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State of Minnesota

HOUSE OF REPRESENTATIVES

NINETY-FOURTH SESSION

H. F. No. 1218

02/20/2025 Authored by Heintzeman and Backer
The bill was read for the first time and referred to the Committee on Environment and Natural Resources Finance and Policy
02/26/2025 Adoption of Report: Re-referred to the Committee on Ways and Means

A bill for an act

relating to environment; appropriating money from the environment and natural resources trust fund; modifying prior appropriations; amending Laws 2024, chapter 83, section 2, subdivisions 3, 8.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

Section 1. **APPROPRIATIONS.**

The sums shown in the columns marked "Appropriations" are appropriated to the agencies and for the purposes specified in this act. The appropriations are from the environment and natural resources trust fund, or another named fund, and are available for the fiscal years indicated for each purpose. The figures "2026" and "2027" used in this act mean that the appropriations listed under them are available for the fiscal year ending June 30, 2026, or June 30, 2027, respectively. "The first year" is fiscal year 2026. "The second year" is fiscal year 2027. "The biennium" is fiscal years 2026 and 2027. Any unencumbered balance remaining in the first year does not cancel and is available for the second year or until the end of the appropriation. These are onetime appropriations.

	APPROPRIATIONS Available for the Year Ending June 30	
	2026	**2027**
Sec. 2. **MINNESOTA RESOURCES**		
Subdivision 1. **Total Appropriation**	**$ 103,326,000**	**$ 0**
This appropriation is from the environment and natural resources trust fund. The amounts		

that may be spent for each purpose are specified in the following subdivisions.

Subd. 2. **Definition**

"Trust fund" means the Minnesota environment and natural resources trust fund established under the Minnesota Constitution, article XI, section 14.

Subd. 3. **Foundational Natural Resource Data and Information**	22,084,000	-0-

(a) **Fond du Lac Deer Study - Phase 1**

$1,441,000 the first year is from the trust fund to the Minnesota State Colleges and Universities for Bemidji State University to collect baseline deer demographic, movement, and habitat-use data before elk restoration to better inform management of both elk and deer populations on the Fond du Lac Reservation and surrounding areas.

(b) **Are All Walleye Created Equal? Probably Not.**

$298,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to investigate Minnesota walleye strain physiology and disease responses to warming water and to build a tool to guide adaptive management of walleye in a warming climate.

(c) **Deer Survival Within Minnesota's Densest Wolf Population**

$809,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to evaluate how wolves, winter severity, and habitat affect deer mortality and

survival across space and time within the Voyageurs region.

(d) **Evaluating Anticoagulant Rodenticide Exposure in Minnesota's Carnivores**

$247,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to determine anticoagulant rodenticide exposure rates and concentrations in Minnesota bobcats and fishers, factors influencing exposure risk, and negative effects of rodenticide exposure on carnivore health.

(e) **Digitizing the Science Museum of Minnesota's Mollusk Specimens**

$386,000 the first year is from the trust fund to the Science Museum of Minnesota to make the museum's Minnesota mollusk specimen collection available for research and education by identifying and organizing all relevant specimens and digitizing the museum's data.

(f) **Integrating Wildlife Objectives in Long-Term Forest Management Planning**

$316,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to develop a harvest-scheduling model that integrates wildlife habitat metrics with timber production objectives in the forest-planning process for more sustainable forest landscape-level outcomes.

(g) **Surveying Minnesota's Secretive Marsh Birds**

$413,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the National Audubon Society, Upper Mississippi River office, to

conduct a breeding marsh bird survey and provide state and federal agencies with an assessment of marsh bird population status and wetland habitat. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

(h) **Improving Conservation Outcomes for Imperiled Wood Turtles**

$242,000 the first year is from the trust fund to the Minnesota Zoological Society to restore imperiled wood turtles by increasing remnant populations, quantifying effectiveness of habitat management strategies, establishing baseline information on disease prevalence, and creating a new decision-support tool for prioritizing future conservation actions.

(i) **Maximizing the Impact of Wildlife Movement Data**

$216,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to create a centralized and accessible database of wildlife movement data from prior trust fund-supported studies and demonstrate tools biologists can use to analyze these data to benefit Minnesota wildlife.

(j) **Expanding the Statewide Motus Wildlife Tracking Network**

$234,000 the first year is from the trust fund to the Minnesota Zoological Society to expand the statewide Motus Wildlife Tracking System network into southwestern Minnesota and the North Shore to guide the conservation of imperiled grassland and boreal migratory birds and other wildlife. This appropriation may

also be used to develop outreach and interpretive materials for Motus sites.

(k) **Updating and Sharing Information on Minnesota's Tick Biodiversity**

$186,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to collaborate with wildlife organizations and community scientists to survey the biodiversity and distribution of ticks in Minnesota and create a publicly accessible GIS dashboard to share results and potential disease implications with the public and wildlife managers.

(l) **Small Mammals and Hunter Participation: Expanded Offal Wildlife Watching**

$563,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to expand and assess hunter participation in monitoring scavenger use of deer gut piles, assess small mammal occurrence and contaminant and disease exposure risk at offal sites, and study how messaging impacts hunters' use of lead ammunition.

(m) **Green Heron as an Indicator of Wetland-Dependent Species**

$424,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to collect data on the year-round habitat use and migratory movements of green herons, assess potential factors leading to population decline, and identify conservation strategies to benefit the green heron and other wetland-dependent bird species.

(n) **Visualizing Minnesota's Natural Resources with CT Scanning**

$955,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, Bell Museum of Natural History, to acquire a CT scanner, scan Bell Museum organismal specimens, create 3D prints from the scans, and share the data and prints through environmental education and research programs. The CT scanner purchased with this appropriation must prioritize use by and be made available cost-free to other Minnesota-focused researchers for the duration of this appropriation. This appropriation may also be used for equipment, tools, and supplies needed to acquire, install, and use the scanner and print 3D models of scanned organisms. Net income generated as part of this appropriation may be reinvested in the project if a plan for reinvestment is approved in the work plan as provided under Minnesota Statutes, section 116P.10.

(o) **Mapping Human-Carnivore Conflicts in Human-Dominated Landscapes**

$563,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to evaluate bear, bobcat, and coyote habitat use, activity, and diet in Duluth and surrounding areas to map hotspots for human-carnivore conflicts and fill knowledge gaps to reduce conflicts. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

(p) **Geologic Atlases for Water Resource Management**

$1,260,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, Minnesota Geological Survey, to continue to produce geologic atlas maps and databases to inform management of groundwater and surface water. This appropriation is to complete Part A, which focuses 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.

(q) **Leveraging Statewide Datasets for Native Rough Fish**

$250,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to construct species distribution models that predict presence and abundance of native rough fish species and identify potential areas for protection, additional monitoring, or restoration across the state. This appropriation may also be used to build an interactive mapping tool and share results.

(r) **The Impacts of Climate Change on Northeastern Minnesota**

$772,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Friends of the Boundary Waters Wilderness to work with collaborators to aggregate research, data, and other information about the impacts of climate change on the habitat and wildlife of northeastern Minnesota into a publicly available, web-based database. This appropriation is available until June 30, 2029,

by which time the project must be completed and final products delivered.

(s) **Health and Disease Monitoring in Minnesota Wildlife**

$750,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, Minnesota Veterinary Diagnostic Laboratory, to collaborate with wildlife rehabilitation organizations and other wildlife health professionals throughout Minnesota to enhance the state's health and disease surveillance, preparedness, and response efforts.

(t) **Affordable Statewide Tracking of Forestry Fragmentation and Degradation**

$331,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to merge aircraft and satellite LiDAR data to build a model and an interactive real-time web dashboard of forest boundaries that provides business-ready information about statewide forest fragmentation and degradation due to human activities and natural disasters.

(u) **Safeguarding Bees While Monitoring Pollinators and Nesting Habitats**

$590,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to pioneer low-mortality methods for monitoring bee populations and to investigate nest habitat materials and antimicrobial properties in cooperation with community scientists and management agencies. This appropriation is available until

June 30, 2029, by which time the project must be completed and final products delivered.

(v) **Expanding the Application of Minnesota's Wetland Monitoring Data**

$312,000 the first year is from the trust fund to the commissioner of natural resources to use existing LiDAR and recurring aerial photographs to determine state grassland acreage and change over the last twenty years, evaluate key drivers of wetland change, and use technology to improve Minnesota's wetland monitoring.

(w) **Enhancing the Value of Minnesota Public Grasslands**

$390,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to evaluate a combination of prescribed fire, brush mowing, and targeted conservation grazing to develop ready-to-use management strategies for public land managers to mitigate woody species encroachment and increase biodiversity and carbon sequestration in public grasslands.

(x) **Foundational Precision Agriculture Data to Reduce Environmental Impacts**

$1,255,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the West Central Research and Outreach Center at Morris to establish data collection systems and methods at sentinel farm sites, develop and evaluate best management practices, and provide outreach and training to farmers to encourage adoption of precision agriculture technologies that

reduce fertilizer and chemical use and improve water and air quality.

(y) **Continued Aggregate Resource Mapping**

$621,000 the first year is from the trust fund to the commissioner of natural resources to map the aggregate resource potential in the state of Minnesota and to make the information available in print and electronic format to local units of government to support informed land-use decisions and resource conservation.

(z) **Advancing Collaborative Wild Rice Monitoring Program Technologies**

$900,000 the first year is from the trust fund to the commissioner of natural resources to continue efforts to create a framework for long-term wild rice monitoring for conservation and collaborate with Tribal and nongovernmental organizations to collect additional data, improve collection and analysis methods, and develop a statewide estimate of wild rice abundance and coverage.

(aa) **Conserving Natural Resources by Advancing Forever Green Agriculture**

$2,146,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Forever Green Initiative to fund research projects to develop new perennial and winter-annual crops to protect water, wildlife, soil, other natural resources, and the climate. This appropriation is available until June 30, 2030, by which time the project must be completed and final products delivered.

(bb) **Minnesota's Priority Native Rough Fish: Gars and Bowfin**

$568,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to develop population dynamics, habitat use, and food web models for Minnesota gars and bowfins and conduct outreach to inform conservation and management and serve as a template for study of Minnesota's other native rough fish species.

(cc) **Understanding to Improve Minnesota's Future Lake Water Quality**

$595,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to use decade-long comprehensive lake, watershed, and weather data and high-resolution climate models to understand lake-specific drivers of water quality and predict the effects of future warming on harmful algal blooms across Minnesota.

(dd) **Operationalizing State Zooplankton Data to Support Lake Health**

$423,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to use long-term monitoring data to determine the relationship between zooplankton communities and ecosystem services, like fisheries health and water quality, and develop biotic indices for lake health.

(ee) **Trialing Climate-Ready Woodland Trees in Urban Areas**

$255,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to demonstrate performance of

climate-adaptive tree species and study land manager and public perceptions of these species to identify the best species and risk tolerance for future plantings in metropolitan areas of Minnesota.

(ff) **Superior Shores: Protecting Our Great Lakes Coastal Habitats**

$675,000 the first year is from the trust fund to the Science Museum of Minnesota for the St. Croix Watershed Research Station to map the locations and survey the biological diversity and water quality of Lake Superior coastal rock pools. This appropriation may also be used to develop outreach materials and host programs on rock pool understanding and conservation.

(gg) **Recruitment and Fecundity of Minnesota Moose**

$2,007,000 the first year is from the trust fund to the commissioner of natural resources for state and Tribal biologists to work collaboratively to estimate survival and fecundity of yearling and 2-year-old moose in northeast Minnesota to inform future management efforts. Of this amount, $841,000 is for an agreement with the 1854 Treaty Authority. This appropriation is available until June 30, 2031, by which time the project must be completed and final products delivered.

(hh) **Fighting Insect Decline: Minnesota Bumblebees to the Rescue**

$249,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to map historical and current bumblebee distribution and develop an

identification tool using molecular barcodes and an online resource hub to improve conservation of Minnesota's native bumblebees.

(ii) **Trace Metals in Municipal Yard Waste and Compost**

$120,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to assess trace metal contamination from collected residential yard waste, finished compost, and compost leachate in municipal yard waste recycling programs.

(jj) **Chronic Wasting Disease Prions in Minnesota Waters**

$322,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to evaluate the movement of chronic wasting disease in Minnesota waters, assess the risk of spread, and share results with wildlife and watershed managers.

Subd. 4. **Water Resources**	11,812,000	-0-

(a) **Enhancing Our Resources - Rural Health and Drinking Water**

$994,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Freshwater Society to partner with the Mayo Clinic to educate well owners and family health providers about the geologic occurrence and risk of arsenic in drinking water. This appropriation is also to provide free arsenic testing to well owners in southeast Minnesota.

(b) **Restoration and Outreach for Minnesota's Native Mussels**

$1,258,000 the first year is from the trust fund to the commissioner of natural resources to propagate, rear, and restore native freshwater mussel populations and the ecosystem services they provide to Minnesota waters; to evaluate reintroduction success; and to inform the public on mussels and mussel conservation.

(c) **Pristine to Green: Toxic Blooms Threaten Northern Lakes**

$1,362,000 the first year is from the trust fund to the Science Museum of Minnesota for the St. Croix Watershed Research Station to evaluate drivers that contribute to the formation of nuisance and toxic algal blooms in relatively pristine and protected lakes across Minnesota.

(d) **Training Lake Communities to Track Chloride and Algae**

$274,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Minnesota Sea Grant college program in Duluth to develop and train a network of community-based volunteers to track chloride and harmful algal blooms in rural Minnesota lakes.

(e) **Clean Sweep Solution to Nonpoint Source Pollution**

$386,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Water Resources Center to enhance Clean Sweep programs, identify the pollutants present in street-sweeping materials, explore material reuse options, and quantify benefits of enhanced street sweeping. This appropriation may also be used to coordinate

county and regional collaborations, develop resources, and provide training to increase targeted street-sweeping practices to reduce nonpoint source pollution to Minnesota's water resources.

(f) **Cyanotoxins in Minnesota Lakes: The Role of Sunlight**

$220,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to quantify degradation of cyanobacterial toxins by sunlight to understand how increasing frequency of harmful algal blooms and changing environmental conditions influence toxin persistence in natural waters.

(g) **Enhancing Degradation of Emerging Contaminants via Microbial Starvation**

$390,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to study how wastewater treatment systems can be improved to more effectively biodegrade mixtures of pharmaceuticals, pesticides, and other contaminants of emerging concern and protect Minnesota's water resources.

(h) **Soil Health Management for Water Storage**

$454,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Water Resources Center to conduct on-farm and model-based research and develop guidance for watershed planners and land managers to effectively use soil health management to achieve water storage and water quality goals.

(i) **Predicting Contaminant Movement in Minnesota's Fractured Aquifers**

$650,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, St. Anthony Falls Laboratory, to develop a software program that predicts the fate and movement of contaminants, such as PFAS, chloride, nitrate, and pathogens, in Minnesota's fractured aquifers.

(j) **Documentation and Toxicity of Microplastics in Urban Ecosystems**

$300,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to research how land use and toxicity affect the accumulation of microplastics and associated contaminants of concern in stormwater ponds and the wildlife that use stormwater ponds.

(k) **Terminating PFAS-Type Pesticides via Enzyme Cocktails**

$297,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to evaluate the ability of selected enzymes and combinations of enzymes to biodegrade per- and polyfluoroalkyl substances (PFAS) found in pesticides and to design a pilot-scale biofilter for effective elimination of PFAS from water.

(l) **Addressing 21st Century Challenges for the St. Croix**

$243,000 the first year is from the trust fund to the Science Museum of Minnesota for the St. Croix Watershed Research Station to develop a watershed model to identify potential hydrologic and water quality impacts

to the lower St. Croix River over the next 75 years and inform future planning and management in the watershed.

(m) **Impact of Statewide Conservation Practices on Stream Biodiversity**

$300,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to use existing monitoring data to evaluate the effects of wetlands and riparian buffers on stream and river biodiversity and biological condition and develop tools and materials to inform the public and natural resource managers.

(n) **Modeling the Future Mississippi River Gorge**

$427,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, St. Anthony Falls Laboratory, to construct a reduced-scale physical model of Mississippi River Pool 1, Lock & Dam 1, and adjacent upstream and downstream reaches; analyze water flow and sediment movement under various pool management strategies; and share results with the public to inform decisions on the future management of the lock and dam.

(o) **Highly Efficient Nutrient Removal Technology for Agricultural Drainage**

$453,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to conduct lab- and field-scale tests of a novel bioreactor technology for removing nutrients from agricultural drainage and disseminate results to farmers and the public.

(p) **Citizen Scientists Capture Microplastic Pollution Around State**

$419,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to develop adaptable microplastic sampling and detection methods, develop a public-access database, and leverage citizen scientists to survey microplastic pollution throughout the state to allow for data-driven risk management decisions and solutions.

(q) **Healthy Native Prairie Microbiomes for Cleaner Water**

$468,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to identify and characterize prairie plant microbiomes and study the potential of native prairie microbes to provide nitrogen for agricultural crops and reduce industrial fertilizer use and nitrate contamination of water.

(r) **Wastewater Chloride Reduction through Industrial Source Reduction Assistance**

$247,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Minnesota Technical Assistance Program to provide technical assistance to businesses to cost-effectively reduce industrial and commercial chloride use in communities with high chloride effluent concentrations.

(s) **Pilot Water Budget Framework for Managing Water Withdrawals**

$198,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to develop a pilot water budget framework to identify sensitive areas in Minnesota where net water withdrawals have

a significant impact on surface water and groundwater.

(t) **Biofilm Mediated Destruction of PFAS in Groundwater**

$1,336,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Bay West, LLC to develop biofilm treatment technology and demonstrate field-scale removal of per- and polyfluoroalkyl substances (PFAS) from contaminated groundwater. A fiscal management plan must be approved in the work plan before any trust fund money is spent.

(u) **Impact of Microplastics on Wastewater Treatment in Minnesota**

$506,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to quantify the abundance of microplastics in wastewater treatment plants in Minnesota, determine how microplastics affect wastewater treatment plant performance, and evaluate how different wastewater treatment processes alter microplastics.

(v) **Portable Arsenic and Nitrate Detector for Well Water**

$358,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to develop a small, cheap, and easy-to-use system to detect arsenic and nitrate in well water and determine whether well water is safe to drink.

(w) **Recovering Salts from Highly Saline Wastewater**

$272,000 the first year is from the trust fund to the Board of Regents of the University of

Minnesota to develop a method to recover useful salts from concentrated saline wastewater to increase the economic sustainability of high water-recovery softening, sulfate removal, and industrial wastewater treatment.

Subd. 5. **Environmental Education** 11,965,000 -0-

(a) **Eagle's Nest: Where the World Becomes Your Classroom**

$130,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Glacial Hills Elementary School to create interactive natural playground and landscaping features for children and provide environmental education programming outside of regular school hours.

(b) **Advancing Equity in Environmental Education**

$700,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Camp Fire Minnesota to provide needs-based scholarships for Minnesota youth to attend state-standards-aligned environmental and outdoor education programs.

(c) **Teacher Field School - Phase 2: Increasing Impact**

$712,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Hamline University to continue the teacher field school program that trains teachers how to connect academic content with environmental stewardship, natural resource conservation, and outdoor recreation. This appropriation is also to pilot

a train-the-trainer model for nature-based education practices.

(d) **Creating Future Leaders in Outdoor and Environmental Leadership**

$330,000 the first year is from the trust fund to the Board of Trustees of the Minnesota State Colleges and Universities for North Hennepin Community College to collaborate with K-12 education, higher education, and outdoor organizations to increase environmental education, leadership, internship, and career opportunities for underrepresented college and high school students.

(e) **Engaging our Diverse Public in Environmental Stewardship - Phase 2**

$249,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Great River Greening to increase participation in natural resources conservation and restoration efforts and careers through volunteer, internship, and youth engagement activities, with a focus on diverse audiences that more accurately reflect local demographic and socioeconomic conditions in Minnesota.

(f) **Outdoor School for Minnesota K-12 Students**

$3,992,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Osprey Wilds Environmental Learning Center to partner with four other accredited residential environmental learning centers in Minnesota to provide needs-based scholarships to K-12 students

statewide for immersive multiday environmental learning experiences.

(g) **Statewide Environmental Education via PBS Outdoor Series**

$415,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Pioneer Public Broadcasting Service to produce, distribute, and promote new episodes of a statewide public television series that inspires Minnesotans to connect with the outdoors and to restore and protect the state's natural resources.

(h) **Maajii-akii-gikenjigewin Conservation Crew Program**

$678,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Conservation Corps Minnesota & Iowa to expand a conservation corps program developed to provide natural resources career development opportunities for indigenous young adults and cultivate an enduring action-based conservation ethic through the integration of traditional knowledge, nature immersion, and the implementation of conservation and restoration practices in the field.

(i) **Reuse for the Future: Youth Education and Engagement**

$225,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Reuse Minnesota to provide curriculum-based opportunities for students to learn about the reuse economy, reuse skills, and other opportunities to reduce waste. This

appropriation may also be used to align materials to state standards and translate materials to additional languages.

(j) **River Bend Nature Center Outdoor Diversity Initiative**

$247,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with River Bend Nature Center to lead a coalition of educational partners and culturally specific organizations to expand recognized environmental education curriculum and provide conservation-based career exploration and job placement opportunities for diverse communities in southern Minnesota.

(k) **Camp Parsons Mississippi Summer**

$225,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Phyllis Wheatley Community Center to provide environmental education to Minneapolis urban youth through the Camp Parsons Mississippi Summer program that fosters connections to nature and encourages responsible stewardship of our natural resources.

(l) **Adult Outdoor Education for Minnesota's Underrepresented Communities**

$247,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Baztec Fishing & Outdoors to create fishing and hunting education, training, and opportunities for underserved and underrepresented communities in Minnesota. All fishing tackle purchased with this appropriation must be lead-free. A fiscal

management plan must be approved in the work plan before any trust fund money is spent.

(m) **Minnesota's Road Map for Sustainability and Climate Education**

$491,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Climate Generation to convene community gatherings and partner with institutions and organizations across the education sector to develop a road map on how to build capacity for equitable and accessible sustainability and climate education programs that align with the Minnesota Climate Action Framework.

(n) **ESTEP 2.0: Earth Science Teacher Education Project**

$643,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Minnesota Science Teachers Association to provide professional development for Minnesota science teachers statewide in environmental and earth science content to strengthen environmental education in schools.

(o) **Engaging Latine Communities in Conservation and Preservation**

$400,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Comunidades Organizando el Poder y la Accion Latina to use community-based partnerships and communications platforms to host outdoor events and conduct educational outreach focused on Latine and BIPOC communities

about the need to protect Minnesota's environment and natural resources.

(p) **Inclusive Wildlife Engagement in Classrooms and Communities**

$712,000 the first year is from the trust fund to the commissioner of natural resources for the nongame wildlife program to provide three wildlife conservation, action-based outdoor educational opportunities to engage needs-based schools, young adults, and communities underrepresented in natural resources through the Bird by Bird, Empowering Pathways into Conservation, and Community Science programs.

(q) **Activating Youth and Family Environmental Stewardship through Raptors**

$228,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Raptor Center to deliver standards-based environmental education featuring live raptors through school programs and community events across Minnesota.

(r) **Moving Minnesota toward a Lead-Free Sporting Future**

$250,000 the first year is from the trust fund to the Board of Trustees of the Minnesota State Colleges and Universities for Bemidji State University to conduct educational outreach directed at hunters and anglers to increase awareness of lead-free options for big-game hunting, small-game hunting, and fishing as a means of reducing wildlife exposure to lead.

(s) **Science Centers Supporting Northern Boys and Girls Clubs**

$1,091,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Headwaters Science Center to expand access to environmental science education in northern Minnesota and leverage partnerships between rural and urban organizations to deliver culturally relevant, hands-on learning experiences to underserved students.

Subd. 6. **Aquatic and Terrestrial Invasive Species** 6,713,000 -0-

(a) **Aquatic Invasive Species: From Problems to Real-World Solutions**

$5,771,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Minnesota Aquatic Invasive Species Research Center to conduct high-priority projects aimed at solving Minnesota's aquatic invasive species problems using rigorous science and a collaborative process. This appropriation may also be used to deliver research findings to end users through strategic communication and outreach. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

(b) **Optimizing Nonnative Cattail Treatment Effectiveness in Prairie Wetlands**

$942,000 the first year is from the trust fund to the commissioner of natural resources to compare the effectiveness of invasive cattail treatment methods and provide recommendations for managers to maximize benefits of conservation money for native wetland plants and wildlife. This appropriation is available until June 30, 2031, by which time

the project must be completed and final products delivered.

Subd. 7. **Air Quality, Climate Change, and Renewable Energy** 11,744,000 -0-

(a) **Protecting Coldwater Fish Habitat in Minnesota Lakes**

$561,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to identify lake-specific watershed protection targets and management practices needed to maintain coldwater fish habitat threatened by warming temperatures and increasing extreme rain events and to integrate this information into conservation planning tools.

(b) **Agrivoltaics 2.0 Building a Resilient E-Farm**

$535,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the West Central Research and Outreach Center at Morris to evaluate emerging solar system designs and solar technology integration with vegetable and livestock production systems to maximize energy production and benefits to farmers.

(c) **Pine Needles Reveal Past and Present Airborne PFAS**

$550,000 the first year is from the trust fund to the commissioner of the Pollution Control Agency to use current and historic pine needles as a low-cost method to assess statewide per- and polyfluoroalkyl substances (PFAS) levels in ambient air.

(d) **Facilitated Transport Hybrid Membranes for CO_2 Separation**

$1,050,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to develop and test advanced polymeric membranes for capture and reuse of carbon dioxide at industrial sources.

(e) **Renewable Energy Conversion for Farm Diesel and Ammonia**

$726,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to develop a novel charge-swing catalytic condenser that will enable the low-cost production of hydrogen from water using rural electricity for on-the-farm energy storage or renewable diesel and ammonia fertilizer.

(f) **Innovative Solution to Renewable Energy from Food Waste**

$5,167,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Ramsey/Washington Recycling and Energy Board to provide reimbursements to offset the processing fees for the public to divert organic materials from landfills and produce renewable natural gas through anaerobic digestion and sequestration of carbon into biochar. Net income generated as part of this appropriation may be reinvested in the project if a plan for reinvestment is approved in the work plan as provided under Minnesota Statutes, section 116P.10. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

(g) **Fueling the Future: Decarbonizing Regional Transportation Project**

$3,155,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of St. Cloud to install a green hydrogen production, storage, and fueling station that provides a renewable, carbon-free, alternate fuel source to decarbonize community transportation and manufacturing sectors. This appropriation may also be used to convert city fleet and public transit vehicles to hydrogen fuel. Net income generated as part of this appropriation may be reinvested in the project if a plan for reinvestment is approved in the work plan as provided under Minnesota Statutes, section 116P.10. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

Subd. 8. **Methods to Protect or Restore Land, Water, and Habitat** 12,188,000 -0-

(a) **Minnesota PlantWatch: Community Scientists Conserving Rare Plants**

$1,086,000 the first year is from the trust fund. Of this amount, $518,000 is to the Board of Regents of the University of Minnesota for the Minnesota Landscape Arboretum and $568,000 is to the commissioner of natural resources to enhance the Minnesota PlantWatch program to improve the conservation of Minnesota's natural resources and support community scientist-driven rare plant surveys and seed banking and preservation.

(b) **Grassland Restoration for Pollinator Conservation and Demonstration**

$250,000 the first year is from the trust fund to the Board of Regents of the University of

Minnesota for the Minnesota Landscape Arboretum to restore a degraded pasture to grassland as a model for climate-resilient pollinator habitat; provide interpretive signage, education, and community engagement; and conduct species monitoring. This appropriation is available until June 30, 2031, by which time the project must be completed and final products delivered.

(c) **Planning for Long-Term Natural Resources Protection in Hennepin County**

$250,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Hennepin County to develop a publicly available interactive map of natural systems, create a centralized clearinghouse of data and best practices toolkit, and provide ongoing technical assistance for local communities with limited resources to manage complex natural resources challenges. Net income generated as part of this appropriation may be reinvested in the project if a plan for reinvestment is approved in the work plan as provided under Minnesota Statutes, section 116P.10.

(d) **Native Forages: Growing Drought and Climate Resiliency**

$2,254,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Ducks Unlimited to collaborate with livestock farmers to establish native grassland wildlife habitat and enhance native forages on working lands to improve ecological, economic, and climate resiliency. Notwithstanding subdivision 13, paragraph (e), restoration efforts may be undertaken on

private lands but must occur on properties enrolled in long-term agreements to protect and maintain the restored areas in conformance with approved restoration and grazing plans as approved in the work plan. This appropriation is available until June 30, 2031, by which time the project must be completed and final products delivered.

(e) **Accelerated Genetic Migration of Bur Oak - Ten-Year Data**

$223,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Great River Greening to assess the growth and survival of previously restored bur oak ecotypes to inform techniques for improved climate resiliency. This appropriation may also be used to enhance the previous plantings and disseminate results of the study to practitioners, students, landowners, and others. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

(f) **Superior Hiking Trail Bridge, Boardwalk, and Trailhead Renewal**

$532,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Superior Hiking Trail Association to renew Superior Hiking Trail bridges, boardwalks, and trailheads to increase user safety, improve the user experience, and protect adjacent land and water.

(g) **Mississippi Gateway Shoreline Stabilization and Fishing Improvements**

$735,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Three Rivers Park District to improve water quality and shoreline fishing access through shoreline stabilization and construction of accessible trails and fishing platforms within Mississippi Gateway Regional Park.

(h) **Phytoremediation of PFAS from Soil**

$1,066,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to use interdisciplinary research in biology, nanotechnology, chemistry, and genetic engineering to develop technology to remediate soils contaminated with per- and polyfluoroalkyl substances (PFAS). This appropriation may also be used to convene stakeholders to coordinate and advance PFAS remediation research in Minnesota. This appropriation is subject to Minnesota Statutes, section 116P.10.

(i) **Removing Mercury from Minnesota Waters**

$247,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to test and refine a biotechnology approach to remove mercury from the food chain in Minnesota's lakes and rivers and potentially make fish consumption in Minnesota safer. This appropriation is subject to Minnesota Statutes, section 116P.10.

(j) **Evaluating Native Seed Mixes for Grazing**

$208,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Restoravore to assess the

use of native hay and pasture mixes to benefit biodiversity, soil health, and Minnesota farmers. A fiscal management plan must be approved in the work plan before any trust fund money is spent.

(k) **Improving Minnesota Forest Health via Post-Duff-Burning Soil Analysis**

$646,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to thoroughly investigate the impact of forest floor duff fires on soil dynamics, nutrient cycles, invasive shrubs, earthworms, and root systems to improve fire management for Minnesota's forest preservation. This appropriation may also be used to develop an outdoor lab-scale duff-burning device.

(l) **Minnesota Riverbank Protection and Parks Improvements**

$1,400,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Shakopee to restore Minnesota River shoreline at Huber Park by regrading and establishing native vegetation to protect fish and wildlife habitat, reduce erosion, and provide public access to the river. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

(m) **Restoration at Wakan Tipi and Bruce Vento Nature Sanctuary**

$669,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Lower Phalen Creek Project to conduct citizen-science natural resource data collection events, recruit and

train volunteer site stewards, and enhance habitat at Wakan Tipi and the Bruce Vento Nature Sanctuary.

(n) **Promoting Pollinators on Corporate Campuses**

$547,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the University of St. Thomas to use experimental bee lawn installations on corporate campuses, combined with landscape modeling and employee surveys, to determine potential ecological, economic, and societal benefits of widespread commercial lawn habitat transformation. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

(o) **Riparian Area Adaptation Strategy for Southeast Minnesota**

$243,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with The Nature Conservancy, in partnership with the University of Minnesota, to assess an alternative adaptation strategy to restore riparian areas by excavating and planting riparian shrubs to reconnect the floodplains. This appropriation may also be used for outreach materials and educational activities.

(p) **Minnehaha Park South Plateau Oak Savanna Restoration**

$242,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Minneapolis Park and Recreation Board to improve wildlife habitat,

enhance recreational experiences, and restore an area of urban parkland in Minnehaha Park to an oak savanna ecosystem. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

(q) **Tree Protection for Minnesota's Tamarack Against Larch Beetle**

$321,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to evaluate new insect management techniques and key factors for predicting future infestations to protect and preserve trees from native eastern larch beetle infestations.

(r) **Shoreline Restoration and Enhancement at Minneapolis Lakes**

$819,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Minneapolis Park and Recreation Board to restore and enhance areas of turf-dominated, eroding, and low habitat value lakeshore that impacts the water quality of the Minneapolis Chain of Lakes.

(s) **Developing Markets for CLC Crops**

$450,000 the first year is from the trust fund to the commissioner of agriculture to provide grants to organizations in Minnesota to develop enterprises, supply chains, and markets for continuous living cover crops and cropping systems in the early stage of commercial development. This appropriation is exempt from the income repayment requirements in Minnesota Statutes, section116P.10, paragraph (c).

Subd. 9. **Land Acquisition, Habitat, and Recreation** 19,553,000 -0-

(a) **Cannon River Preservation and Access**

$2,717,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Dakota County to rehabilitate the historic Waterford Bridge for the Mill Towns State Trail; restore and enhance upland shoreline, forest, and prairie habitats; and develop a trailhead and recreational access to the Cannon River.

(b) **Mesabi Trail: Aurora to Hoyt Lakes**

$1,325,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with St. Louis and Lake Counties Regional Railroad Authority for environmental review and permitting and to engineer, design, and construct a segment of the Mesabi Trail beginning at the intersection of Main Street and Forestry Road in Aurora toward Hoyt Lakes.

(c) **RTA Maintenance Trail Stabilization Project**

$500,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Eden Prairie to construct a retaining wall and restore adjacent remnant prairie along the maintenance trail at Richard T. Anderson (RTA) Conservation Area to mitigate ongoing erosion and protect native habitat and plant communities.

(d) **Local Parks, Trails, and Natural Areas Grant Programs**

$4,769,000 the first year is from the trust fund to the commissioner of natural resources to

solicit, rank, and fund competitive matching grants for local parks, trail connections, and natural and scenic areas under Minnesota Statutes, section 85.019. This appropriation is for local nature-based recreation, connections to regional and state natural areas, and recreation facilities and may not be used for athletic facilities such as sport fields, courts, and playgrounds. This appropriation is exempt from subdivision 13, paragraph (k).

(e) **Boardwalk Over Boggy Land for Recreational Purposes**

$148,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Battle Lake to design and construct a boardwalk over city land to protect wetlands and to increase community access to natural areas and wildlife habitat.

(f) **Lake Zumbro Park Water Access and Site Improvements**

$1,978,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Olmsted County to enhance the Lake Zumbro Park water access and the federal Americans with Disabilities Act (ADA) accessibility for boating, fishing, and viewing, while creating new user-friendly and accessible amenities for individuals and families. This may include new fishing docks or piers, restored shoreline, improved parking, and ADA accessible access to an existing kayak and canoe launch.

(g) **Scientific and Natural Area (SNA) Biodiversity Protection**

$1,104,000 the first year is from the trust fund to the commissioner of natural resources for the scientific and natural area program to conserve Minnesota's most unique places and rare species and strategically acquire lands that meet criteria for SNAs under Minnesota Statutes, section 86A.05. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

(h) **Scandia Gateway Trail Connection: Recreation, Wetlands, and Environmental Education**

$907,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Scandia to engineer, design, and construct a bike and pedestrian trail to connect recreational, cultural, and environmental resources in Scandia to the state Gateway Trail. This appropriation is also to create and install educational interpretive signage about wetlands and rain gardens near the trail.

(i) **Lake Byllesby Regional Park Restoration and Recreation**

$1,120,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Dakota County to restore prairie, woodland, and shoreline habitat and design and install trails, birding and picnic areas, and other recreational amenities to enhance the visitor experience and stewardship at Lake Byllesby Regional Park. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

(j) **Thompson County Park Restoration and Accessibility Improvements**

$867,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Dakota County to develop a pollinator promenade with accessible natural surface paths, native plantings, and interpretive signage at Thompson County Park. This appropriation may also be used to conduct stream restoration to enhance visitor experience and provide stormwater storage, sediment and nutrient reduction, and increased habitat and species diversity within the park. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

(k) **Thom Storm Chalet and Outdoor Recreation Center**

$2,312,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Duluth to construct a new building and accessible parking for the Thom Storm Chalet and Outdoor Recreation Center at Chester Park to expand high-quality outdoor recreation and environmental education opportunities that enhance youth and family understanding of the importance of natural resource protection, conservation, and preservation. Net income generated as part of this appropriation may be reinvested in the project if a plan for reinvestment is approved in the work plan as provided under Minnesota Statutes, section 116P.10.

(l) **Enhancing Preservation and Accessibility at Hawk Ridge Nature Reserve**

$155,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Duluth to develop accessible trails and remove invasive species to enhance outdoor recreation and education opportunities that promote conservation of raptors and preservation of natural resources at Hawk Ridge Nature Reserve.

(m) **Echo Bay County Park - Phase 1 Construction**

$1,122,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Otter Tail County to construct, in accordance with the Echo Bay County Park Master Plan, access roads, trails, parking, and bathroom facilities that create designated public access and use corridors for outdoor recreation and limit natural resource impacts in Echo Bay County Park.

(n) **Chaska Big Woods Property Acquisition**

$529,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Chaska to acquire property that contains remnant Big Woods to protect Minnesota forests and wetlands and to increase community access to natural areas.

Subd. 10. **Administration, Emerging Issues, and Contract Agreement Reimbursement** 7,267,000 -0-

(a) **Emerging Issues Account**

$2,984,000 the first year is from the trust fund to the Legislative-Citizen Commission on Minnesota Resources to an emerging issues

account authorized in Minnesota Statutes, section 116P.08, subdivision 4, paragraph (d).

(b) **2025 Contract Agreement Reimbursement**

$280,000 the first year is from the trust fund to the commissioner of natural resources, at the direction of the Legislative-Citizen Commission on Minnesota Resources, for expenses incurred in preparing and administering contracts, including for the agreements specified in this section.

(c) **LCCMR Administrative Budget**

$4,000,000 the first year is from the trust fund to the Legislative-Citizen Commission on Minnesota Resources for administration in fiscal years 2026 and 2027 as provided in Minnesota Statutes, section 116P.09, subdivision 5. This appropriation is available until June 30, 2027. Notwithstanding Minnesota Statutes, section 116P.11, paragraph (b), Minnesota Statutes, section 16A.281, applies to this appropriation.

(d) **Legislative Coordinating Commission Legacy Website**

$3,000 the first year is from the trust fund to the Legislative Coordinating Commission for the website required in Minnesota Statutes, section 3.303, subdivision 10.

Subd. 11. **Availability of appropriations**

Money appropriated in this section may not be spent on activities unless they are directly related to and necessary for a specific appropriation and are specified in the work plan approved by the Legislative-Citizen Commission on Minnesota Resources. Money

appropriated in this section must not be spent on indirect costs or other institutional overhead charges that are not directly related to and necessary for a specific appropriation. Costs that are directly related to and necessary for an appropriation, including financial services, human resources, information services, rent, and utilities, are eligible only if the costs can be clearly justified and individually documented specific to the appropriation's purpose and would not be generated by the recipient but for receipt of the appropriation. No broad allocations for costs in either dollars or percentages are allowed. Unless otherwise provided, the amounts in this section are available for three years beginning July 1, 2025, and ending June 30, 2028, when projects must be completed and final products delivered. For acquisition of real property, the appropriations in this section are available for an additional fiscal year if a binding contract for acquisition of the real property is entered into before the expiration date of the appropriation. If a project receives a federal award, the period of the appropriation is extended to equal the federal award period to a maximum trust fund appropriation length of six years.

Subd. 12. **Data availability requirements**

Data collected by the projects funded under this section must conform to guidelines and standards adopted by Minnesota IT Services. Spatial data must also conform to additional guidelines and standards designed to support data coordination and distribution that have

been published by the Minnesota Geospatial Information Office. Descriptions of spatial data must be prepared as specified in the state's geographic metadata guidelines and final data must be uploaded to the Minnesota Geospatial Commons upon project completion. All data must be accessible and free to the public unless made private under the Data Practices Act, Minnesota Statutes, chapter 13. To the extent practicable, summary data and results of projects funded under this section should be readily accessible on the Internet and identified as having received funding from the environment and natural resources trust fund.

Subd. 13. **Project requirements**

(a) As a condition of accepting an appropriation under this section, an agency or entity receiving an appropriation or a party to an agreement from an appropriation must comply with paragraphs (b) to (m) and Minnesota Statutes, chapter 116P, and must submit a work plan and annual or semiannual progress reports in the form determined by the Legislative-Citizen Commission on Minnesota Resources for any project funded in whole or in part with money from the appropriation. Modifications to the approved work plan and budget expenditures must be made through the amendment process established by the Legislative-Citizen Commission on Minnesota Resources.

(b) A recipient of money appropriated in this section that conducts a restoration using money appropriated in this section must use native plant species according to the Board of

Water and Soil Resources' native vegetation establishment and enhancement guidelines and include an appropriate diversity of native species selected to provide habitat for pollinators throughout the growing season as required under Minnesota Statutes, section 84.973.

(c) For all restorations conducted with money appropriated under this section, a recipient must prepare an ecological restoration and management plan that, to the degree practicable, is consistent with the highest-quality conservation and ecological goals for the restoration site. Consideration should be given to soil, geology, topography, and other relevant factors that would provide the best chance for long-term success and durability of the restoration project. The plan must include the proposed timetable for implementing the restoration, including site preparation, establishment of diverse plant species, maintenance, and additional enhancement to establish the restoration; identify long-term maintenance and management needs of the restoration and how the maintenance, management, and enhancement will be financed; and take advantage of the best-available science and include innovative techniques to achieve the best restoration.

(d) An entity receiving an appropriation in this section for restoration activities must provide an initial restoration evaluation at the completion of the appropriation and an evaluation three years after the completion of

the expenditure. Restorations must be evaluated relative to the stated goals and standards in the restoration plan, current science, and, when applicable, the Board of Water and Soil Resources' native vegetation establishment and enhancement guidelines. The evaluation must determine whether the restorations are meeting planned goals, identify any problems with implementing the restorations, and, if necessary, give recommendations on improving restorations. The evaluation must be focused on improving future restorations.

(e) All restoration and enhancement projects funded with money appropriated in this section must be on land permanently protected by a conservation easement or public ownership.

(f) A recipient of money from an appropriation under this section must give consideration to contracting with Conservation Corps Minnesota for contract restoration and enhancement services.

(g) All conservation easements acquired with money appropriated under this section must:

(1) be permanent;

(2) specify the parties to the easement in the easement document;

(3) specify all provisions of an agreement that are permanent;

(4) be sent to the Legislative-Citizen Commission on Minnesota Resources in an electronic format at least 20 business days before closing;

(5) include a long-term monitoring and enforcement plan and funding for monitoring and enforcing the easement agreement; and

(6) include requirements in the easement document to protect the quantity and quality of groundwater and surface water through specific activities, such as keeping water on the landscape, reducing nutrient and contaminant loading, and not permitting artificial hydrological modifications.

(h) For any acquisition of lands or interest in lands, a recipient of money appropriated under this section must not agree to pay more than 100 percent of the appraised value for a parcel of land using this money to complete the purchase, in part or in whole, except that up to ten percent above the appraised value may be allowed to complete the purchase, in part or in whole, using this money if permission is received in advance of the purchase from the Legislative-Citizen Commission on Minnesota Resources.

(i) For any acquisition of land or interest in land, a recipient of money appropriated under this section must give priority to high-quality natural resources or conservation lands that provide natural buffers to water resources.

(j) For new lands acquired with money appropriated under this section, a recipient must prepare an ecological restoration and management plan in compliance with paragraph (c), including sufficient funding for implementation unless the work plan addresses why a portion of the money is not necessary to achieve a high-quality restoration.

(k) To ensure public accountability for using public money, a recipient of money appropriated under this section must, within 60 days of a land acquisition, provide to the Legislative-Citizen Commission on Minnesota Resources documentation of the selection process used to identify parcels acquired and provide documentation of all related transaction costs, including but not limited to appraisals, legal fees, recording fees, commissions, other similar costs, and donations. This information must be provided for all parties involved in the transaction. The recipient must also report to the Legislative-Citizen Commission on Minnesota Resources any difference between the acquisition amount paid to the seller and the state-certified or state-reviewed appraisal, if a state-certified or state-reviewed appraisal was conducted.

(l) A recipient of an appropriation from the trust fund under this section must acknowledge financial support from the environment and natural resources trust fund in project publications, signage, and other public communications and outreach related to work completed using the appropriation. Acknowledgment may occur, as appropriate, through use of the trust fund logo or inclusion of language attributing support from the trust fund. Each direct recipient of money appropriated in this section, as well as each recipient of a grant awarded pursuant to this section, must satisfy all reporting and other requirements incumbent upon constitutionally dedicated funding recipients as provided in

Minnesota Statutes, section 3.303, subdivision 10, and chapter 116P.

(m) A recipient of an appropriation from the trust fund under this section that is receiving funding to conduct children's services, as defined in Minnesota Statutes, section 299C.61, subdivision 7, must certify to the Legislative-Citizen Commission on Minnesota Resources, as part of the required work plan, that criminal background checks for background check crimes, as defined in Minnesota Statutes, section 299C.61, subdivision 2, are performed on all employees, contractors, and volunteers that have or may have access to a child to whom the recipient provides children's services using the appropriation.

Subd. 14. **Payment conditions and capital equipment expenditures**

(a) All agreements, grants, or contracts referred to in this section must be administered on a reimbursement basis unless otherwise provided in this section. Notwithstanding Minnesota Statutes, section 16A.41, expenditures made on or after July 1, 2025, or the date the work plan is approved, whichever is later, are eligible for reimbursement unless otherwise provided in this section. Periodic payments must be made upon receiving documentation that the deliverable items articulated in the approved work plan have been achieved, including partial achievements as evidenced by approved progress reports. Reasonable amounts may be advanced to projects to accommodate

cash-flow needs or match federal money. The advances must be approved as part of the work plan. No expenditures for capital equipment are allowed unless expressly authorized in the project work plan.

(b) Single-source contracts as specified in the approved work plan are allowed.

Subd. 15. **Purchasing recycled and recyclable materials**

A political subdivision, public or private corporation, or other entity that receives an appropriation under this section must use the appropriation in compliance with Minnesota Statutes, section 16C.0725, regarding purchasing recycled, repairable, and durable materials, and Minnesota Statutes, section 16C.073, regarding purchasing and using paper stock and printing.

Subd. 16. **Accessibility**

Structural and nonstructural facilities must meet the design standards in the Americans with Disabilities Act (ADA) accessibility guidelines.

Subd. 17. **Carryforward; extensions**

(a) The availability of the appropriations for the following projects is extended to June 30, 2026:

(1) Laws 2021, First Special Session chapter 6, article 5, section 2, subdivision 3, paragraph (d), Foundational Hydrology Data for Wetland Protection and Restoration;

(2) Laws 2021, First Special Session chapter 6, article 5, section 2, subdivision 6, paragraph

(b), Protect Community Forests by Managing Ash for Emerald Ash Borer;

(3) Laws 2021, First Special Session chapter 6, article 5, section 2, subdivision 9, paragraph (t), Chippewa County Acquisition, Recreation, and Education;

(4) Laws 2021, First Special Session chapter 6, article 6, section 2, subdivision 3, paragraph (g), Geologic Atlases for Water Resource Management;

(5) Laws 2021, First Special Session chapter 6, article 6, section 2, subdivision 3, paragraph (n), Bioacoustics for Broad-Scale Species Monitoring and Conservation;

(6) Laws 2022, chapter 94, section 2, subdivision 4, paragraph (f), Water and Climate Information to Enhance Community Resilience;

(7) Laws 2022, chapter 94, section 2, subdivision 4, paragraph (i), Is the Tire Chemical 6PPDq Killing Minnesota's Fish?;

(8) Laws 2022, chapter 94, section 2, subdivision 7, paragraph (a), Green Solar Cells from a Minnesota Natural Resource;

(9) Laws 2022, chapter 94, section 2, subdivision 8, paragraph (d), Hastings Lake Rebecca Park Area;

(10) Laws 2022, chapter 94, section 2, subdivision 9, paragraph (a), Mesabi Trail: Wahlsten Road (CR 26) to Tower; and

(11) Laws 2022, chapter 94, section 2, subdivision 9, paragraph (j), Silver Bay Multimodal Trailhead Project.

(b) The availability of the appropriations for the following projects is extended to June 30, 2027:

(1) Laws 2022, chapter 94, section 2, subdivision 4, paragraph (g), Catch and Reveal: Discovering Unknown Fish Contamination Threats;

(2) Laws 2022, chapter 94, section 2, subdivision 9, paragraph (e), Native Prairie Stewardship and Prairie Bank Easement Acquisition;

(3) Laws 2022, chapter 94, section 2, subdivision 9, paragraph (h), SNA Habitat Restoration and Public Engagement; and

(4) Laws 2022, chapter 94, section 2, subdivision 9, paragraph (n), Ranier Safe Harbor/Transient Dock - Phase 2.

EFFECTIVE DATE. Subdivision 17 is effective the day following final enactment.

Sec. 3. Laws 2024, chapter 83, section 2, subdivision 3, is amended to read:

Subd. 3. **Foundational Natural Resource Data and Information**	-0-	14,993,000

(a) **Native Plant Community Data in the City of Duluth**

$198,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Minnesota Land Trust to develop field-verified native plant community data and maps for the city of Duluth and the St. Louis River estuary to support conservation and restoration activities.

(b) **Reconstructing Historical Wild Rice to Understand Its Future**

$200,000 the second year is from the trust fund to the Science Museum of Minnesota for the St. Croix Watershed Research Station to characterize environmental drivers contributing to the decline of wild rice using lake sediment cores to reconstruct historical wild rice abundance in relation to lake and watershed stressors.

(c) **Characterizing Tree Cavities and Use by Minnesota's Wildlife**

$349,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to assess the effects of forest management on Minnesota's primary cavity engineer, the pileated woodpecker, and on the wildlife that rely on the cavities that pileated woodpeckers create. This appropriation is also to develop management guidelines.

(d) **Fate of Minnesota's Lakes in the Next Century**

$453,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to use new modeling techniques to quantify how water quality of Minnesota's lakes will change in the next century under future land use and climate change scenarios and to create an online web tool to display the results. This appropriation is subject to Minnesota Statutes, section 116P.10.This appropriation is available until June 30, 2028, by which time the project must be completed and final products delivered.

(e) **Turtle Island Skywatchers - Minnesota Research and Data Visualization**

$200,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Native Skywatchers Inc. to engage youth in environmental stewardship by collecting images and acoustic data from turtles and other culturally significant animals and their habitats, evaluating the differences in these soundscapes across landscapes, and sharing the results through scientific storytelling and online platforms.

(f) **Monitoring Minnesota's Insects: Connecting Habitat to Insect Prey**

$199,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to investigate the ecological roles of and energy transfer by certain Minnesota insects throughout their life cycles and to train future insect researchers on field techniques.

(g) **Determining Ambient Background PFAS Concentrations in Minnesota Soils**

$621,000 the second year is from the trust fund to the commissioner of the Pollution Control Agency to determine ambient background per- and polyfluoroalkyl substance (PFAS) levels in urban and nonurban soils to help Minnesota develop management strategies for PFAS-contaminated soils. This appropriation is available until June 30, 2028, by which time the project must be completed and final products delivered.

(h) **Investigating Life History Characteristics of Minnesota Elk**

$933,000 the second year is from the trust fund to the commissioner of natural resources to assess Minnesota elk herd health and genetic diversity, movements, survival, and causes of mortality and to develop a noninvasive, safer, and more accurate method to estimate population size. This appropriation is available until June 30, 2028, by which time the project must be completed and final products delivered.

(i) **Foundational Data for Moth and Butterfly Conservation**

$195,000 the second year is from the trust fund to the commissioner of natural resources to perform field surveys and consolidate existing data to create the first comprehensive list of Minnesota moths and butterflies. This appropriation is also to conduct outreach to inform land managers and to facilitate public appreciation of these species.

(j) **DNR County Groundwater Atlas**

$3,200,000 the second year is from the trust fund to the commissioner of natural resources to continue producing county groundwater atlases to inform management of surface water and groundwater resources for drinking and other purposes. This appropriation is for Part B, to characterize the potential water yields of aquifers and aquifers' sensitivity to contamination.

(k) **Voyageurs Wolf Project - Phase III**

$996,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to continue to study summertime wolf predation on deer, moose, and other

species in the greater Voyageurs ecosystem to inform wildlife management and to share natural history of this species with the public. This appropriation is available until June 30, 2028, by which time the project must be completed and final products delivered.

(l) **Distribution and Population Status of Weasels in Minnesota**

$400,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to determine the distribution, relative abundance, and spatial occupancy patterns of small weasel species in Minnesota to fill key knowledge gaps in weasel distribution and status in Minnesota.

(m) **Improving Aquatic Plant Knowledge for Healthy Waters**

$198,000 the second year is from the trust fund to the commissioner of natural resources to collect foundational data on Minnesota's native aquatic plant biodiversity through new and enhanced lake surveys and to disseminate results to state resource managers, scientists, and the public.

(n) **New Small Mammal Monitoring Methods for Minnesota**

$199,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to develop camera trapping methods as a new tool to collect foundational data and fill key knowledge gaps in the status of small mammal species in Minnesota.

(o) **Status of Bats and Roost Trees after White-Nose Syndrome**

$195,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to study changes in maternity roost trees and bat populations in the forested areas of Minnesota and to evaluate the effects of years of white-nose syndrome on Minnesota bats.

(p) **Sublethal Effects of Pesticides on the Invertebrate Community**

$387,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to provide data on pesticide contamination in soil and the insect community across the state and the effect of insecticide exposure on insect reproduction. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

(q) **Modernizing Minnesota's Plant Community Classification and Field Guides**

$1,800,000 the second year is from the trust fund to the commissioner of natural resources to collect additional vegetation and environmental data and update the state's 20-year-old native plant community classification guides to incorporate new data, streamline user application and access to products, and include analysis of climate and vegetation trends. Net income generated as part of this appropriation may be reinvested in the project if a plan for reinvestment is approved in the work plan. This appropriation

is subject to Minnesota Statutes, section 116P.10.

(r) **Assessing Prairie Health to Inform Pollinator Conservation**

$297,000 the second year is from the trust fund to the Minnesota Zoological Society to assess habitat quality and pesticide occurrence in Minnesota prairies to help inform management actions, endangered species recovery plans, and pollinator reintroduction efforts for endangered and threatened butterflies and other wildlife.

(s) **Understanding Native Fishes in the Bowfishing Era**

$588,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota, Duluth, to collect foundational biological information on a selection of native Minnesota fish to aid in sustainable management, improve recreational opportunities, and educate the public about these shared aquatic resources. This appropriation is available until June 30, 2028, by which time the project must be completed and final products delivered.

(t) **Preserving Minnesota Wildflower Information**

$199,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota, Bell Museum of Natural History, to preserve and enhance Minnesota Wildflowers Information, an online tool for plant identification, by integrating the content and functionality of the website with the Minnesota Biodiversity Atlas for public use

as required by Laws 2017, chapter 96, section 2, subdivision 3, paragraph (e).

(u) **White-Tailed Deer Movement and Disease in Suburban Areas**

$699,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to better understand white-tailed deer movement, habitat use, and disease dynamics at the suburban-agricultural interface to inform more efficient deer management and disease control.

(v) **Highly Pathogenic Avian Influenza and Minnesota Raptors**

$187,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Raptor Center to evaluate Minnesota raptors for current or past infections with highly pathogenic avian influenza virus to better understand disease transmission and outbreak impacts on raptor populations.

(w) **Geologic Atlases for Water Resource Management**

$1,236,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota, Minnesota Geological Survey, to continue producing county geologic atlases to inform management of surface water and groundwater resources. This appropriation is to complete Part A, which focuses 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.

(x) **Remote Sensing for Pollinator Habitat**

$180,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Monarch Joint Venture to use remote sensing technology to evaluate pollinator habitat on energy and transportation corridors across Minnesota and to host field-day training workshops. Net income generated as part of this appropriation may be reinvested in the project if a plan for reinvestment is approved in the work plan as provided under Minnesota Statutes, section 116P.10.

(y) **Harnessing Cover Crops and Roots for Sustainable Cropping**

$375,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to determine carbon sequestration, nitrogen credit potential, water use, and performance of cover crops in corn-soybean and corn-soybean-wheat rotations in southern Minnesota.

(z) **Effects of Conservation Grazing on Solar Sites Managed for Pollinator Habitat**

$88,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Minnesota Native Landscapes, in partnership with Temple University, to analyze the effects of sheep grazing and mowing on the vegetation and soils of solar sites managed for pollinator habitat and to improve understanding of the environmental outcomes from the colocation of solar panels; grazing; and native, pollinator-friendly vegetation. This appropriation is available until June 30, 2029,

by which time the project must be completed and final products delivered.

(aa) **Genetic Detection of Endangered Mussels in the Mississippi**

$241,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the United States Geological Survey, Ohio Water Microbiology Lab, to create, optimize, and use eDNA assays to detect the presence of endangered or threatened mussel species around Buffalo Slough near the Prairie Island Indian Community.

(bb) **Integrated Population Modeling for Trumpeter Swans**

$180,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to compile and use all available data to model historical population abundance and estimate future population dynamics of Minnesota trumpeter swans.

EFFECTIVE DATE. This section is effective retroactively from July 1, 2024.

Sec. 4. Laws 2024, chapter 83, section 2, subdivision 8, is amended to read:

Subd. 8. **Methods to Protect or Restore Land, Water, and Habitat**	-0-	10,910,000

(a) **Long-Term Preservation of Minnesota's Ball Cactus Population**

$100,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Minnesota Landscape Arboretum to protect Minnesota's only population of ball cactus by supporting population expansion and establishment, monitoring transferred plants, and training

long-term volunteer monitors. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

(b) **Morrison County Historical Society Streambank Stabilization and Restoration**

$519,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Morrison Soil and Water Conservation District to stabilize and restore land along the Mississippi River owned by the Morrison County Historical Society within the statutory boundaries of Charles A. Lindbergh State Park to improve water quality and improve aquatic and terrestrial habit. For purposes of this appropriation, subdivision 13, paragraph (e), does not apply. The commissioner of natural resources may make reasonable amounts of this appropriation available on an advance basis to accommodate the Morrison Soil and Water Conservation District's cash-flow needs if a plan for the advances is approved as part of the work plan.

(c) **Can Increased Tree Diversity Increase Community Diversity?**

$415,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to evaluate impacts of increasing tree diversity on wildlife, plant and fungal communities, and carbon storage within aspen forests in northern Minnesota to develop best management practices for mixed woodland systems.

(d) **Restoration of Riverside Park**

$141,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Long Prairie to improve water retention, increase native habitat, and enhance footpaths for recreation at Riverside Park in Todd County, Minnesota. The project must create a net increase in habitat, and this appropriation may not be used to meet the conditions of any permits received for the project.

(e) **Pollinator Central IV: Habitat Improvement with Public Engagement**

$698,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Great River Greening to partner with municipalities, educational organizations, and volunteers to create and enhance pollinator habitat along public corridors from Lakeville to St. Cloud and to engage youth and the public through education and monitoring the impact of habitat improvements. This appropriation is available until June 30, 2028, by which time the project must be completed and final products delivered.

(f) **Conservation Grazing for Birds, Beef, and Better Soil**

$342,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the National Audubon Society, Minnesota office, to assess Audubon Conservation Ranching as a strategic approach to improve grassland biodiversity, soils, and ecosystem resilience. This appropriation is available until June 30, 2028, by which time

the project must be completed and final products delivered.

(g) **Minnesota Microbes for Enhanced Biodegradation of Microplastics**

$524,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to investigate the potential of natural and indigenous microbes to biodegrade conventional plastics in contaminated soils and waters across the state. This appropriation is subject to Minnesota Statutes, section 116P.10.

(h) **Completing the Mississippi River Greenway: Dakota County**

$657,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Dakota County to restore and enhance habitat on public lands, establish linear native plantings, and install electric-vehicle charging stations within and along the 27-mile Mississippi River Greenway in Dakota County. Net income generated as part of this appropriation may be reinvested in the project if a plan for reinvestment is approved in the work plan. This appropriation is subject to Minnesota Statutes, section 116P.10, and is available until June 30, 2028, by which time the project must be completed and final products delivered.

(i) **Enabling Nature to Destroy Environmental PFAS Contaminants**

$378,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to identify enzymes and microbes that can break down soil-based per-

and polyfluoroalkyl substances (PFAS) into nontoxic elements. This appropriation is subject to Minnesota Statutes, section 116P.10.

(j) **Bioacoustics for Species Monitoring and Conservation - Phase 2**

$568,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to assess avian diversity at the statewide scale by developing a citizen science bioacoustics monitoring program with an initial focus on private lands.

(k) **Preventing PFAS and Microplastics Contaminants Across Minnesota**

$656,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to help stop the flow of per- and polyfluoroalkyl substances (PFAS) and microplastics contaminants into Minnesota's environment by developing strategies and technologies to manage solid waste streams on site. This appropriation is subject to Minnesota Statutes, section 116P.10.

(l) **Shingle Creek Aquatic and Shoreline Habitat Enhancement**

$1,100,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Minneapolis Park and Recreation Board to plan and restore a section of Shingle Creek in north Minneapolis with native aquatic and shoreline vegetation, channel and bank modification, and natural stream features. This appropriation is also to monitor plant and animal health following construction to ensure that the ecological functioning of the creek corridor is restored.

This appropriation is available until June 30, 2030, by which time the project must be completed and final products delivered.

(m) **LiDAR Technology to Help Prevent Wildlife Fatalities from Wind Turbines**

$525,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to create a low-cost and advanced LiDAR system to detect bats and birds approaching wind turbines that may be used in concert with deterrence or impact avoidance methods to prevent collisions. This appropriation is subject to Minnesota Statutes, section 116P.10.

(n) **Road Salt Pollution of Surface Waters from Groundwater**

$622,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to inform source-reduction efforts by developing a model to identify hot spots where road-salt-contaminated groundwater leads to chloride pollution of surface waters.

(o) **Growing the Minnesota Bison Conservation Herd**

$1,775,000 the second year is from the trust fund to the commissioner of natural resources to reintroduce bison to Camden State Park as part of a statewide effort to preserve the American Plains bison genome. Reintroduction includes the design, construction, and installation of fencing, a handling facility, signage, exhibits, and other site improvements. This appropriation is available until June 30, 2030, by which time

the project must be completed and final products delivered.

(p) **Priority Lakes: Meeting Protection Goals and Multiplying Benefits**

$1,890,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Hubbard County Soil and Water Conservation District, in cooperation with Minnesota Land Trust, to protect habitat, forest health, and water quality in the best fishing lakes by creating lake implementation action plans, conducting community-based habitat restorations and improvements, and protecting forest lands with conservation easements and Sustainable Forest Incentive Act (SFIA) enrollments within prioritized areas of the upper Mississippi River basin ~~in Hubbard County~~. Of this amount, up to $168,000 is for deposit in a monitoring fund to be used by Minnesota Land Trust as approved in the work plan and subject to Minnesota Statutes, section 116P.20.

EFFECTIVE DATE. This section is effective retroactively from July 1, 2024.