

<p align="center"><b>2019 LCCMR Metro and Southeast Minnesota Site Visit</b>          Tuesday, October 15 and Wednesday, October 16, 2019          Locations and times may change due to weather and other circumstances – if you are planning on attending please contact LCCMR staff 651-296-2406 or <a href="mailto:lccmr@lccmr.leg.mn">lccmr@lccmr.leg.mn</a></p>	
<p align="center"><b>Day One – Tuesday October 15, 2019</b></p>	
<p align="center"><b>Day 1:</b> Environmental Education, Trout Streams, Native Mussels, Water Resources Strategic Planning Listening Session at Bell Museum and Dinner Discussion, Rochester</p>	
8:00 a.m. Depart	<p><b>Depart from State Office Building</b> - Bus departs from front of the building          Location: <a href="#">100 Rev. Dr. Martin Luther King Jr. Blvd., St. Paul, Minnesota 55155</a></p> <p><i>Directions to Frogtown Park and Farm:</i> (8 minutes / 2.1 miles)          Head north toward Rice St (259 ft)          Turn left toward Rice St (187ft)          Turn right at the 1<sup>st</sup> cross street onto Rice St (292 ft)          Turn left onto University Ave W (1.5 mi)          Turn right onto n Victoria St (0.3 mi)          Turn left onto Lafond Ave (0.2 mi)          Destination will be on the right</p>
8:10 a.m. Arrive	<p><b>Frogtown Park and Farm, St. Paul</b> (15 minutes for presentation and discussion)          Location: <a href="#">941 Lafond Avenue, St. Paul, MN 55104</a></p> <p><i>Presenters:</i>          The Trust For Public Land              Jenna Fletcher, Community Powered Parks Director              Kim Lawler, Minnesota Philanthropy Director          Frogtown Farm and Park              Shelby Rutzick, Operations and Development Manager              Tiffany LaShae, Farm Manager          City of St. Paul              Mike Hahm, Director of Parks and Recreation              Alice Messer, Manager of Design and Construction          Frogtown Green              Patricia Ohmans, 37-year Frogtown resident and Director</p> <p><i>Topics:</i>          Acquire a portion of 12 acres for Frogtown Farm and Park to be established as a St. Paul city park. Greenspace needs in urban neighborhoods; urban agriculture, healthy food, and healthy living; and the importance of partnerships.</p> <p><i>Appropriation:</i>          M.L. 2013 04k Frogtown Farm and Park Acquisition – Trust for Public Land - \$1,500,000</p>
8:30 a.m. Depart	<p><b>Depart to Bell Museum, Saint Paul</b>          Location: <a href="#">2088 Larpenteur Ave W, St Paul, MN 55113</a></p> <p><i>Directions:</i> (13 minutes / 5.6 miles)          Head west on Lafond Ave toward Chatsworth St N (432 ft)          Turn right onto Chatsworth St N (0.4 mi)          Turn left onto W Pierce Butler Route (1.2 mi)          Turn left onto the 123 N ramp (0.1 mi)</p>

	<p>Merge onto MN-51 N/Snelling Ave (1.6 mi)          Use the left 2 lanes to turn left after Wing St (on the right) (1.6 mi)          Make a U-turn at Pleasant St (0.6 mi)          Destination will be on the right</p>
8:45 a.m. Arrive	<p><b>Bell Museum, St. Paul</b> (30 minutes for presentation and discussion)</p> <p>Location: <a href="#">2088 Larpenteur Ave W, St Paul, MN 55113</a></p> <p><i>Presenters:</i>          Sally Brummel, Planetarium Manager, Bell Museum          George Weiblen, Science Director, Bell Museum</p> <p><i>Topics:</i>          Create an interactive planetarium program on water resources, reaching approximately 400,000 citizens statewide through the Bell Museum Planetarium, St. Paul Public Schools, Mayo High School, Mankato East High School, Southwest Minnesota State University, Minnesota State University Moorhead, and University of Minnesota Duluth.</p> <p>Create a publicly accessible, online tool and repository that will electronically integrate over 600,000 existing biodiversity records, 300,000 existing images, and future data and associated imagery pertaining to Minnesota wildlife, plant, and fungi species in order to enhance research, guide field surveys, and inform conservation planning.</p> <p>Expand the biodiversity atlas project by adding more than 800,000 records and images of Minnesota wildlife, plants, and fungi, including observations from state agencies and other museum collections, to enhance research, guide field surveys, and inform conservation planning.</p> <p><i>Appropriations:</i>          M.L. 2018 03c Minnesota Biodiversity Atlas - Phase 2 – Bell Museum - \$350,000          M.L. 2017 05c Interactive Water Resource Programs for Planetariums in Minnesota – Bell Museum - \$500,000          M.L. 2015 03d Minnesota Biodiversity Atlas for Enhanced Natural Resource Management – Bell Museum - \$340,000</p>
9:30 a.m.	<p><b>Strategic Planning Public Listening Session, St. Paul</b> (60 minutes for session)</p> <p>Location: Bell Museum of Natural History's Nucleus Room, <a href="#">2088 Larpenteur Ave W, St. Paul, MN 55113</a></p> <p>"LCCMR will be hosting 'Food for Thought,' an open-house style listening session at the Bell Museum on the University of Minnesota St. Paul Campus. Enjoy coffee and donuts and tell state decision-makers what environmental issues need funding."</p>
10:40 a.m. Depart	<p><b>Depart to Minnesota Zoological Garden, Apple Valley</b></p> <p>Location: <a href="#">13000 Zoo Blvd, Apple Valley, MN 55124</a></p> <p><i>Directions:</i> (33 minutes / 20.3 miles)          Head east on Larpenteur Ave W toward Cleveland Ave N (1.0 mi)          Turn right onto MN-51 S/Snelling Ave (2.4 mi)          Keep right to continue on Snelling Ave (0.7 mi)          Turn left onto Selby Ave (0.2 mi)          Slight right onto Ayd Mill Rd (1.4 mi)          Use any lane to take the ramp onto I-35E S (0.4 mi)          Merge onto I-35E S (10.4 mi)          Take exit 93 for Cliff Rd toward Dakota County 32 (0.3 mi)          Sharp left onto Cliff Rd (0.8 mi)          Turn right onto Johnny Cake Ridge Rd (1.9 mi)</p>

	<p>Turn right onto McAndrews Rd (0.3 mi)  Turn right onto Zoo Blvd (0.2 mi)  Turn left (0.2 mi)  Turn right (0.1 mi)</p>
11:20 a.m. Arrive	<p><b>Minnesota Zoological Garden, Apple Valley</b> (30 minutes for presentation and discussion)</p> <p>Location: <a href="#">13000 Zoo Blvd, Apple Valley, MN 55124</a>  Meet at the bison statue</p> <p><i>Presenters:</i>  Seth Stapleton, Director of Field Conservation, MN Zoo  Erik Runquist, Butterfly Conservation Biologist, MN Zoo  Cale Nordmeyer, Butterfly Conservation Specialist, MN Zoo  Ben Minerich, Mussel Conservation Specialist, MN Zoo  Liz Gilles, Director of Education, MN Zoo  Tricia Markle, Wildlife Conservation Specialist (Turtles), MN Zoo</p> <p><i>Topics:</i>  Reestablish populations of Minnesota's imperiled butterflies through reintroductions and prairie restorations and by developing foundational habitat recommendations for preventing future extinctions</p> <p>Continue efforts to prevent the extinction of imperiled native Minnesota butterfly species through breeding, research, field surveys, and potential reintroduction.</p> <p>Accelerate the reintroduction of native mussels into Minnesota rivers and streams through expanded mussel rearing, research, and statewide educational activities promoting mussel conservation and water quality.</p> <p>Improve the long-term viability of Minnesota's imperiled turtle populations by researching threats, identifying mitigation strategies, implementing mechanisms to reduce threats and mortality, and creating related outreach and educational materials.</p> <p><i>Appropriations:</i>  M.L. 2019 08a Saving Endangered Pollinators through Data-Driven Prairie Restoration – MN Zoo - \$800,000  M.L. 2018 03k Conserving Minnesota's Nine Species of Freshwater Turtles – MN Zoo - \$300,000  M.L. 2017 04c Rearing Native Mussels for Reintroduction and Expanding Water Quality Awareness – MN Zoo - \$591,000  M.L. 2016 03c1 Prairie Butterfly Conservation, Research and Breeding - Phase II – MN Zoo - \$421,000  M.L. 2014 05j-1 Imperiled Prairie Butterfly Conservation, Research, and Breeding Program – MN Zoo – \$380,000</p>
12:00 p.m.	<p><b>Lunch at the Zoo, Apple Valley</b>  Location: Minnesota Zoological Garden, <a href="#">13000 Zoo Blvd, Apple Valley, MN 55124</a></p> <p>Lunches will be provided for members and invited guests</p>
12:30 p.m. Depart	<p><b>Depart to Hay Creek in Hay Creek, MN</b>  Location: Hay Creek, <a href="#">FCPC+MR Hay Creek, Hay Creek Township, MN</a></p> <p><i>Directions:</i> (1 Hour / 50.0 miles)  Head south (69 ft)  Turn left toward Zoo Blvd (66 ft)  Turn right onto Zoo Blvd (0.2 mi)  Turn left onto McAndrews Rd (3.6 mi)</p>

	<p>Turn right onto S Robert Trail (1.2 mi)  Turn left onto Connemara Trail W (2.2 mi)  Turn right onto Akron Ave (0.2 mi)  Turn left onto 145th St W (2.4 mi)  Turn right to merge onto US-52 S (26 mi)  Take the exit toward 380th St/County 9 Blvd (0.1 mi)  Turn left onto 380th St/County 9 Blvd (11.4 mi)  Turn left onto MN-58 N (7.4 mi)  Turn left onto 320<sup>th</sup> St (1.1 mi)</p>
1:30 p.m. Arrive	<p><b>Hay Creek in Hay Creek, MN</b> (20 minutes for presentation and discussion)</p> <p>Location: Hay Creek, <a href="#">FCPC+MR Hay Creek, Hay Creek Township, MN</a> – (Follow 320<sup>th</sup> street west one mile to bus stop off Hay Creek)</p> <p><i>Presenters:</i>  Jeff Hastings, Project Manager Driftless Area Restoration Effort, Minnesota Trout Unlimited  John Lenczewski, Executive Director, Minnesota Trout Unlimited</p> <p><i>Topics:</i>  Restore at least four miles of riparian corridor for trout and nongame species in southeast Minnesota and increase local capacities to implement stream restoration through training and technical assistance. Development of Riparian Habitat Development Guide for Nongame Species.</p> <p><i>Appropriations:</i>  M.L. 2011 04p Southeast Minnesota Stream Restoration – Trout Unlimited - \$250,000</p>
2:00 p.m. Depart	<p><b>Depart to DNR Native Mussel Restoration Scuba Demonstration in Lake Pepin, Frontenac</b></p> <p>Location: Florence Township Beach, <a href="#">28822-, 28838 Lake St, Frontenac, MN 55026</a></p> <p><i>Directions:</i> (18 minutes / 13.3 miles)  Head west on 315th St toward MN-58 N (23 ft)  Turn right onto MN-58 N (1.9 mi)  Turn right onto County 5 Blvd (4.7 mi)  Turn left onto County 2 Blvd (4.7 mi)  Turn right onto US-61 S/US Hwy 63 S (344 ft)  Turn left onto County 2 Blvd/Galia Ave (1.9 mi)  Turn left onto Garrard Ave (33ft)  Keep right to continue to Garrad Ave (0.1 mi)  Destination will be on the right</p>
2:30 p.m. Arrive	<p><b>DNR Native Mussel Restoration Scuba Demonstration in Lake Pepin, Frontenac</b> (10 minutes for presentation and discussion)</p> <p>Location: Florence Township Beach, <a href="#">28822-, 28838 Lake St, Frontenac, MN 55026</a></p> <p><i>Presenters:</i>  Mike Davis, Program Consultant, MN Department of Natural Resources (MN DNR)  Zeb Secrist, Database development/mussel diver, MN Department of Natural Resources (MN DNR)  Bernard Sietman, Research Scientist, MN Department of Natural Resources (MN DNR)</p> <p><i>Topics:</i>  Restore native freshwater mussel assemblages, and the ecosystem services they provide, in the Mississippi, Cedar, and Cannon Rivers and to inform the public on mussels and mussel conservation. This is the site used from 2001-2010 for Higgins' Eye mussel rearing.</p>

	<p>Statewide mussel program to rear, restore, and re-establish native mussel species in streams and rivers.</p> <p><i>Appropriations:</i>  M.L. 2019 03b Restoring Native Mussels in Streams and Lakes – MN DNR -\$500,000  M.L. 2016 04c Restoring Native Mussels in Streams and Lakes – MN DNR - \$600,000</p>
2:45 p.m. Depart	<p><b>Depart to DNR Center for Aquatic Mollusk Programs &amp; Laboratory Tour, Lake City</b>  Location: Lake City Area Fisheries Office, <a href="#">2109 North Lakeshore Drive, Lake City, MN 55041</a></p> <p><i>Directions:</i> (9 minutes / 5.5 miles)  Head south on Lake St toward Garrard Ave (0.1 mi)  Merge onto County 2 Blvd/Garrard Ave (0.2 mi)  Continue straight onto County 2 Blvd (1.3 mi)  Turn left onto US-61 S/US Hwy 63 S (3.6 mi)  Turn right onto N Lakeshore Dr (52 ft)  Turn right to stay on N Lakeshore Dr (0.2 MI)  Turn left to stay on N Lakeshore Dr (312 ft)</p>
3:00 p.m. Arrive	<p><b>DNR Center for Aquatic Mollusk Programs &amp; Laboratory Tour, Lake City</b> (20 minutes for presentation and discussion)</p> <p>Location: Lake City Area Fisheries Office, <a href="#">2109 North Lakeshore Drive, Lake City, MN 55041</a></p> <p><i>Presenters:</i>  Mike Davis, Program Consultant, MN Department of Natural Resources  Madeline Pletta, Mussel Propagation Biologist, MN Department of Natural Resources  Bernard Sietman, Research Scientist, MN Department of Natural Resources  Lindsey Ohlman, Propagation Biologist, MN Department of Natural Resources</p> <p><i>Topics:</i>  Restore native freshwater mussel assemblages, and the ecosystem services they provide, in the Mississippi, Cedar, and Cannon Rivers and to inform the public on mussels and mussel conservation. Tour of lab facility to view baby mussels and their fish hosts.</p> <p>Statewide mussel program to rear, restore, and re-establish native mussel species in streams and rivers.</p> <p><i>Appropriations:</i>  M.L. 2019 03b Restoring Native Mussels in Streams and Lakes – MN DNR -\$500,000  M.L. 2016 04c Restoring Native Mussels in Streams and Lakes – MN DNR - \$600,000</p>
3:30 p.m. Depart	<p><b>Depart to Watershed Planning, Wabasha</b>  Location: <a href="#">8WQF+QF Wabasha, Minnesota</a></p> <p><i>Directions:</i> (29 minutes / 17.1 miles)  Head north on N Lakeshore Dr (312 ft)  Turn right to stay on N Lakeshore Dr (0.2 mi)  Turn left to stay on N Lakeshore Dr (52 ft)  Turn right onto US-61 S/N Lakeshore Dr (3.8 mi)  Turn right onto County Rd 4 (2.1 mi)  Turn left onto County Rd 10 (4.9 mi)  Turn right onto County Rd 20 (3.7 mi)  Turn left onto MN-60 E (1.5 mi)  Turn right onto County Rd 81 (0.6 mi)  Turn left (177 ft)  Turn right (0.3 mi)  Destination will be on the left</p>

<p>4:00 p.m. Arrive</p>	<p><b>Watershed Planning, Wabasha</b> (20 minutes for presentation and discussion)</p> <p>Location: <a href="#">8WQF+QF Wabasha, Minnesota</a></p> <p>Kruger Forest Campground 20462 County Rd 81, Wabasha, MN 55981 Meet at the picnic shelter and then a short walk to the Zumbro River</p> <p><i>Presenters:</i> David Schmidt, Southeast MN Conservation Coordinator, The Nature Conservancy</p> <p><i>Topics: Watershed planning, Flooding, and Water Quality</i> Provide a framework and plans for the protection and stewardship of unimpaired waters in southeast Minnesota. The result will be a template for watershed protection in Minnesota.</p> <p><i>Appropriations:</i> M.L. 2014 06e Southeast Minnesota Watershed Protection Plan – The Nature Conservancy - \$200,000</p>
<p>4:30 p.m. Depart.</p>	<p><b>Depart to Optimizing Wastewater Treatment Facilities, Kellogg</b></p> <p>Location: Wastewater Treatment Facility, <a href="#">8249+H5 Kellogg, MN</a></p> <p><i>Directions:</i> (14 minutes / 6.6 miles) Head southeast (0.3 mi) Turn left toward County Rd 81 (177 ft) Turn left onto County Rd 81 (4.2 mi) Turn right onto US-61 S (1.0 mi) Turn left at the 1st cross street onto W Belvidere Ave (0.5 mi) Turn left onto S Dodge St (440 ft) Turn right onto E Winona Ave (472 ft) Continue onto Belter Rd (0.4 mi)</p>
<p>4:45 p.m. Arrive</p>	<p><b>Optimizing Wastewater Treatment Facilities, Kellogg</b> (35 minutes for presentation and discussion)</p> <p>Location: Wastewater Treatment Facility, <a href="#">8249+H5 Kellogg, MN</a></p> <p><i>Presenters:</i> Minnesota Pollution Control Agency (MPCA) Joel Peck, Municipal Liaison Minnesota Rural Water Association Tim Hagenmeier, Wastewater Operations Specialists Frank Stuemke, Wastewater Operations Specialists Minnesota Technical Assistance Program (MnTAP) Jon Vanyo, Wastewater Engineer</p> <p><i>Topics:</i> This pilot project will work with operators of up to 45 facilities as a representative sample of the 395 stabilization pond systems in Minnesota. The project also works with MnTAP, University of Minnesota, to optimize up to ten mechanical treatment systems to explore the ways and the means by which mechanical systems can be optimized to achieve greater treatment without significant capital expenditures. The work product will be a field guide for operators to transfer knowledge so they can first explore optimization techniques before construction.</p> <p><i>Appropriations:</i> M.L. 2018 04a Pilot Program to Optimize Local Mechanical and Pond Wastewater-Treatment Plants – MPCA - \$700,000</p>

5:30 p.m. Depart	<p><b>Depart to Strategic Planning Dinner Discussion, Rochester</b>  Location: Pasquales Neighborhood Pizzeria private dining room, <a href="#">130 5th St SW, Rochester, MN 55902</a></p> <p><i>Directions:</i> (51 minutes / 37.9 miles)  Head west on Belter Rd (0.4 mi)  Continue onto E Winona Ave (472 ft)  Turn left onto S Dodge St (0.4 mi)  Continue onto County Rd 18 (0.3 mi)  Continue onto MN-42 S (25.8 mi)  Turn right onto Co Hwy 9/Co Rd 9 (3.5 mi)  Continue onto Collegeview Rd E (6.0 mi)  Continue onto 4th St SE (1.3 mi)  Turn left onto 1st Ave SW (407 ft)  Turn right onto 5th St SW (210 ft)  Destination will be on the left</p>
6:30 p.m. Arrive	<p><b>Strategic Planning Dinner Discussion, Rochester</b> (90 minutes for dinner and discussion)  Location: Pasquales Neighborhood Pizzeria private dining room, <a href="#">130 5th St SW, Rochester, MN 55902</a></p> <p>Dinner provided for members and invited guests</p>
8:00 p.m. Depart	<p><b>Depart to Country Inn &amp; Suites by Radisson, Rochester</b>  Location: <a href="#">77 Woodlake Dr, Rochester, MN 55904</a></p> <p><i>Directions:</i> (13 minutes / 4.9 miles)  Head east on 5th St SW toward 1st Ave SW (210 ft)  Turn right onto 1st Ave SW (417 ft)  Turn left at the 1st cross street onto 6th St SW (367 ft)  Use the right 2 lanes to turn right onto S Broadway (3.5 mi)  Take the 40th Street exit (0.3 mi)  Turn left onto 40th St SW/County Rd 117 SW (0.2 mi)  Turn left onto Woodlake Dr (0.8 mi)  Turn left (293 ft)  Destination will be on the right</p>
8:15 p.m. Arrive	<p><b>Country Inn &amp; Suites by Radisson, Rochester South</b> <a href="#">77 Woodlake Dr, Rochester, MN 55904</a></p>



<b>Day Two – Wednesday October, 2019</b>	
<b>Day 2:</b> Sustainable Agriculture, Geology, Air Quality, Environmental Engineering, Voyager Canoe Paddle Strategic Planning Coffee and Conversation and Lunchtime Discussion, Minneapolis	
6:45 a.m. Depart	<p><b>Depart Country Inn &amp; Suites by Radisson, Rochester South</b> Location: <a href="#">77 Woodlake Dr, Rochester, MN 55904</a></p> <p><i>Directions to Fiddlehead Coffee Co.: (13 minutes / 5.1 miles)</i>  Head southeast toward Woodlake Dr (292 ft)  Turn right onto Woodlake Dr (0.8 mi)  Take the US-63 N ramp (0.3 mi)  Merge onto US-63/S Broadway/US Hwy 63 (3.0 mi)  Turn right onto 12th St SE (0.2 mi)  Turn left at the 1st cross street onto 3rd Ave SE (0.8 mi)  Destination will be on the right</p>
7:00 a.m. Arrive	<p><b>Strategic Planning Coffee and Conversation, Rochester</b> (50 minutes for discussion)</p> <p>Location: Fiddlehead Coffee Co., <a href="#">412 3rd Ave SE, Rochester, MN 55904</a>  Park in lot just south of the coffee shop (closed pawn shop lot)</p> <p>“Please join LCCMR members for Coffee &amp; Conversation at Fiddlehead Coffee Co. Let them know what natural resources issues you think Minnesota should make a spending priority, while you get your morning caffeine fix.”</p>
8:00 a.m. Depart	<p><b>Depart to Olmstead County SWCD Soil Health Farm, Rochester</b> Location: <a href="#">704 Silver Creek Road NE, Rochester, MN</a></p> <p><i>Directions: (4 minutes / 1.7 miles)</i>  Head north on 3rd Ave SE toward 4th St SE (121 ft)  Turn right at the 1st cross street onto 4th St SE (1.0 mi)  Continue onto Collegeview Rd E (0.5 mi)  Turn left onto Silver Creek Rd NE (0.2 mi)</p>
8:15 a.m. Arrive	<p><b>Olmstead County SWCD Soil Health Farm, Rochester</b> (20 minutes for presentation and discussion)</p> <p>Location: <a href="#">704 Silver Creek Road NE, Rochester, MN</a> – (The bus pull into the gravel driveway to the east of Campus Drive SE to drop off and meet the presenters. Additional Vehicles can park along the east side of the road near the intersection with Campus Dr SE)</p> <p><i>Presenters:</i>  Board of Water and Soil Resources (BWSR)  Adam Beilke, Board Conservationist  Dave Copeland, Board Conservationist  University of Minnesota Extension  Jake Overgaard, Extension Educator  Olmsted County SWCD  Skip Langer, Director  Angela White, Soil Conservation Technician  Martin Larsen, Feedlot Technician</p>



	<p>Caitlin Brady, Water Resources Coordinator</p> <p><i>Topics:</i> Promote cover crops as a means of protecting soil and water quality in southeastern Minnesota through training and education for local practitioners, economic analysis of implementation, and on-farm demonstration sites.</p> <p>In addition, Olmsted SWCD staff will show cover crops in the field and talk about local efforts to monitor nitrates in nearby streams.</p> <p><i>Appropriations:</i> M.L. 2015 04e Southeast Minnesota Cover Crop and Soil Health Initiatives – BWSR - \$253,000</p>
8:45 a.m. Depart	<p><b>Depart to Rochester Area Overlook, Rochester</b> Location: Assisi Heights, <a href="#">1001 14<sup>th</sup> St NW, Rochester, MN 55901</a></p> <p><i>Directions:</i> (11 minutes / 3.8 miles) Head south on Silver Creek Rd NE (0.2 mi) Turn right onto Collegeview Rd E (0.5 mi) Turn right onto E Center St (1.2 mi) Turn right onto Civic Center Dr NE (0.1 mi) Turn left onto Civic Center Dr NW (0.4 mi) Turn right at the 3rd cross street onto 4th Ave NW (0.6 mi) Turn left onto 14th St NW (0.5 mi) Turn right onto Assisi Heights Dr (0.3 mi) Slight left (364 ft) Destination will be on the right</p>
9:00 a.m. Arrive	<p><b>Rochester Area Overlook, Rochester</b> (20 minutes for presentation and discussion) Location: Assisi Heights, <a href="#">1001 14<sup>th</sup> St NW, Rochester, MN 55901</a></p> <p><i>Presenters:</i> MN Geological Survey Tony Runkel, Chief Geologist Minnesota Department of Natural Resources John Barry, Hydrogeologist Paul Putzier, Hydrogeologist Supervisor Olmsted County SWCD Caitlin Brady, Water Resources Coordinator Rochester Public Utilities Todd Osweiler, Environmental Analyst Olmsted County Terry Lee, (retired)</p> <p><i>Topics: Minnesota Geologic Survey – County Geologic Atlas Program Parts A and B, Karst and Geology</i> These appropriations focus on the production of county geologic and groundwater atlases that are used to inform management of surface water and groundwater resources. Appropriation M.L. 2019 03n is to complete geologic atlases (Part A), which focus on the properties and distribution of earth materials to define aquifer boundaries and the connection of aquifers to the land surface and surface water resources. Appropriation M.L. 2019 03o is to complete groundwater atlases (Part B), which use the geologic characteristics mapped in Part A, plus groundwater and surface water chemistry and additional modeling to characterize aquifer flow and sensitivity to pollution through a combination of maps and reports.</p> <p><i>Appropriations:</i> M.L. 2019 03n County Geologic Atlases - Part A, Mapping – UMN - \$2,000,000</p>

	M.L. 2019 03o County Geologic Atlases - Part B, Mapping Aquifer Hydrology – DNR- \$2,400,000
9:30 a.m. Depart	<p><b>Departing to Air Quality Monitoring Network, West St. Paul</b> Location: Humboldt High School, <a href="#">30 Baker St E, St Paul, MN 55107</a></p> <p><i>Directions:</i> (1 hour &amp; 11 minutes / 74.5 miles)            Head southeast toward Assissi Heights Dr (364 ft)            Continue onto Assissi Heights Dr (0.3 mi)            Turn right onto 14th St NW (0.1 mi)            Turn right onto Assisi Dr NW (0.7 mi)            Use the middle lane to turn left onto Elton Hills Dr NW (410 ft)            Turn right to merge onto US-52 N (0.2 mi)            Merge onto US-52 N (64.3 mi)            Keep right at the fork to stay on US-52 N (7.3 mi)            Exit onto MN-156 N/Concord St (0.2 mi)            Use the left 2 lanes to merge onto MN-156 N/Concord St (signs for Cesar Chavez St) (0.1 mi)            Continue onto Cesar Chavez St (0.6 mi)            Sharp left onto S Robert St (0.4 mi)            Turn right onto Baker St E (0.1 mi)</p>
10:45 a.m. Arrive.	<p><b>Air Quality Monitoring Network, West St. Paul</b> (20 minutes for presentation and discussion) Location: Humboldt High School, <a href="#">30 Baker St E, St Paul, MN 55107</a></p> <p><i>Presenters:</i>            Monika Vadali, Environmental Research Scientist, Minnesota Pollution Control Agency (MPCA)            Jacob Nelson, Environmental Specialist, Minnesota Pollution Control Agency (MPCA)</p> <p><i>Topics:</i> Air Quality and Community Engagement            Set up and operate a network of 250 air pollution sensors at 50 sites to monitor fine particles, ozone, nitrogen oxides, sulfur dioxide, and carbon monoxide in each zip code for the cities of Minneapolis and St. Paul to assess variability of urban air pollution.</p> <p><i>Appropriations:</i>            M.L. 2017 07b Assessment of Urban Air Quality – MPCA - \$700,000</p>
11:15 a.m. Depart	<p><b>Depart to Strategic Planning Lunchtime Group Discussion, Ventura Village, Minneapolis</b> Location: Maria's Columbian Café, <a href="#">113 East Franklin Avenue, Minneapolis, MN 55404</a></p> <p><i>Directions:</i> (21 minutes / 11.0 miles)            Head east on Baker St E toward Livingston Ave (0.1 mi)            Turn left onto S Robert St (0.4 mi)            Turn left onto Cesar Chavez St (0.2 mi)            Continue onto Wabasha St S (0.5 mi)            Continue straight to stay on Wabasha St S (1.0 mi)            Turn left onto the I-35E/I-94 ramp (407 ft)            Keep right at the fork, follow signs for Interstate 94 W and merge onto I-94 W (0.3 mi)            Merge onto I-94 W (7.3 mi)            Take exit 234B for 7th St toward Hospital (0.4 mi)            Slight right onto S 7th St (0.1 mi)            Turn left onto 11th Ave S (0.6 mi)            Turn left onto E Franklin Ave (131 ft)            Destination will be on the right</p>
11:45 a.m. Arrive	<b>Strategic Planning Lunchtime Group Discussion, Ventura Village, Minneapolis</b> (75 minutes for lunch and discussion)

	<p>Location: Maria's Columbian Café, <a href="#">113 East Franklin Avenue, Minneapolis, MN 55404</a></p> <p>Lunch will be provided for members and invited guests from the community</p>
1:15 p.m. Depart	<p><b>Depart to Civil, Environmental, and Geo- Engineering Department, University of Minnesota, Minneapolis</b></p> <p>Location: <a href="#">500 Pillsbury Dr. SE, Minneapolis, MN 55455</a>.</p> <p><i>Directions:</i> (9 minutes / 3.3 miles)  Head east on E Franklin Ave toward 13th Ave S (0.6 mi)  Turn right onto Cedar Ave (0.2 mi)  Turn left to merge onto MN-55 W/Hiawatha Ave (0.6 mi)  Use the right lane to take the ramp onto I-35W N (1.1 mi)  Use the right lane to take exit 18 for University Ave toward 4th St SE/County Rd 36 (0.1 mi)  Use the right 2 lanes to turn right onto University Ave SE (0.6 mi)  Turn right onto Church St SE (377 ft)  Turn left onto Pillsbury Dr SE (203 ft)</p>
1:30 p.m. Arrive	<p><b>Civil, Environmental, and Geo- Engineering Department, University of Minnesota, Minneapolis</b>  (35 minutes for presentation and discussion)</p> <p>Location: <a href="#">500 Pillsbury Dr. SE, Minneapolis, MN 55455</a>.  Meet at informational kiosk on the north side while going East on Pillsbury</p> <p><i>Presenters:</i>  Paige Novak, UMN  Tim LaPara, UMN  Sebastian Behrens, UMN  Matt Behrens (Bill Arnold's student), UMN  Ray Hozalski, UMN</p> <p><i>Topics:</i> Drinking Water and Wastewater, Engineering and Technology, and Contaminants of Emerging Concern</p> <p>Several projects will be discussed that highlight the breadth of LCCMR-sponsored research being performed in the CEGE Department at the University of Minnesota. Projects range from those focused on developing new technologies for better water treatment (e.g., for nitrogen, sulfate, or metal removal), focused on understanding natural systems and the health implications of those systems (e.g., bacterial presence, precursors for disinfection byproducts in drinking water), and focused on the occurrence of pollutants in the environment and their ecological impacts (e.g., insecticides).</p> <p><i>Appropriations:</i>  M.L. 2017 04b Wastewater Nitrogen Removal Technology to Protect Water Quality - \$450,000  M.L. 2016, 04f Bacterial Assessment of Groundwater Supplies Used for Drinking Water - \$299,000  M.L. 2016, 04p Engineered Biofilter for Sulfate and Metal Removal from Mine Waters - \$440,000  M.L. 2019 04a Neonicotinoid Insecticides: Occurrence And Influence on Algal Blooms - \$350,000  M.L. 2019 04f Improving Drinking Water for Minnesotans through Pollution Prevention - \$345,000</p>
2:15 p.m. Depart	<p><b>Depart to St. Anthony Falls Laboratory, University of Minnesota, Minneapolis</b></p> <p>Location: <a href="#">2 SE 3rd Ave, Minneapolis, MN 55455</a></p> <p><i>Directions:</i> (7 minutes / 1.5 miles)  Head northwest on Pillsbury Dr SE toward Church St SE (203 ft)  Turn right onto Church St SE (377 ft)  Continue onto SE 17th Ave (410 ft)  Turn left onto SE 4th St (0.9 mi)  Turn left onto 5th Ave SE (0.2 mi)  Turn right at the 2nd cross street onto 2nd St SE (0.2 mi)</p>

	Turn left at the 1st cross street onto SE 3rd Ave (397 ft)
2:30 p.m. Arrive	<p><b>St. Anthony Falls Laboratory, University of Minnesota, Minneapolis</b> (35 minutes for presentation and discussion)</p> <p>Location: <a href="#">2 SE 3rd Ave, Minneapolis, MN 55455</a></p> <p><i>Presenters:</i></p> <p>Lian Shen, SAFL UMN  Jeffrey Marr, SAFL UMN  Ardeshir Ebtehaj, SAFL UMN  Miki Hondzo, SAFL UMN  William Herb, SAFL UMN  Jiarong Hong, SAFL UMN  Peter Kang, SAFL UMN  Jessica Kozarek, SAFL UMN</p> <p><i>Topics:</i> Environmental Fluid Flows, Renewable Energy, Storm water, Outdoor Lab, Harmful Algal Booms (HAB), Micro plastic pollution</p> <p>Introduction to St. Anthony Falls Laboratory (SAFL) and its research on Minnesota environment and natural resources, in the areas of:</p> <ol style="list-style-type: none"> <li>1. Assess, track, and develop methods to remove microscopic plastic particles that are dispersed and accumulating as pollution in Minnesota water bodies.</li> <li>2. Enhance efforts to increase natural reproduction of fish in Minnesota lakes by assessing wave energy impacts on near-shore spawning habitat.</li> <li>3. Investigate lake processes and meteorological conditions triggering algal blooms and toxin production, develop models for tracking blooms, and provide outreach on the prediction, detection, and impacts of mitigation of algal bloom events.</li> <li>4. Air- and space-borne remote sensing of surface water and environmental pollution. Real-time monitoring of statewide pollen in Minnesota. Assessing the increasing harmful algal blooms in Minnesota lakes. Monitoring and prediction of groundwater contaminant transport.</li> <li>5. Environmentally-friendly wind energy, hydropower, and solar energy for Minnesota.</li> </ol> <p><i>Appropriations:</i></p> <p>M.L. 2018 04b Assess and Develop Strategies to Remove Microscopic Plastic-Particle Pollution from Minnesota Water - \$300,000  M.L. 2017 08e Enhancing Spawning Habitat Restoration in Minnesota Lakes - \$294,000  M.L. 2016 04b Assessing the Increasing Harmful Algal Blooms in Minnesota Lakes - \$270,000  M.L. 2017 06a MAISRC Subproject 21.2: Field validation of multibeam sonar zebra mussel detection - \$228,900</p>
3:15 p.m. Depart	<p><b>Depart to Paddling the Mississippi River with Wilderness Inquiry, Minneapolis</b></p> <p>Location: North Mississippi Regional Park, Carl W. Kroening Interpretative Center, <a href="#">4900 N Mississippi Dr, Minneapolis, MN 55430</a></p> <p><i>Directions:</i> (13 minutes / 6.2 miles)</p> <p>Head northeast on SE 3rd Ave toward 2nd St SE (397 ft)  Turn left at the 1st cross street onto 2nd St SE (0.2 mi)  Turn left onto Central Ave SE (0.3 mi)  Continue onto 3rd Ave S (0.4 mi)  Turn right onto S 3rd St (0.5 mi)  Use the right 3 lanes to take the Interstate 94 W/Interstate 394 W ramp (52 ft)  Keep right at the fork, follow signs for I-94 W and merge onto I-94 W (4.2 mi)  Take exit 226 for 49th Ave N toward 53rd Ave N (0.3 mi)  Continue onto Lyndale Ave N (0.2 mi)</p>

	Turn right onto N Mississippi Dr (213 ft)
3:30 p.m. Arrive	<p><b>Paddling the Mississippi River with Wilderness Inquiry, Minneapolis</b> (80 minutes for presentation and discussion)</p> <p>Location: North Mississippi Regional Park, Carl W. Kroening Interpretative Center, <a href="#">4900 N Mississippi Dr, Minneapolis, MN 55430</a></p> <p>Meet at the interpretative center for presentation followed by a paddle along the Mississippi to Boom Island</p> <p><i>Presenters:</i></p> <p>Greg Lais, Executive Director, Wilderness Inquiry  Julie Edmiston, COO, Wilderness Inquiry  Willy Tully, Development Manager, Wilderness Inquiry</p> <p><i>Topics:</i> Statewide youth engagement in the outdoors and Place-based education through hands-on STEM programming</p> <p>Collaborative partnership, including the National Park Service, Minneapolis Public Schools, and St. Paul Public Schools, to establish a metrowide system providing place-based environmental education experiences using existing, but underutilized, outdoor environmental resources serving over 15,000 middle and high school students.</p> <p>Provide place-based environmental education science water experiences to approximately 20,000 middle- and high-school students</p> <p><i>Appropriations:</i></p> <p>M.L. 2017 05a Connecting Youth to Minnesota Waterways through Outdoor Classrooms - \$1,200,000  M.L. 2014 09c Urban Environmental Education Engaging Students in Local Resources - \$1,093,000</p>
5:00 p.m. Depart	<p><b>Return to State Office Building</b></p> <p>Location: <a href="#">100 Rev. Dr. Martin Luther King Jr. Blvd., St. Paul, Minnesota 55155</a></p> <p><i>Directions:</i> (21 minutes / 16.3 miles)</p> <p>Head south on N Mississippi Dr toward Lyndale Ave N (213 ft)  Turn right onto Lyndale Ave N (0.3 mi)  Turn left at the 1st cross street onto 53rd Ave N (404 ft)  Turn left at the 1st cross street onto W Lyndale Ave N (signs for I-94 E) (0.3 mi)  Use the left lane to take the ramp onto I-94 E (0.6 mi)  Merge onto I-94 E (2.7 mi)  Keep left to stay on I-94 E (1.2 mi)  Keep left to stay on I-94 E (10.1 mi)  Take exit 241A toward Marion St/Kellogg Blvd/State Capitol (0.4 mi)  Use the left lane to merge onto Concordia Ave (341 ft)  Turn left onto Marion St (0.4 mi)  Turn right onto University Ave W (0.3 mi)  Turn right onto Rev Dr Martin Luther King Jr Boulevard. (0.1 mi)</p>
5:30 p.m. Arrive	<p><b>Return to State Office Building</b></p> <p>Location: <a href="#">100 Rev. Dr. Martin Luther King Jr. Blvd., St. Paul, Minnesota 55155</a></p>