| FINA | Day 1 - LCCMR Presentation Schedule - 2020 Proposals Monday, June 17, 2019 - Co-chair: Sen. Bill Ingebrigtsen Room 5, State Office Building, St. Paul, MN 8:30 AM - 8:35 PM | | | | |
|----------|---|--|-------------|--|---------------------|
| Time | ID # | Project Title | \$ Request | Organization | Project Manager |
| 8:30 AM | 2019 11b | Optimizing Local Mechanical and Pond Wastewater-Treatment Plants | \$500,000 | Minnesota Pollution Control Agency | Joel Peck |
| 8:45 AM | 2019 08e | Nongame Wildlife Program Acceleration | \$513,000 | MN DNR | Cynthia Osmundson |
| 9:00 AM | 2019 06d | Emerald Ash Borer Response Grants | \$300,000 | MN DNR | Valerie McClannahan |
| 9:15 AM | 2019 06c | Noxious Weed Detection and Eradication | \$1,000,000 | Minnesota Department of Agriculture | Mark Abrahamson |
| 9:30 AM | 2019 05d | Increasing Diversity in Environmental Careers | \$250,000 | MN DNR | Mimi Daniel |
| 9:45AM | 2019 04t | Managed Aquifer Recharge | \$350,000 | U of MN - Water Resources Center | John Bilotta |
| 10:00 AM | 2019 03t | Diagnostic Test for Chronic Wasting Disease | \$1,804,000 | U of MN | Peter Larsen |
| 10:15 AM | 2019 03s | Native Bee Survey | \$600,000 | MN DNR | Jessica Petersen |
| 10:30 AM | 2019 08g | Agricultural Weed Control Using Autonomous Mowers | \$900,000 | U of MN - Morris | Eric Buchanan |
| 10:45 AM | 2019 09q | Historic Bruce Mine Park and Mesabi Trailhead | \$1,000,000 | St. Louis & Lake Counties Regional Railroad Authority | Bob Manzoline |
| 11:00 AM | 2019 09p | Rainy Lake Recreational Access and Boat Wash Station | \$200,000 | City of Ranier | Sheril Gautreaux |
| 11:15 AM | | Agenda item - WP approvals | | | |
| 11:30 AM | 247-FH | Pollinator Habitat Creation Along the Urban Mississippi River | \$129,297 | Friends of the Mississippi River | Betsy Daub |
| 11:45 AM | 138-CH | Engaging Minnesotans with Phenology: Radio, Podcasts, Citizen Science | \$198,478 | Northern Community Radio, Inc. | Maggie Montgomery |
| 12:00 PM | 116-BH | Expanding Protection of Minnesota Water through Industrial Conservation | \$178,430 | U of MN | Laura Babcock |
| 12:15 PM | | Break for Lunch | | | |

| 1:00 PM | 167-DH | How Effective and Protective are AIS Removal Methods? | \$110,699 | U of MN - Duluth NRRI | Valerie Brady |
|---------|--------|---|-----------|---|------------------|
| 1:15 PM | 056-AH | Conserving Black Terns and Forsters Terns in Minnesota | \$198,640 | U of MN - Duluth NRRI | Annie Bracey |
| 1:30 PM | 286-GH | Construction of Pedestrian/Bicycle Bridge on LSSB/GRR | \$133,000 | Lady Slipper Scenic Byway, Inc. | Bruce Hasbargen |
| 1:45 PM | 244-FH | Peatland Restoration in the Lost River State Forest | \$135,646 | Roseau River Watershed District | Torin McCormack |
| 2:00 PM | 205-EH | Rural Distributed Renewable Energy and Back-Up Power | \$198,500 | Northwest Renewable Energy LLC | Jill Thibert |
| 2:15 PM | 285-GH | Chippewa Acquisition, Recreation and Education | \$160,000 | Chippewa County | Scott Williams |
| 2:30 PM | 196-EH | The Beltrami County Climate Vulnerability Assessment | \$180,000 | Headwaters Regional Development Commission | Joel Anastasio |
| 2:45 PM | 169-DH | Rainy Lake Non-native Hybridized Cattail Removal | \$199,500 | Koochiching SWCD | Eric Olson |
| 3:00 PM | 058-AH | How to Save the Cisco-Trout Lakes | \$185,438 | U of MN -Duluth- Sea Grant | John Downing |
| 3:15 PM | 255-FH | Increase Golden Shiner Production to Protect Aquatic Communities | \$188,161 | U of MN - Duluth - Sea Grant | John Downing |
| 3:30 PM | 117-BH | Minnesota Sentinel Springs, Understanding Groundwater Recharge and Chemistry | \$182,267 | MN DNR | John Barry |
| 3:45 PM | 047-AH | Do Beavers Buffer Against Droughts and Floods? | \$168,400 | Voyageurs National Park | Steve Windels |
| 4:00 PM | 048-AH | Enhancing Bat Recovery by Optimizing Artificial Roost Structures | \$190,271 | MN DNR | Ed Quinn |
| 4:15 PM | 139-CH | Driving Conservation Behavior for Mussels and Water Quality | \$191,580 | Minnesota Zoological Society | Emily Kalnicky |
| 4:30 PM | 062-AH | Engagement and Monitoring for the Insect Apocalypse | \$191,824 | MN DNR | Jessica Petersen |
| 4:45 PM | 198-EH | Eco-Friendly Plastics from Cloquet Pulp-Mill Lignin | \$193,967 | U of MN | Simo Sarkanen |
| 5:00 PM | 259-FH | Restoring Turf to Native Pollinator Gardens Across Metro | \$197,000 | Wilderness in the City | Holly Jenkins |
| 5:15 PM | 049-AH | Tools for Supporting Healthy Ecosystems and Pollinators | \$198,397 | MN DNR | Jessica Petersen |
| 5:30 PM | 064-AH | Environmental Factors Influencing Nutritional Content of Wild Rice | \$198,092 | U of MN | Emily Onello |

| 5:45 PM | 075-В | Understanding and Managing Persistent Chloride Pollution in Freshwaters | \$299,000 | U of MN | Jacques Finlay |
|---------|--------|--|-----------|--|--------------------|
| 6:00 PM | 199-EH | Diverting Unsold Food from Landfills, Reducing Greenhouse Gases | \$130,000 | Second Harvest Heartland | April Rog |
| 6:15 PM | 145-CH | River Watch on the Minnesota River | \$100,000 | Friends of the Minnesota Valley | Ted Suss |
| 6:30 PM | 245-FH | Prescribed Burning for Brushland-Dependent Species- Phase II | \$147,428 | U of MN | Rebecca Montgomery |
| 6:45 PM | 137-CH | YES! Students Take on Water Quality Challenge Phase-II | \$199,700 | Prairie Woods Environmental Learning Center | Shelli-Kae Foster |
| 7:00 PM | 051-AH | Modern eDNA Technology for Better Game Fish Census | \$200,000 | U of MN | Michael Sadowsky |
| 7:15 PM | 008-A | Foundational Hydrology Data for Wetland Protection and Restoration | \$461,499 | MN DNR | Doug Norris |
| 7:35 PM | 082-В | Is Glyphosate causing harmful Algal Blooms? | \$427,000 | U of MN | James Cotner |
| 7:55 PM | 114-B | Innovative Solution for Protecting Minnesota from PFAS contamination | \$750,000 | Dem-Con | Bill Keegan |
| 8:15 PM | | LCCMR Business Meeting/Process and Issue Discussion | | | |
| 8:35 PM | | Adjourn | | | |

Day 2 - LCCMR Presentation Schedule - 2020 Proposals Monday June 24, 2019 - Co-chair: Rep. Rick Hansen

Room 5, State Office Building, St. Paul, MN 8:30 AM - 6:10 PM

| Time | ID # | Project Title | \$ Request | Organization | Project Manager |
|----------|--------|---|-------------|--|--------------------|
| 8:35 AM | 066-AH | Understanding Environmental Factors that Impact Minnesota Tick Populations | \$199,938 | U of MN | Jesse Berman |
| 8:50 AM | 001-A | Geologic Atlases for Water Resource Management | \$4,121,625 | U of MN - Minnesota Geological Survey | Barbara Lusardi |
| 9:10 AM | 002-A | Expanding the Minnesota Ecological Monitoring Network | \$1,587,134 | MN DNR | Hannah Texler |
| 9:30 AM | 003-A | Win-Win Forestry: Maximizing Economic and Ecological Benefits | \$532,733 | U of MN - Duluth NRRI | Alexis Grinde |
| 9:50 AM | 004-A | Minnesota; How much Water? How is it Changing? | \$529,139 | U of MN | John Nieber |
| 10:10 AM | 005-A | Optimizing Land Cover Data for Water Resource Analysis | \$370,000 | MN Board of Water and Soil Resources | Matt Drewitz |
| 10:30 AM | 007-A | County Groundwater Atlas | \$2,250,000 | MN DNR | Paul Putzier |
| 10:50 AM | 164-D | Stop Starry Invasion - Community Invasive Species Containment | \$1,264,955 | Minnesota Lakes and Rivers Advocates | Jeff Forester |
| 11:10 AM | 010-A | Real-Time Measurements of Nitrate Pollution in Surface Water | \$631,800 | U.S. Geological Survey | Joel Groten |
| 11:30 AM | 014-A | Voyageurs Wolf Project – Phase II | \$608,320 | U of MN | Joseph Bump |
| 12:10 PM | | Break for Lunch | | | |
| 12:50 PM | 016-A | Expanding Restoration and Promoting Awareness of Native Mussels | \$489,270 | Minnesota Zoological Society | Seth Stapleton |
| 1:10 PM | 017-A | Improving Pollinator Conservation by Revealing Habitat Needs | \$615,000 | U of MN | Colleen Satyshur |
| 1:30 PM | 018-A | Bee Minnesota - Protect our Native Bumblebees | \$693,000 | U of MN | Declan Schroeder |
| 1:50 PM | 019-A | Bobcat and Fisher Habitat Use and Interactions | \$440,719 | U of MN | Michael Joyce |
| 2:10 PM | 021-A | Complete Sonar Data Mapping on Three Minnesota Rivers | \$525,945 | National Park Service | Nancy Duncan |
| 2:30 PM | 022-A | Enhancing Bird and Insect Recovery in Oak Savannas | \$238,000 | U of MN | Francesca Cuthbert |

| 2:50 PM | 024-A | Impacts of Conservation Grazing on Greater Prairie- chickens | \$560,044 | MN DNR | Charlotte Roy |
|---------|-------|--|-----------|--------------------------|--------------------|
| 3:10 PM | 026-A | Estimating Fish Production in Stressed Minnesota Lakes | \$416,500 | U.S. Geological Survey | Richard Kiesling |
| 3:30 PM | 028-A | Habitat Friendly Solar Impacts: Environmental and Economic Guidance | \$751,048 | U of MN | David Mulla |
| 3:50 PM | 031-A | Morrison County Performance Drainage and Hydrology Management Phase II | \$213,300 | Morrison SWCD | Shannon Wettstein |
| 4:10 PM | 034-A | Winter Dynamics of Vulnerable Trout Streams: Central Minnesota | \$767,060 | U of MN | Leonard Ferrington |
| 4:30 PM | 037-A | Foundational Research on Fungi and Protecting Minnesota Trees | \$362,196 | U of MN | Robert Blanchette |
| 4:50 PM | 038-A | Taxonomic Survey of Earthworm Species in Minnesota | \$233,501 | Bemidji State University | Richard Koch |
| 5:10 PM | 040-A | Freshwater Sponges and AIS: Engaging Citizen Scientists | \$460,000 | U of MN | Venugopal Mukku |
| 5:30 PM | 069-В | Assessing the Value of Green Infrastructure within Minnesota's Water Infrastructure Funding Shortfall | \$384,923 | U of MN | Terin Mayer |
| 5:50 PM | 208-F | Prairie to the People: Habitat Restoration and Education | \$441,128 | Wildlife Forever | Dane Huinker |
| 6:10 PM | | LCCMR Business Meeting/Process and Issue Discussion | | | |
| 6:30 PM | | Adjourn | | | |

Day 3 - LCCMR Presentation Schedule - 2020 Proposals

Tuesday, June 25, 2019 - Co-chair: Nancy Gibson

Room 5, State Office Building, St. Paul, MN

8:30 AM - 5:50 PM

| Time | ID # | Project Title | \$ Request | Organization | Project Manager |
|----------|--------|--|-------------|------------------------------------|-------------------|
| 8:30 AM | 070-В | Unprecedented Change Threatens Minnesota's Pristine Lakes | \$849,392 | | Mark Edlund |
| 8:50 AM | 071-B | Microplastics: Occurrence, Toxins, and Detection with Drones | \$450,000 | U of MN | Ardeshir Ebtehaj |
| 9:10 AM | 073-В | Preventing Harmful Algal Blooms through Improved Stormwater Detention | \$619,031 | U of MN | John Gulliver |
| 9:30 AM | 074-В | Trace Organic Contaminants in Groundwater from Stormwater Infiltration | \$910,000 | U.S. Geological Survey | Sarah Elliott |
| 9:50 AM | 168-DH | Invasive Rock Snot Threatens North Shore Streams | \$197,896 | Science Museum of Minnesota | Mark Edlund |
| 10:10 AM | 076-В | Reducing Chloride in Minnesota's Water from Water Softening | \$362,699 | U of MN | Sara Heger |
| 10:30 AM | 078-B | Bacterial Starvation for Improved Toxic Contaminant Treatment | \$235,854 | U of MN | Paige Novak |
| 10:50 AM | 080-В | Managing Highly Saline Waste from Municipal Water Treatment | \$255,000 | U of MN | Natasha Wright |
| 11:10 AM | 129-C | 450 Underserved, Diverse Youth Gain Environmental Education | \$428,250 | YMCA of the Greater Twin Cities | Beth Becker |
| 11:30 AM | 083-В | Technology for Energy-Generating Onsite Industrial Wastewater Treatment | \$474,939 | U of MN | Paige Novak |
| 12:10 PM | | Break for Lunch | | | |
| 12:50 PM | 085-В | Our Future Drinking Water: Nitrate, Tile, and Climate | \$330,000 | Science Museum of Minnesota | James Almendinger |
| 1:10 PM | 086-В | Groundwater Microbiology Phase 2: Private Wells | \$499,196 | U of MN | Raymond Hozalski |
| 1:30 PM | 087-В | Microplastics: Transporters of Contaminants in Minnesota Waters | \$448,630 | U of MN | Lee Penn |
| 1:50 PM | 098-В | Developing Strategies to Manage PFAS in Land-Applied Biosolids | \$1,403,556 | Minnesota Pollution Control Agency | Summer Streets |
| 2:10 PM | 104-В | Quantifying A New Urban Precipitation/Water Reality | \$1,377,893 | U of MN | Joe Magner |
| 2:30 PM | 108-B | Vermillion River Surface Water and Groundwater Nitrate Impacts | \$268,000 | Dakota County | Valerie Grover |

| 2:50 PM | 110-В | Increased Sample Capacity for Analysis of Pesticides | \$736,079 | Minnesota Department of Agriculture | Heather Johnson |
|---------|--------|---|-------------|--|-------------------|
| 3:10 PM | 122-C | Statewide Environmental Education via Public Television Outdoor Series | \$300,000 | Pioneer Public Television | Cindy Dorn |
| 3:30 PM | 123-C | Minnesota Freshwater Quest: Environmental Education on State Waterways | \$1,432,110 | Wilderness Inquiry | Julie Edmiston |
| 3:50 PM | 201-EH | Identifying Agricultural Energy Consumption and Impacts in Minnesota | \$146,791 | Minnesota State University Mankato | Joel Tallaksen |
| 4:10 PM | 124-C | TeachScience: Schools as STEM living laboratories | \$368,505 | Climate Generation: A Will Steger Legacy | Kristen Poppleton |
| 4:30 PM | 125-C | Mentoring the Next Generation of Conservation Professionals | \$755,544 | Minnesota Valley National Wildlife Refuge Trust, Inc. | Deborah Loon |
| 4:50 PM | 127-C | Jay C. Hormel Nature Center Supplemental Teaching Staff | \$252,898 | City of Austin | Luke Reese |
| 5:10 PM | 128-C | UMD Boreal Observatory at Chik-Wauk on the Gunflint | \$514,865 | U of MN - Duluth | Joel Halvorson |
| 5:30 PM | | LCCMR Business Meeting/Process and Issue Discussion | | | |
| 5:50 PM | | Adjourn | | | |

Day 4 - LCCMR Presentation Schedule - 2020 Proposals Wednesday, June 26, 2019 - Co-chair: Sen. Bill Ingebrigtsen Room 5, State Office Building, St. Paul, MN

8:30 AM - 4:50 PM

| Time | ID # | Project Title | \$ Request | Organization | Project Manager |
|----------|-------|---|-------------|--|---------------------|
| 8:30 AM | 134-C | Restoring Land, Reviving Heritage: Conservation Through Indigenous Culture | \$606,885 | Belwin Conservancy | Katie Bloome |
| 8:50 AM | 155-D | Minnesota Invasive Terrestrial Plants and Pests Center (MITPPC) Phase 5 | \$7,000,000 | U of MN - MITPPC | Robert Venette |
| 9:10 AM | 156-D | Protect Community Forests by Managing Ash for EAB | \$5,929,174 | MN DNR | Valerie McClannahan |
| 9:30 AM | 157-D | White Nose Bat Syndrome Biological Control: Phase 3 | \$444,636 | U of MN | Christine Salomon |
| 9:50 AM | 158-D | Applying New Tools and Techniques against Invasive Carp | \$578,000 | MN DNR | Brian Nerbonne |
| 10:10 AM | 159-D | EAB and Black Ash: Maintaining Forests and Benefits | \$774,000 | U of MN | Robert Slesak |
| 10:30 AM | 160-D | Tactical Invasive Plant Management Plan Development and Implementation | \$658,137 | Minnesota Department of Agriculture | Monika Chandler |
| 10:50 AM | 161-D | Enhancing Habitat and Diversity in Cattail-Dominated Shorelines | \$582,994 | U of MN | Amy Schrank |
| 11:10 AM | 162-D | Ticks! A Rising Threat in Minnesota | \$300,000 | U of MN | Jonathan Oliver |
| 11:30 AM | 219-F | Native Eastern Larch Beetle is Decimating Minnesota's Tamarack Forests | \$398,180 | U of MN | Brian Aukema |
| 11:50 PM | 173-E | Storing Renewable Energy in Flow-Battery for Grid Use | \$3,271,229 | U of MN - Morris | Bryan Herrmann |
| 12:10 PM | | Break for Lunch | | | |
| 12:50 PM | 176-E | Produce Marketable Liquid Fuels from Plastic Wastes | \$383,000 | U of MN | Paul Chen |
| 1:10 PM | 192-Е | Phase 2: Integrated Small-Scale Ammonia Synthesis | \$2,108,520 | U of MN | Alon McCormick |
| 1:30 PM | 194-E | Minnesota Shrimp Production Using Clean Energy | \$1,129,000 | U of MN | Robert Gardner |
| 1:50 PM | 224-F | Habitat Associations of Mississippi Bottomland Forest Marsh Birds | \$295,336 | National Audubon Society | Luis Ramirez |

| 2:10 PM | 209-F | Pollinator & Beneficial Insect Strategic Habitat Program | \$780,500 | MN Board of Water and Soil Resources | Dan Shaw |
|---------|-------|--|-------------|---|------------------|
| 2:30 PM | 214-F | Marsh Bird Conservation Planning in St. Louis River Estuary | \$284,068 | National Audubon Society | Nathaniel Miller |
| 2:50 PM | 215-F | Lignin-coated Fertilizers for Phosphate Control | \$279,382 | U of MN - Duluth NRRI | Eric Singsaas |
| 3:10 PM | 216-F | Implementing Hemp Crop Rotation to Improve Water Quality | \$740,000 | Central Lakes College | Keith Olander |
| 3:30 PM | 218-F | Developing Cover Crop Systems for Sugarbeet Production | \$300,546 | U of MN | Anna Cates |
| 3:50 PM | 261-G | DNR Scientific and Natural Areas | \$5,875,000 | MN DNR | Judy Schulte |
| 4:10 PM | 262-G | Private Native Prairie Conservation through Native Prairie Bank | \$2,280,000 | MN DNR | Judy Schulte |
| 4:30 PM | | LCCMR Business Meeting/Process and Issue Discussion | | | |
| 4:50 PM | | Adjourn | | | |

Day 5 - LCCMR Presentation Schedule - 2020 Proposals Thursday, June 27, 2019 - Co-chair: Rep. Rick Hansen Room 5, State Office Building, St. Paul, MN 8:30 AM - 4:50 PM

| Time | ID # | Project Title | \$ Request | Organization | Project Manager |
|----------|-------|---|--------------|--|-------------------|
| 8:30 AM | 274-G | Acquire Riverfront Land at Upper St. Anthony Falls | \$3,000,000 | Friends of the Lock & Dam | Kjersti Monson |
| 8:50 AM | 263-G | Minnesota State Parks and State Trails In-Holdings | \$5,000,000 | MN DNR | Jennifer Christie |
| 9:10 AM | 264-G | Grants for Local Parks, Trails, and Natural Areas | \$3,000,000 | MN DNR | Audrey Mularie |
| 9:30 AM | 265-G | Mississippi River Aquatic Habitat Restoration and Mussel Reintroduction | \$2,538,000 | Minneapolis Park and Recreation Board | Adam Arvidson |
| 9:50 AM | 266-G | Minnesota Hunter Walking Trails, Public Land Recreational Access | \$545,000 | Ruffed Grouse Society | Gary Drotts |
| 10:10 AM | 267-G | Turning Back to Rivers: Environmental and Recreational Protection | \$3,803,600 | The Trust for Public Land | DJ Forbes |
| 10:30 AM | 268-G | Metropolitan Regional Parks System Land Acquisition Phase 6 | \$2,500,000 | Metropolitan Council | Emmett Mullin |
| 10:50 AM | 269-G | Minnesota State Trails Development | \$10,000,000 | MN DNR | Kent Skaar |
| 11:10 AM | 270-G | Elm Creek Restoration Phase IV | \$650,200 | City of Champlin | Todd Tuominen |
| 11:30 AM | 271-G | Superior Hiking Trail As Environmental Showcase | \$450,000 | Superior Hiking Trail Association | Denny Caneff |
| 11:50 AM | 273-G | Red Wing Riverfront Trail Connection Project | \$682,000 | City of Red Wing | Ron Rosenthal |
| 12:10 PM | | Break for Lunch | | | |
| 12:50 PM | 275-G | Whiskey Creek & Mississippi River Water Quality/Habitat/Recreation Project | \$1,470,500 | Mississippi Headwaters Board | Tim Terrill |
| 1:10 PM | 276-G | Perham to Pelican Rapids Regional Trail (West Segment) | \$2,836,000 | Otter Tail County | Charles Grotte |
| 1:30 PM | 277-G | Crow Wing County Community Natural Area Acquisition | \$405,000 | Crow Wing County | Ryan Simonson |
| 1:50 PM | 279-G | Rocori Trail Phase 3 | \$1,260,000 | ROCORI Trail Construction Board | Pete Weber |

| 2:10 PM | 278-G | Purchasing 316 acres for Conservation and Agriculture Education | \$1,500,000 | The Food Group | Amber Stenson |
|---------|--------|--|-------------|--|-------------------|
| 2:30 PM | 025-A | Healthy Prairies III: Restoring MN prairie plant diversity | \$1,128,000 | U of MN | Ruth Shaw |
| 2:50 PM | 281-G | Mesabi Trail; New Trail and Additional Funding | \$6,337,000 | St. Louis and Lake Counties Regional Railroad Authority | Robert Manzoline |
| 3:10 PM | 283-G | Ranier Safe Harbor/Transient Dock on Rainy Lake | \$762,650 | City of Ranier | Sherril Gautreaux |
| 3:30 PM | 284-G | Crane Lake Voyageurs National Park Campground & Visitors Center | \$3,600,000 | Town of Crane Lake | Jim Janssen |
| 3:50 PM | 207-F | Pollinator Central: Habitat improvement with citizen monitoring | \$981,000 | Great River Greening | Wiley Buck |
| 4:10 PM | 289-GH | Sportsmens Training and Developmental Learning Center | \$85,000 | Minnesota Forest Zone Trappers Association | Ray Sogard |
| 4:30 PM | | LCCMR Business Meeting/Process and Issue Discussion | | | |
| 4:50 PM | | Adjourn | | | |