Attachment #5 2017 Environment and Natural Resources Trust Fund Proposals [legal size - YELLOW SHEET] JMULATIVE AVERAGE OF MEMBER PANKINGS - LICETED BY STATE -**CUMULATIVE AVERAGE OF MEMBER RANKINGS - LISTED BY OVERALL RANK - HIGH TO LOW**

Line #	Line #: Blue Sheet	ID#	Compiled Member Ranking (Out of 16)	Total # Members that Scored	Total # Members with Conflict	Project Title	\$ Requested	Organization	Project Manager
1		181-H	8.65	17	0	Contract Agreement Reimbursement	\$135,000		Sherman-Hoehn,
2	6	001-A	7.82	17	0	Minnesota Geological Survey Geologic Atlases for Water Management	\$3,784,700	U of MN - Minnesota Geological Survey	Katherine Setterholm, Dale
3	9	006-A	7.35	17	0	Minnesota Biological Survey	\$2,955,861	MN DNR	Carlson, Bruce
4	13	035-B	7.29	17	0	Rearing Native Mussels and Building Water Quality Awareness	\$591,925	Minnesota Zoo	Maguire, Allan
5	17	079-C	7.29	17	0	Floating Classroom: Connecting 20,000 Youth to Minnesota Waterways	\$1,240,730	Wilderness Inquiry	Lais, Greg
6	3	155-F	6.94	17	0	State Parks for Monarchs and Other Native Pollinators	\$672,159	MN DNR	Quinn, Edward
7	7	157-F	6.94	17	0	Roadside Prairie Prescribed Fire	\$345,000	Minnesota Department of Transportation	Graeve, Ken
8	4	009-A	6.82	17	0	Promoting Wild Rice Restoration Success by Examining Microbes	\$334,035	U of MN - Duluth NRRI	Chun, Chanlan
9	18	171-G	6.76	17	0	Minnesota State Parks and State Trails Land Acquisition	\$1,500,000	MN DNR	Christie, Jennifer
10	15	174-G	6.75	16	1	Leech Lake Natural Resource Multi-Benefit Conservation Acquisition	\$1,500,000	Leech Lake Division of Resource Management	Brown, Levi
11	11	170-G	6.65	17	0	SNA Acquisition, Restoration, Citizen Science and Engagement	\$6,022,220		Booth, Margaret (Peggy)
12	14	172-G	6.59	17	0	Native Prairie Stewardship and Prairie Bank Easement Acquisition	\$5,185,457	MN DNR	Schulte, Judy
13	5	128-E	6.53	17	0	Cheap Solar Energy from Simple Roll-to-Roll Manufacturing	\$388,852	U of MN	Cui, Tianhong
14	10	182-I	6.50	14	0	Minnesota Vegetative Buffer Assessment and Prioritization to Protect Water Quality	\$170,000	U of MN	Mulla, David
15	8	187-I	6.43	14	0	Solar Cells Manufacturing Research	\$388,000	U of MN	Cui, Tianhong
16	16	189-I	6.43	14	0	Geotargeted Distributed Clean Energy Initiative	\$800,000	Center for Energy and Environment	Nelson, Carl
17	12	100-C	6.41	17	0	Developing Watershed Stewardship in NW Minnesota Youth	\$71,861	Headwaters Science Center	Joy, Susan
18	21	183-I	6.40	15	0	Techniques for Water Storage Estimates in Central Minnesota	\$250,000	U of MN	Nieber, John
19	22	176-G	6.35	17	0	Mesabi Trail, Wetland Crossing and Bridge Rehab	\$1,231,500	St Louis and Lake Counties Regional Railroad Authority	Manzoline, Robert
20	20	188-I	6.33	15	0	High-Resolution Climate Projections to Aid Local Planning and Implementation Efforts	\$411,000	U of MN	Snyder, Peter
21	32	015-A	6.29	17	0	Non-Invasive Moose Calf Surveys and Ecosystem Monitoring	\$348,151	U of MN	Ditmer, Mark
22	26	082-C	6.29	17	0	Increasing Diversity in Environmental Careers: Fellowships, Internships, Mentorships	\$1,487,519	MN DNR	Getchell, Vikki
23	30	190-I	6.27	15	0	State Parks and Trails Land Acquisition	\$2,445,000	MN DNR	Christie, Jennifer
24	25	033-В	6.24	17	0	Household Chemicals as Water Pollutants and Toxic Precursors	\$236,000	U of MN	Arnold, William
25	35	092-C	6.18	17	0	Bird City - Education for Lasting Conservation	\$280,000	Audubon Minnesota	Eckles, Joanna
26	29	108-D	6.18	17	0	EAB Biocontrol Phase III: Assessment and Citizen Engagement	\$729,540	Minnesota Department of Agriculture	Osthus, Jonathan
27	23	002-A	6.12	17	0	What are the Public Benefits of Protecting Sourcewater?	\$320,000	U of MN	Keeler, Bonnie
28	27	007-A	6.06	17	0	Continue Expansion of the Minnesota Wildflowers Online Botanical Reference	\$270,470	Minnesota Wildflowers Information	Chayka, Catherine
29	37	034-B	6.06	17	()	Innovative Nitrogen Removal Technology to Protect Water Quality	\$476,100	U of MN	Novak, Paige
30	31	048-B	6.00	17	0	Reassessing Toxicity of Petroleum Spills with New Technologies	\$423,189	University of St. Thomas	Martinovic-Weigelt, Dalma
31	28	119-D	5.94	17	0	Adapting Stream Barriers to Remove Invasive Fish	\$381,150	U of MN	Bajer, Przemyslaw
32	34	107-D	5.82	17	0	Implementing Biological Control of Garlic Mustard	\$421,987	U of MN	Becker, Roger
33	24	153-F	5.82	17	0	Promoting Conservation Biocontrol of Beneficial Insects	\$399,000	U of MN	Krischik, Vera
34	36	059-В	5.76	17	0	Chemicals of Emerging Concern in Minnesota Fish	\$436,922	Grand Portage Band of Lake Superior Chippewa	Moore, Seth
35	33	106-D	5.76	17	0	Using Science to Solve Minnesota's AIS problems - Phase II	\$6,100,000		Galatowitsch, Susan
36	39	158-F	5.76	17	0	MN Honey Bee & Monarch Butterfly Partnership	\$732,162	Pheasants Forever	Holland, Matt
37	46	184-I	5.73	15	0	Assessing Climate Change Effects on Release of Mercury and Sulfur into Aquatic Ecosystems	\$300,000	U of MN	Nater, Ed
38	41	131-E	5.71	17	0	Enabling Extraction of Solar Thermal Energy in Minnesota	\$351,040	U of MN	Coletti, Filippo
39	45	160-F	5.69	16		Restoring 83-acres of Prairie, Savanna & Forest Habitat	\$213,450	Friends of the Mississippi River	Lewanski, Tom

Attachment #5 2017 Environment and Natural Resources Trust Fund Proposals [legal size - YELLOW SHEET] JMULATIVE AVERAGE OF MEMBER PANISHES. LICENS TO SEE **CUMULATIVE AVERAGE OF MEMBER RANKINGS - LISTED BY OVERALL RANK - HIGH TO LOW**

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Line #	Line #: Blue Sheet	ID#	Compiled Member Ranking (Out of 16)	Total # Members that Scored	Total # Members with Conflict	Project Title	\$ Requested	Organization	Project Manager
40		185-I	5.67	15	0	Workshops and Outreach for Nontoxic	\$133,000	U of MN	Ponder, Julia
41		017-A	5.65	17	0	Ammunition Alternatives Effects of Wolves on Beavers, Moose, and Deer	\$293,000	Voyageurs National Park	Windels, Steve
						Tactical Invasive Plant Management Plan		Minnesota Department of	·
42		122-D	5.65	17	0	Development Providing Residential Environmental Learning	\$296,832	Agriculture Audubon Center of the North	Chandler, Monika
43	42	101-C	5.63	16	1	Experiences to Under-Served Students	\$130,000	Woods	Wood, Bryan
44	40	003-A	5.59	17	0	Minnesota Trumpeter Swan Migration Ecology and Conservation	\$462,433	U of MN	Andersen, David
45	43	154-F	5.59	17	0	Restoring and Preserving Savanna Using Bison	\$388,000	Cedar Creek Ecosystem Science Reserve, U of MN	Tilman, David
46	49	016-A	5.56	16	1	Cascading Effects of Wolf Recolonization	\$398,000	U of MN	Isbell, Forest
47	54	012-A	5.53	17	0	Mapping Groundwater Contamination: Accessible Data to Protect Resources	\$480,000	МРСА	Neve, Hans
48	53	084-C	5.53	17	0	Bridging Classroom and Outdoor Learning by Studying Birds	\$270,740	U of MN	Ponder, Julia
49	51	129-E	5.47	17	0	Community-Scale Energy Storage Guide for Clean Energy	\$625,478	U of MN	Anderson, Ellen
50	60	031-A	5.44	16	0	Minnesota's Freshwater Sponges: Mapping Taxonomy and Environmental Toxicology	\$258,000	U of MN	Mukku, Venugopal
51	58	044-B	5.44	16	1	Responsive Water Quality Monitoring: SEern Minnesota Trout Streams	\$583,980	Winona State University	Mundahl, Neal
52	62	114-D	5.29	17	0	Continuation of Invasive Carp and Native Fish Evaluation	\$739,064	MN DNR	Parsons, Bradford
53	56	132-E	5.29	17	0	Deploying New Technology to Understand Urban Air Pollution	\$981,564	MPCA	Vadali, Monika
54	61	123-D	5.18	17	0	Maximize Value of Water Impoundments to Wildlife	\$195,000	Audubon Minnesota	Hall, Kristin
55	59	004-A	5.13	16	1	Healthy Prairies II: Preserving MN Prairie Plant Diversity	\$938,000	U of MN	Shaw, Ruth
56	52	152-F	5.12	17	0	Optimizing the Nutrition of Roadside Plants for Pollinators	\$815,000	U of MN	Snell-Rood, Emilie
57	55	161-F	5.00	17	0	Restoring Our Metro Lands and Waters: MeCC 10	\$524,400	Great River Greening	Buck, Wiley
58	57	169-G	5.00	17	0	Metropolitan Regional Parks System Land Acquisition	\$2,400,000	Metropolitan Council	Streets Jensen, Deborah
59	72	038-B	4.94	17	0	Removing Plastic Particle Pollution from Minnesota Water Bodies	\$359,540	U of MN	Coletti, Filippo
60	64	051-B	4.94	17	0	New Self-Sustaining Nitrate and Pesticides Removal Biotechnology	\$318,162	U of MN	Behrens, Sebastian
61	66	111-D	4.94	17	0	New Technology to Control Invasive Carp	\$389,000	U of MN	Smanski, Michael
62	65	055-B	4.88	17	0	Maximizing the Benefits of Water Reuse	\$148,000	U of MN	Ishii, Satoshi
63	67	192-K	4.76	17	0	Voyageurs National Park Crane Lake Visitor Center Partnership	\$950,000	Town of Crane Lake	Janssen, Jim
64	70	186-I	4.73	15	0	Analysis of Thermally Modified Wood Nesting Boxes for Birds	\$117,000	U of MN - NRRI	Hueffmeier, Ryan
65	69	013-A	4.69	16	0	Landslide Hazards and Impacts on Minnesota's	\$672,408	U of MN	Gran, Karen
66	73	083-C	4.65	17	0	Natural Environment Minnesota Water Stories Told in Digital Planetariums	\$622,000	U of MN - Bell Museum of Natural History	Weiblen, George
67	68	081-C	4.53	17	0	Youth Convening Minnesota	\$310,008	Climate Generation: A Will Steger Legacy	Poppleton, Kristen
68	71	150-E	4.53	17	0	District Heating with Renewable Biomass at Camp Ripley Training Center	\$1,969,988	Department of Military Affairs	Pennington, Josh
69	81	087-C	4.47	17	0	Market Science: Connecting Minnesotans to Environmental Research	\$132,000	U of MN	Tiffin, Peter
70	77	156-F	4.47	17	0	Prioritizing Shoreline Habitat Restoration in Minnesota Lakes	\$294,913	U of MN - St. Anthony Falls Laboratory	Herb, William
71	80	085-C	4.18	17	0	Students Use Local Phenology to Understand Climate Varability	\$240,000	U of MN	Carlson, Stephan
72	75	117-D	4.18	17	0	Acquiring Key Information for a Carp Deterrent System at Lock and Dam #5	\$284,000	U of MN	Sorensen, Peter
73	83	180-G	4.06	16	1	Tower Trailhead Boat Landing and Habitat Improvement	\$983,448	City of Tower	Keith, Linda
74	76	147-E	4.06	17	0	Generation, Storage, and Utilization of Solar	\$795,500	U of MN	Heins, Bradley
75	78	046-B	3.94	17	0	Energy How Rapidly can Groundwater Quality be	\$672,000	U of MN	Nieber, John
76	79	196-K	3.88	17	0	Improved? CREP Implementation Phase 1	\$8,761,320	Board of Water and Soil	Hoek, Tabor
77	82	042-B	3.65	17	0	Restoring Agricultural Lakes and Watersheds by	\$967,100	Resources U of MN	Bajer, Przemyslaw
78	84	054-B	3.65	17	0	Managing Carp Preventing Fish Kills by Increasing Understanding	\$699,905	MN DNR	Rantala, Heidi
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Attachment #5 2017 Environment and Natural Resources Trust Fund Proposals [legal size - YELLOW SHEET] JMULATIVE AVERAGE OF MEMBER PANISHOS AUGUST TO SEE THE STATE OF THE STA **CUMULATIVE AVERAGE OF MEMBER RANKINGS - LISTED BY OVERALL RANK - HIGH TO LOW**

	COMULATIVE AVERAGE OF MEMBER RANKINGS - LISTED BY OVERALL RANK - HIGH TO LOW								
Line #	Line #: Blue Sheet	ID#	Compiled Member Ranking (Out of 16)	Total # Members that Scored	Total # Members with Conflict	Project Title	\$ Requested	Organization	Project Manager
79	85	105-C	3.65	17	0	NE Minneapolis Sustainability Incubator	\$235,000	Holland Neighborhood Improvement Association	Koski, Adelheid
80	86	011-A	3.53	17	0	Drainage Records Modernization – Phase II, Cost- Share	\$540,000	Board of Water and Soil Resources	Gillette, Timothy
81	93	020-A	3.44	16	0	Lowland Conifer Ecosystems: Holistic Assessment for Adaptive Management	\$763,702	U of MN	Windmuller- Campione, Marcella
82	90	162-F	3.38	16	0	Precision Conservation and Agriculture: Growing Green2 Together	\$508,370	Pheasants Forever	Bruse, Tanner
83	88	191-J	3.35	17	0	Real Wildlife, Real Conservation, Real Impact	\$488,128	Wildlife Science Center	Callahan, Peggy
84	91	137-E	3.29	17	0	Forest Regeneration: Maximizing the Value of Our Investment	\$732,046	U of MN - Duluth	Etterson, Julie
85	89	005-A	3.24	17	0	Enhancing Targeted and Measureable Watershed Restoration and Protection	\$2,802,000	Board of Water and Soil Resources	Thomas, Doug
86	92	164-F	3.18	17	0	Identifying Optimal Soil Conditions for Sustainable Forest Management	\$415,000	U of MN	Slesak, Robert
87	94	036-В	3.12	17	0	Rural Industrial Water Efficiency Impact on Drinking Water	\$282,000	U of MN	Brauman, Kate
88	96	074-B	3.00	17	0	Measuring Reductions in Nitrate Pollution from Precision Agriculture	\$159,833	University of St. Thomas	Small, Gaston
89	98	193-K	2.94	17	0	Organic Weed Control Using Solar-Powered Robots	\$1,650,000	U of MN - Morris	Reese, Michael
90	101	167-F	2.76	17	0	Mississippi River Habitat Restoration at Halls Island	\$1,451,500	Minneapolis Park and Recreation Board	Arvidson, Adam
91	104	058-B	2.65	17	0	Sulfate and Metal Removal from NE MinnesotaWaters	\$298,325	U of MN	Dutcher, Cari
92	105	109-D	2.65	17	0	Quantifying Spiny Waterflea Threats to Minnesota Walleye Lakes	\$1,690,320	U. S. Geological Survey	Kiesling, Richard
93	106	115-D	2.59	17	0	Impact of Zebra Mussels on Mercury in Fish	\$211,437	U of MN - Duluth	Ozersky, Tedy
94	99	045-B	2.53	17	0	Buffer Gap Analysis	\$1,390,656	Board of Water and Soil Resources	Mohring, Eric
95	102	151-E	2.47	17	0	Renewable Energy Production from Municipal Organic Waste	\$1,687,500	Minnesota Energy Center (MNEC)	Waite-Altringer, Melanie
96	100	127-E	2.41	17	0	Managing for "Climate Smart" Trees and Forests	\$385,000	U of MN	Reich, Peter
97	103	112-D	2.29	17	0	Mountain Pine Beetle Phase II: Protecting Minnesota	\$384,838	U of MN	Aukema, Brian
98	108	149-E	2.24	17	0	Climate-Smart Cities: Helping Cities Make Smarter Land-Use Decisions	\$288,800	The Trust for Public Land	Forbes, DJ
99	110	010-A	1.94	17	0	Contaminants in Urban Soils: Understanding the Urban Environment	\$1,000,000	U. S. Geological Survey	Elliott, Sarah
100	112	066-B	1.59	17	0	Continuous Nitrate Pollution Monitoring at the Kitchen Sink	\$276,590	U of MN	Wickert, Andrew
101	111	052-B	0.82	17	0	The Minnesota Center for Water Treatment Technology Innovation	\$10,306,899	U of MN	Hozalski, Raymond