This Document can be made available in alternative formats upon request

1.1

1.21

1.22

1.23

State of Minnesota

HOUSE OF REPRESENTATIVES

A bill for an act

NINETY-FOURTH SESSION

н. ғ. №. 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

1.2	relating to environment; appropriating money from the environment and natural
1.3	resources trust fund; modifying prior appropriations; amending Laws 2024, chapter
1.4	83, section 2, subdivisions 3, 8.
1.5	BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:
1.6	Section 1. APPROPRIATIONS.
1.7	The sums shown in the columns marked "Appropriations" are appropriated to the agencies
1.8	and for the purposes specified in this act. The appropriations are from the environment and
1.9	natural resources trust fund, or another named fund, and are available for the fiscal years
1.10	indicated for each purpose. The figures "2026" and "2027" used in this act mean that the
1.11	appropriations listed under them are available for the fiscal year ending June 30, 2026, or
1.12	June 30, 2027, respectively. "The first year" is fiscal year 2026. "The second year" is fiscal
1.13	year 2027. "The biennium" is fiscal years 2026 and 2027. Any unencumbered balance
1.14	remaining in the first year does not cancel and is available for the second year or until the
1.15	end of the appropriation. These are onetime appropriations.
1.16	APPROPRIATIONS
1.17	Available for the Year
1.18	Ending June 30
1.19	$20\overline{26}$ 2027
1.20	Sec. 2. MINNESOTA RESOURCES

\$

103,326,000 \$

Sec. 2. 1

Subdivision 1. Total Appropriation

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	<u>-0-</u>
(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		
	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 (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	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 (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 elimate. (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

REVISOR

CKM/EN

02/14/25

25-03949

3.1	survival across space and time within the
3.2	Voyageurs region.
3.3 3.4	(d) Evaluating Anticoagulant Rodenticide Exposure in Minnesota's Carnivores
3.5	\$247,000 the first year is from the trust fund
3.6	to the Board of Regents of the University of
3.7	Minnesota for the Natural Resources Research
3.8	Institute in Duluth to determine anticoagulant
3.9	rodenticide exposure rates and concentrations
3.10	in Minnesota bobcats and fishers, factors
3.11	influencing exposure risk, and negative effects
3.12	of rodenticide exposure on carnivore health.
3.13 3.14	(e) Digitizing the Science Museum of Minnesota's Mollusk Specimens
3.15	\$386,000 the first year is from the trust fund
3.16	to the Science Museum of Minnesota to make
3.17	the museum's Minnesota mollusk specimen
3.18	collection available for research and education
3.19	by identifying and organizing all relevant
3.20	specimens and digitizing the museum's data.
3.21 3.22	(f) Integrating Wildlife Objectives in Long-Term Forest Management Planning
3.23	\$316,000 the first year is from the trust fund
3.24	to the Board of Regents of the University of
3.25	Minnesota to develop a harvest-scheduling
3.26	model that integrates wildlife habitat metrics
3.27	with timber production objectives in the
3.28	forest-planning process for more sustainable
3.29	forest landscape-level outcomes.
3.30 3.31	(g) Surveying Minnesota's Secretive Marsh Birds
3.32	\$413,000 the first year is from the trust fund
3.33	to the commissioner of natural resources for
3.34	an agreement with the National Audubon
3.35	Society, Upper Mississippi River office, to

4.1	conduct a breeding marsh bird survey and
4.2	provide state and federal agencies with an
4.3	assessment of marsh bird population status
4.4	and wetland habitat. This appropriation is
4.5	available until June 30, 2029, by which time
4.6	the project must be completed and final
4.7	products delivered.
4.8 4.9	(h) Improving Conservation Outcomes for Imperiled Wood Turtles
4.10	\$242,000 the first year is from the trust fund
4.11	to the Minnesota Zoological Society to restore
4.12	imperiled wood turtles by increasing remnant
4.13	populations, quantifying effectiveness of
4.14	habitat management strategies, establishing
4.15	baseline information on disease prevalence,
4.16	and creating a new decision-support tool for
4.17	prioritizing future conservation actions.
4.18 4.19	(i) Maximizing the Impact of Wildlife Movement <u>Data</u>
4.20	\$216,000 the first year is from the trust fund
4.20 4.21	\$216,000 the first year is from the trust fund to the Board of Regents of the University of
	•
4.21	to the Board of Regents of the University of
4.21 4.22	to the Board of Regents of the University of Minnesota to create a centralized and
4.21 4.22 4.23	to the Board of Regents of the University of Minnesota to create a centralized and accessible database of wildlife movement data
4.21 4.22 4.23 4.24	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
4.21 4.22 4.23 4.24 4.25	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
4.21 4.22 4.23 4.24 4.25 4.26	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
4.21 4.22 4.23 4.24 4.25 4.26 4.27 4.28	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
4.21 4.22 4.23 4.24 4.25 4.26 4.27 4.28 4.29	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
4.21 4.22 4.23 4.24 4.25 4.26 4.27 4.28 4.29 4.30	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
4.21 4.22 4.23 4.24 4.25 4.26 4.27 4.28 4.29 4.30 4.31	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
4.21 4.22 4.23 4.24 4.25 4.26 4.27 4.28 4.29 4.30 4.31 4.32	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

5.1	also be used to develop outreach and
5.2	interpretive materials for Motus sites.
5.3 5.4	(k) Updating and Sharing Information on Minnesota's Tick Biodiversity
5.5	\$186,000 the first year is from the trust fund
5.6	to the Board of Regents of the University of
5.7	Minnesota to collaborate with wildlife
5.8	organizations and community scientists to
5.9	survey the biodiversity and distribution of
5.10	ticks in Minnesota and create a publicly
5.11	accessible GIS dashboard to share results and
5.12	potential disease implications with the public
5.13	and wildlife managers.
5.14 5.15	(1) Small Mammals and Hunter Participation: Expanded Offal Wildlife Watching
5.16	\$563,000 the first year is from the trust fund
5.17	to the Board of Regents of the University of
5.18	Minnesota to expand and assess hunter
5.19	participation in monitoring scavenger use of
5.20	deer gut piles, assess small mammal
5.21	occurrence and contaminant and disease
5.22	exposure risk at offal sites, and study how
5.23	messaging impacts hunters' use of lead
5.24	ammunition.
5.25 5.26	(m) Green Heron as an Indicator of Wetland-Dependent Species
5.27	\$424,000 the first year is from the trust fund
5.28	to the Board of Regents of the University of
5.29	Minnesota to collect data on the year-round
5.30	habitat use and migratory movements of green
5.31	herons, assess potential factors leading to
5.32	population decline, and identify conservation
5.33	strategies to benefit the green heron and other
5.34	wetland-dependent bird species.

6.1 6.2	(n) Visualizing Minnesota's Natural Resources with CT Scanning
6.3	\$955,000 the first year is from the trust fund
6.4	to the Board of Regents of the University of
6.5	Minnesota, Bell Museum of Natural History,
6.6	to acquire a CT scanner, scan Bell Museum
6.7	organismal specimens, create 3D prints from
6.8	the scans, and share the data and prints through
6.9	environmental education and research
6.10	programs. The CT scanner purchased with this
6.11	appropriation must prioritize use by and be
6.12	made available cost-free to other
6.13	Minnesota-focused researchers for the duration
6.14	of this appropriation. This appropriation may
6.15	also be used for equipment, tools, and supplies
6.16	needed to acquire, install, and use the scanner
6.17	and print 3D models of scanned organisms.
6.18	Net income generated as part of this
6.19	appropriation may be reinvested in the project
6.20	if a plan for reinvestment is approved in the
6.21	work plan as provided under Minnesota
6.22	Statutes, section 116P.10.
6.23 6.24	(o) Mapping Human-Carnivore Conflicts in Human-Dominated Landscapes
6.25	\$563,000 the first year is from the trust fund
6.26	to the Board of Regents of the University of
6.27	Minnesota for the Natural Resources Research
6.28	Institute in Duluth to evaluate bear, bobcat,
6.29	and coyote habitat use, activity, and diet in
6.30	Duluth and surrounding areas to map hotspots
6.31	for human-carnivore conflicts and fill
6.32	knowledge gaps to reduce conflicts. This
6.33	appropriation is available until June 30, 2029,
6.34	by which time the project must be completed
6.35	and final products delivered.

02/14/25	REVISOR	CKM/EN	25-03949

7.1 7.2	(p) Geologic Atlases for Water Resource <u>Management</u>
7.3	\$1,260,000 the first year is from the trust fund
7.4	to the Board of Regents of the University of
7.5	Minnesota, Minnesota Geological Survey, to
7.6	continue to produce geologic atlas maps and
7.7	databases to inform management of
7.8	groundwater and surface water. This
7.9	appropriation is to complete Part A, which
7.10	focuses on the properties and distribution of
7.11	earth materials to define aquifer boundaries
7.12	and the connection of aquifers to the land
7.13	surface and surface water resources.
7.14 7.15	(q) Leveraging Statewide Datasets for Native Rough Fish
7.16	\$250,000 the first year is from the trust fund
7.17	to the Board of Regents of the University of
7.18	Minnesota to construct species distribution
7.19	models that predict presence and abundance
7.20	of native rough fish species and identify
7.21	potential areas for protection, additional
7.22	monitoring, or restoration across the state. This
7.23	appropriation may also be used to build an
7.24	interactive mapping tool and share results.
7.25 7.26	(r) The Impacts of Climate Change on Northeastern Minnesota
7.27	\$772,000 the first year is from the trust fund
7.28	to the commissioner of natural resources for
7.29	an agreement with Friends of the Boundary
7.30	Waters Wilderness to work with collaborators
7.31	to aggregate research, data, and other
7.32	information about the impacts of climate
7.33	change on the habitat and wildlife of
7.34	northeastern Minnesota into a publicly
7.35	available, web-based database. This
7.36	appropriation is available until June 30, 2029,

8.1	by which time the project must be completed
8.2	and final products delivered.
8.3 8.4	(s) Health and Disease Monitoring in Minnesota Wildlife
8.5	\$750,000 the first year is from the trust fund
8.6	to the Board of Regents of the University of
8.7	Minnesota, Minnesota Veterinary Diagnostic
8.8	Laboratory, to collaborate with wildlife
8.9	rehabilitation organizations and other wildlife
8.10	health professionals throughout Minnesota to
8.11	enhance the state's health and disease
8.12	surveillance, preparedness, and response
8.13	efforts.
8.14 8.15	(t) Affordable Statewide Tracking of Forestry Fragmentation and Degradation
8.16	\$331,000 the first year is from the trust fund
8.17	to the Board of Regents of the University of
8.18	Minnesota to merge aircraft and satellite
8.19	LiDAR data to build a model and an
8.20	interactive real-time web dashboard of forest
8.21	boundaries that provides business-ready
8.22	information about statewide forest
8.23	fragmentation and degradation due to human
8.24	activities and natural disasters.
8.25 8.26	(u) Safeguarding Bees While Monitoring Pollinators and Nesting Habitats
8.27	\$590,000 the first year is from the trust fund
8.28	to the Board of Regents of the University of
8.29	Minnesota to pioneer low-mortality methods
8.30	for monitoring bee populations and to
8.31	investigate nest habitat materials and
8.32	antimicrobial properties in cooperation with
8.33	community scientists and management
8.34	agencies. This appropriation is available until

9.1	June 30, 2029, by which time the project must
9.2	be completed and final products delivered.
9.3 9.4	(v) Expanding the Application of Minnesota's Wetland Monitoring Data
9.5	\$312,000 the first year is from the trust fund
9.6	to the commissioner of natural resources to
9.7	use existing LiDAR and recurring aerial
9.8	photographs to determine state grassland
9.9	acreage and change over the last twenty years,
9.10	evaluate key drivers of wetland change, and
9.11	use technology to improve Minnesota's
9.12	wetland monitoring.
9.13 9.14	(w) Enhancing the Value of Minnesota Public Grasslands
9.15	\$390,000 the first year is from the trust fund
9.16	to the Board of Regents of the University of
9.17	Minnesota to evaluate a combination of
9.18	prescribed fire, brush mowing, and targeted
9.19	conservation grazing to develop ready-to-use
9.20	management strategies for public land
9.21	managers to mitigate woody species
9.22	encroachment and increase biodiversity and
9.23	carbon sequestration in public grasslands.
9.24 9.25	(x) Foundational Precision Agriculture Data to Reduce Environmental Impacts
9.26	\$1,255,000 the first year is from the trust fund
9.27	to the Board of Regents of the University of
9.28	Minnesota for the West Central Research and
9.29	Outreach Center at Morris to establish data
9.30	collection systems and methods at sentinel
9.31	farm sites, develop and evaluate best
9.32	management practices, and provide outreach
9.33	and training to farmers to encourage adoption
9.34	of precision agriculture technologies that

10.1	reduce fertilizer and chemical use and improve
10.2	water and air quality.
10.3	(y) Continued Aggregate Resource Mapping
10.4	\$621,000 the first year is from the trust fund
10.5	to the commissioner of natural resources to
10.6	map the aggregate resource potential in the
10.7	state of Minnesota and to make the
10.8	information available in print and electronic
10.9	format to local units of government to support
10.10	informed land-use decisions and resource
10.11	conservation.
10.12 10.13	(z) Advancing Collaborative Wild Rice Monitoring Program Technologies
10.14	\$900,000 the first year is from the trust fund
10.15	to the commissioner of natural resources to
10.16	continue efforts to create a framework for
10.17	long-term wild rice monitoring for
10.18	conservation and collaborate with Tribal and
10.19	nongovernmental organizations to collect
10.20	additional data, improve collection and
10.21	analysis methods, and develop a statewide
10.22	estimate of wild rice abundance and coverage.
10.23 10.24	(aa) Conserving Natural Resources by Advancing Forever Green Agriculture
10.25	\$2,146,000 the first year is from the trust fund
10.26	to the Board of Regents of the University of
10.27	Minnesota for the Forever Green Initiative to
10.28	fund research projects to develop new
10.29	perennial and winter-annual crops to protect
10.30	water, wildlife, soil, other natural resources,
10.31	and the climate. This appropriation is available
10.32	until June 30, 2030, by which time the project
10.33	must be completed and final products
10.34	delivered.

11.1	Gars and Bowfin
11.3	\$568,000 the first year is from the trust fund
11.4	to the Board of Regents of the University of
11.5	Minnesota to develop population dynamics,
11.6	habitat use, and food web models for
11.7	Minnesota gars and bowfins and conduct
11.8	outreach to inform conservation and
11.9	management and serve as a template for study
11.10	of Minnesota's other native rough fish species.
11.11 11.12	(cc) Understanding to Improve Minnesota's Future Lake Water Quality
11.13	\$595,000 the first year is from the trust fund
11.14	to the Board of Regents of the University of
11.15	Minnesota to use decade-long comprehensive
11.16	lake, watershed, and weather data and
11.17	high-resolution climate models to understand
11.18	lake-specific drivers of water quality and
11.19	predict the effects of future warming on
11.20	harmful algal blooms across Minnesota.
11.21 11.22	(dd) Operationalizing State Zooplankton Data to Support Lake Health
11.23	\$423,000 the first year is from the trust fund
11.24	to the Board of Regents of the University of
11.25	Minnesota to use long-term monitoring data
11.26	to determine the relationship between
11.27	zooplankton communities and ecosystem
11.28	services, like fisheries health and water
11.29	quality, and develop biotic indices for lake
11.30	health.
11.31 11.32	(ee) Trialing Climate-Ready Woodland Trees in Urban Areas
11.33	\$255,000 the first year is from the trust fund
11.34	to the Board of Regents of the University of
11.35	Minnesota to demonstrate performance of

12.1	climate-adaptive tree species and study land
12.2	manager and public perceptions of these
12.3	species to identify the best species and risk
12.4	tolerance for future plantings in metropolitan
12.5	areas of Minnesota.
12.6 12.7	(ff) Superior Shores: Protecting Our Great Lakes Coastal Habitats
12.8	\$675,000 the first year is from the trust fund
12.9	to the Science Museum of Minnesota for the
12.10	St. Croix Watershed Research Station to map
12.11	the locations and survey the biological
12.12	diversity and water quality of Lake Superior
12.13	coastal rock pools. This appropriation may
12.14	also be used to develop outreach materials and
12.15	host programs on rock pool understanding and
12.16	conservation.
12.17 12.18	(gg) Recruitment and Fecundity of Minnesota Moose
12.19	\$2,007,000 the first year is from the trust fund
12.20	to the commissioner of natural resources for
12.21	state and Tribal biologists to work
12.22	collaboratively to estimate survival and
12.23	fecundity of yearling and 2-year-old moose in
12.24	northeast Minnesota to inform future
12.25	management efforts. Of this amount, \$841,000
12.26	is for an agreement with the 1854 Treaty
12.27	Authority. This appropriation is available until
12.28	June 30, 2031, by which time the project must
12.29	be completed and final products delivered.
12.30 12.31	(hh) Fighting Insect Decline: Minnesota Bumblebees to the Rescue
12.32	\$249,000 the first year is from the trust fund
12.22	<u>+= 1,), </u>
12.33	to the Board of Regents of the University of
12.33	<u> </u>

	02/14/25	REVISOR	CKM/EN	25-03949
13.1	identification tool using molecular bar	codes		
13.2	and an online resource hub to improve	<u>}</u>		
13.3	conservation of Minnesota's native			
13.4	bumblebees.			
13.5 13.6	(ii) Trace Metals in Municipal Yard Compost	Waste and		
13.7	\$120,000 the first year is from the trus	st fund		
13.8	to the Board of Regents of the University	sity of		
13.9	Minnesota to assess trace metal contam	<u>ination</u>		
13.10	from collected residential yard waste, f	inished		
13.11	compost, and compost leachate in mur	nicipal		
13.12	yard waste recycling programs.			
13.13 13.14	(jj) Chronic Wasting Disease Prions Minnesota Waters	<u>in</u>		
13.15	\$322,000 the first year is from the trus	st fund		
13.16	to the Board of Regents of the University	sity of		
13.17	Minnesota to evaluate the movement of	<u>of</u>		
13.18	chronic wasting disease in Minnesota	waters,		
13.19	assess the risk of spread, and share resu	lts with		
13.20	wildlife and watershed managers.			
13.21	Subd. 4. Water Resources		11,812,000	<u>-0-</u>
13.22 13.23	(a) Enhancing Our Resources - Rurand Drinking Water	al Health		
13.24	\$994,000 the first year is from the trus	st fund		
13.25	to the commissioner of natural resource	ces for		
13.26	an agreement with Freshwater Society	to		
13.27	partner with the Mayo Clinic to educa	te well		
13.28	owners and family health providers ab	out the		
13.29	geologic occurrence and risk of arseni	<u>c in</u>		
13.30	drinking water. This appropriation is a	lso to		
13.31	provide free arsenic testing to well ow	ners in		
13.32	southeast Minnesota.			
13.33 13.34	(b) Restoration and Outreach for M Native Mussels	innesota's		

25-03949

Sec. 2. 13

14.1	\$1,258,000 the first year is from the trust fund
14.2	to the commissioner of natural resources to
14.3	propagate, rear, and restore native freshwater
14.4	mussel populations and the ecosystem services
14.5	they provide to Minnesota waters; to evaluate
14.6	reintroduction success; and to inform the
14.7	public on mussels and mussel conservation.
14.8 14.9	(c) Pristine to Green: Toxic Blooms Threaten Northern Lakes
14.10	\$1,362,000 the first year is from the trust fund
14.11	to the Science Museum of Minnesota for the
14.12	St. Croix Watershed Research Station to
14.13	evaluate drivers that contribute to the
14.14	formation of nuisance and toxic algal blooms
14.15	in relatively pristine and protected lakes across
14.16	Minnesota.
14.17 14.18	(d) Training Lake Communities to Track Chloride and Algae
14.10	Chioride and Aigae
14.19	\$274,000 the first year is from the trust fund
14.19	\$274,000 the first year is from the trust fund
14.19 14.20	\$274,000 the first year is from the trust fund to the Board of Regents of the University of
14.19 14.20 14.21	\$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
14.19 14.20 14.21 14.22	\$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
14.19 14.20 14.21 14.22 14.23	\$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
14.19 14.20 14.21 14.22 14.23 14.24	\$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
14.19 14.20 14.21 14.22 14.23 14.24 14.25	\$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
14.19 14.20 14.21 14.22 14.23 14.24 14.25 14.26 14.27	\$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
14.19 14.20 14.21 14.22 14.23 14.24 14.25 14.26 14.27	\$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
14.19 14.20 14.21 14.22 14.23 14.24 14.25 14.26 14.27 14.28 14.29	\$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
14.19 14.20 14.21 14.22 14.23 14.24 14.25 14.26 14.27 14.28 14.29 14.30	\$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
14.19 14.20 14.21 14.22 14.23 14.24 14.25 14.26 14.27 14.28 14.29 14.30 14.31	\$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
14.19 14.20 14.21 14.22 14.23 14.24 14.25 14.26 14.27 14.28 14.29 14.30 14.31 14.32	\$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,

15.1	county and regional collaborations, develop
15.2	resources, and provide training to increase
15.3	targeted street-sweeping practices to reduce
15.4	nonpoint source pollution to Minnesota's water
15.5	resources.
15.6 15.7	(f) Cyanotoxins in Minnesota Lakes: The Role of Sunlight
15.8	\$220,000 the first year is from the trust fund
15.9	to the Board of Regents of the University of
15.10	Minnesota to quantify degradation of
15.11	cyanobacterial toxins by sunlight to understand
15.12	how increasing frequency of harmful algal
15.13	blooms and changing environmental
15.14	conditions influence toxin persistence in
15.15	natural waters.
15.16 15.17	(g) Enhancing Degradation of Emerging Contaminants via Microbial Starvation
15.18	\$390,000 the first year is from the trust fund
15.19	to the Board of Regents of the University of
15.20	Minnesota to study how wastewater treatment
15.21	systems can be improved to more effectively
15.22	biodegrade mixtures of pharmaceuticals,
15.23	pesticides, and other contaminants of emerging
15.24	concern and protect Minnesota's water
15.25	resources.
15.26	(h) Soil Health Management for Water Storage
15.27	\$454,000 the first year is from the trust fund
15.28	to the Board of Regents of the University of
15.29	Minnesota for the Water Resources Center to
15.30	conduct on-farm and model-based research
15.31	and develop guidance for watershed planners
15.32	and land managers to effectively use soil
15.33	health management to achieve water storage
15.34	and water quality goals.

16.1 16.2	(i) Predicting Contaminant Movement in Minnesota's Fractured Aquifers
16.3	\$650,000 the first year is from the trust fund
16.4	to the Board of Regents of the University of
16.5	Minnesota, St. Anthony Falls Laboratory, to
16.6	develop a software program that predicts the
16.7	fate and movement of contaminants, such as
16.8	PFAS, chloride, nitrate, and pathogens, in
16.9	Minnesota's fractured aquifers.
16.10 16.11	(j) Documentation and Toxicity of Microplastics in Urban Ecosystems
16.12	\$300,000 the first year is from the trust fund
16.13	to the Board of Regents of the University of
16.14	Minnesota to research how land use and
16.15	toxicity affect the accumulation of
16.16	microplastics and associated contaminants of
16.17	concern in stormwater ponds and the wildlife
16.18	that use stormwater ponds.
16.19 16.20	(k) Terminating PFAS-Type Pesticides via Enzyme Cocktails
16.21	\$297,000 the first year is from the trust fund
16.22	to the Board of Regents of the University of
16.23	Minnesota to evaluate the ability of selected
16.24	enzymes and combinations of enzymes to
16.25	biodegrade per- and polyfluoroalkyl
16.26	substances (PFAS) found in pesticides and to
16.27	design a pilot-scale biofilter for effective
16.28	elimination of PFAS from water.
16.29 16.30	(1) Addressing 21st Century Challenges for the St. Croix
16.31	\$243,000 the first year is from the trust fund
16.32	to the Science Museum of Minnesota for the
16.33	St. Croix Watershed Research Station to
16.34	develop a watershed model to identify
16 35	notential hydrologic and water quality impacts

17.1	to the lower St. Croix River over the next /5
17.2	years and inform future planning and
17.3	management in the watershed.
17.4 17.5	(m) Impact of Statewide Conservation Practices on Stream Biodiversity
17.6	\$300,000 the first year is from the trust fund
17.7	to the Board of Regents of the University of
17.8	Minnesota to use existing monitoring data to
17.9	evaluate the effects of wetlands and riparian
17.10	buffers on stream and river biodiversity and
17.11	biological condition and develop tools and
17.12	materials to inform the public and natural
17.13	resource managers.
17.14	(n) Modeling the Future Mississippi River Gorge
17.15	\$427,000 the first year is from the trust fund
17.16	to the Board of Regents of the University of
17.17	Minnesota, St. Anthony Falls Laboratory, to
17.18	construct a reduced-scale physical model of
17.19	Mississippi River Pool 1, Lock & Dam 1, and
17.20	adjacent upstream and downstream reaches;
17.21	analyze water flow and sediment movement
17.22	under various pool management strategies;
17.23	and share results with the public to inform
17.24	decisions on the future management of the
17.25	lock and dam.
17.26 17.27	(o) Highly Efficient Nutrient Removal Technology for Agricultural Drainage
17.28	\$453,000 the first year is from the trust fund
17.29	to the Board of Regents of the University of
17.30	Minnesota to conduct lab- and field-scale tests
17.31	of a novel bioreactor technology for removing
17.32	nutrients from agricultural drainage and
17.33	disseminate results to farmers and the public.
17.34 17.35	(p) Citizen Scientists Capture Microplastic Pollution Around State

18.1	\$419,000 the first year is from the trust fund
18.2	to the Board of Regents of the University of
18.3	Minnesota to develop adaptable microplastic
18.4	sampling and detection methods, develop a
18.5	public-access database, and leverage citizen
18.6	scientists to survey microplastic pollution
18.7	throughout the state to allow for data-driven
18.8	risk management decisions and solutions.
18.9 18.10	(q) Healthy Native Prairie Microbiomes for Cleaner Water
18.11	\$468,000 the first year is from the trust fund
18.12	to the Board of Regents of the University of
18.13	Minnesota to identify and characterize prairie
18.14	plant microbiomes and study the potential of
18.15	native prairie microbes to provide nitrogen for
18.16	agricultural crops and reduce industrial
18.17	fertilizer use and nitrate contamination of
18.18	water.
18.18 18.19 18.20	water. (r) Wastewater Chloride Reduction through Industrial Source Reduction Assistance
18.19	(r) Wastewater Chloride Reduction through
18.19 18.20	(r) Wastewater Chloride Reduction through Industrial Source Reduction Assistance
18.19 18.20 18.21	(r) Wastewater Chloride Reduction through Industrial Source Reduction Assistance \$247,000 the first year is from the trust fund
18.19 18.20 18.21 18.22	(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
18.19 18.20 18.21 18.22 18.23	(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
18.19 18.20 18.21 18.22 18.23 18.24	(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
18.19 18.20 18.21 18.22 18.23 18.24 18.25	(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
18.19 18.20 18.21 18.22 18.23 18.24 18.25 18.26	(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
18.19 18.20 18.21 18.22 18.23 18.24 18.25 18.26 18.27	(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
18.19 18.20 18.21 18.22 18.23 18.24 18.25 18.26 18.27 18.28	(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
18.19 18.20 18.21 18.22 18.23 18.24 18.25 18.26 18.27 18.28 18.29 18.30	(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
18.19 18.20 18.21 18.22 18.23 18.24 18.25 18.26 18.27 18.28 18.29 18.30	(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
18.19 18.20 18.21 18.22 18.23 18.24 18.25 18.26 18.27 18.28 18.29 18.30 18.31 18.32	(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

19.1	a significant impact on surface water and
19.2	groundwater.
19.3 19.4	(t) Biofilm Mediated Destruction of PFAS in Groundwater
19.5	\$1,336,000 the first year is from the trust fund
19.6	to the commissioner of natural resources for
19.7	an agreement with Bay West, LLC to develop
19.8	biofilm treatment technology and demonstrate
19.9	field-scale removal of per- and polyfluoroalkyl
19.10	substances (PFAS) from contaminated
19.11	groundwater. A fiscal management plan must
19.12	be approved in the work plan before any trust
19.13	fund money is spent.
19.14 19.15	(u) Impact of Microplastics on Wastewater Treatment in Minnesota
19.16	\$506,000 the first year is from the trust fund
19.17	to the Board of Regents of the University of
19.18	Minnesota to quantify the abundance of
19.19	microplastics in wastewater treatment plants
19.20	in Minnesota, determine how microplastics
19.21	affect wastewater treatment plant performance,
19.22	and evaluate how different wastewater
19.23	treatment processes alter microplastics.
19.24 19.25	(v) Portable Arsenic and Nitrate Detector for Well Water
19.26	\$358,000 the first year is from the trust fund
19.27	to the Board of Regents of the University of
19.28	Minnesota to develop a small, cheap, and
19.29	easy-to-use system to detect arsenic and nitrate
19.30	in well water and determine whether well
19.31	water is safe to drink.
19.32 19.33	(w) Recovering Salts from Highly Saline Wastewater
19.34	\$272,000 the first year is from the trust fund
19.35	to the Board of Regents of the University of

20.1	Minnesota to develop a method to recover		
20.2	useful salts from concentrated saline		
20.3	wastewater to increase the economic		
20.4	sustainability of high water-recovery		
20.5	softening, sulfate removal, and industrial		
20.6	wastewater treatment.		
20.7	Subd. 5. Environmental Education	11,965,000	<u>-0-</u>
20.8 20.9	(a) Eagle's Nest: Where the World Becomes Your Classroom		
20.10	\$130,000 the first year is from the trust fund		
20.11	to the commissioner of natural resources for		
20.12	an agreement with Glacial Hills Elementary		
20.13	School to create interactive natural playground		
20.14	and landscaping features for children and		
20.15	provide environmental education programming		
20.16	outside of regular school hours.		
20.17 20.18	(b) Advancing Equity in Environmental Education		
20.19	\$700,000 the first year is from the trust fund		
20.20	to the commissioner of natural resources for		
20.21	an agreement with Camp Fire Minnesota to		
20.22	provide needs-based scholarships for		
20.23	Minnesota youth to attend		
20.24	state-standards-aligned environmental and		
20.25	outdoor education programs.		
20.26 20.27	(c) Teacher Field School - Phase 2: Increasing Impact		
20.28	\$712,000 the first year is from the trust fund		
20.29	to the commissioner of natural resources for		
20.30	an agreement with Hamline University to		
20.31	continue the teacher field school program that		
20.32	trains teachers how to connect academic		
20.33	content with environmental stewardship,		
20.34	natural resource conservation, and outdoor		
20.35	recreation. This appropriation is also to pilot		

REVISOR

02/14/25

25-03949

CKM/EN

21.1	a train-the-trainer model for nature-based
21.2	education practices.
21.3 21.4	(d) Creating Future Leaders in Outdoor and Environmental Leadership
21.5	\$330,000 the first year is from the trust fund
21.6	to the Board of Trustees of the Minnesota
21.7	State Colleges and Universities for North
21.8	Hennepin Community College to collaborate
21.9	with K-12 education, higher education, and
21.10	outdoor organizations to increase
21.11	environmental education, leadership,
21.12	internship, and career opportunities for
21.13	underrepresented college and high school
21.14	students.
21.15 21.16	(e) Engaging our Diverse Public in Environmental Stewardship - Phase 2
21.17	\$249,000 the first year is from the trust fund
21.18	to the commissioner of natural resources for
21.19	an agreement with Great River Greening to
21.20	increase participation in natural resources
21.21	conservation and restoration efforts and
21.22	careers through volunteer, internship, and
21.23	youth engagement activities, with a focus on
21.24	diverse audiences that more accurately reflect
21.25	local demographic and socioeconomic
21.26	conditions in Minnesota.
21.27	(f) Outdoor School for Minnesota K-12 Students
21.28	\$3,992,000 the first year is from the trust fund
21.29	to the commissioner of natural resources for
21.30	an agreement with Osprey Wilds
21.31	Environmental Learning Center to partner with
21.32	four other accredited residential environmental
21.33	learning centers in Minnesota to provide
21.34	needs-based scholarships to K-12 students

22.1	statewide for immersive multiday
22.2	environmental learning experiences.
22.3 22.4	(g) Statewide Environmental Education via PBS Outdoor Series
22.5	\$415,000 the first year is from the trust fund
22.6	to the commissioner of natural resources for
22.7	an agreement with Pioneer Public
22.8	Broadcasting Service to produce, distribute,
22.9	and promote new episodes of a statewide
22.10	public television series that inspires
22.11	Minnesotans to connect with the outdoors and
22.12	to restore and protect the state's natural
22.13	resources.
22.14 22.15	(h) Maajii-akii-gikenjigewin Conservation Crew Program
22.16	\$678,000 the first year is from the trust fund
22.17	to the commissioner of natural resources for
22.18	an agreement with Conservation Corps
22.19	Minnesota & Iowa to expand a conservation
22.20	corps program developed to provide natural
22.21	resources career development opportunities
22.22	for indigenous young adults and cultivate an
22.23	enduring action-based conservation ethic
22.24	through the integration of traditional
22.25	knowledge, nature immersion, and the
22.26	implementation of conservation and
22.27	restoration practices in the field.
22.28 22.29	(i) Reuse for the Future: Youth Education and Engagement
22.30	\$225,000 the first year is from the trust fund
22.31	to the commissioner of natural resources for
22.32	an agreement with Reuse Minnesota to provide
22.33	curriculum-based opportunities for students
22.34	to learn about the reuse economy, reuse skills,
22 35	and other opportunities to reduce waste. This

23.1	appropriation may also be used to align
23.2	materials to state standards and translate
23.3	materials to additional languages.
23.4 23.5	(j) River Bend Nature Center Outdoor Diversity Initiative
23.6	\$247,000 the first year is from the trust fund
23.7	to the commissioner of natural resources for
23.8	an agreement with River Bend Nature Center
23.9	to lead a coalition of educational partners and
23.10	culturally specific organizations to expand
23.11	recognized environmental education
23.12	curriculum and provide conservation-based
23.13	career exploration and job placement
23.14	opportunities for diverse communities in
23.15	southern Minnesota.
23.16	(k) Camp Parsons Mississippi Summer
23.17	\$225,000 the first year is from the trust fund
23.18	to the commissioner of natural resources for
23.19	an agreement with the Phyllis Wheatley
23.20	Community Center to provide environmental
23.21	education to Minneapolis urban youth through
23.22	the Camp Parsons Mississippi Summer
23.23	program that fosters connections to nature and
23.24	encourages responsible stewardship of our
23.25	natural resources.
23.26 23.27	(l) Adult Outdoor Education for Minnesota's Underrepresented Communities
23.28	\$247,000 the first year is from the trust fund
23.29	to the commissioner of natural resources for
23.30	an agreement with Baztec Fishing & Outdoors
23.31	to create fishing and hunting education,
23.32	training, and opportunities for underserved
23.33	and underrepresented communities in
23.34	Minnesota. All fishing tackle purchased with
23.35	this appropriation must be lead-free. A fiscal

24.1	management plan must be approved in the
24.2	work plan before any trust fund money is
24.3	spent.
24.4 24.5	(m) Minnesota's Road Map for Sustainability and Climate Education
24.6	\$491,000 the first year is from the trust fund
24.7	to the commissioner of natural resources for
24.8	an agreement with Climate Generation to
24.9	convene community gatherings and partner
24.10	with institutions and organizations across the
24.11	education sector to develop a road map on
24.12	how to build capacity for equitable and
24.13	accessible sustainability and climate education
24.14	programs that align with the Minnesota
24.15	Climate Action Framework.
24.16 24.17	(n) ESTEP 2.0: Earth Science Teacher Education Project
24.18	\$643,000 the first year is from the trust fund
24.19	to the commissioner of natural resources for
24.20	an agreement with Minnesota Science
24.21	Teachers Association to provide professional
24.22	development for Minnesota science teachers
24.23	statewide in environmental and earth science
24.24	content to strengthen environmental education
24.25	in schools.
24.26 24.27	(o) Engaging Latine Communities in Conservation and Preservation
24.28	\$400,000 the first year is from the trust fund
24.29	to the commissioner of natural resources for
24.30	an agreement with Comunidades Organizando
24.31	el Poder y la Accion Latina to use
24.32	community-based partnerships and
24.33	communications platforms to host outdoor
24.34	events and conduct educational outreach
24.35	focused on Latine and BIPOC communities

25.1	about the need to protect Minnesota's
25.2	environment and natural resources.
25.3 25.4	(p) Inclusive Wildlife Engagement in Classrooms and Communities
25.5	\$712,000 the first year is from the trust fund
25.6	to the commissioner of natural resources for
25.7	the nongame wildlife program to provide three
25.8	wildlife conservation, action-based outdoor
25.9	educational opportunities to engage
25.10	needs-based schools, young adults, and
25.11	communities underrepresented in natural
25.12	resources through the Bird by Bird,
25.13	Empowering Pathways into Conservation, and
25.14	Community Science programs.
25.15	(q) Activating Youth and Family Environmental
25.16	Stewardship through Raptors
25.17	\$228,000 the first year is from the trust fund
25.18	to the Board of Regents of the University of
25.19	Minnesota for the Raptor Center to deliver
25.20	standards-based environmental education
25.21	featuring live raptors through school programs
25.22	and community events across Minnesota.
25.23 25.24	(r) Moving Minnesota toward a Lead-Free Sporting Future
25.25	\$250,000 the first year is from the trust fund
25.26	to the Board of Trustees of the Minnesota
25.27	State Colleges and Universities for Bemidji
25.28	State University to conduct educational
25.29	outreach directed at hunters and anglers to
25.30	increase awareness of lead-free options for
25.31	big-game hunting, small-game hunting, and
25.32	fishing as a means of reducing wildlife
25.33	exposure to lead.
25.34 25.35	(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	<u>6,713,000</u>	<u>-0-</u>
(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		

REVISOR

CKM/EN

25-03949

Sec. 2. 26

02/14/25

27.1 27.2	the project must be completed and final products delivered.		
27.3 27.4	Subd. 7. Air Quality, Climate Change, and Renewable Energy	11,744,000	<u>-0-</u>
27.5 27.6	(a) Protecting Coldwater Fish Habitat in Minnesota Lakes		
27.7	\$561,000 the first year is from the trust fund		
27.8	to the Board of Regents of the University of		
27.9	Minnesota to identify lake-specific watershed		
27.10	protection targets and management practices		
27.11	needed to maintain coldwater fish habitat		
27.12	threatened by warming temperatures and		
27.13	increasing extreme rain events and to integrate		
27.14	this information into conservation planning		
27.15	tools.		
27.16	(b) Agrivoltaics 2.0 Building a Resilient E-Farm		
27.17	\$535,000 the first year is from the trust fund		
27.18	to the Board of Regents of the University of		
27.19	Minnesota for the West Central Research and		
27.20	Outreach Center at Morris to evaluate		
27.21	emerging solar system designs and solar		
27.22	technology integration with vegetable and		
27.23	livestock production systems to maximize		
27.24	energy production and benefits to farmers.		
27.25 27.26	(c) Pine Needles Reveal Past and Present Airborne PFAS		
27.27	\$550,000 the first year is from the trust fund		
27.28	to the commissioner of the Pollution Control		
27.29	Agency to use current and historic pine		
27.30	needles as a low-cost method to assess		
27.31	statewide per- and polyfluoroalkyl substances		
27.32	(PFAS) levels in ambient air.		
27.33 27.34	(d) Facilitated Transport Hybrid Membranes for CO ₂ Separation		

REVISOR

CKM/EN

02/14/25

25-03949

\$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

02/14/25	REVISOR	CKM/EN	25-03949

\$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 (a) Minnesota PlantWatch: Community Scientists Conserving Rare Plants	12,188,000	<u>-0-</u>
\$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		
PlantWatch program to improve the		
PlantWatch program to improve the conservation of Minnesota's natural resources		
PlantWatch program to improve the conservation of Minnesota's natural resources and support community scientist-driven rare		
PlantWatch program to improve the conservation of Minnesota's natural resources		
PlantWatch program to improve the conservation of Minnesota's natural resources and support community scientist-driven rare plant surveys and seed banking and preservation.		
PlantWatch program to improve the conservation of Minnesota's natural resources and support community scientist-driven rare plant surveys and seed banking and		
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		

30.1	Minnesota for the Minnesota Landscape
30.2	Arboretum to restore a degraded pasture to
30.3	grassland as a model for climate-resilient
30.4	pollinator habitat; provide interpretive signage,
30.5	education, and community engagement; and
30.6	conduct species monitoring. This appropriation
30.7	is available until June 30, 2031, by which time
30.8	the project must be completed and final
30.9	products delivered.
30.10 30.11	(c) Planning for Long-Term Natural Resources <u>Protection in Hennepin County</u>
30.12	\$250,000 the first year is from the trust fund
30.13	to the commissioner of natural resources for
30.14	an agreement with Hennepin County to
30.15	develop a publicly available interactive map
30.16	of natural systems, create a centralized
30.17	clearinghouse of data and best practices
30.18	toolkit, and provide ongoing technical
30.19	assistance for local communities with limited
30.20	resources to manage complex natural resources
30.21	challenges. Net income generated as part of
30.22	this appropriation may be reinvested in the
30.23	project if a plan for reinvestment is approved
30.24	in the work plan as provided under Minnesota
30.25	Statutes, section 116P.10.
30.26 30.27	(d) Native Forages: Growing Drought and Climate Resiliency
30.28	\$2,254,000 the first year is from the trust fund
30.29	to the commissioner of natural resources for
30.30	an agreement with Ducks Unlimited to
30.31	collaborate with livestock farmers to establish
30.32	native grassland wildlife habitat and enhance
30.33	native forages on working lands to improve
30.34	ecological, economic, and climate resiliency.
30.35	Notwithstanding subdivision 13, paragraph
30.36	(e), restoration efforts may be undertaken on

31.1	private lands but must occur on properties
31.2	enrolled in long-term agreements to protect
31.3	and maintain the restored areas in
31.4	conformance with approved restoration and
31.5	grazing plans as approved in the work plan.
31.6	This appropriation is available until June 30,
31.7	2031, by which time the project must be
31.8	completed and final products delivered.
31.9 31.10	(e) Accelerated Genetic Migration of Bur Oak - Ten-Year Data
31.11	\$223,000 the first year is from the trust fund
31.12	to the commissioner of natural resources for
31.13	an agreement with Great River Greening to
31.14	assess the growth and survival of previously
31.15	restored bur oak ecotypes to inform techniques
31.16	for improved climate resiliency. This
31.17	appropriation may also be used to enhance the
31.18	previous plantings and disseminate results of
31.19	the study to practitioners, students,
31.20	landowners, and others. This appropriation is
31.21	available until June 30, 2029, by which time
31.22	the project must be completed and final
31.23	products delivered.
31.24 31.25	(f) Superior Hiking Trail Bridge, Boardwalk, and Trailhead Renewal
31.26	\$532,000 the first year is from the trust fund
31.27	to the commissioner of natural resources for
31.28	an agreement with the Superior Hiking Trail
31.29	Association to renew Superior Hiking Trail
31.30	bridges, boardwalks, and trailheads to increase
31.31	user safety, improve the user experience, and
31.32	protect adjacent land and water.
31.33 31.34	(g) Mississippi Gateway Shoreline Stabilization and Fishing Improvements

32.1	\$735,000 the first year is from the trust fund
32.2	to the commissioner of natural resources for
32.3	an agreement with Three Rivers Park District
32.4	to improve water quality and shoreline fishing
32.5	access through shoreline stabilization and
32.6	construction of accessible trails and fishing
32.7	platforms within Mississippi Gateway
32.8	Regional Park.
32.9	(h) Phytoremediation of PFAS from Soil
32.10	\$1,066,000 the first year is from the trust fund
32.11	to the Board of Regents of the University of
32.12	Minnesota to use interdisciplinary research in
32.13	biology, nanotechnology, chemistry, and
32.14	genetic engineering to develop technology to
32.15	remediate soils contaminated with per- and
32.16	polyfluoroalkyl substances (PFAS). This
32.17	appropriation may also be used to convene
32.18	stakeholders to coordinate and advance PFAS
32.19	remediation research in Minnesota. This
32.20	appropriation is subject to Minnesota Statutes,
32.21	section 116P.10.
32.22	(i) Removing Mercury from Minnesota Waters
32.23	\$247,000 the first year is from the trust fund
32.24	to the Board of Regents of the University of
32.25	Minnesota to test and refine a biotechnology
32.26	approach to remove mercury from the food
32.27	chain in Minnesota's lakes and rivers and
32.28	potentially make fish consumption in
32.29	Minnesota safer. This appropriation is subject
32.30	to Minnesota Statutes, section 116P.10.
32.31	(j) Evaluating Native Seed Mixes for Grazing
32.32	\$208,000 the first year is from the trust fund
32.33	to the commissioner of natural resources for
32.34	an agreement with Restoravore to assess the

33.1	use of native hay and pasture mixes to benefit
33.2	biodiversity, soil health, and Minnesota
33.3	farmers. A fiscal management plan must be
33.4	approved in the work plan before any trust
33.5	fund money is spent.
33.6 33.7	(k) Improving Minnesota Forest Health via Post-Duff-Burning Soil Analysis
33.8	\$646,000 the first year is from the trust fund
33.9	to the Board of Regents of the University of
33.10	Minnesota to thoroughly investigate the impact
33.11	of forest floor duff fires on soil dynamics,
33.12	nutrient cycles, invasive shrubs, earthworms,
33.13	and root systems to improve fire management
33.14	for Minnesota's forest preservation. This
33.15	appropriation may also be used to develop an
33.16	outdoor lab-scale duff-burning device.
33.17 33.18	(l) Minnesota Riverbank Protection and Parks Improvements
33.19	\$1,400,000 the first year is from the trust fund
33.19	\$1,400,000 the first year is from the trust fund
33.20	to the commissioner of natural resources for
33.20	to the commissioner of natural resources for
33.20 33.21	to the commissioner of natural resources for an agreement with the city of Shakopee to
33.20 33.21 33.22	to the commissioner of natural resources for an agreement with the city of Shakopee to restore Minnesota River shoreline at Huber
33.20 33.21 33.22 33.23	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
33.20 33.21 33.22 33.23 33.24	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,
33.20 33.21 33.22 33.23 33.24 33.25	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
33.20 33.21 33.22 33.23 33.24 33.25 33.26	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
33.20 33.21 33.22 33.23 33.24 33.25 33.26 33.27	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
33.20 33.21 33.22 33.23 33.24 33.25 33.26 33.27 33.28	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
33.20 33.21 33.22 33.23 33.24 33.25 33.26 33.27 33.28 33.29 33.30	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
33.20 33.21 33.22 33.23 33.24 33.25 33.26 33.27 33.28 33.29 33.30	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
33.20 33.21 33.22 33.23 33.24 33.25 33.26 33.27 33.28 33.29 33.30 33.31	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

34.1	train volunteer site stewards, and enhance
34.2	habitat at Wakan Tipi and the Bruce Vento
34.3	Nature Sanctuary.
34.4 34.5	(n) Promoting Pollinators on Corporate Campuses
34.6	\$547,000 the first year is from the trust fund
34.7	to the commissioner of natural resources for
34.8	an agreement with the University of St.
34.9	Thomas to use experimental bee lawn
34.10	installations on corporate campuses, combined
34.11	with landscape modeling and employee
34.12	surveys, to determine potential ecological,
34.13	economic, and societal benefits of widespread
34.14	commercial lawn habitat transformation. This
34.15	appropriation is available until June 30, 2029,
34.16	by which time the project must be completed
34.17	and final products delivered.
34.18 34.19	(o) Riparian Area Adaptation Strategy for Southeast Minnesota
34.20	\$243,000 the first year is from the trust fund
34.21	to the commissioner of natural resources for
34.22	an agreement with The Nature Conservancy,
34.23	in partnership with the University of
34.24	Minnesota, to assess an alternative adaptation
34.25	strategy to restore riparian areas by excavating
34.26	and planting riparian shrubs to reconnect the
34.27	floodplains. This appropriation may also be
34.28	used for outreach materials and educational
34.29	activities.
34.30 34.31	(p) Minnehaha Park South Plateau Oak Savanna Restoration
34.32	\$242,000 the first year is from the trust fund
34.33	to the commissioner of natural resources for
34.34	an agreement with the Minneapolis Park and
34.35	Recreation Board to improve wildlife habitat,

35.1	enhance recreational experiences, and restore
35.2	an area of urban parkland in Minnehaha Park
35.3	to an oak savanna ecosystem. This
35.4	appropriation is available until June 30, 2029,
35.5	by which time the project must be completed
35.6	and final products delivered.
35.7 35.8	(q) Tree Protection for Minnesota's Tamarack Against Larch Beetle
35.9	\$321,000 the first year is from the trust fund
35.10	to the Board of Regents of the University of
35.11	Minnesota to evaluate new insect management
35.12	techniques and key factors for predicting
35.13	future infestations to protect and preserve trees
35.14	from native eastern larch beetle infestations.
35.15 35.16	(r) Shoreline Restoration and Enhancement at Minneapolis Lakes
35.17	\$819,000 the first year is from the trust fund
35.18	to the commissioner of natural resources for
35.19	an agreement with the Minneapolis Park and
35.20	Recreation Board to restore and enhance areas
35.21	of turf-dominated, eroding, and low habitat
35.22	value lakeshore that impacts the water quality
35.23	of the Minneapolis Chain of Lakes.
35.24	(s) Developing Markets for CLC Crops
35.25	\$450,000 the first year is from the trust fund
35.26	to the commissioner of agriculture to provide
35.27	grants to organizations in Minnesota to
35.28	develop enterprises, supply chains, and
35.29	markets for continuous living cover crops and
35.30	cropping systems in the early stage of
35.31	commercial development. This appropriation
35.32	is exempt from the income repayment
35.33	requirements in Minnesota Statutes,
35.34	section116P.10, paragraph (c).

36.1 36.2	Subd. 9. Land Acquisition, Habitat, and Recreation	19,553,000	<u>-0-</u>
36.3	(a) Cannon River Preservation and Access		
36.4	\$2,717,000 the first year is from the trust fund		
36.5	to the commissioner of natural resources for		
36.6	an agreement with Dakota County to		
36.7	rehabilitate the historic Waterford Bridge for		
36.8	the Mill Towns State Trail; restore and		
36.9	enhance upland shoreline, forest, and prairie		
36.10	habitats; and develop a trailhead and		
36.11	recreational access to the Cannon River.		
36.12	(b) Mesabi Trail: Aurora to Hoyt Lakes		
36.13	\$1,325,000 the first year is from the trust fund		
36.14	to the commissioner of natural resources for		
36.15	an agreement with St. Louis and Lake		
36.16	Counties Regional Railroad Authority for		
36.17	environmental review and permitting and to		
36.18	engineer, design, and construct a segment of		
36.19	the Mesabi Trail beginning at the intersection		
36.20	of Main Street and Forestry Road in Aurora		
36.21	toward Hoyt Lakes.		
36.22	(c) RTA Maintenance Trail Stabilization Project		
36.23	\$500,000 the first year is from the trust fund		
36.24	to the commissioner of natural resources for		
36.25	an agreement with the city of Eden Prairie to		
36.26	construct a retaining wall and restore adjacent		
36.27	remnant prairie along the maintenance trail at		
36.28	Richard T. Anderson (RTA) Conservation		
36.29	Area to mitigate ongoing erosion and protect		
36.30	native habitat and plant communities.		
36.31 36.32	(d) Local Parks, Trails, and Natural Areas Grant Programs		
36.33	\$4,769,000 the first year is from the trust fund		
36.34	to the commissioner of natural resources to		

REVISOR

02/14/25

25-03949

CKM/EN

37.1	solicit, rank, and fund competitive matching
37.2	grants for local parks, trail connections, and
37.3	natural and scenic areas under Minnesota
37.4	Statutes, section 85.019. This appropriation is
37.5	for local nature-based recreation, connections
37.6	to regional and state natural areas, and
37.7	recreation facilities and may not be used for
37.8	athletic facilities such as sport fields, courts,
37.9	and playgrounds. This appropriation is exempt
37.10	from subdivision 13, paragraph (k).
37.11 37.12	(e) Boardwalk Over Boggy Land for Recreational Purposes
37.13	\$148,000 the first year is from the trust fund
37.14	to the commissioner of natural resources for
37.15	an agreement with the city of Battle Lake to
37.16	design and construct a boardwalk over city
37.17	land to protect wetlands and to increase
37.18	community access to natural areas and wildlife
37.19	habitat.
37.20 37.21	(f) Lake Zumbro Park Water Access and Site Improvements
37.22	\$1,978,000 the first year is from the trust fund
37.23	to the commissioner of natural resources for
37.24	an agreement with Olmsted County to enhance
37.25	the Lake Zumbro Park water access and the
37.26	federal Americans with Disabilities Act
37.27	(ADA) accessibility for boating, fishing, and
37.28	viewing, while creating new user-friendly and
37.29	accessible amenities for individuals and
37.30	families. This may include new fishing docks
37.31	or piers, restored shoreline, improved parking,
37.32	and ADA accessible access to an existing
37.33	kayak and canoe launch.
37.34 37.35	(g) Scientific and Natural Area (SNA) Biodiversity Protection

38.1	\$1,104,000 the first year is from the trust fund
38.2	to the commissioner of natural resources for
38.3	the scientific and natural area program to
38.4	conserve Minnesota's most unique places and
38.5	rare species and strategically acquire lands
38.6	that meet criteria for SNAs under Minnesota
38.7	Statutes, section 86A.05. This appropriation
38.8	is available until June 30, 2029, by which time
38.9	the project must be completed and final
38.10	products delivered.
38.11 38.12 38.13	(h) Scandia Gateway Trail Connection: Recreation, Wetlands, and Environmental Education
38.14	\$907,000 the first year is from the trust fund
38.15	to the commissioner of natural resources for
38.16	an agreement with the city of Scandia to
38.17	engineer, design, and construct a bike and
38.18	pedestrian trail to connect recreational,
38.19	cultural, and environmental resources in
38.20	Scandia to the state Gateway Trail. This
38.21	appropriation is also to create and install
38.22	educational interpretive signage about
38.23	wetlands and rain gardens near the trail.
38.24 38.25	(i) Lake Byllesby Regional Park Restoration and Recreation
38.26	\$1,120,000 the first year is from the trust fund
38.27	to the commissioner of natural resources for
38.28	an agreement with Dakota County to restore
38.29	prairie, woodland, and shoreline habitat and
38.30	design and install trails, birding and picnic
38.31	areas, and other recreational amenities to
38.32	enhance the visitor experience and stewardship
38.33	at Lake Byllesby Regional Park. This
38.34	appropriation is available until June 30, 2029,
38.35	by which time the project must be completed
38.36	and final products delivered.

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
<u>116P.10.</u>
(1) Enhancing Preservation and Accessibility at Hawk Ridge Nature Reserve

02/14/25	REVISOR	CKM/EN	25-03949
----------	---------	--------	----------

40.1	\$155,000 the first year is from the trust fund
40.2	to the commissioner of natural resources for
40.3	an agreement with the city of Duluth to
40.4	develop accessible trails and remove invasive
40.5	species to enhance outdoor recreation and
40.6	education opportunities that promote
40.7	conservation of raptors and preservation of
40.8	natural resources at Hawk Ridge Nature
40.9	Reserve.
40.10 40.11	(m) Echo Bay County Park - Phase 1 Construction
40.12	\$1,122,000 the first year is from the trust fund
40.13	to the commissioner of natural resources for
40.14	an agreement with Otter Tail County to
40.15	construct, in accordance with the Echo Bay
40.16	County Park Master Plan, access roads, trails,
40.17	parking, and bathroom facilities that create
40.18	designated public access and use corridors for
40.19	outdoor recreation and limit natural resource
40.20	impacts in Echo Bay County Park.
40.21	(n) Chaska Big Woods Property Acquisition
40.22	\$529,000 the first year is from the trust fund
40.23	to the commissioner of natural resources for
40.24	an agreement with the city of Chaska to
40.25	acquire property that contains remnant Big
40.26	Woods to protect Minnesota forests and
40.27	wetlands and to increase community access
40.28	to natural areas.
40.29 40.30	Subd. 10. Administration, Emerging Issues, and Contract Agreement Reimbursement 7,267,000 -0-
40.31	(a) Emerging Issues Account
40.32	\$2,984,000 the first year is from the trust fund
40.33	to the Legislative-Citizen Commission on
40.34	Minnesota Resources to an emerging issues

41.1	account authorized in Minnesota Statutes,
41.2	section 116P.08, subdivision 4, paragraph (d).
41.3	(b) 2025 Contract Agreement Reimbursement
41.4	\$280,000 the first year is from the trust fund
41.5	to the commissioner of natural resources, at
41.6	the direction of the Legislative-Citizen
41.7	Commission on Minnesota Resources, for
41.8	expenses incurred in preparing and
41.9	administering contracts, including for the
41.10	agreements specified in this section.
41.11	(c) LCCMR Administrative Budget
41.12	\$4,000,000 the first year is from the trust fund
41.13	to the Legislative-Citizen Commission on
41.14	Minnesota Resources for administration in
41.15	fiscal years 2026 and 2027 as provided in
41.16	Minnesota Statutes, section 116P.09,
41.17	subdivision 5. This appropriation is available
41.18	until June 30, 2027. Notwithstanding
41.19	Minnesota Statutes, section 116P.11,
41.20	paragraph (b), Minnesota Statutes, section
41.21	16A.281, applies to this appropriation.
41.22 41.23	(d) Legislative Coordinating Commission Legacy Website
41.24	\$3,000 the first year is from the trust fund to
41.25	the Legislative Coordinating Commission for
41.26	the website required in Minnesota Statutes,
41.27	section 3.303, subdivision 10.
41.28	Subd. 11. Availability of appropriations
41.29	Money appropriated in this section may not
41.30	be spent on activities unless they are directly
41.31	related to and necessary for a specific
41.32	appropriation and are specified in the work
41.33	plan approved by the Legislative-Citizen
41.34	Commission on Minnesota Resources. Money

42.1	appropriated in this section must not be spent
42.2	on indirect costs or other institutional overhead
42.3	charges that are not directly related to and
42.4	necessary for a specific appropriation. Costs
42.5	that are directly related to and necessary for
42.6	an appropriation, including financial services,
42.7	human resources, information services, rent,
42.8	and utilities, are eligible only if the costs can
42.9	be clearly justified and individually
42.10	documented specific to the appropriation's
42.11	purpose and would not be generated by the
42.12	recipient but for receipt of the appropriation.
42.13	No broad allocations for costs in either dollars
42.14	or percentages are allowed. Unless otherwise
42.15	provided, the amounts in this section are
42.16	available for three years beginning July 1,
42.17	2025, and ending June 30, 2028, when projects
42.18	must be completed and final products
42.19	delivered. For acquisition of real property, the
42.20	appropriations in this section are available for
42.21	an additional fiscal year if a binding contract
42.22	for acquisition of the real property is entered
42.23	into before the expiration date of the
42.24	appropriation. If a project receives a federal
42.25	award, the period of the appropriation is
42.26	extended to equal the federal award period to
42.27	a maximum trust fund appropriation length of
42.28	six years.
42.29	Subd. 12. Data availability requirements
42.30	Data collected by the projects funded under
42.31	this section must conform to guidelines and
42.32	standards adopted by Minnesota IT Services.
42.33	Spatial data must also conform to additional
42.34	guidelines and standards designed to support
42.35	data coordination and distribution that have

43.1	been published by the Minnesota Geospatial
43.2	Information Office. Descriptions of spatial
43.3	data must be prepared as specified in the state's
43.4	geographic metadata guidelines and final data
43.5	must be uploaded to the Minnesota Geospatial
43.6	Commons upon project completion. All data
43.7	must be accessible and free to the public
43.8	unless made private under the Data Practices
43.9	Act, Minnesota Statutes, chapter 13. To the
43.10	extent practicable, summary data and results
43.11	of projects funded under this section should
43.12	be readily accessible on the Internet and
43.13	identified as having received funding from the
43.14	environment and natural resources trust fund.
43.15	Subd. 13. Project requirements
43.16	(a) As a condition of accepting an
43.17	appropriation under this section, an agency or
43.18	entity receiving an appropriation or a party to
43.19	an agreement from an appropriation must
43.20	comply with paragraphs (b) to (m) and
43.21	Minnesota Statutes, chapter 116P, and must
43.22	submit a work plan and annual or semiannual
43.23	progress reports in the form determined by the
43.24	Legislative-Citizen Commission on Minnesota
43.25	Resources for any project funded in whole or
43.26	in part with money from the appropriation.
43.27	Modifications to the approved work plan and
43.28	budget expenditures must be made through
43.29	the amendment process established by the
43.30	Legislative-Citizen Commission on Minnesota
43.31	Resources.
43.32	(b) A recipient of money appropriated in this
43.33	section that conducts a restoration using
43.34	money appropriated in this section must use
43.35	native plant species according to the Board of

44.1	Water and Soil Resources' native vegetation
44.2	establishment and enhancement guidelines
44.3	and include an appropriate diversity of native
44.4	species selected to provide habitat for
44.5	pollinators throughout the growing season as
44.6	required under Minnesota Statutes, section
44.7	<u>84.973.</u>
44.8	(c) For all restorations conducted with money
44.9	appropriated under this section, a recipient
44.10	must prepare an ecological restoration and
44.11	management plan that, to the degree
44.12	practicable, is consistent with the
44.13	highest-quality conservation and ecological
44.14	goals for the restoration site. Consideration
44.15	should be given to soil, geology, topography,
44.16	and other relevant factors that would provide
44.17	the best chance for long-term success and
44.18	durability of the restoration project. The plan
44.19	must include the proposed timetable for
44.20	implementing the restoration, including site
44.21	preparation, establishment of diverse plant
44.22	species, maintenance, and additional
44.23	enhancement to establish the restoration;
44.24	identify long-term maintenance and
44.25	management needs of the restoration and how
44.26	the maintenance, management, and
44.27	enhancement will be financed; and take
44.28	advantage of the best-available science and
44.29	include innovative techniques to achieve the
44.30	best restoration.
44.31	(d) An entity receiving an appropriation in this
44.32	section for restoration activities must provide
44.33	an initial restoration evaluation at the
44.34	completion of the appropriation and an
44.35	evaluation three years after the completion of

45.1	the expenditure. Restorations must be
45.2	evaluated relative to the stated goals and
45.3	standards in the restoration plan, current
45.4	science, and, when applicable, the Board of
45.5	Water and Soil Resources' native vegetation
45.6	establishment and enhancement guidelines.
45.7	The evaluation must determine whether the
45.8	restorations are meeting planned goals,
45.9	identify any problems with implementing the
45.10	restorations, and, if necessary, give
45.11	recommendations on improving restorations.
45.12	The evaluation must be focused on improving
45.13	future restorations.
45.14	(e) All restoration and enhancement projects
45.15	funded with money appropriated in this section
45.16	must be on land permanently protected by a
45.17	conservation easement or public ownership.
45.18	(f) A recipient of money from an appropriation
45.19	under this section must give consideration to
45.20	contracting with Conservation Corps
45.21	Minnesota for contract restoration and
45.22	enhancement services.
45.23	(g) All conservation easements acquired with
45.24	money appropriated under this section must:
45.25	(1) be permanent;
45.26	(2) specify the parties to the easement in the
45.27	easement document;
45.28	(3) specify all provisions of an agreement that
45.29	are permanent;
45.30	(4) be sent to the Legislative-Citizen
45.31	Commission on Minnesota Resources in an
45.32	-14
	electronic format at least 20 business days

46.1	(5) include a long-term monitoring and
46.2	enforcement plan and funding for monitoring
46.3	and enforcing the easement agreement; and
46.4	(6) include requirements in the easement
46.5	document to protect the quantity and quality
46.6	of groundwater and surface water through
46.7	specific activities, such as keeping water on
46.8	the landscape, reducing nutrient and
46.9	contaminant loading, and not permitting
46.10	artificial hydrological modifications.
46.11	(h) For any acquisition of lands or interest in
46.12	lands, a recipient of money appropriated under
46.13	this section must not agree to pay more than
46.14	100 percent of the appraised value for a parcel
46.15	of land using this money to complete the
46.16	purchase, in part or in whole, except that up
46.17	to ten percent above the appraised value may
46.18	be allowed to complete the purchase, in part
46.19	or in whole, using this money if permission is
46.20	received in advance of the purchase from the
46.21	<u>Legislative-Citizen Commission on Minnesota</u>
46.22	Resources.
46.23	(i) For any acquisition of land or interest in
46.24	land, a recipient of money appropriated under
46.25	this section must give priority to high-quality
46.26	natural resources or conservation lands that
46.27	provide natural buffers to water resources.
46.28	(j) For new lands acquired with money
46.29	appropriated under this section, a recipient
46.30	must prepare an ecological restoration and
46.31	management plan in compliance with
46.32	paragraph (c), including sufficient funding for
46.33	implementation unless the work plan addresses
46.34	why a portion of the money is not necessary
46.35	to achieve a high-quality restoration.

47.1	$\underline{\text{(k) To ensure public accountability for using}}$
47.2	public money, a recipient of money
47.3	appropriated under this section must, within
47.4	60 days of a land acquisition, provide to the
47.5	Legislative-Citizen Commission on Minnesota
47.6	Resources documentation of the selection
47.7	process used to identify parcels acquired and
47.8	provide documentation of all related
47.9	transaction costs, including but not limited to
47.10	appraisals, legal fees, recording fees,
47.11	commissions, other similar costs, and
47.12	donations. This information must be provided
47.13	for all parties involved in the transaction. The
47.14	recipient must also report to the
47.15	Legislative-Citizen Commission on Minnesota
47.16	Resources any difference between the
47.17	acquisition amount paid to the seller and the
47.18	state-certified or state-reviewed appraisal, if
47.19	a state-certified or state-reviewed appraisal
47.20	was conducted.
47.21	(l) A recipient of an appropriation from the
47.22	trust fund under this section must acknowledge
47.23	financial support from the environment and
47.24	natural resources trust fund in project
47.25	publications, signage, and other public
47.26	communications and outreach related to work
47.27	completed using the appropriation.
47.28	Acknowledgment may occur, as appropriate,
47.29	through use of the trust fund logo or inclusion
47.30	of language attributing support from the trust
47.31	fund. Each direct recipient of money
47.32	appropriated in this section, as well as each
47.33	recipient of a grant awarded pursuant to this
47.34	section, must satisfy all reporting and other
47.35	requirements incumbent upon constitutionally
47.36	dedicated funding recipients as provided in

48.1	Minnesota Statutes, section 3.303, subdivision
48.2	10, and chapter 116P.
48.3	(m) A recipient of an appropriation from the
48.4	trust fund under this section that is receiving
48.5	funding to conduct children's services, as
48.6	defined in Minnesota Statutes, section
48.7	299C.61, subdivision 7, must certify to the
48.8	Legislative-Citizen Commission on Minnesota
48.9	Resources, as part of the required work plan,
48.10	that criminal background checks for
48.11	background check crimes, as defined in
48.12	Minnesota Statutes, section 299C.61,
48.13	subdivision 2, are performed on all employees,
48.14	contractors, and volunteers that have or may
48.15	have access to a child to whom the recipient
48.16	provides children's services using the
48.17	appropriation.
48.18 48.19	Subd. 14. Payment conditions and capital equipment expenditures
48.20	(a) All agreements, grants, or contracts
48.21	referred to in this section must be administered
48.22	on a reimbursement basis unless otherwise
48.23	
40.04	provided in this section. Notwithstanding
48.24	<u>provided in this section. Notwithstanding</u> <u>Minnesota Statutes, section 16A.41,</u>
48.24	<u> </u>
	Minnesota Statutes, section 16A.41,
48.25	Minnesota Statutes, section 16A.41, expenditures made on or after July 1, 2025,
48.25 48.26	Minnesota Statutes, section 16A.41, expenditures made on or after July 1, 2025, or the date the work plan is approved,
48.25 48.26 48.27	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
48.25 48.26 48.27 48.28	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
48.25 48.26 48.27 48.28 48.29	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
48.25 48.26 48.27 48.28 48.29 48.30	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
48.25 48.26 48.27 48.28 48.29 48.30 48.31	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
48.25 48.26 48.27 48.28 48.29 48.30 48.31 48.32	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

49.1	cash-flow needs or match federal money. The
49.2	advances must be approved as part of the work
49.3	plan. No expenditures for capital equipment
49.4	are allowed unless expressly authorized in the
49.5	project work plan.
49.6	(b) Single-source contracts as specified in the
49.7	approved work plan are allowed.
49.8 49.9	Subd. 15. Purchasing recycled and recyclable materials
49.10	A political subdivision, public or private
49.11	corporation, or other entity that receives an
49.12	appropriation under this section must use the
49.13	appropriation in compliance with Minnesota
49.14	Statutes, section 16C.0725, regarding
49.15	purchasing recycled, repairable, and durable
49.16	materials, and Minnesota Statutes, section
49.17	16C.073, regarding purchasing and using
49.18	paper stock and printing.
49.19	Subd. 16. Accessibility
49.20	Structural and nonstructural facilities must
49.21	meet the design standards in the Americans
49.22	with Disabilities Act (ADA) accessibility
49.23	guidelines.
49.24	Subd. 17. Carryforward; extensions
49.25	(a) The availability of the appropriations for
49.26	the following projects is extended to June 30,
49.27	<u>2026:</u>
49.28	(1) Laws 2021, First Special Session chapter
49.29	6, article 5, section 2, subdivision 3, paragraph
49.30	(d), Foundational Hydrology Data for Wetland
49.31	Protection and Restoration;
49.32	(2) Laws 2021, First Special Session chapter
49.33	6, article 5, section 2, subdivision 6, paragraph

	02/14/25 REV
50.1	(b), Protect Community Forests by Managing
50.2	Ash for Emerald Ash Borer;
50.3	(3) Laws 2021, First Special Session chapter
50.4	6, article 5, section 2, subdivision 9, paragraph
50.5	(t), Chippewa County Acquisition, Recreation,
50.6	and Education;
50.7	(4) Laws 2021, First Special Session chapter
50.8	6, article 6, section 2, subdivision 3, paragraph
50.9	(g), Geologic Atlases for Water Resource
50.10	Management;
50.11	(5) Laws 2021, First Special Session chapter
50.12	6, article 6, section 2, subdivision 3, paragraph
50.13	(n), Bioacoustics for Broad-Scale Species
50.14	Monitoring and Conservation;
50.15	(6) Laws 2022, chapter 94, section 2,
50.16	subdivision 4, paragraph (f), Water and
50.17	Climate Information to Enhance Community
50.18	Resilience;
50.19	(7) Laws 2022, chapter 94, section 2,
50.20	subdivision 4, paragraph (i), Is the Tire
50.21	Chemical 6PPDq Killing Minnesota's Fish?;
50.22	(8) Laws 2022, chapter 94, section 2,
50.23	subdivision 7, paragraph (a), Green Solar Cells
50.24	from a Minnesota Natural Resource;
50.25	(9) Laws 2022, chapter 94, section 2,
50.26	subdivision 8, paragraph (d), Hastings Lake
50.27	Rebecca Park Area;
50.28	(10) Laws 2022, chapter 94, section 2,
50.29	subdivision 9, paragraph (a), Mesabi Trail:
50.30	Wahlsten Road (CR 26) to Tower; and
50.31	(11) Laws 2022, chapter 94, section 2,

Sec. 2. 50

subdivision 9, paragraph (j), Silver Bay

Multimodal Trailhead Project.

50.32

50.33

	02/14/25	REVISOR	CKM/EN	25-03949
51.1	(b) The availability of the appropriation	s for		
51.2	the following projects is extended to Jun	<u>e 30,</u>		
51.3	<u>2027:</u>			
51.4	(1) Laws 2022, chapter 94, section 2,			
51.5	subdivision 4, paragraph (g), Catch and			
51.6	Reveal: Discovering Unknown Fish			
51.7	Contamination Threats;			
51.8	(2) Laws 2022, chapter 94, section 2,			
51.9	subdivision 9, paragraph (e), Native Pra	<u>irie</u>		
51.10	Stewardship and Prairie Bank Easement			
51.11	Acquisition;			
51.12	(3) Laws 2022, chapter 94, section 2,			
51.13	subdivision 9, paragraph (h), SNA Habi	<u>tat</u>		
51.14	Restoration and Public Engagement; and	<u>d</u>		
51.15	(4) Laws 2022, chapter 94, section 2,			
51.16	subdivision 9, paragraph (n), Ranier Saf	<u>è</u>		
51.17	Harbor/Transient Dock - Phase 2.			
51.18	EFFECTIVE DATE. Subdivision 1	7 is effective th	ne day following final	enactment.
51.19	Sec. 3. Laws 2024, chapter 83, section	2, subdivision	3, is amended to read	:
51.20 51.21	Subd. 3. Foundational Natural Resourand Information	ce Data	-0-	14,993,000
51.22 51.23	(a) Native Plant Community Data in the Duluth	he City of		
51.24	\$198,000 the second year is from the tru	ıst		
51.25	fund to the commissioner of natural reso	urces		
51.26	for an agreement with Minnesota Land	Γrust		
51.27	to develop field-verified native plant			
51.28	community data and maps for the city of	f		
51.29	Duluth and the St. Louis River estuary t	o		
51.30	support conservation and restoration activ	rities.		

(b) Reconstructing Historical Wild Rice to Understand Its Future

51.31 51.32

02/14/25	REVISOR	CKM/EN	25-03949

52.1	\$200,000 the second year is from the trust
52.2	fund to the Science Museum of Minnesota for
52.3	the St. Croix Watershed Research Station to
52.4	characterize environmental drivers
52.5	contributing to the decline of wild rice using
52.6	lake sediment cores to reconstruct historical
52.7	wild rice abundance in relation to lake and
52.8	watershed stressors.
52.9 52.10	(c) Characterizing Tree Cavities and Use b Minnesota's Wildlife
52.11	\$349,000 the second year is from the trust
52.12	fund to the Board of Regents of the University
52.13	of Minnesota for the Natural Resources
52.14	Research Institute in Duluth to assess the
52.15	effects of forest management on Minnesota's
52.16	primary cavity engineer, the pileated
52.17	woodpecker, and on the wildlife that rely on
52.18	the cavities that pileated woodpeckers create.
52.19	This appropriation is also to develop
52.20	management guidelines.
52.21 52.22	(d) Fate of Minnesota's Lakes in the Next Century
52.23	\$453,000 the second year is from the trust
52.24	fund to the Board of Regents of the University
52.25	of Minnesota to use new modeling techniques
52.26	to quantify how water quality of Minnesota's
52.27	lakes will change in the next century under
52.28	future land use and climate change scenarios
52.29	and to create an online web tool to display the
52.30	results. This appropriation is subject to
52.31	Minnesota Statutes, section 116P.10.This
52.32	appropriation is available until June 30, 2028,
52.33	by which time the project must be completed
52.34	and final products delivered.
52.35 52.36	(e) Turtle Island Skywatchers - Minnesota Research and Data Visualization

02/14/25	REVISOR	CKM/EN	25-03949

53.1	\$200,000 the second year is from the trust
53.2	fund to the commissioner of natural resources
53.3	for an agreement with Native Skywatchers
53.4	Inc. to engage youth in environmental
53.5	stewardship by collecting images and acoustic
53.6	data from turtles and other culturally
53.7	significant animals and their habitats,
53.8	evaluating the differences in these soundscapes
53.9	across landscapes, and sharing the results
53.10	through scientific storytelling and online
53.11	platforms.
53.12 53.13	(f) Monitoring Minnesota's Insects: Connecting Habitat to Insect Prey
53.14	\$199,000 the second year is from the trust
53.15	fund to the Board of Regents of the University
53.16	of Minnesota to investigate the ecological
53.17	roles of and energy transfer by certain
53.18	Minnesota insects throughout their life cycles
53.19	and to train future insect researchers on field
53.20	techniques.
53.21 53.22	(g) Determining Ambient Background PFAS Concentrations in Minnesota Soils
53.23	\$621,000 the second year is from the trust
53.24	fund to the commissioner of the Pollution
53.25	Control Agency to determine ambient
53.26	background per- and polyfluoroalkyl substance
53.27	(PFAS) levels in urban and nonurban soils to
53.28	help Minnesota develop management
53.29	strategies for PFAS-contaminated soils. This
53.30	appropriation is available until June 30, 2028,
53.31	by which time the project must be completed
53.32	and final products delivered.
53.33 53.34	(h) Investigating Life History Characteristics of Minnesota Elk

02/14/25	REVISOR	CKM/EN	25-03949
U2/14/23	REVISUR		/ 1-111949

54.1	\$933,000 the second year is from the trust
54.2	fund to the commissioner of natural resources
54.3	to assess Minnesota elk herd health and
54.4	genetic diversity, movements, survival, and
54.5	causes of mortality and to develop a
54.6	noninvasive, safer, and more accurate method
54.7	to estimate population size. This appropriation
54.8	is available until June 30, 2028, by which time
54.9	the project must be completed and final
54.10	products delivered.
54.11 54.12	(i) Foundational Data for Moth and Butterfly Conservation
54.13	\$195,000 the second year is from the trust
54.14	fund to the commissioner of natural resources
54.15	to perform field surveys and consolidate
54.16	existing data to create the first comprehensive
54.17	list of Minnesota moths and butterflies. This
54.18	appropriation is also to conduct outreach to
54.19	inform land managers and to facilitate public
54.20	appreciation of these species.
54.21	(j) DNR County Groundwater Atlas
54.22	\$3,200,000 the second year is from the trust
54.23	fund to the commissioner of natural resources
54.24	to continue producing county groundwater
54.25	atlases to inform management of surface water
54.26	and groundwater resources for drinking and
54.27	other purposes. This appropriation is for Part
54.28	B, to characterize the potential water yields of
54.29	aquifers and aquifers' sensitivity to
54.30	contamination.
54.31	(k) Voyageurs Wolf Project - Phase III
54.32	\$996,000 the second year is from the trust
54.33	fund to the Board of Regents of the University
54.34	of Minnesota to continue to study summertime
54.35	wolf predation on deer, moose, and other

02/14/25	REVISOR	CKM/EN	25-03949

55.1	species in the greater voyageurs ecosystem
55.2	to inform wildlife management and to share
55.3	natural history of this species with the public.
55.4	This appropriation is available until June 30,
55.5	2028, by which time the project must be
55.6	completed and final products delivered.
55.7 55.8	(l) Distribution and Population Status of Weasels in Minnesota
55.9	\$400,000 the second year is from the trust
55.10	fund to the Board of Regents of the University
55.11	of Minnesota for the Natural Resources
55.12	Research Institute in Duluth to determine the
55.13	distribution, relative abundance, and spatial
55.14	occupancy patterns of small weasel species in
55.15	Minnesota to fill key knowledge gaps in
55.16	weasel distribution and status in Minnesota.
55.17 55.18	(m) Improving Aquatic Plant Knowledge for Healthy Waters
55.19	\$198,000 the second year is from the trust
55.20	fund to the commissioner of natural resources
55.21	to collect foundational data on Minnesota's
55.22	native aquatic plant biodiversity through new
55.23	and enhanced lake surveys and to disseminate
55.24	results to state resource managers, scientists,
55.25	and the public.
55.26 55.27	(n) New Small Mammal Monitoring Methods for Minnesota
55.28	\$199,000 the second year is from the trust
55.29	fund to the Board of Regents of the University
55.30	of Minnesota for the Natural Resources
55.31	Research Institute in Duluth to develop camera
55.32	trapping methods as a new tool to collect
55.33	foundational data and fill key knowledge gaps
55.34	in the status of small mammal species in
55.35	Minnesota.

56.1 56.2	(o) Status of Bats and Roost Trees after White-Nose Syndrome
56.3	\$195,000 the second year is from the trust
56.4	fund to the Board of Regents of the University
56.5	of Minnesota for the Natural Resources
56.6	Research Institute in Duluth to study changes
56.7	in maternity roost trees and bat populations in
56.8	the forested areas of Minnesota and to evaluate
56.9	the effects of years of white-nose syndrome
56.10	on Minnesota bats.
56.11 56.12	(p) Sublethal Effects of Pesticides on the Invertebrate Community
56.13	\$387,000 the second year is from the trust
56.14	fund to the Board of Regents of the University
56.15	of Minnesota to provide data on pesticide
56.16	contamination in soil and the insect
56.17	community across the state and the effect of
56.18	insecticide exposure on insect reproduction.
56.19	This appropriation is available until June 30,
56.20	2029, by which time the project must be
56.21	completed and final products delivered.
56.22 56.23	(q) Modernizing Minnesota's Plant Community Classification and Field Guides
56.24	\$1,800,000 the second year is from the trust
56.25	fund to the commissioner of natural resources
56.26	to collect additional vegetation and
56.27	environmental data and update the state's
56.28	20-year-old native plant community
56.29	classification guides to incorporate new data,
56.30	streamline user application and access to
56.31	products, and include analysis of climate and
56.32	vegetation trends. Net income generated as
56.33	part of this appropriation may be reinvested
56.34	in the project if a plan for reinvestment is
56.35	approved in the work plan. This appropriation

02/14/25	REVISOR	CKM/EN	25-03949

57.1	is subject to Minnesota Statutes, section
57.2	116P.10.
57.3 57.4	(r) Assessing Prairie Health to Inform Pollinator Conservation
57.5	\$297,000 the second year is from the trust
57.6	fund to the Minnesota Zoological Society to
57.7	assess habitat quality and pesticide occurrence
57.8	in Minnesota prairies to help inform
57.9	management actions, endangered species
57.10	recovery plans, and pollinator reintroduction
57.11	efforts for endangered and threatened
57.12	butterflies and other wildlife.
57.13 57.14	(s) Understanding Native Fishes in the Bowfishing Era
57.15	\$588,000 the second year is from the trust
57.16	fund to the Board of Regents of the University
57.17	of Minnesota, Duluth, to collect foundational
57.18	biological information on a selection of native
57.19	Minnesota fish to aid in sustainable
57.20	management, improve recreational
57.21	opportunities, and educate the public about
57.22	these shared aquatic resources. This
57.23	appropriation is available until June 30, 2028,
57.24	by which time the project must be completed
57.25	and final products delivered.
57.26 57.27	(t) Preserving Minnesota Wildflower Information
57.28	\$199,000 the second year is from the trust
57.29	fund to the Board of Regents of the University
57.30	of Minnesota, Bell Museum of Natural
57.31	History, to preserve and enhance Minnesota
57.32	Wildflowers Information, an online tool for
57.33	plant identification, by integrating the content
57.34	and functionality of the website with the
57.35	Minnesota Biodiversity Atlas for public use

02/14/25	REVISOR	CKM/EN	25-0394
02/14/25	REVISOR	CKM/EN	25-03

58.1	as required by Laws 2017, chapter 96, section
58.2	2, subdivision 3, paragraph (e).
58.3 58.4	(u) White-Tailed Deer Movement and Disease in Suburban Areas
58.5	\$699,000 the second year is from the trust
58.6	fund to the Board of Regents of the University
58.7	of Minnesota to better understand white-tailed
58.8	deer movement, habitat use, and disease
58.9	dynamics at the suburban-agricultural interface
58.10	to inform more efficient deer management and
58.11	disease control.
58.12 58.13	(v) Highly Pathogenic Avian Influenza and Minnesota Raptors
58.14	\$187,000 the second year is from the trust
58.15	fund to the Board of Regents of the University
58.16	of Minnesota for the Raptor Center to evaluate
58.17	Minnesota raptors for current or past infections
58.18	with highly pathogenic avian influenza virus
58.19	to better understand disease transmission and
58.20	outbreak impacts on raptor populations.
58.21 58.22	(w) Geologic Atlases for Water Resource Management
58.23	\$1,236,000 the second year is from the trust
58.24	fund to the Board of Regents of the University
58.25	of Minnesota, Minnesota Geological Survey,
58.26	to continue producing county geologic atlases
58.27	to inform management of surface water and
58.28	groundwater resources. This appropriation is
58.29	to complete Part A, which focuses on the
58.30	properties and distribution of earth materials
58.31	to define aquifer boundaries and the
58.32	connection of aquifers to the land surface and
58.33	surface water resources.
58.34	(x) Remote Sensing for Pollinator Habitat

59.1	\$180,000 the second year is from the trust
59.2	fund to the commissioner of natural resources
59.3	for an agreement with Monarch Joint Venture
59.4	to use remote sensing technology to evaluate
59.5	pollinator habitat on energy and transportation
59.6	corridors across Minnesota and to host
59.7	field-day training workshops. Net income
59.8	generated as part of this appropriation may be
59.9	reinvested in the project if a plan for
59.10	reinvestment is approved in the work plan as
59.11	provided under Minnesota Statutes, section
59.12	<u>116P.10.</u>
59.13	(y) Harnessing Cover Crops and Roots for
59.14	Sustainable Cropping
59.15	\$375,000 the second year is from the trust
59.16	fund to the Board of Regents of the University
59.17	of Minnesota to determine carbon
59.18	sequestration, nitrogen credit potential, water
59.19	use, and performance of cover crops in
59.20	corn-soybean and corn-soybean-wheat
59.21	rotations in southern Minnesota.
59.22 59.23	(z) Effects of Conservation Grazing on Solar Sites Managed for Pollinator Habitat
59.24	\$88,000 the second year is from the trust fund
59.25	to the commissioner of natural resources for
59.26	an agreement with Minnesota Native
59.27	Landscapes, in partnership with Temple
59.28	University, to analyze the effects of sheep
59.29	grazing and mowing on the vegetation and
59.30	soils of solar sites managed for pollinator
59.31	habitat and to improve understanding of the
59.32	environmental outcomes from the colocation
59.33	of solar panels; grazing; and native,
59.34	pollinator-friendly vegetation. This
59.35	appropriation is available until June 30, 2029,

	02/14/25	REVISOR	CKM/EN	25-03949
60.1	by which time the project must be	completed		
60.2	and final products delivered.			
60.3 60.4	(aa) Genetic Detection of Endang in the Mississippi	gered Mussels		
60.5	\$241,000 the second year is from t	the trust		
60.6	fund to the commissioner of natura	l resources		
60.7	for an agreement with the United S	States		
60.8	Geological Survey, Ohio Water Mi	crobiology		
60.9	Lab, to create, optimize, and use eD	NA assays		
60.10	to detect the presence of endanger	ed or		
60.11	threatened mussel species around	Buffalo		
60.12	Slough near the Prairie Island Indi	an		
60.13	Community.			
60.14 60.15	(bb) Integrated Population Mode Trumpeter Swans	eling for		
60.16	\$180,000 the second year is from t	the trust		
60.17	fund to the Board of Regents of the	University		
60.18	of Minnesota to compile and use al	ll available		
60.19	data to model historical population	abundance		
60.20	and estimate future population dyr	namics of		
60.21	Minnesota trumpeter swans.			
60.22	EFFECTIVE DATE. This sec	tion is effective retroa	actively from July	1, 2024.
60.23	Sec. 4. Laws 2024, chapter 83, se	ection 2, subdivision 8	s, is amended to rea	ad:
60.24 60.25	Subd. 8. Methods to Protect or R Water, and Habitat	estore Land,	-0-	10,910,000
60.26 60.27	(a) Long-Term Preservation of M Cactus Population	innesota's Ball		
60.28	\$100,000 the second year is from t	the trust		
60.29	fund to the Board of Regents of the	University		
60.30	of Minnesota for the Minnesota La	andscape		
60.31	Arboretum to protect Minnesota's	only		
60.32	population of ball cactus by suppo	rting		
60.33	population expansion and establish	nment,		
60.34	monitoring transferred plants, and	training		

02/14/25	REVISOR	CKM/EN	25-03949

61.1	long-term volunteer monitors. This
61.2	appropriation is available until June 30, 2029,
61.3	by which time the project must be completed
61.4	and final products delivered.
61.5 61.6	(b) Morrison County Historical Society Streambank Stabilization and Restoration
61.7	\$519,000 the second year is from the trust
61.8	fund to the commissioner of natural resources
61.9	for an agreement with the Morrison Soil and
61.10	Water Conservation District to stabilize and
61.11	restore land along the Mississippi River owned
61.12	by the Morrison County Historical Society
61.13	within the statutory boundaries of Charles A.
61.14	Lindbergh State Park to improve water quality
61.15	and improve aquatic and terrestrial habit. For
61.16	purposes of this appropriation, subdivision 13,
61.17	paragraph (e), does not apply. The
61.18	commissioner of natural resources may make
61.19	reasonable amounts of this appropriation
61.20	available on an advance basis to accommodate
61.21	the Morrison Soil and Water Conservation
61.22	District's cash-flow needs if a plan for the
61.23	advances is approved as part of the work plan.
61.24 61.25	(c) Can Increased Tree Diversity Increase Community Diversity?
61.26	\$415,000 the second year is from the trust
61.27	fund to the Board of Regents of the University
61.28	of Minnesota to evaluate impacts of increasing
61.29	tree diversity on wildlife, plant and fungal
61.30	communities, and carbon storage within aspen
61.31	forests in northern Minnesota to develop best
61.32	management practices for mixed woodland
61.33	systems.
61.34	(d) Restoration of Riverside Park

02/14/25	REVISOR	CKM/EN	25-03949

62.1	\$141,000 the second year is from the trust
62.2	fund to the commissioner of natural resources
62.3	for an agreement with the city of Long Prairie
62.4	to improve water retention, increase native
62.5	habitat, and enhance footpaths for recreation
62.6	at Riverside Park in Todd County, Minnesota.
62.7	The project must create a net increase in
62.8	habitat, and this appropriation may not be used
62.9	to meet the conditions of any permits received
62.10	for the project.
62.11 62.12	(e) Pollinator Central IV: Habitat Improvement with Public Engagement
62.13	\$698,000 the second year is from the trust
62.14	fund to the commissioner of natural resources
62.15	for an agreement with Great River Greening
62.16	to partner with municipalities, educational
62.17	organizations, and volunteers to create and
62.18	enhance pollinator habitat along public
62.19	corridors from Lakeville to St. Cloud and to
62.20	engage youth and the public through education
62.21	and monitoring the impact of habitat
62.22	improvements. This appropriation is available
62.23	until June 30, 2028, by which time the project
62.24	must be completed and final products
62.25	delivered.
62.26 62.27	(f) Conservation Grazing for Birds, Beef, and Better Soil
62.28	\$342,000 the second year is from the trust
62.29	fund to the commissioner of natural resources
62.30	for an agreement with the National Audubon
62.31	Society, Minnesota office, to assess Audubon
62.32	Conservation Ranching as a strategic approach
62.33	to improve grassland biodiversity, soils, and
62.34	ecosystem resilience. This appropriation is
62.35	available until June 30, 2028, by which time

63.1	the project must be completed and final
63.2	products delivered.
63.3 63.4	(g) Minnesota Microbes for Enhanced Biodegradation of Microplastics
63.5	\$524,000 the second year is from the trust
63.6	fund to the Board of Regents of the University
63.7	of Minnesota to investigate the potential of
63.8	natural and indigenous microbes to biodegrade
63.9	conventional plastics in contaminated soils
63.10	and waters across the state. This appropriation
63.11	is subject to Minnesota Statutes, section
63.12	116P.10.
63.13 63.14	(h) Completing the Mississippi River Greenway: Dakota County
63.15	\$657,000 the second year is from the trust
63.16	fund to the commissioner of natural resources
63.17	for an agreement with Dakota County to
63.18	restore and enhance habitat on public lands,
63.19	establish linear native plantings, and install
63.20	electric-vehicle charging stations within and
63.21	along the 27-mile Mississippi River Greenway
63.22	in Dakota County. Net income generated as
63.23	part of this appropriation may be reinvested
63.24	in the project if a plan for reinvestment is
63.25	approved in the work plan. This appropriation
63.26	is subject to Minnesota Statutes, section
63.27	116P.10, and is available until June 30, 2028,
63.28	by which time the project must be completed
63.29	and final products delivered.
63.30 63.31	(i) Enabling Nature to Destroy Environmental PFAS Contaminants
63.32	\$378,000 the second year is from the trust
63.33	fund to the Board of Regents of the University
63.34	of Minnesota to identify enzymes and
63.35	microbes that can break down soil-based per-

64.1	and polyfluoroalkyl substances (PFAS) into
64.2	nontoxic elements. This appropriation is
64.3	subject to Minnesota Statutes, section 116P.10.
64.4 64.5	(j) Bioacoustics for Species Monitoring and Conservation - Phase 2
64.6	\$568,000 the second year is from the trust
64.7	fund to the Board of Regents of the University
64.8	of Minnesota to assess avian diversity at the
64.9	statewide scale by developing a citizen science
64.10	bioacoustics monitoring program with an
64.11	initial focus on private lands.
64.12 64.13	(k) Preventing PFAS and Microplastics Contaminants Across Minnesota
64.14	\$656,000 the second year is from the trust
64.15	fund to the Board of Regents of the University
64.16	of Minnesota to help stop the flow of per- and
64.17	polyfluoroalkyl substances (PFAS) and
64.18	microplastics contaminants into Minnesota's
64.19	environment by developing strategies and
64.20	technologies to manage solid waste streams
64.21	on site. This appropriation is subject to
64.22	Minnesota Statutes, section 116P.10.
64.23 64.24	(l) Shingle Creek Aquatic and Shoreline Habitat Enhancement
64.25	\$1,100,000 the second year is from the trust
64.26	fund to the commissioner of natural resources
64.27	for an agreement with the Minneapolis Park
64.28	and Recreation Board to plan and restore a
64.29	section of Shingle Creek in north Minneapolis
64.30	with native aquatic and shoreline vegetation,
64.31	channel and bank modification, and natural
64.32	stream features. This appropriation is also to
64.33	monitor plant and animal health following
64.34	construction to ensure that the ecological
64.35	functioning of the creek corridor is restored.

65.1	This appropriation is available until June 30,
65.2	2030, by which time the project must be
65.3	completed and final products delivered.
65.4 65.5	(m) LiDAR Technology to Help Prevent Wildlife Fatalities from Wind Turbines
65.6	\$525,000 the second year is from the trust
65.7	fund to the Board of Regents of the University
65.8	of Minnesota to create a low-cost and
65.9	advanced LiDAR system to detect bats and
65.10	birds approaching wind turbines that may be
65.11	used in concert with deterrence or impact
65.12	avoidance methods to prevent collisions. This
65.13	appropriation is subject to Minnesota Statutes,
65.14	section 116P.10.
65.15 65.16	(n) Road Salt Pollution of Surface Waters from Groundwater
65.17	\$622,000 the second year is from the trust
65.18	fund to the Board of Regents of the University
65.19	of Minnesota to inform source-reduction
65.20	efforts by developing a model to identify hot
65.21	spots where road-salt-contaminated
65.22	groundwater leads to chloride pollution of
65.23	surface waters.
65.24 65.25	(o) Growing the Minnesota Bison Conservation Herd
65.26	\$1,775,000 the second year is from the trust
65.27	fund to the commissioner of natural resources
65.28	to reintroduce bison to Camden State Park as
65.29	part of a statewide effort to preserve the
65.30	American Plains bison genome.
65.31	Reintroduction includes the design,
65.32	construction, and installation of fencing, a
65.33	handling facility, signage, exhibits, and other
65.34	site improvements. This appropriation is
65.35	available until June 30, 2030, by which time

	02/14/25	REVISOR	CKM/EN	25-03949
66.1	the project must be completed and final			

66.1	the project must be completed and final
66.2	products delivered.
66.3 66.4	(p) Priority Lakes: Meeting Protection Goals and Multiplying Benefits
66.5	\$1,890,000 the second year is from the trust
66.6	fund to the commissioner of natural resources
66.7	for an agreement with the Hubbard County
66.8	Soil and Water Conservation District, in
66.9	cooperation with Minnesota Land Trust, to
66.10	protect habitat, forest health, and water quality
66.11	in the best fishing lakes by creating lake
66.12	implementation action plans, conducting
66.13	community-based habitat restorations and
66.14	improvements, and protecting forest lands with
66.15	conservation easements and Sustainable Forest
66.16	Incentive Act (SFIA) enrollments within
66.17	prioritized areas of the upper Mississippi River
66.18	basin in Hubbard County. Of this amount, up
66.19	to \$168,000 is for deposit in a monitoring fund
66.20	to be used by Minnesota Land Trust as
66.21	approved in the work plan and subject to
66.22	Minnesota Statutes, section 116P.20.

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

Sec. 4. 66

66.23