It is needed because
Additional dollars from the Heritage Enhancement Account will help to: 1) maintain and expand the Ecological Classification System (ECS) program on state forest lands to determine land capabilities and develop forest habitat management, restoration, and improvement objectives, and 2) prevent the introduction and spread of invasive species on state lands.

The ECS is the scientific foundation for the silvicultural interpretations DNR foresters use to inform their management decisions. Silvicultural interpretations contain science-based information on the full set of management options and site constraints for forest communities as they vary across the state. ECS enhances interdisciplinary communication and management decision making for addressing pressing forest issues involving sustainable harvest, critical habitat needs, and biological diversity.

Every day, opportunities increase for insects, plants, diseases, and other invasive species to enter the United States and Minnesota. For example, gypsy moth is being found in greater numbers in Minnesota each year and will soon impact the health and enjoyment of our state lands. Emerald ash borer, currently not found in Minnesota, may become well established long before it is found. Emerald ash borers are capable of killing all species of ash in any forest type within three to five years of attack. Since invasive species outbreaks can occur at any time and in any place within Minnesota, state agencies must be proactive. Strategies, action plans, and guidelines need to be developed and implemented now to slow the introduction and spread of invasive species and to help combat outbreaks when they occur.

Major program elements
Additional dollars for the ECS program will be used to:

- Increase the classification and mapping of native plant communities on state forest land by 50,000 acres each year, bringing the total amount completed to 70,000 acres each year;
- Continue developing silvicultural interpretations to link the ecological characteristics of a native plant community and the forest management actions taken to manage that community; and
- Provide training to introduce and incorporate the use of ECS field keys into forest management and planning.

Additional dollars for managing invasive species will be used to:

- Partner with organizations like the Department of Agriculture to meet the management and detection trapping needs in the state as federal program dollars decline;
- Develop a risk rating of invasive terrestrial plants in Minnesota’s forest ecosystems;
- Finalize and implement silvicultural guidelines for gypsy moth on all land ownerships;
- Develop and implement silvicultural guidelines for emerald ash borer on all land ownerships;
- Identify invasive pathways to state lands and inventory a sample of pathways to establish a baseline; and
- Control terrestrial invasive plants found in critical habitats and/or along leading edges of invasive species populations.

Priority-setting
ECS program priorities will include:

- Continued development and refinement of silvicultural interpretations as the basic tool for improving forest productivity, health, and diversity of wildlife habitat;
Development and delivery of training to incorporate silvicultural interpretations into forest management activities; and
Classifying and mapping of native plant communities.

Invasive species program priorities will include:
♦ Working with public and private campgrounds statewide to retard the introduction of emerald ash borer;
♦ Completing road and gravel pit inventories;
♦ Developing silvicultural guidelines and thresholds for invasive terrestrial plants in forested areas; and
♦ Development and delivery of training for addressing the threat and management of invasive species on all forestland ownerships.

**Project locations**

**ECS program locations:**
♦ The main focus of the ECS effort will be the Laurentian Mixed Forest Province (northern and central Minnesota forested areas).
♦ Central Region ECS program specialist effort will be the Eastern Broadleaf Forest Province, especially southeastern Minnesota in the Richard J. Dorer Memorial Hardwood State Forest.

**Invasive species program locations:**
♦ The DNR will augment the gypsy moth trapping efforts done by the Department of Agriculture in the eastern half of Minnesota and in state parks;
♦ Road and gravel pit inventories and silvicultural guideline and threshold development will be focused in the Laurentian Mixed Forest Province, particularly in the counties west of Lake, Cook, Carlton, and the eastern half of St. Louis counties; and
♦ Training tools and programs will occur statewide on all ownerships.

**Key measures and outcomes**

**ECS Program:**
♦ Classify and map the native plant communities (NPCs) on 50,000 acres of state forest land over and above the 20,000 acres mapped during routine activities;
♦ Complete silvicultural interpretations for an additional 20 NPCs, bringing the percent of state forest land for which NPC interpretations are available from 75% to 90%; and
♦ Provide training on the use of silvicultural interpretations to DNR field staff.

Managing invasive species:
♦ Maintain or enhance the current invasive species trapping system as federal funding declines;
♦ Develop silvicultural guidelines for the management of gypsy moth and emerald ash borer; and
♦ Treat 10,000 acres of critical habitat for invasive plant species.

**Financial implications**
The $950,000 from the Heritage Enhancement Account in FY 2010 and FY 2011 will be used for:
♦ The ECS program—$600,000 each fiscal year; and
♦ Managing invasive species—$350,000 each fiscal year.

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