

PART V

Natural Heritage Plan Implementation

The basic framework of Natural Heritage methodology will continue to be used for the 2007-2009 biennium to identify project and activity priorities for the Natural Heritage and Natural Areas programs. The programs will focus their efforts in three primary areas:

- ▶ Developing and maintaining a robust information system about the state's biodiversity,
- ▶ Sharing information with agencies and organizations for environmental assessment and land management purposes, and
- ▶ Using the information to help guide conservation actions.

Natural Heritage Program staff have identified gaps in the information base, in the products and services that have been developed for delivery of information to others, and in the level of protection provided for ecologically significant sites. These gaps form the basis of the project priorities listed here for the 2007-2009 biennium.

The priorities for management of the Department of Natural Resources' natural areas have their foundation in the purposes of establishing natural areas: providing adequate protection for the significant ecological features present within them and providing appropriate scientific, educational and low-impact public use opportunities.

Following the statewide projects priorities, priorities within each ecoregion are identified. The geographic distribution of priorities is not even. It is driven by the combination of two factors: the distribution, by ecoregion, of biological diversity, and the degree of threat, by ecoregion, posed to the biodiversity. Those ecoregions with high biodiversity and high threat tend to attract more attention and have a greater number of priority projects.

The Natural Heritage and Natural Areas programs will emphasize creating partnerships to enhance their capacity to have a positive conservation impact.

**40 2007-2009 Statewide Priority
Projects and Activities**

**43 2005-2007 Statewide
Conservation Actions**

**45 ECOREGIONS
OF WASHINGTON STATE**

**Descriptions, Maps, Ownership Areas,
2007-2009 Priority Projects/Activities
2005-2007 Conservation Actions**

2007-2009 | STATEWIDE PRIORITY PROJECTS AND ACTIVITIES

DEVELOPING A ROBUST INFORMATION SYSTEM

Maintaining a current and comprehensive database on the species and ecosystems of the state is the foundation for establishing conservation priorities, and for making sound conservation decisions. This is a core Natural Heritage Program function. We have been compiling information on the state's biodiversity for almost 30 years now. Despite this accumulation of information, more detailed knowledge of our state's rarest species and ecosystems is needed to carry out effective, on-the-ground, conservation. A few of the more significant projects are briefly described below.

● **Shrub-steppe species and ecosystems inventory**

Shrub-steppe ecosystems are rapidly disappearing from the state. Natural Heritage Program scientists will continue inventory efforts on DNR lands and expand the effort to other ownerships. The outcome will be an improved assessment of conservation priorities throughout the shrub-steppe.

● **Sand dune ecosystems within the Columbia Plateau**

Sand dunes are disappearing from the interior of the state before we have a good understanding of the biodiversity that they support. Natural Heritage Program scientists hope to complete inventory of these systems, to develop refined priorities, and to identify key areas for conservation action.

● **Rare species inventories**

Many of the state's rarest plant species are listed or being considered for listing under the federal Endangered Species Act; these will continue to be a priority for the program's botanist. Our inventory priorities are established in cooperation with the U.S. Fish and Wildlife Service. The program's zoologists will also continue to focus on species such as the Island Marble butterfly, the Pygmy Rabbit, and the Striped Whipsnake.

● **National Parks vegetation classification**

Natural Heritage Program ecologists are assisting the National Park Service (NPS) in the development of a vegetation classification for the state's national parks, national recreation areas, and other NPS-administered lands. The vegetation classification will, in turn, be used to create maps of the parks' vegetation. These maps will be useful for the NPS in a variety of land-management planning and decision-making efforts.

● **Partnership with Rare Care to continue monitoring rare plant populations on public lands**

The Natural Heritage Program currently tracks nearly 4,000 locations of more than 365 rare plant species. In an effort to keep the information as current as possible, we have partnered with the Rare Care program within the University of Washington's Center for Urban Horticulture. Trained volunteers revisit known populations, monitor their overall condition, and provide updated information to the Natural Heritage Program.

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Detailed knowledge of our state's rarest species and ecosystems is needed for effective, on-the-ground, conservation.

2007-2009 | STATEWIDE PRIORITY PROJECTS AND ACTIVITIES

SHARING INFORMATION

Another core function of the Natural Heritage Program is to provide information to agencies, organizations and individuals engaged in land-use planning and decision-making. The NHP has been providing biodiversity information to a wide variety of users since the program's inception. However, we believe that we can have a greater conservation impact by improving our information delivery. A few of the more significant projects are briefly described below.

● **Increase Web-based delivery of information on Washington's biodiversity**

The Natural Heritage Program will complete a project with EPA, NatureServe and a handful of other NHPs to develop the capability of delivering information on priority species and ecosystems, including site-specific information, via the Internet. During the 2007-2009 biennium, the NHP will actively encourage data users to access information in this way. The NHP will also develop the means by which data can be submitted via the Internet, moving closer to real-time delivery of inventory information for land-use planning and decision-making.

● **National Geographic and NatureServe on-line conservation guide to America's natural places**

The Natural Heritage Program (NHP) is a partner with NatureServe, four other NHPs and National Geographic to create an on-line encyclopedia of America's natural places. This project will involve networking with state and federal agencies, land trusts, and other conservation organizations to create a website where people can learn about conservation actions and conservation opportunities within their particular area of interest.

● **Support for the USFS and BLM Sensitive Species programs**

Both federal agencies make use of the NatureServe/Natural Heritage Program global and state ranking methodology in the development of their respective sensitive species lists. The Natural Heritage Program has supported both agencies by developing and analyzing the information necessary to assign global and state ranks.

● **Vertebrate Distribution Modeling**

The Natural Heritage Program is partnering with four other NHPs (Wyoming, Montana, Idaho and Oregon), the University of Wyoming, and the U.S. Geological Survey to prepare distribution models for all native vertebrates (except fishes and marine species) for the five-state area. This project is part of an effort to update various GAP analysis products that were generated a decade ago. The project involves capturing information regarding habitat and life history requirements from literature and experts, applying that information to observations data for each species, and then convening workshops of experts to review and fine-tune distribution models generated at the University of Wyoming.

● **Sustainable Forestry Initiative (SFI)**

The Natural Heritage Program will provide training to DNR personnel regarding the biodiversity conservation criteria that are part of the forest products industry's green certification process. Certification requires protection of "globally critically imperiled" (G1) and "globally imperiled" (G2) species and ecosystems. These global status rankings are maintained by the network of Natural Heritage Programs. The NHP will also make training and other SFI-relevant information available to private timber companies.

● **Support for the Biodiversity Council's 30-year strategy**

Although the 30-year strategy has not yet been finalized, the Natural Heritage Program will actively look for opportunities to support the final recommendations.

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2007-2009 | STATEWIDE PRIORITY PROJECTS AND ACTIVITIES

CONSERVATION PLANNING AND IMPLEMENTATION

The Natural Heritage and Natural Areas Programs will continue to identify priority sites for inclusion within the statewide system of natural areas. Another means by which the Natural Heritage Program can have a strong conservation impact is to provide support, in the form of biodiversity information and expertise, to other agencies and organizations. The more significant conservation planning projects for the 2007-2009 biennium include the following:

● **Add to the statewide system of natural areas**

DNR is actively pursuing acquisition of lands at more than a dozen natural areas. In each case, the natural area boundary has been approved by the Natural Heritage Advisory Council and the Commissioner of Public Lands. Acquisitions are dependent upon the landowners' willingness to sell. Priority acquisition projects are identified within the individual ecoregion sections of this document.

● **Partner with U.S. Forest Service, Bureau of Land Management, and National Park Service to identify potential natural areas on federal lands**

Many of the current gaps in ecosystems' representation in the statewide system of natural areas can best be met on federal lands. Natural Heritage Program scientists will work with counterparts in the federal agencies to address these gaps.

● **Important Bird Areas**

The Natural Heritage Program is partnering with Audubon Washington to identify objective criteria by which Important Bird Areas (IBAs) will be identified, to manage data relevant to the selection of potential IBAs, and to create a process by which sites will be presented to the Natural Heritage Advisory Council for approval. Audubon and the NHP will identify two IBAs and take them through an approval process, including holding public hearings in appropriate counties.

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2005-2007 | STATEWIDE CONSERVATION ACCOMPLISHMENTS

The Natural Heritage, Natural Areas, and Special Lands Acquisition programs made a significant number of accomplishments during the 2005-2007 biennium. Some of the statewide accomplishments are highlighted below:

DEVELOPING A ROBUST INFORMATION SYSTEM

○ Rare Care volunteers revisited and monitored rare plant locations

Natural Heritage partnered with Rare Care, a rare plant conservation program at the Center for Urban Horticulture, University of Washington, resulting in volunteers revisiting and monitoring more than 190 occurrences of approximately 50 different rare plant species.

○ **Rare plant inventories undertaken** Natural Heritage Program botanists completed more than 20 high priority species inventory, monitoring or research projects.

○ **State Parks rare amphibian and reptile inventories** The Natural Heritage Program herpetologist completed an inventory of individual state parks for priority amphibians and reptiles.

○ **Data compiled for vertebrate distribution modeling effort** The Natural Heritage Program completed the first phase of this multi-year project. To date, more than 260,000 records for approximately 500 species have been compiled with the cooperation of WDFW, universities, numerous natural history museums, researchers, Pacific Northwest National Laboratory, and other information sources.

○ Conservation status of mollusks and dragonflies reviewed

Global and state ranks were assigned to mollusks and dragonflies after extensive literature review and communication with various experts. A number of species have been added to the priority species list in this edition of the State of Washington Natural Heritage Plan.

CONSERVATION PLANNING AND IMPLEMENTATION

○ Lands acquired within 12 existing natural areas

The DNR acquired lands within several previously established natural areas, using Washington Wildlife and Recreation Program and Trust Land Transfer funding:

- ▶ Mt. Si NRCA (30 acres)
- ▶ West Tiger Mountain NRCA (15 acres)
- ▶ Shumocher Creek NAP (10 acres)
- ▶ Woodard Bay NRCA (23 acres)
- ▶ Washougal Oaks NAP/NRCA (75 acres)
- ▶ Mima Mounds NAP (11 acres)
- ▶ Cypress Island NRCA (135 acres)
- ▶ Admiralty Inlet NAP (33 acres)
- ▶ Charley Creek NAP (1,124 acres)
- ▶ Tahoma NRCA (230 acres)
- ▶ Upper Sultan Basin NRCA (4,065 acres)
- ▶ Stavis Creek NRCA (492 acres)

○ **New natural area approved in Clark County** The Natural Heritage Advisory Council recommended to the Commissioner of Public Lands that Lacamas Prairie (Clark County) be added to the statewide system of natural areas. The area boasts nine priority features, including Bradshaw's lomatium, listed as endangered under the federal Endangered Species Act. The vision for this site includes both NAP and NRCA. Partnerships with Clark County, U.S. Fish and Wildlife Service, Columbia Land Trust, and others will be a key to success at this site.

○ **Natural area expansions recommended** Boundary expansions for Bald Hills NAP, Klickitat River NRCA, and Upper Dry Gulch NAP were recommended to the Commissioner of Public Lands by the Natural Heritage Advisory Council.

○ **Invasive species control on 40 natural areas** The Natural Areas Program, through the use of staff, contractors and volunteers emphasized weed control as a priority management activity.

SHARING INFORMATION

○ On-line field guides enhanced

The amphibian and reptile atlas and the guide to plant associations of the Puget Trough were expanded.

○ Support provided for the U.S. Forest Service and Bureau of Land Management Sensitive Species Program

Natural Heritage Program staff reviewed and made revisions as appropriate to the global and state ranks for rare vertebrates and select groups of invertebrates. The information was provided to both federal agencies for their process of creating sensitive species lists.

○ Responding to information requests

The Natural Heritage Program responded to more than 1,200 requests for information during the biennium. Requests came from consulting firms, agencies, organizations, and landowners.

○ **Support for the Washington Biodiversity Council** NHP staff prepared a report on the status and trends of Washington's biodiversity.

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ECOREGIONS

Ecoregions are delineated based on ecological patterns on the landscape. As a result, they cross political boundaries. There are portions of nine ecoregions within Washington state.