

Appendix 1. Review of statutory language of conservation acquisition programs and conservation funds in Minnesota for principles of ecosystem services.

Table A1.1. Citations from Minnesota statute that support principles of ecosystem services in the conservation activities that they provide guidance for or enable. The text that was used to make the determination of presence of ecosystem services principles is available below this table. This is not an exhaustive list of statutory text that meets the ecosystem services principles criteria.

Program	Directly calls for multiple benefits, or lists several benefits?	Directly calls for humans as beneficiaries?
DNR Aquatic Management Areas	86A.05 Subd. 14 (a), (b) 97C.02	97C.02
DNR Wildlife Management Areas	86A.05 Subd. 8. (a), (b)	97A.135 Subd. 1. (a)
DNR Trout Stream Easements	84.0272 Subd. 2. (a)	84.0272 Subd. 2. (a)
DNR Scientific and Natural Areas	84.944 Subd. 1. (a) 86A.05 Subd. 5.	86A.05 Subd. 5. (e)
DNR Native Prairie Bank	No	No
DNR Forests for the Future	84.66 Subd. 1-5. 89.001 Subd. 8	84.66 Subd. 3. 84.66 Subd. 6. 89.001 Subd. 8.
Reinvest in Minnesota Resources (RIM)	103F.505 103F.515 Subd. 1.	Not directly
Environment and Natural Resources Trust Fund	116P.08 Subd. 1. (6)	116P.01
Clean Water Fund	114D.50 Subd. 4. (a)	114D.10 Subd. 2. (1) 114D.50 Subd. 4. (b) 114D.50 Subd. 4. (e)
Outdoor Heritage Fund	97A.056 Subd. (1) 97A.056 Subd. (3) (a), (c)	97A.056 Subd. 19. (a)

Department of Natural Resources- Aquatic Management Area

Received Environment and Natural Resources Trust Fund funding: Yes

Received Outdoor Heritage Fund funding: Yes

Received Clean Water Fund funding: No

Language relating to multiple benefits:

97C.02 The commissioner shall acquire lands that are critical for fish and other aquatic life and that meet criteria described for aquatic management areas in section 86A.05, subdivision 14. The lands that are acquired may be developed to manage lakes, rivers, streams, and adjacent wetlands and lands for aquatic life, water quality, intrinsic biological value, public fishing, and other compatible outdoor recreational uses. The land may be acquired by gift, lease, easement, or purchase. The commissioner shall designate land acquired under this subdivision as aquatic management areas for the purposes of the outdoor recreation system.

86A.05 Subd. 14. Aquatic management areas.

(a) Aquatic management areas may be established to protect, develop, and manage lakes, rivers, streams, and adjacent wetlands and lands that are critical for fish and other aquatic life, for water quality, and for their intrinsic biological value, public fishing, or other compatible outdoor recreational uses.

(b) Aquatic management areas may be established to protect wetland areas under ten acres that are donated to the Department of Natural Resources.

(c) No unit may be authorized unless it meets one or more of the following criteria:

- (1) provides angler or management access;
- (2) protects fish spawning, rearing, or other unique habitat;
- (3) protects aquatic wildlife feeding and nesting areas;
- (4) protects critical shoreline habitat; or
- (5) provides a site for research on natural history.

(d) Aquatic management areas must be administered by the commissioner of natural resources in a manner consistent with the purposes of this subdivision to perpetuate and, if necessary, reestablish high quality aquatic habitat for production of fish, wildlife, and other aquatic species. Public fishing and other uses shall be consistent with the limitations of the resource, including the need to preserve adequate populations and prevent long-term habitat injury or excessive fish population reduction or increase. Public access to aquatic management areas may be closed during certain time periods.

Language relating to human beneficiaries:

97C.02 The commissioner shall acquire lands that are critical for fish and other aquatic life and that meet criteria described for aquatic management areas in section 86A.05, subdivision 14. The lands that are acquired may be developed to manage lakes, rivers, streams, and adjacent wetlands and lands for aquatic life, water quality, intrinsic biological value, public fishing, and other compatible outdoor recreational uses. The land may be acquired by gift, lease, easement, or purchase. The commissioner shall designate land acquired under this subdivision as aquatic management areas for the purposes of the outdoor recreation system.

Department of Natural Resources- Wildlife Management Area

Received Environment and Natural Resources Trust Fund funding: Yes

Received Outdoor Heritage Fund funding: Yes

Received Clean Water Fund funding: No

Language relating to multiple benefits:

86A.05 Subd. 8. State wildlife management area; purpose; resource and site qualifications; administration.

(a) A state wildlife management area shall be established to protect those lands and waters which have a high potential for wildlife production and to develop and manage these lands and waters for the production of wildlife, for public hunting, fishing, and trapping, and for other compatible outdoor recreational uses.

(b) No unit shall be authorized as a state wildlife management area unless its proposed location substantially satisfies the following criteria:

(1) includes appropriate wildlife lands and habitat, including but not limited to marsh or wetlands and the margins thereof, ponds, lakes, stream bottomlands, and uplands, which permit the propagation and management of a substantial population of the desired wildlife species; and

(2) includes an area large enough to ensure adequate wildlife management and regulation of the permitted recreational uses.

Language relating to human beneficiaries:

97A.135 Subd. 1. (a) The commissioner or the commissioner of administration shall acquire and improve land for public hunting, game refuges, and food and cover planting. The land may be acquired by a gift, lease, easement, purchase, or condemnation. At least two-thirds of the total area acquired in a county must be open to public hunting.

Department of Natural Resources- Trout Stream Easements

Received Environment and Natural Resources Trust Fund funding: Yes

Received Outdoor Heritage Fund funding: Yes

Received Clean Water Fund funding: No

Language relating to multiple benefits:

84.0272 Subd. 2. (a) Notwithstanding subdivision 1, the commissioner may acquire permanent stream easements for angler access, fish management, and habitat work for a onetime payment based on a value attributed to both the stream and the easement corridor. The payment shall equal:

Language relating to human beneficiaries:

84.0272 Subd. 2. (a) Notwithstanding subdivision 1, the commissioner may acquire permanent stream easements for angler access, fish management, and habitat work for a onetime payment based on a value attributed to both the stream and the easement corridor. The payment shall equal:

Department of Natural Resources- Native Prairie Bank

Received Environment and Natural Resources Trust Fund funding: Yes

Received Outdoor Heritage Fund funding: Yes

Received Clean Water Fund funding: No

Language relating to multiple benefits:

The statute is silent with regards to the criteria used to prioritize acquisition, but grants the authority to prescribe eligibility requirements to the commissioner of natural resources. Without more specific guidance, the enabling legislation for the native prairie bank program does not meet the multiple benefits criterion.

84.96 Subd. 1. The commissioner shall establish a native prairie bank, determine where native prairie land is located in the state, and prescribe eligibility requirements for inclusion of land in the native prairie bank.

Language relating to human beneficiaries:

None

Department of Natural Resources- Scientific and Natural Areas

Received Environment and Natural Resources Trust Fund funding: Yes

Received Outdoor Heritage Fund funding: Yes

Received Clean Water Fund funding: No

Language relating to multiple benefits:

84.944 Subd. 1. (a) In determining what critical natural habitat shall be acquired or improved, the commissioner shall consider:

- (1) the significance of the land or water as existing or potential habitat for fish and wildlife and providing fish and wildlife oriented recreation;
 - (2) the significance of the land, water, or habitat improvement to maintain or enhance native plant, fish, or wildlife species designated as endangered or threatened under section 84.0895;
 - (3) the presence of native ecological communities that are now uncommon or diminishing; and
 - (4) the significance of the land, water or habitat improvement to protect or enhance natural features within or contiguous to natural areas including fish spawning areas, wildlife management areas, scientific and natural areas, riparian habitat and fish and wildlife management projects.
- (b) Based on the above clauses, the commissioner by rule must establish a process to prioritize what critical habitat shall be acquired or improved.

86A.05 Subd. 5. State scientific and natural areas; purpose; resource and site qualifications; administration; designation.

- (a) A state scientific and natural area shall be established to protect and perpetuate in an undisturbed natural state those natural features which possess exceptional scientific or educational value.
- (b) No unit shall be authorized as a scientific and natural area unless its proposed location substantially satisfies the following criteria:
- (1) embraces natural features of exceptional scientific and educational value, including but not limited to any of the following:
- (i) natural formations or features which significantly illustrate geological processes;
 - (ii) significant fossil evidence of the development of life on earth;
 - (iii) an undisturbed plant community maintaining itself under prevailing natural conditions typical of Minnesota;
 - (iv) an ecological community significantly illustrating the process of succession and restoration to natural condition following disruptive change;
 - (v) a habitat supporting a vanishing, rare, endangered, or restricted species of plant or animal;
 - (vi) a relict flora or fauna persisting from an earlier period; or
 - (vii) a seasonal haven for concentrations of birds and animals, or a vantage point for observing concentrated populations, such as a constricted migration route; and
- (2) embraces an area large enough to permit effective research or educational functions and to preserve the inherent natural values of the area.
- (c) State scientific and natural areas shall be administered by the commissioner of natural resources, in consultation with qualified persons, in a manner which is consistent with the purposes of this subdivision to preserve, perpetuate and protect from unnatural influences the scientific and educational resources within them. Interpretive studies may be provided for the general public. Physical development shall be limited to the facilities absolutely necessary for protection, research, and educational projects, and, where appropriate, for interpretive services.

Language relating to human beneficiaries:

86A.05 Subd. 5. (e) At the discretion of the managing agency, each scientific and natural area shall be designated as one of the following types:

- (i) Research unit. Use is limited to programs conducted by qualified scientists and college graduate and postgraduate students.
- (ii) Educational unit. Permitted uses include all activities specified in paragraph (i) above and primary, secondary, and college undergraduate programs.
- (iii) Public use unit. Permitted uses include all uses permitted in paragraphs (i) and (ii) above and interpretive programs for the benefit of the general public.

Department of Natural Resources- Forests for the Future

Received Environment and Natural Resources Trust Fund funding: No

Received Outdoor Heritage Fund funding: Yes

Received Clean Water Fund funding: No

Language relating to multiple benefits:

84.66 Subd. 1. The Minnesota forests for the future program identifies and protects private, working forest lands for their timber, scenic, recreational, fish and wildlife habitat, threatened and endangered species, and other cultural and environmental values.

84.66 Subd. 2. (5) "working forest land" means land that provides a broad range of goods and services, including forest products, recreation, fish and wildlife habitat, clean air and water, and carbon sequestration.

84.66 Subd. 3. The commissioner of natural resources shall establish and administer a Minnesota forests for the future program. Land selected for inclusion in the program shall be evaluated on the land's potential for:

- (1) producing timber and other forest products;
- (2) maintaining forest landscapes;
- (3) providing public recreation; and
- (4) providing ecological, fish and wildlife habitat, and other cultural and environmental values and values consistent with working forest lands.

84.66 Subd. 4. Land may be placed in the Minnesota forests for the future program if it:

- (1) is:
 - (i) forest land;
 - (ii) desirable land adjacent to forest land, as determined by the commissioner; or
 - (iii) beneficial to forest resource* protection;
- (2) is at least five acres in size, except for a riparian area or an area providing access to state forest land;
- (3) is not set aside, enrolled, or diverted under another federal or state program, unless enrollment in the Minnesota forests for the future program would provide additional conservation benefits or a longer enrollment term than under the current federal or state program.

*89.001 Subd. 8 "Forest resources" means those natural assets of forest lands, including timber and other forest crops; biological diversity; recreation; fish and wildlife habitat; wilderness; rare and distinctive flora and fauna; air; water; soil; climate; and educational, aesthetic, and historic values.

Language relating to human beneficiaries:

84.66 Subd. 3. The commissioner of natural resources shall establish and administer a Minnesota forests for the future program. Land selected for inclusion in the program shall be evaluated on the land's potential for:

- (1) producing timber and other forest products;
- (2) maintaining forest landscapes;
- (3) providing public recreation; and
- (4) providing ecological, fish and wildlife habitat, and other cultural and environmental values and values consistent with working forest lands.

84.66 Subd. 6. The commissioner shall accept applications from owners of eligible lands at the time, in the form, and containing the information as the commissioner may prescribe. If the number of applications exceeds the ability to fund them all, priority shall be given to those applications covering lands providing the greatest public benefits for timber productivity, public access, and ecological and wildlife values.

The definition of “Forest resources” in 89.001 Subd. 8 includes references to human specific services such as timber, cultural, historic, educational, and aesthetic.

Board of Water and Soil Resources – Reinvest in Minnesota (RIM)

RIM operates several easement acquisition programs with slightly different scoring systems. The legal authority for the acquisitions all comes from the RIM law, but differences in prioritization arise from different funding sources and management activities. All programs may receive funding from the three funds reviewed here, but Clean Water Fund money is preferentially available for Wildlife Riparian Buffers and acquisitions in wellhead protection areas.

Received Environment and Natural Resources Trust Fund funding: Yes

Received Outdoor Heritage Fund funding: Yes

Received Clean Water Fund funding: Yes

Language relating to multiple benefits:

103F.505 It is the purpose of sections 103F.505 to 103F.531 to restore certain marginal agricultural land and protect environmentally sensitive areas to enhance soil and water quality, minimize damage to flood-prone areas, sequester carbon, and support native plant, fish, and wildlife habitats.

103F.515 Subd. 1. Selection of land for the reinvest in Minnesota reserve program must be based on its enhancement potential for fish, wildlife, and native plant habitats, reducing erosion, and protecting water quality.

Language relating to human beneficiaries:

No explicit references, but direction to prioritize the protection of drinking water.

103F.515 Subd. 2. (d) Land is eligible if the land is a wellhead protection area as defined under section 103I.005, subdivision 24, and has a wellhead protection plan approved by the commissioner of health.

Environment and Natural Resources Trust Fund

Language relating to multiple benefits:

116P.08 Subd. 1. Money in the trust fund may be spent only for:

(6) activities that preserve or enhance fish, wildlife, land, air, water, and other natural resources that otherwise may be substantially impaired or destroyed in any area of the state;

Language relating to human beneficiaries:

116P.01 The legislature finds that all Minnesotans share the responsibility to ensure wise stewardship of the state's environment and natural resources for the benefit of current citizens and future generations. Proper management of the state's environment and natural resources includes and requires foresight, planning, and long-term activities that allow the state to preserve its high quality environment and provides for wise use of its natural resources. The legislature also finds that to undertake such activities properly, a long-term, consistent, and stable source of funding must be provided.

Clean Water Fund

Language relating to multiple benefits:

114D.50 Subd. 4. (a) A project receiving funding from the clean water fund must meet or exceed the constitutional requirements to protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater and drinking water from degradation. Priority may be given to projects that meet more than one of these requirements.

Language relating to human beneficiaries:

114D.10 Subd. 2. (1) there is a close link between protecting, enhancing, and restoring the quality of Minnesota's groundwater and surface waters and the ability to develop the state's economy, enhance its quality of life, and protect its human and natural resources;

114D.50 Subd. 4 (b) Money from the clean water fund shall be expended to balance the benefits across all regions and residents of the state.

114D.50 Subd. 4 (e) Money from the clean water fund may only be spent on projects that benefit Minnesota waters.

Outdoor Heritage Fund

Language relating to multiple benefits:

97A.056 Subd 1. An outdoor heritage fund, under article XI, section 15, of the Minnesota Constitution, is established as an account in the state treasury. All money earned by the outdoor heritage fund must be credited to the fund. At least 99 percent of the money appropriated from the fund must be expended to restore, protect, and enhance wetlands, prairies, forests, and habitat for fish, game, and wildlife. Money appropriated from the outdoor heritage fund shall not be spent to acquire property by eminent domain unless the owner requests that the owner's property be acquired by eminent domain.

97A.056 Subd. 3. (a) The council shall make recommendations to the legislature on appropriations of money from the outdoor heritage fund that are consistent with the Constitution

and state law and that will achieve the outcomes of existing natural resource plans, including, but not limited to, the Minnesota Statewide Conservation and Preservation Plan, that directly relate to the restoration, protection, and enhancement of wetlands, prairies, forests, and habitat for fish, game, and wildlife, and that prevent forest fragmentation, encourage forest consolidation, and expand restored native prairie. In making recommendations, the council shall consider a range of options that would best restore, protect, and enhance wetlands, prairies, forests, and habitat for fish, game, and wildlife.

(c) The council may work with the Clean Water Council to identify projects that are consistent with both the purpose of the outdoor heritage fund and the purpose of the clean water fund.

Language relating to human beneficiaries:

97A.056 Subd. 19. (a) Lands acquired by fee with money appropriated from the outdoor heritage fund that are held by the state must be open to the public taking of fish and game during the open season, unless otherwise provided by state law.