Blair
05e	2021-186	The Voyageurs Classroom Initiative	\$348.000	Voyageurs National Park Association	Christina Hausman Rhode
		Restoring Land, Reviving Heritage: Conservation Through	72.2,300	, 0	
05f	2021-320	Indigenous Culture	\$420,000	Belwin Conservancy	Katie Bloome
		Expanding Access To Environmental Education For Underserved	· ,	·	
05g	2021-323	Communities	\$178,000	U of MN, Raptor Center	Julia Ponder
			\$2,687,000		
Subd. 06 Aqua	tic and Terre	strial Invasive Species \$6,148,000 7/88			
				Minnesota State Colleges and	
				Universities, Minnesota State	
		Starch Allocation Patterns Of Starry Stonewort (Nitellopsis		University Mankato - Department of	
06a	2021-017	Obtusa) Harvested From Lake Koronis, MN	\$101,000	Biological Sciences	Ryan Wersal

Draft Work	Original Proposal		Total ENRTF \$		
Plan Subd.	ENRTF ID	Title	FY2022	Organization	Project Manager
06b	2021 001	Long Torm Efficacy Of Invasive Removal In Floodplain Forests	¢3E 000	Macalester College	Mike Anderson
UOD	2021-091	Long-Term Efficacy Of Invasive Removal In Floodplain Forests	\$25,000	Macalester College  Morrison Soil and Water	Mike Anderson
06c	2021-162	Oak Wilt Suppression At The Northern Edge II	\$423,000		Shannon Wettstein
				U of MN, College of Food, Agricultural	
06d	2021-164	Biocontrol Of Bee Lawns And Parklands	\$425,000		Vera Krischik
06e	2021-104	Building Knowledge And Capacity For AIS Solutions	\$3,750,000		Nicholas Phelps
000	2021 100	building knowledge And capacity For Als solutions	\$3,730,000	o or with walste	Micholas i neips
				U of MN, College of Food, Agricultural	
06f	2021-217	Evaluating Minnesotas Last Best Chance To Stop Carp	\$424,000		Peter Sorensen
			ψ,,000	Minnesota Lakes and Rivers	
06g	2021-313	Stop Starry Invasion - Community Invasive Species Containment	\$1,000,000		Jeff Forester
		, ,	\$6,148,000		
Subd. 07 Air Q	uality, Climat	te Change, and Renewable Energy \$6,205,000 6/88			
		Enhanced Thermo-Active Foundations For Space Heating In			
07a	2021-010	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
		Behavioral Response Of Bald And Golden Eagles To Acoustic			
07d	2021-294	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
		Strengthening Minnesota's Reuse Economy To Conserve			
07f	2021-402	Natural Resources	\$334,000	ReUse Minnesota	Jennifer Kedward
			\$6,205,000		
Subd. 08 Meth	ods to Prote	ct, Restore, and Enhance Land, Water, and Habitat \$6,429,000 1	.8/88		
		Camp Ripley Sentinel Landscape Forest Restoration And		Crow Wing Soil and Water	
08a	2021-022	Enhancements	\$731,000		Melissa Barrick
				MN DNR, Ecological and Water	
08b	2021-039	Restoring Mussels In Streams And Lakes - Continuation	\$619,000	Resources Division	Mike Davis
		Pollinator Central II: Habitat Improvement With Community			
08c	2021-058	Monitoring	\$631,000		Rebecca Tucker
08d	2021-062	Preserving Minnesota's Only Ball Cactus Population	\$103,000	·	David Remucal
				Minnesota Department of	
08e	2021-065	Phase 2 - Prescribed-Fire Management For Roadside Prairies	\$217,000		Nathan Johnson
08f	2021-084	Restoring Upland Forests For Birds	\$193,000	American Bird Conservancy	Kevin Sheppard

Draft Work Plan Subd.	Original Proposal ENRTF ID	Title	Total ENRTF \$ FY2022	Organization	Project Manager
08g	2021-097	Minnesota Green Schoolyards	\$250,000	The Trust for Public Land	Eric Weiss
08h	2021-137	Plumbing The Muddy Depths Of Superior Hiking Trail	\$187,000	Superior Hiking Trail Association	Lisa Luokkala
		Reducing Plastic Pollution With Biodegradable Erosion Control		Agricultural Utilization Research	
08i	2021-212	Products	\$200,000	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		Sara Gabrielson
081	2021-231	Urban Pollinator And Native American Cultural Site Restoration	\$213,000		Betsy Daub
00	2024 202		4000 000	Redwood Soil & Water Conservation	
08m	2021-280	Economic And Ecological Benefits Of Soil Health	\$288,000	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
		Shoreline Stabilization, Fishing, ADA Improvements At			
080	2021-322	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		Todd Tuominen
			\$6,429,000		
Subd. 09 Land	Acquisition f	or 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 Csah 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		Katie Bloom
09j		SNA Acquisition, Restoration, Citizen-Science And Outreach	\$3,336,000	MN DNR, Ecological and Water	Molly Roske

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Draft Work	Proposal		Total ENRTF \$		
Plan Subd.	ENRTF ID	Title	FY2022	Organization	Project Manager
09k	2021-154	Precision Acquisition For Restoration, Groundwater Recharge And Habitat.	¢467.000	Chall Book Biver Wetershad District	Carreta or Dhilling
			. ,	Shell Rock River Watershed District	Courtney Phillips  Brad Bonk
091	2021-222	Lake Brophy Trail Expansion	\$100,000	Douglas County	
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
		Brookston Campground, Boat Launch & Outdoor Recreational			
09o	2021-330	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
				Minneapolis Parks and Recreation	
09q	2021-338	Above The Falls Regional Park Acquisition And Restoration	\$950,000	Board	Adam Arvidson
09r	2021-339	Silver Lake Trail Improvement Project	\$1,071,000	City of Virginia	Britt See-Benes
				MN DNR, State Parks and Trails	
09s	2021-362	Minnesota State Trails Development	\$4,266,000	Division	Kent Skaar
09t	2021-363	Highbanks Ravine Bat Habernaculum Project	\$825,000	City of St. Cloud	Lisa Vollbrecht
				MN DNR, State Parks and Trails	
09u	2021-371	State Parks And State Trails In-Holdings	\$2,560,000	Division	Brandon Helm
				MN DNR, State Parks and Trails	
09v	2021-380	Accessible Fishing Piers And Shore Fishing Areas	\$340,000	Division	Nancy Stewart
			\$32,062,000		SubTotal
Subd. 10 Admi	nistrative and	d 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
	, ч		\$2,120,000		22, 0.30
		Total	\$70,881,000		
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