M.L. 2018 Environment and Natural Resources Trust Fund Recommendations (FY 2019) Additional Information

					Average Score -			% Recom'd				
	ENRTF				Members that		LCCMR \$	of \$				
Subd.	ID #	Project Title	Organization	Project Manager	Scored	\$ Request	Recommended	Request	Comments related to funding level recommended by the LCCMR			
Subd.	Subd. 03 Foundational Natural Resource Data and Information (12 Recommendations /					Subtotal \$7,293,000)						
03a	001-A	County Geologic Atlases - Part A	U of MN - MN Geological Survey	Setterholm, Dale	6.53	\$4,121,000	\$2,500,000	61%	Scalable, fewer atlases completed.			
03b	002-A	County Geologic Atlases - Part B	MN DNR	Putzier, Paul	6.12	\$2,400,000	\$1,500,000	63%	Scalable, fewer atlases completed.			
03c	003-A	Providing Critical Water Quality Information for Lake Management	U of MN	Peterson, Jeffrey	5.24	\$477,000	\$250,000	52%	Focus on activity 1 (Build methods for near time measuring of water quality with remote sensing) and figure out how to do some outreach at this budget.			
03d	004-A	Minnesota Biodiversity Atlas - Phase 2	U of MN	Weiblen, George	5.18	\$496,000	\$350,000	71%	Will retain all proposed project partners but digitize approximately 30% fewer collections than initially proposed. Will still nearly double the size of the Atlas and release the mobile app.			
03e	006-A	Peatland Forest Management	U of MN	Windmuller-Campione, Marcella	5.29	\$698,000	\$600,000	86%	Scalable			
03f	013-A	Assessing Natural Resource Benefits Provided by Lichens and Mosses	U of MN	Stanton, Daniel	5.29	\$213,000	\$213,000	100%	Full funding			
03g	014-A	Develop a System to Assess Wildlife Health Threats in Minnesota	U of MN	VanderWaal, Kimberly	5.69	\$280,000	\$280,000	100%	Full funding			
03h	016-A	Conservation of Minnesota's Forest Birds of Management Concern	U of MN - Duluth NRRI	Grinde, Alexis	5.41	\$613,000	\$500,000	82%	Scalable including fewer transmitters deployed.			
03i	018-A	Mapping Avian Movement in Minnesota	U of MN - Duluth NRRI	Niemi, Gerald	4.94	\$682,000	\$200,000	29%	Cover smaller geographic area and make more of pilot project to test for later statewide implementation.			
03j	022-A	Improve Trout Stream Management by Understanding Variable Winter Thermal Conditions	U of MN	Ferrington, Leonard	5.06	\$499,000	\$400,000	80%	Scalable			
03k	011-A	Conserving Minnesota's Nine Species of Freshwater Turtles	Minnesota Zoological Garden	Stapleton, Seth	5.19	\$364,000	\$300,000	82%	Scalable			
031	030-A	Develop Sonar Data Mapping on Three Rivers to Assess Native Mussel Habitat Suitability	National Park Service	Duncan, Nancy	5.19	\$309,000	\$200,000	65%	Decrease the number of river miles to be surveyed with a focus on area most likely to have viable mussel habitat.			
					Subtotal	\$11,152,000	\$7,293,000					
Subd.	04 Wat	er Resources (11 Recommendation	s / Subtotal \$5,275,00	00)								
04a	035-B	Pilot Program to Optimize Local Mechanical and Pond Wastewater Treatment Plants	Minnesota Pollution Control Agency	Peck, Joel	8.00	\$779,000	\$700,000	90%	Scalable, original proposal was \$236,000 before pond systems and more outreach were added.			
04b	034-В	Assess and Develop Strategies to Remove Microscopic Plastic Particle Pollution from Minnesota Water Bodies	U of MN	Coletti, Filippo	5.29	\$388,000	\$300,000	77%	Scalable			

					Average Score -			% Recom'd	
Cuba	ENRTF		Orreguization	Ducient Menoreu	Members that	ć Desuvest	LCCMR \$	of \$	Comments related to funding level recommended by the LCCMD
Subd. 04c	ID # 037-B	Project Title Reduce Chlorides in Minnesota Waters by	Organization U of MN	Project Manager Gulliver, John	Scored 6.38	\$ Request \$521,000	Recommended \$400,000	Request 77%	Comments related to funding level recommended by the LCCMR Focus on Activity 1 (Synthesize past and current research efforts) and Activity 2
040	057-В	Evaluating Road Salt Alternatives and Pavement		Guiller, John	0.38	\$321,000	\$400,000	11/0	(Pavement friction tests as alternatives to using salts). Activity 3 (field testing)
		Innovations							removed but they will seek funding through a MnDot program specific to funding
									testing alternatives.
04d	041-B	Protect Water Quality with Efficient Removal of Contaminants in Storm Water Treatment Ponds	St. Cloud State University	Schoenfuss, Heiko	6.94	\$377,000	\$325,000	86%	Scalable
04e	048-B	Develop a Small and Inexpensive Community	U of MN	Cui, Tianhong	6.38	\$496,000	\$425,000	86%	Scalable
		Drinking Water Purification System							
						4055 000	4000 000		
04f	054-B	Evaluate Emerging Pathogens in Lakes, Rivers, and Tap Water to Keep Drinking Water Safe	U of MN	LaPara, Timothy	6.56	\$355,000	\$325,000	92%	Scalable
04g	064-B	Characterize Unregulated Contaminants in	Minnesota Department of	Robertson, Stephen	5.24	\$2,107,000	\$1,000,000	47%	Focus on more on surface water but will make sure to keep in some ground water.
-		Source Water and Drinking Water	Health						Fewer repetitions. Likely reduce geographic reach and reduced sampling/testing of
						<u> </u>	Á750.000	0404	water samples.
04h	039-В	Mapping Antibiotic Resistance in Minnesota to Help Protect Environmental, Animal, and Human	U of MN	Singer, Randall	5.50	\$921,000	\$750,000	81%	Scalable
		Health							
04i	055-B	Farmer-led Expansion of Alfalfa Production to	U of MN	Jordan, Nicholas	4.50	\$752,000	\$500,000	66%	Focus on core activities. Reduced water quality monitoring, less economic analysis
		Increase Water Protection							and reduced effort on value-added products.
04j	057-В	Using Perennial Grain Crops in Wellhead	Minnesota Department of	Wagner, Margaret	3.88	\$759,000	\$250,000	33%	Focus on planting Kernza demonstration areas with more limited evaluations. Will
		Protection Areas to Protect Groundwater	Agriculture						no longer develop a Kernza enterprise budget, reduce experiments related to water use and hydrology, and eliminate the crop simulation and water balance
									models.
04k	094-B	Implement a Pilot Storm Water Credit Trading	Shell Rock River Watershed	Christensen, Courtney	5.44	\$350,000	\$300,000	86%	Scalable
		System in the Shell Rock River Watershed to	District						
		Improve Water Quality							
					Subtotal	\$7,805,000	\$5,275,000		
Subd.	05 Envi	ronmental Education (12 Recomme	ndations / Subtotal \$	5,168,000)					
05a	109-C	Prairie Sportsman Statewide Environmental Broadcasts and Videos	Pioneer Public Television	Bakken, Timothy	7.00	\$300,000	\$300,000	100%	Full funding
05b	106-C	YES! Students Take on Minnesota Water Quality Challenge	Prairie Woods Environ. Learning Center	Foster, Shelli-Kae	7.13	\$213,000	\$213,000	100%	Full funding
05c	112-C	Get Outdoors after School Training	Project Get Outdoors Inc	Holger, Sara	7.25	\$30,000	\$30,000	100%	Full funding
05d	101-C	Connecting Students with Water Stewardship through Hands-on Learning	Minnesota Trout Unlimited	Lenczewski, John	5.38	\$581,000	\$400,000	69%	Scalable - fewer students involved.
05e	121-C	Expanding River Watch Program on the	Friends of the Minnesota	Suss, Ted	5.81	\$103,000	\$100,000	97%	Almost full funding
		Minnesota River With High School Teams	Valley			4			
05f	099-C	Increase Diversity in Environmental Careers to Serve Minnesota's Changing Demographics	MN DNR	Legato, Denise	6.29	\$1,000,000	\$750,000		Would match with ML 2017 5b \$487,000. The DNR is waiting for these additional funds before it starts spending ML 2017.
				l					

Subd.	ENRTF ID #	Project Title	Organization	Project Manager	Average Score - Members that Scored	\$ Request	LCCMR \$ Recommended	% Recom'd of \$ Request	Comments related to funding level recommended by the LCCMR
05g	102-C	Pollinator Ambassadors Program for Gardens	U of MN	Evans, Elaine	5.94	\$421,000	\$250,000	-	Scalable - fewer educators and students involved.
05h	118-C	Morris Prairie Pollinator Demonstration Area and Education	U of MN	Poppe, Steven	5.00	\$681,000	\$550,000	81%	Scalable
05i	120-C	Expanding Nature Knowledge and Experience with New Interactive Exhibits at North Mississippi Regional Park	Minneapolis Parks and Recreation Board	Pulscher, MaryLynn	6.06	\$865,000	\$500,000	58%	Will scale back unless other funding can be secured to do full project.
05j	127-C	Update International Wolf Center Exhibits	International Wolf Center	Kline, David	5.56	\$1,200,000	\$1,000,000	83%	Will scale back unless other funding can be secured to do full project
05k	108-C	Expanding the State's Reuse Economy to Conserve Natural Resources	ReUSE Minnesota	Thomas, Steve	5.69	\$363,000	\$275,000	76%	Scalable
051	164-E	Expand Materials Reuse and Recycling Jobs Program	The NetWork for Better Futures MN	Swaggert, Nick	5.81	\$1,151,000	\$800,000	70%	Scalable, fewer buildings deconstructed and fewer people employed.
					Subtotal	\$6,908,000	\$5,168,000		
Subd.	06 Aqua	atic and Terrestrial Invasive Species	(6 Recommendations	s / Subtotal \$5,76	60,000)				
06a	132-D	Minnesota Invasive Terrestrial Plants and Pests Center - Phase 4	U of MN	Venette, Robert	5.76	\$7,000,000	\$3,500,000	50%	Scalable, fewer TIS research projects will be funded through the center.
06b	141-D	Palmer Amaranth Detection and Eradication Continuation	Minnesota Department of Agriculture	Chandler, Monika	6.06	\$431,000	\$431,000		Full funding
06c	152-D	Evaluate Control Methods for Invasive Hybrid Cattails	Voyageurs National Park	Windels, Steve	6.24	\$131,000	\$131,000	100%	Full funding
06d	133-D	Developing RNA Interference to Control Zebra Mussels	U.S. Geological Survey	Merkes, Christopher	6.06	\$716,000	\$500,000	70%	Viable project but without activity 2 (microparticle development) and reduced number of RNAi target genes tested.
06e	134-D	Install and Evaluate an Invasive Carp Deterrent for Mississippi River Locks and Dams	U of MN	Sorensen, Peter	5.35	\$998,000	\$998,000	100%	Full funding
06f	139-D	Determining Risk of a Toxic Algal in Minnesota Lakes	Science Museum of MN - St. Croix Research Station	Heathcote, Adam	5.41	\$243,000	\$200,000	82%	Scaled back from the 24 lakes to 20 and also eliminated outreach efforts but will look for other ways to do the outreach.
					Subtotal	\$9,519,000	\$5,760,000		
Subd.	07 Air C	Quality, Climate Change, and Renew	able Energy (3 Recom	mendations / Su	btotal \$1,200,0	00)			
07a	158-E	Develop Solar Window Concentrators for Electricity	U of MN	Kortshagen, Uwe	5.88	\$458,000	\$350,000	76%	Reduce graduate student effort which may slow down and reduce the research effort. Not purchase the solar simulator equipment require performing these measurements only on sunny days which will slow progress.
07b	159-E	Community-Scale Renewable Energy Storage System Demonstrations	U of MN	Anderson, Ellen	5.44	\$625,000	\$550,000	88%	Scalable
07c	160-E	Develop Inexpensive Energy from Simple Roll-to- Roll Manufacturing	The University of Minnesota	Cui, Tianhong	5.94	\$388,000	\$300,000	77%	Scalable
					Subtotal	\$1,471,000	\$1,200,000		

					Average Score -			% Recom'd	
Subd.	ENRTF ID #	Project Title	Organization	Project Manager	Members that Scored	\$ Request	LCCMR \$ Recommended	of \$ Request	Comments related to funding level recommended by the LCCMR
08a		Nongame Wildlife Program Acceleration	MN DNR	Henderson, Carrol	5.06	\$2,000,000	\$1,000,000	50%	Scalable
08b	195-F	Develop BioMulch to Replace Plastic Soil Covering in Vegetable and Fruit Production to Increase Yield and Reduce Waste	U of MN - Southwest Research and Outreach Center Lamberton	Pagliari, Paulo	7.18	\$310,000	\$310,000	100%	Full funding
08c	180-F	Develop Market-Based Alternatives for Perennial Crops to Benefit Water Quality and Wildlife	Science Museum of MN - St. Croix Research Station	Schottler, Shawn	3.94	\$347,000	\$150,000	43%	Scale back the number of market scenarios from 10 to 6 and reduced outreach.
08d	157-Е	Agricultural Weed Control Using Autonomous Mowers	U of MN - Morris	Reese, Michael	6.69	\$600,000	\$550,000	92%	Almost fully funded.
08e	182-F	Restoring Forests in Minnesota State Parks	MN DNR	Quinn, Edward	5.47	\$432,000	\$250,000	58%	Scalable, reduced number of acres restored.
08f		Develop Timber Harvest Strategies to Minimize Soil Impacts to Maintain Healthy and Diverse Forests	U of MN	Slesak, Robert	4.24	\$396,000	\$200,000	51%	Eliminate Activity 1 (climate models), reduce the number of experimental sites from 10 to 7 (No sites would be located in SE Minnesota to reduce travel and other logistical costs).
08g	186-F	Restoring Wetland Invertebrates to Revive Wildlife Habitat	MN DNR	Larson, Danelle	5.29	\$417,000	\$400,000	96%	Almost fully funded
08h	179-F	Preserving and Restoring Minnesota's Native Orchids - Phase 2	U of MN	Remucal, David	5.41	\$468,000	\$259,000	55%	Fund Activity-1 Expand collection/preservation efforts to at least 30 species. To continue to move forward need to do some testing and propagating of the seed as they are brought in to bank. Scale back to a 2 year project from a 3 year project.
					Subtotal	\$4,970,000	\$3,119,000		
Subd.	09 Land	Acquisition for Habitat and Recrea	tion (12 Recommend	ations / \$17,439,	000)				
09a	201-G	Local Parks, Trails, and Natural Area Grants	MN DNR	Mularie, Audrey	7.00	\$3,000,000	\$2,000,000	67%	Scalable with fewer grants. Will focus on natural resource based recreation and not for athletic facilities such as sport fields, courts, and playgrounds.
09b	205-G	Develop a Mesabi Trail Segment From County Road 88 to Ely	St. Louis & Lake Counties Reg. Railroad Authority	Manzoline, Robert	7.41	\$600,000	\$600,000	100%	Full funding
09c	207-G	Harmony State Trail Extension Land Acquisition	City of Harmony	Illg, Jerome	8.12	\$235,000	\$235,000	100%	Full funding
09d		Mississippi Blufflands State Trail - Red Wing Barn Bluff to Colvill Park Segment	City of Red Wing	Owens, Jay	6.47	\$920,000	\$550,000		City will make work by looking for more "other" funding to complete the project.
09e		Swedish Immigrant Regional Trail Segment within Interstate State Park	Chisago County Environmental Services	Mork, Laird	5.18	\$2,254,000	\$2,254,000	100%	Full funding
09f		Superior Hiking Trail Enhancement Plan	Superior Hiking Trail Association	Caneff, Denny	6.88	\$100,000	\$100,000		Full funding
09g	213-G	Protecting Mississippi River Headwaters Lands through a Local State and Federal Partnership	City of Baxter	Doty, Josh	6.94	\$700,000	\$700,000	100%	Full funding
09h	215-G	Protecting North-Central Minnesota Lakes	Crow Wing SWCD	Barrick, Melissa	5.71	\$1,492,000	\$750,000	50%	Scalable - less out reach and fewer easements.

Subd. 09i	ENRTF ID # 203-G	Project Title Native Prairie Bank Easement Program	Organization MN DNR	Project Manager Schulte, Judy	Average Score - Members that Scored 6.24	\$ Request \$2,477,000	LCCMR \$ Recommended	% Recom'd of \$ Request 81%	Comments related to funding level recommended by the LCCMR Scalable
09j	202-G	Minnesota State Trail Development	MN DNR	Skaar, Kent	7.35	\$5,000,000	\$2,500,000	50%	Scalable - fewer project miles developed. Will work on Gateway tunnel and Gitchi Gami, will not include Paul Bunyan, Gateway-L'Orient realignment, Heartland or Gitchi Gami -Tettegouche segment.
09k	200-G	Minnesota State Parks and State Trails	MN DNR	Christie, Jennifer	5.88	\$5,000,000	\$2,500,000	50%	Scalable - will work on Tettagouche, Sibley, Minneopa, Goodhue-Pioneer trail, and/or Minneopa - will go down this list if any do not work out.
091	199-G	Scientific and Natural Areas Program	MN DNR	Pierce, Ann	6.35	\$6,760,000	\$3,250,000	48%	Activity 1 -Native Habitat Restoration, Enhancements and Improvements at \$1,500,000. Activity 2-Public Engagement, Outreach & Citizen Science in Natural Areas at \$500,000. Activity 3-Strategic Acquisition of Sites with Biodiversity Significance at \$1,250,000 and fee title acquisition of SNA's is to be in southern Minnesota from willing sellers and an equal number of acres of state land are sold elsewhere in the state.
					Subtotal	\$28,538,000	\$17,439,000		
Subd.	10 Othe	er (1 Recommendation / \$135,000)							
10a	217-H	Contract Agreement Reimbursement	MN DNR	Sherman-Hoehn, Katherine		\$135,000	\$135,000		
					Subtotal	\$135,000	\$135,000		
					TOTAL	\$70,498,000	\$45,389,000		

Note: Remaining Funds of \$439,000 have not been recommended for funding.