



**WASHINGTON BIODIVERSITY
CONSERVATION STRATEGY**

Sustaining Our Natural Heritage For Future Generations

Executive Summary

DECEMBER 2007

WASHINGTON
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The full *Washington Biodiversity Conservation Strategy: Sustaining Our Natural Heritage for Future Generations* is available at www.biodiversity.wa.gov

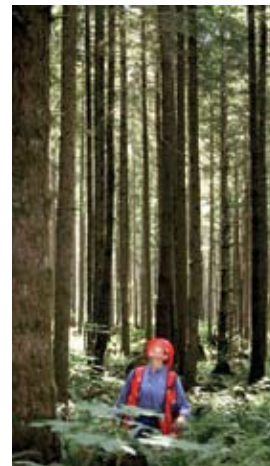
Introduction



JEAN BOYLE



BEN LEGLER



WASHINGTON FOREST PROTECTION ASSOCIATION

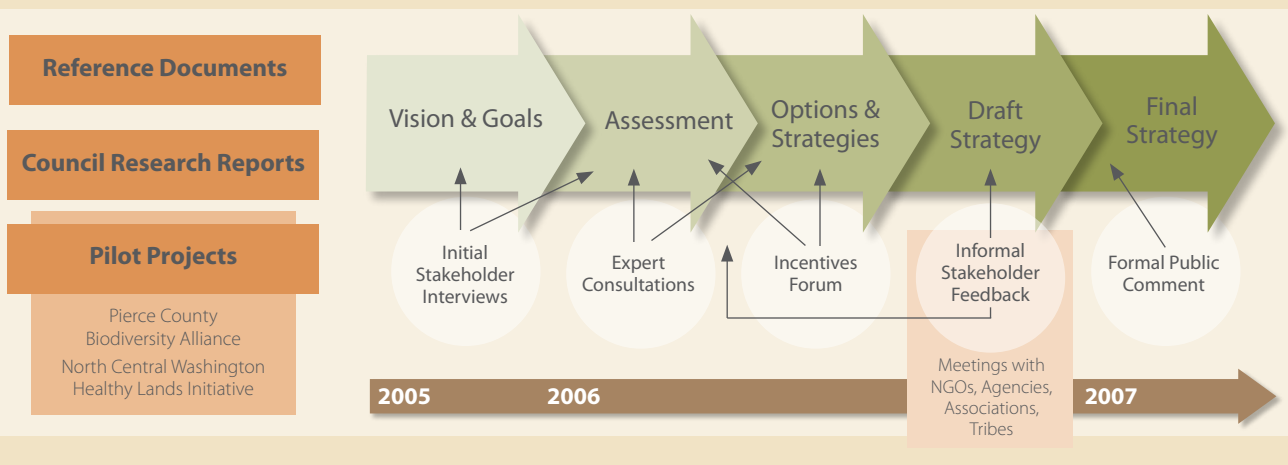
A Conservation Strategy for the Future

Washington State is blessed with a unique bounty of natural environments and resources, from the rich fertile soils of the Palouse to the varied marine life of Puget Sound. This bounty supports an extraordinary diversity of life including the world's tallest Douglas-firs, the salmon, wheat, and apples that have made our state famous, and even the millions of tiny organisms that are the foundation of the food chain.

Biodiversity is defined here as “the full range of life in all its forms.” It includes the tremendous variety of species, the habitats in which life occurs, the ways that species and habitats interact and the physical environment and processes necessary for those interactions.

This natural heritage—Washington’s biological diversity—is an extraordinary state treasure. Yet, as our population has soared and our economy prospered, this biological diversity has steadily declined. In the face of this trend, the Washington State Legislature in 2002 directed the state to develop a framework to safeguard Washington’s rich biodiversity for the benefit of current and future generations.

STRATEGY DEVELOPMENT PROCESS



Acting on this directive, as well as the work by an interim committee, the Governor established the Washington Biodiversity Council and charged it with developing a comprehensive strategy “that enables the state to sustainably protect its biodiversity heritage.”¹

The Biodiversity Conservation Strategy was prepared by the Council in recognition of the critical importance of healthy natural systems to the state’s residents, and the substantial benefits that a renewed focus on conservation can bring. This summary report presents a high level overview of the Strategy—the full report is available at www.biodiversity.wa.gov.

Developing the Strategy—A Collaborative Process

Research and deliberations to formulate this strategy began in 2005 with articulation of a vision for Washington as well as guiding principles, goals, and benchmarks. The Council commissioned studies to examine the effects of climate change on biodiversity, assess current efforts, and document the current status of the state’s biodiversity and key threats. The Council also sponsored two pilot studies exploring education and incentive based approaches to conservation.

Throughout the process, the Council consulted with stakeholders and experts including educators, scientists, landowners, business leaders, and conservation groups. The consultations focused on identifying gaps in the current system and opportunities to build on the work of existing organizations. Later these stakeholders provided critically important feedback on the draft recommendations. This guidance has been fundamental to crafting the strategy.



JOHN JACOBSON



THE NATURE CONSERVANCY

COUNCIL PILOT PROJECTS

The Pierce County Biodiversity Alliance organized a BioBlitz, or rapid biological inventory, in the lower White River Biodiversity Management Area (BMA). The BioBlitz ground-truthed species diversity, engaged citizen scientists, and served as a kick-off for community planning.

The Healthy Lands Initiative brought together the agriculture, land conservation, planning, and economic development communities to learn about the biodiversity in north central Washington and to explore conservation tools and resources, both existing and potential.

Vision for Washington

In our lifetimes, the native plants and animals, along with their habitats in the water and on the land, are healthy and in harmony with our working landscapes and residential communities.

The vital importance of biodiversity conservation is recognized in principle and practice. Washington citizens see themselves as stewards of our natural resources diversity and accept a responsibility to pass the heritage along to their children and future generations in a healthy condition.



KELLY MCALLISTER

GUIDING PRINCIPLES

- Recognize existing efforts and maximize coordination.
- Expand the focus of conservation to include ecosystems.
- Build on sound science.
- Recognize and encourage active stewardship by private landowners.
- Foster local decision making.
- Work across political boundaries.

¹ Governor Gary Locke, March 1, 2004, Executive Order 04-02, “Establishing the Washington Biodiversity Council”

What the Strategy Does



WASHINGTON STATE DEPARTMENT OF TRANSPORTATION



BEN LEGLER



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The Biodiversity Conservation Strategy is designed to build on the strengths of existing programs. It sets forth a strategic mix of actions, activities, and programs intended to have both an immediate impact and to build capacity for lasting change. The Council developed its recommendations to address gaps, needs, and opportunities and to build partnerships so that diverse interests can work together to conserve Washington's biodiversity resources.

The strategy:

- **Provides for a coordinated response to overlapping natural resource issues** to increase the impact and efficiency of our efforts.
- **Informs the state's efforts to fight and manage the impacts of climate change.**
- **Addresses conservation needs proactively** to help avoid future ecosystem collapses, such as that facing Puget Sound.
- **Emphasizes incentives and voluntary actions** to conserve biodiversity and to build support from a broad base of stakeholders.
- **Uses a system-wide approach to conservation** to protect species of interest at lower cost and with less friction.
- **Supports related high-priority initiatives** for Washington, including:
 - The Puget Sound Partnership;
 - The Working Lands Initiative;
 - The E3 Washington Initiative in environmental education; and
 - The Washington Invasive Species Council.

The Heart of the Strategy

The strategy consists of a comprehensive set of recommendations in six focus areas. These are summarized starting on page 13. While the Council recommends phased action on all recommendations, three broad initiatives form the heart of the strategy. Taken together, these initiatives offer a bold new approach to defining priorities, fostering widespread landowner engagement, and measuring our progress.

The strategy proposes:

- **A new unified landscape approach to guide investments and actions, so that we will indeed conserve our most important biodiversity where we work, play, and live.** The Biodiversity Council developed a tool to classify lands based on their biodiversity significance and the risks from growth and development. Regional maps were created to identify priority lands for conservation and a range of possible strategies for all areas on the maps. With the state's technical and financial support, local governments, state agencies, and others can use this tool to adopt a landscape approach to conservation. This approach fosters efficiency, better integration, and improved outcomes.
- **Better incentives and markets for landowners to provide tangible benefits for conservation on working lands and open spaces.** Simply put, the goal is for landowners to increase their income through conservation actions. Now is the time for the many organizations engaged in conservation to offer landowners an expanded, integrated suite of incentives and market-based opportunities. Programs should be easily accessible and make voluntary stewardship and conservation a practical and rewarding option. These incentive programs must be structured to encourage investment in high-priority landscapes, so that we save our natural heritage and keep working lands working .
- **Citizens and scientists working together to inventory and monitor Washington's biodiversity.** This initiative seeks to unleash the potential inherent in a vibrant citizen science network. Such a network engages adults and students, working under the guidance of scientists, to count and catalogue biodiversity resources in the streams, forests, and fields near where they live, work, or go to school. A Science Panel charged to help coordinate biodiversity-related research efforts is needed to spearhead this effort. This initiative offers the promise of building knowledge and tracking progress at a fraction of the cost of traditional approaches.

The strategy also includes recommendations to provide support for local governments, to ensure consistency and compliance with existing laws, to educate citizens and students about biodiversity, and to implement regional pilot projects that foster innovation.

In addition, recommendations are set forth to ensure leadership, accountability, and adequate funding, so that investments deliver a real return to Washington taxpayers over time.

Why Biodiversity Matters



JULIE BENNETT



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JULIE BENNETT

Biological diversity has provided humankind with enormous economic, health, and cultural benefits, which we have just begun to quantify. These benefits include the economic returns from agriculture, forestry, and fishing, which generate roughly \$3.5 billion in income in Washington annually; the 100 million gallons of water supplied to Seattle each day, filtered only by the forests of the Cedar River watershed; and the cultural and spiritual importance of interacting with nature for residents across the state.

Washington's Heritage—Biodiversity as the Foundation for Our Economy

Washington's diverse ecosystems provided sustenance and spiritual values for Washington's earliest peoples, and they laid the foundation for a thriving natural resource economy. Today, the resource-based industries of forestry, farming, and fisheries continue to provide jobs and economic vitality. In addition, our diverse natural environments are responsible, in part, for the growing value of outdoor recreation and tourism and for making Washington a desirable location for new businesses and enterprises.

Ecosystem Services—Essential to Our Prosperity

Healthy ecosystems provide many benefits that are vital to human health and well-being. These "ecosystem services" include flood control, water purification, and crop pollination. For example, healthy wetlands, with a variety of plants and other life, capture water and delay runoff during storms, reducing or preventing flood damage. These flood protection benefits of wetlands have been valued at a range of \$7,800-\$51,000 per acre.¹

Medicinal Benefits—Diverse Ecosystems as Nature's Pharmacies

Diverse ecosystems are the sources for many medicines. For example, taxol, a successful cancer treatment, was originally harvested from Pacific yews growing in diverse mixed-conifer forests.

¹ Asia Pacific Environmental Exchange, *Untold Value: Nature's Services in Washington State* (2004).

In the future, not-yet-investigated organisms among our fungi, lichens, mosses, and invertebrates are expected to yield new cures and treatments.

Intrinsic Value—Helping Us Find Our Place

The intrinsic value of our natural heritage is important to all Washingtonians. This value is expressed in our regional culture, from Northwest writers and artists inspired by the landscape and its people, to local cuisine featuring naturally abundant foods such as salmon, Dungeness crab, chanterelle mushrooms, and berries.

Resilience—Staying Healthy in the Face of Change

As our climate changes and our global lifestyles increasingly bring non-native species to our region, healthy diversity helps keep our ecological systems functioning. Forests composed of many different tree species, for example, are less susceptible than single-species monocultures to destruction from insects like mountain pine beetle or diseases like pine blister rust. Biodiversity, like a diversified stock portfolio, keeps our options abundant and varied.

Why Biodiversity Matters Most—A Legacy for Our Children

Clean water, flood protection, shellfish harvests, tall trees, grazing elk, wild blueberries—if we serve as good stewards of our natural heritage, our children and their children will be able to enjoy the many benefits of the diverse and healthy ecosystems that we enjoy today.

“The one process now going on that will take millions of years to correct is the loss of genetic and species diversity by the destruction of natural habitats. This is the folly our descendants are least likely to forgive us.” – E. O. Wilson



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Current Status and Primary Threats



RALPH NAESS



TARA GALUSKA



WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

Current Status—Diverse and Declining

Washington is one of the most biologically diverse states in the nation due to its varied topography, exposure to Pacific Ocean weather patterns, and location on the migratory path of many wildlife species. Among the rapidly growing western states, Washington has the smallest land area, and its population density ranks second only to California. As its population has grown, Washington has experienced a dramatic loss of its native biodiversity, and the state faces significant threats in the future.

Species

While a few native species have increased in numbers, such as the white-tailed deer and the western scrub jay, many species have experienced significant declines in Washington State:

- The federal government has listed 40 animal species (including 15 fish species) and 10 plant species as endangered or threatened.
- Washington State agencies have identified approximately 500 species of plants and animals that are at risk.¹

Ecosystems and Landscapes

Since statehood in 1889, Washington's economy and communities have grown and prospered. At the same time, many of Washington's most important ecosystems, including marine, freshwater, forest, and grasslands, have experienced dramatic changes, as the following examples highlight:

- Human development has modified up to 52% of the central Puget Sound shoreline.
- Dams have altered the natural flood regime of the Columbia, Snake, and other rivers.

¹ Washington State Department of Natural Resources, *State of Washington Natural Heritage Plan: 2005 Update* (April 2005); Washington Department of Fish and Wildlife, *Washington's Comprehensive Wildlife Conservation Strategy* (September 19, 2005).

- Over two-thirds of Washington's historical old-growth forests have been harvested.² Changes to forest structure have made some forests more vulnerable to fire and have altered the habitat value of others.
- Ninety four percent of the original Palouse grasslands have been converted to crops, hay, or pasture. Today's remaining isolated pieces offer limited habitat for key species.

Primary Threats and Drivers of Change

Many factors, including land conversion, invasive species, pollution, and disruption of natural processes, have contributed to the current declines in biodiversity. Over the next 30 years and beyond, a combination of climate change and the impacts of rapid population and economic growth are expected to bring additional and unprecedented threats to biodiversity.

- **Washington's population has doubled** in the past 40 years from 3 to 6 million residents, and it is **expected to increase to more than 8 million in the next 20 years**. This growth means greater resource use and land conversion, particularly if current consumption practices continue.
- The rapid spread of **invasive species** across Washington currently poses a threat to an estimated 25% of the state's plant species.
- **Pollution contaminates ecosystems and threatens species**, such as shellfish, fish, birds, and marine mammals in Puget Sound.³
- **Disruption of wildfires, flooding, and other natural processes** impairs the maintenance of ecosystems and habitats, such as prairies and floodplains.
- **Anticipated climate impacts**, including warmer weather, wetter winters, and drier summers, are expected to affect ecosystems and species.

Shifts in the nature of our economy, and in the demographics of our state, will continue to affect both the threats to biodiversity as well as our ability to respond.⁴

- The **high value of land** puts pressures on farmers and foresters to convert their lands to residential and commercial uses. At least 80 acres of Washington forests are converted to other uses each day.⁵
- **Increased prosperity means increased consumption** and more infrastructure, which fragments and contaminates our natural resources.
- **Fast growth rates in rural counties, technological advances that make it possible to work remotely, and an aging population**⁶ will likely accelerate demand for vacation or retirement homes and increase conversion of forest and farm lands.⁷

2 Washington State Department of Natural Resources, "Timberland Acres in Washington State," in Washington State Office of Financial Management, *Environmental Chartbook: A Collection of Indicators on Washington's Environment* (1999).

3 Washington State Department of Ecology, *Washington's Environmental Health 2004*, Publication No. 04-01-011 (2004).

4 Washington State Economic and Revenue Forecast Council, *Washington State Economic Climate Study* (2005).

5 Ara Erickson, University of Washington, College of Forest Resources, personal communication, October 8, 2007.

6 Office of Financial Management, State of Washington, *Forecast of the State Population by Age and Sex: 1990 to 2030* (2005).

7 C. Mater, "The New Generation of Private Forest Landowners: Brace for Change," *The Pinchot Letter* 10, no. 2 (2005): 1-4.

- **Globalization** reduces our ability as a state to control our own destiny and often compels farmers to use every acre possible to maximize revenues.

Current Efforts to Protect and Conserve Our Biodiversity

In the face of these threats, state, federal, tribal, and local governments, as well as nonprofits and private landowners, are investing substantial time, energy, and resources to protect and conserve components of biodiversity across Washington. A partial list of the many existing programs and initiatives includes:

- Washington State government is actively engaged in managing and conserving biodiversity as a landowner, regulator, technical assistance provider, and educator. Important examples of state efforts include the Department of Natural Resources' **Natural Heritage Program**, Department of Fish and Wildlife's **Comprehensive Wildlife Conservation Strategy**, stewardship initiatives in **State Parks**, the **Governor's Salmon Recovery Office**, the **Invasive Species Council**, funding programs of the **Recreation and Conservation Office**, pollution control enforcement by the **Department of Ecology**, and conservation efforts of the **Conservation Commission** and conservation districts.
- **Private and nonprofit efforts** include the programs of the Trust for Public Land, The Nature Conservancy, and Cascade Land Conservancy, as well as conservation initiatives by many smaller land trusts and countless individual stewardship actions by foresters, farmers, and other landowners.
- **Tribes** manage reservation lands and waters, and they are particularly engaged in conservation of salmon and salmon habitat.
- The **federal government** plays a critical role in managing natural resources as both a landowner and regulator, and as the major funder for landowner incentives through the Farm Bill and other programs.
- **Local governments** actively protect open space, habitat, and other aspects of biodiversity through creation and enforcement of local land use policies and zoning.
- **Nature centers, elementary and secondary schools, and colleges and universities** offer environmental and science education programs related to biodiversity.

Recommendations for Action



USDA/NRCS



KITTITAS COUNTY CONSERVATION DISTRICT



AARON BARNA

This strategy builds on existing efforts and targets areas of greatest need and potential to achieve real outcomes. The belief that public, private, and nonprofit entities need to work together to achieve a widely shared vision lies at the core of the strategy. The Council also founded its work on the assessment that:

- **New approaches are needed to engage the private sector in voluntary conservation** efforts and provide better economic returns for good stewardship.
- **Existing efforts must be linked together** to achieve greater outcomes more efficiently and effectively.
- **More integrated approaches to research and data management are needed** as well as better information to guide actions on the ground.
- **A landscape approach offers the best way to move forward** for managing resources.
- **Opportunities to engage citizens and students** in learning about and stewarding our biodiversity **need to increase dramatically.**

The Council identified six focus areas where Washington State has the opportunity to make significant progress to conserve biodiversity and where stakeholder support for taking action is high.

Recommendations in each of these areas are summarized below. An overview of the strategy—at a glance—follows at the end of this document.

A full description of recommended actions is available in the complete strategy, available at www.biodiversity.wa.gov



USDA/NRCS



ELLEN BANNER



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1. Guiding Investments on the Ground Using the Conservation Opportunity Framework

Every area of the state can contribute to conserving Washington's biodiversity, and many tools exist to support conservation, including education, improved land management, landowner incentives, and acquisition. The challenge is to determine what strategies to use on which landscapes and to focus investments in key locations to make the best use of finite resources. Accordingly, the Council developed the **Conservation Opportunity Framework**, a tool to classify lands based on their biodiversity significance and the risks from growth and development. Using this tool, the Council prepared a set of regional maps assessing the distribution of species, plant communities, ecological systems, and human population trends across Washington. These maps can be used to help identify biodiversity conservation opportunities and priorities throughout the state.

Objective: State agencies and local governments along with their nonprofit and federal government partners will use the Conservation Opportunity Framework as a basis for identifying opportunities, establishing priorities, and implementing strategies for biodiversity conservation throughout Washington State.

Three strategies and six recommended actions are designed to ensure that the Conservation Opportunity Framework is an effective tool for biodiversity conservation.

Summary of Recommendations

- 1.1 **Use the Conservation Opportunity Framework to facilitate coordination among public and private resource managers** in developing and implementing conservation plans, investments, and programs.
- 1.2 **Incorporate biodiversity conservation into state acquisition programs**, including updating the Washington Wildlife and Recreation Program's criteria to incorporate biodiversity where appropriate.
- 1.3 **Provide local governments and resource management agencies with regularly updated maps and tools** that provide current, scientifically valid information for planning and land use decisions.



STOCK



MIKE O'MALLEY



STOCK

2. Incentives and Markets

More than 60% of the land in Washington State is in private ownership. These lands include many areas important for biodiversity conservation, such as riparian zones, wetlands, and intact plant communities. Consequently, the ongoing participation of private landowners is essential to biodiversity conservation. Policies and programs that encourage voluntary action will be essential to success.

Objective: Washington will offer an expanded, integrated suite of incentives and market-based programs that are easily accessible to private landowners and that make voluntary stewardship and conservation a practical and rewarding option. Incentive programs will be structured to especially encourage investment in high-priority landscapes.

Five strategies and 13 recommended actions are offered to build on current programs and enhance their effectiveness.

Summary of Recommendations

- 2.1 **Make existing landowner incentive programs more accessible, easier to use, and strategic.** Specific actions include establishing a comprehensive clearinghouse, piloting a system of regional brokers to provide targeted technical assistance, improving coordination among incentive program providers, and expanding recognition of voluntary, private-sector stewardship.
- 2.2 **Strategically expand incentive programs to target high-priority conservation areas** through dedicated funding, additional funding for highly effective programs, and new programs to reach underserved landowners.
- 2.3 **Accelerate the development of conservation markets** to create new sources of income for conservation actions. Specific actions include establishing a lead entity to facilitate market development at the state level and investing in pilot studies and feasibility analyses to jump-start the growth of these markets.

- 2.4 **Improve the effectiveness of existing regulatory programs**, starting with a working group to examine how existing federal, state, and local regulatory programs contribute to biodiversity conservation in Washington, both individually and cumulatively, and how they might be improved to further that contribution. This analysis includes looking for disincentives, cumulative impacts, possible solutions, and exploring how best to track results.
- 2.5 **Maximize the use of current use taxation** primarily by working with local governments to identify and overcome barriers.



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CAROLE RICHMOND



KIRSTEN MORSE



3. Land Use and Development

Development in many parts of Washington State is occurring in a sprawling fashion, which can rapidly consume and fragment wildlife habitat. As development occurs, it increases pressure on both private and public lands. Achieving the vision of a future where communities grow and thrive in ways that conserve open space and protect biodiversity resources will require substantial changes in current practices and patterns of growth.

Objective: Biodiversity conservation priorities and tools are incorporated into land use planning processes, development actions, and management activities.

Five strategies and 15 recommended actions are designed to improve how we incorporate biodiversity conservation into land use and development decisions and practices.

Summary of Recommendations

- 3.1 **Provide funding and technical assistance to local governments** to strengthen their capacity to plan and manage for biodiversity conservation.
- 3.2 **Ensure consistency and compliance with existing laws, plans, and regulations**, including invasive species policies.
- 3.3 **Make mitigation more efficient for developers and effective for conservation** through new processes to support mitigation banking, better guidance, and pilot projects to determine the best methods for offsite mitigation.
- 3.4 **Further the development and widespread adoption of innovative approaches to development that promote biodiversity conservation** in livable communities. Methods include pilot projects, research, testing new models for regional cooperation, and expanding the use of transfers of development rights in rapidly growing areas.
- 3.5 **Fully incorporate biodiversity conservation strategies into the management of public lands** by taking inventory of biodiversity resources, using the Conservation Opportunity Framework, and focusing conservation and restoration efforts in areas of high biodiversity value.



AARON BARNA



AARON BARNA



HARLEY SOLTES

4. Science and Information

Decades of scientific inquiry and study have contributed immensely to our understanding of biodiversity in this state. We still have much to learn, however, and it is essential that we develop a more integrated approach to research and to management of data. A need also exists for improved information products to help land managers, government officials, and others make better decisions about land use and development.

Objective: Establish a comprehensive scientific understanding of Washington's biodiversity and effective conservation practices. Make information readily accessible and useful for land managers and decision makers.

Developing and disseminating scientific knowledge about biodiversity in Washington will be aided through two strategies and eight recommended actions.

Summary of Recommendations

- 4.1 **Create a strong science foundation to inform policy and action on biodiversity conservation.** A biodiversity science panel should coordinate research needs and projects, and a data partnership should better manage information sharing within government.
- 4.2 **Fill critical gaps in our knowledge of Washington's biodiversity and how best to conserve it,** including research into climate change, invasive species, and the value of ecosystem services. Expand existing programs, to create a publicly accessible and comprehensive inventory of species in the state.



SHUTTERSTOCK.COM/DANA E. FRY



NANCY WARNER



WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

5. Education and Public Engagement

Washington has a number of institutions and programs that provide opportunities for students of all ages to learn about biodiversity. Yet the 2004 *Report Card on the Status of Environmental Education in Washington State*, requested by the Washington State Legislature, rates general awareness of environmental education in Washington as “average” and state support of environmental education as “below average.” Rich opportunities exist to improve understanding of natural systems and the role they play in our lives as well as to enhance the ability for citizens to have meaningful contact with the natural world.¹

Education is a crucial component of this Biodiversity Conservation Strategy. The Council’s vision is that the educational system will provide students with a comprehensive understanding of the science and value of biodiversity. In work with partners, new messages need to be developed and communicated to the public and decision makers. These two sets of activities will increase citizens’ awareness and support of conservation efforts.

Objective: Inform, educate, and engage Washingtonians—including decision makers, students, adult learners, and the general public—to create an understanding of biodiversity’s importance to our quality of life and to build capacity to take action to conserve, care for, and restore ecosystems.

Four strategies and 11 recommended actions are offered to bring a broader understanding of Washington’s biodiversity to the public.

Summary of Recommendations

- 5.1 **Develop and deliver effective messages** to citizens and their elected leaders, by forming a high powered messaging team to work collaboratively with existing organizations on education about the value of biodiversity and conservation opportunities.
- 5.2 **Significantly enhance learning opportunities about biodiversity for K-20 students** by creating a biodiversity component in Washington Learns, establishing an Academy of Sciences for Youth, and enhancing opportunities for students to learn about natural resources management.

¹ Environmental Education Association of Washington, *Report Card on the Status of Environmental Education in Washington State* (2004).

- 5.3 **Create expanded citizen science networks** to engage people in conservation and to monitor biodiversity.
- 5.4 **Support community stewardship programs** in their efforts to conserve biodiversity and restore and protect ecosystems. Provide essential training to these community efforts and publicly celebrate their successes.



AARON BARNA



WASHINGTON DEPARTMENT OF FISH AND WILDLIFE



DAVID PERRY

6. Achieving Results

This comprehensive strategy takes new approaches, focuses our resources, and engages citizens in the common cause of caring for our natural heritage. Leadership and resources will be required to move forward. Accountability is also needed to ensure that we do indeed protect our heritage and that public resources are well spent.

Objective: Provide leadership, accountability, and funding to ensure successful implementation of the Biodiversity Conservation Strategy.

Three strategies and seven recommended actions are designed to support successful implementation of the strategy.

Summary of Recommendations

- 6.1 **Provide leadership to guide initial implementation of the strategy** and establish biodiversity conservation as an organizing principle for the state's natural resource programs. Renewing the Biodiversity Council would ensure this ongoing leadership.
- 6.2 **Develop a biodiversity scorecard and invest in the Biodiversity Project website** to provide up-to-date information on the status of biodiversity and foster accountability for the effectiveness of conservation programs.
- 6.3 **Identify and secure innovative funding** to implement the strategy and to generate income for conservation and invasive species control.

Implementing the Strategy



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TARA GALUSKA



CLAYTON J. ANTIEAU

Under the leadership of the Governor and Legislature, state agencies will be the natural leads for implementing this strategy, working in close collaboration with their federal, tribal, nonprofit, and private partners. The Biodiversity Council can assist by guiding efforts where needed and by tracking and reporting on progress.

State Agency Leadership

The Washington Department of Fish and Wildlife, Department of Natural Resources, Department of Ecology, the Recreation and Conservation Office, State Parks, Washington State Department of Transportation, and the Conservation Commission all have vital roles to play in providing the leadership, technical expertise, and creativity necessary for successful implementation. The Biodiversity Council can continue to play an important role by facilitating coordination between agencies and with other partners within and outside state government.

Other state entities that will be involved include the newly established Puget Sound Partnership, the Washington Invasive Species Council, the Department of Community, Trade, and Economic Development, the Office of the Superintendent of Public Instruction, and University of Washington, Western Washington University, Washington State University, and other educational institutions.

Finally, partnerships are also critical with tribes, the federal government, and such entities as the Bonneville Power Authority that own, control, and regulate lands and waterways throughout Washington.

Next Steps

Implementation begins immediately with an initial set of actions designed to: 1) ensure leadership and continuity, 2) demonstrate the benefits of the strategy on the ground, 3) establish a baseline against which to measure future progress, and 4) mobilize resources.

Essential actions include the following:

- **Charge the Biodiversity Council with guiding initial strategy implementation.**
- **Implement regional pilot projects** in 2008 and 2009 to demonstrate effectiveness and build support for future actions.
- **Prepare a biodiversity conservation scorecard** to serve as the baseline for measuring progress and providing for accountability.
- **Identify funding options** and, working collaboratively with lead agencies, mobilize existing funding sources to begin action.
- **Establish**, through legislation, **biodiversity conservation as an organizing principle** for natural resource management.

With these initial actions, Washington will be off to a strong start toward conserving its biodiversity heritage. State agencies and partner organizations can, at the same time, begin to advance the initiatives that form the heart of the strategy:

- **Provide maps and tools to local governments** to make the Conservation Opportunity Framework useful to planners and managers at the regional and local level and begin to guide investments on the ground.
- **Expand and coordinate incentive programs**, targeting biodiversity-rich landscapes and accelerate conservation market based approaches.
- **Establish the citizen science network and the Science Panel**, to focus on inventorying and monitoring Washington's biodiversity and better coordinate research and data collection efforts.

Conclusion

Washington's Biodiversity is In Our Hands



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Washington's diverse species, ecosystems, and landscapes are a wondrous and precious resource, a natural wealth people depend on for basic needs such as clean water, new medicines, thriving agriculture, and spiritual and cultural fulfillment. This web of life is essential to our well-being.

Yet this resource is in decline and under increasing pressure from population growth, climate change, development, and other threats. Fortunately, Washington is exceptionally well positioned to tackle these threats, with committed and engaged citizens, landowners who care deeply about stewardship, and a multitude of organizations and initiatives dedicated to conserving our natural heritage. Working together, we can ensure that as we grow, we conserve Washington's biodiversity—the landscapes that define us and the healthy ecosystems that sustain us.

The strategy presented in this report recommends a series of practical actions to fulfill this promise. These actions build on existing programs in ways that will significantly advance conservation efforts. The recommendations establish a foundation for long-term success—by, for example, bolstering nature-based education for kids and establishing a vibrant citizen science network. The strategy also will deliver immediate benefits such as making incentive programs easier to use for landowners and creating new tools and maps to identify priorities for conservation investments.

By moving forward on these recommendations, thirty years from now Washingtonians of all ages and backgrounds will be enjoying the bounty of Washington much as we do today—our farms and forests will be thriving; wild salmon of all species will populate our rivers; chanterelle and morel mushrooms will grace our tables; and sandhill cranes and orca whales will delight citizens and the many visitors who flock to Washington to experience nature. We will be able to look back with pride to the time we chose to act decisively and in common cause to sustain this richness.

Biodiversity Conservation Strategy *at a glance*

Moving Forward Immediate Next Steps

- Provide for continuity of leadership by extending tenure of Council
- Prepare baseline biodiversity scorecard
- Implement pilot projects to demonstrate benefits of strategy on the ground
- Identify funding options.

Partners in Advancing the Strategy

- Washington Department of Fish and Wildlife
- Washington Department of Natural Resources
- Recreation and Conservation Office
- Conservation Commission
- State Parks
- Department of Ecology
- Local Government
- Federal Government
- Landowner Groups
- Conservation and Education Organizations
- Washington Invasive Species Council
- Tribes

Conserving Our Biodiversity Heritage for Future Generations.

Incentives and Markets

Expand and integrate to make conservation by private landowners easy and rewarding.

Guiding Investments

Use the Conservation Opportunity Maps to identify and prioritize opportunities for conservation.

Land Use & Development

Incorporate biodiversity conservation priorities and tools into planning processes.

Science and Information

Build understanding of Washington's biodiversity and make information readily accessible and useful.

Education

Inform, educate, and engage Washingtonians to understand biodiversity's importance to our quality of life.

Achieving Results

Provide leadership, accountability, and funding to ensure successful implementation.

Benefits for Washington

- Forward looking and proactive
- Improves coordination and efficiency
- Informs response to climate change
- Conserves working lands
- Rewards voluntary actions
- Sustains ecological functions
- Secures quality of life

Selected Milestones

2007

Strategy delivered to Governor and Legislature

2008-2009

- Leadership identified
- Pilot projects underway
- Baseline biodiversity scorecard completed

2009-2011

Early actions underway

- Conservation maps and tools are used by local government.
- Incentive programs directed at important landscapes.
- Citizen scientists and the Science Panel build the Biodiversity Inventory and complete the second biodiversity scorecard.

WASHINGTON
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