



WASHINGTON BIODIVERSITY  
CONSERVATION STRATEGY



Sustaining Our Natural Heritage  
For Future Generations

DECEMBER 2007

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CONSERVATION STRATEGY**

**Sustaining our Natural Heritage  
for Future Generations**

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Fellow Washingtonians:

As Chair of the Washington Biodiversity Council, I am pleased to present you with the Washington Biodiversity Conservation Strategy: Sustaining our Natural Heritage for Future Generations. Three years ago the Council was charged with creating a long-term, comprehensive strategy to sustainably protect Washington's biodiversity heritage. This document delivers on that challenge.

As you will learn in the following pages, Washington's biodiversity is at risk and under increasing pressure from our growing population, development, and climate change. Despite many successful efforts in recent years, scientists continue to mark declines in ecosystem health across our state.

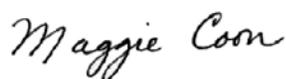
In this strategy, the Council sets forth a bold set of actions designed to turn the tide—to marshal our collective efforts toward a common purpose and increase attention in key areas, including:

- Adopting a landscape approach to focus our investments on the ground and better conserve biodiversity where we work, play, and live.
- Enhancing voluntary incentives for private landowners.
- Linking citizens with scientists to monitor biodiversity and enhance our knowledge.

By carrying out the recommendations described herein, Washington can make great strides toward conserving biodiversity in ways that provide rich benefits for all of us and our communities.

Crafting this strategy has been an exciting journey for us as Council members. The experience has deeply reinforced our sense of wonder at the beauty and richness of Washington's natural landscapes. We have enjoyed the process and have been inspired along the way by the commitment of the people we've met. As a highly diverse group ourselves, the Council has repeatedly sought input from a wide variety of individuals and organizations. Their thoughtful perspectives have fundamentally shaped our approach and we deeply appreciate their contributions.

Together, we can achieve much by building on the strong foundation and good work already underway. All of us, no matter where we live or work, have important roles to play in conserving our natural heritage. We invite you to join with us in the vital effort to sustain Washington's biodiversity for the future.



Maggie Coon

Chair, Washington Biodiversity Council

# Table of Contents

## **TABLE OF CONTENTS** \_\_\_\_\_ **4**

### **1 INTRODUCTION: A CONSERVATION STRATEGY FOR THE FUTURE** \_\_\_\_\_ **7**

The Washington Biodiversity Council—Diverse Stakeholders Coming Together _____	9
Vision and Goals _____	9
Guiding Principles _____	10
Why a Biodiversity Conservation Strategy _____	12
The Benefits of the Strategy _____	13
Strategy Development Process _____	14
Strategy Organization _____	15

### **2 BIODIVERSITY IN WASHINGTON** \_\_\_\_\_ **17**

Biodiversity is the Web of Life _____	18
Genetic Diversity _____	18
Species Diversity _____	19
Ecosystem Diversity _____	19
Landscape Diversity _____	19
Why Biodiversity Matters _____	20
Washington's Heritage _____	20
Today's Economy—Benefiting from Sustainable Management _____	20
Ecosystem Services—Essential to Our Modern Economy _____	21
Medicinal Benefits—Diverse Ecosystems as Nature's Pharmacies _____	22
Intrinsic Value—Helping Us Find Our Place _____	22
Resilience—Staying Healthy in the Face of Change _____	23
Why Biodiversity Matters Most: A Legacy for Our Children _____	23
What is Happening to Washington's Biodiversity Resources? _____	24
Current Status: Diverse and Declining _____	24
Primary Threats and Drivers of Change _____	27
Current Efforts to Protect and Conserve Our Biodiversity _____	32
Summary—Washington's Biodiversity is in Our Hands _____	37

### **3 RECOMMENDATIONS FOR ACTION** \_\_\_\_\_ **39**

What Needs To Be Done _____	40
Guiding Investments on the Ground: Using the Conservation Opportunity Framework _____	42

Introduction	42
Recommendations	43
Incentives and Markets	50
Introduction	50
Recommendations	52
Land Use and Development	60
Introduction	60
Recommendations	61
Science and Information	68
Introduction	68
Recommendations	69
Education and Public Engagement	74
Introduction	74
Recommendations	75
Achieving Results	81
Recommendations	82
Summary of Recommendations	88

#### **4 CONSERVATION OPPORTUNITY FRAMEWORK 95**

Introduction	96
Methodology for Developing the Conservation Opportunity Maps	97
Conservation Opportunities and Approaches	103
Connect and Discover	104
Learn and Restore	106
Manage and Maintain	108
Collaborate and Innovate	110
Additional Resources and Research Needs	112
Conservation Opportunity Maps for Seven Ecoregions in Washington	114

#### **5 COUNCIL-SPONSORED RESEARCH REPORTS 129**

Climate Change and the Future of Biodiversity in Washington	130
Washington Forum for Conservation Incentives, Proceedings	130
Washington's Biodiversity: Status and Threats	130
Toward a Biodiversity Conservation Strategy:	
Socioeconomic Conditions and Trends in Washington State	130
Conservation Incentive Programs in Washington State:	
Trends, Gaps, and Opportunities	131
The Scope and Range of Conservation Assessments in Washington State	131

#### **6 APPENDICES AND ACKNOWLEDGEMENTS 133**

A. Options for Financing Biodiversity Conservation in Washington	134
B. Regional Pilot Projects	140
C. Indicators, Goals	144
Acknowledgements	147



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WASHINGTON FOREST PROTECTION ASSOCIATION

# Introduction: A Conservation Strategy for the Future

The Washington Biodiversity Council—Diverse Stakeholders Coming Together 09

Vision and Goals 09

Guiding Principles 10

Why a Biodiversity Conservation Strategy 12

The Benefits of the Strategy 13

Strategy Development Process 14

Strategy Organization 15

Washington State is blessed with a unique bounty of natural environments and resources, from the rich fertile soils of the Palouse to the diverse 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 millions of tiny organisms that are the foundation of the food chain.

This natural resource heritage—the biological diversity of organisms and habitats—is our state treasure. Yet as our population has soared and our economy prospered, our state’s natural heritage has steadily diminished. Since Washington became a state in 1889, we have lost significant portions of our wetlands, riparian habitat, old-growth forests, shrub-steppe, and arid grasslands. Consequently, the health of many of our lands and water systems is declining. Today, for example, the vitality of Puget Sound is threatened to the extent that we are contemplating spending billions of dollars to restore its health and productivity. Other ecosystems across the state may also be in danger if current trends continue.

In the face of these trends, the Washington State Legislature in 2002 enacted ESSB 6400, which recognized the critical importance of biodiversity to the well-being of the state’s citizens, businesses, and agriculture. This legislation directed the State to develop a comprehensive framework to safeguard Washington’s rich biodiversity heritage for the benefit of current and future generations. The Washington Biodiversity Conservation Committee produced an interim strategy report in 2003 setting forth guiding principles and desired outcomes, including recommendations to establish a standing Council to develop a comprehensive long-term strategy. The Governor subsequently established the Washington Biodiversity Council and charged it with developing a “30-year, comprehensive prioritized strategy and implementation plan for the state of Washington that enables the state to sustainably protect its biodiversity heritage.”<sup>1</sup>

**The Washington Biodiversity Council defines biodiversity as the full range of life in all its forms. This includes the habitats in which life occurs, the ways that species and habitats interact with each other, and the physical environment and the processes necessary for those interactions.**



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<sup>1</sup> Gary Locke, March 1, 2004, Executive Order 04-02, “Establishing the Washington Biodiversity Council.”

## The Washington Biodiversity Council—Diverse stakeholders coming together

The Washington Biodiversity Council is comprised of individuals representing a diverse set of interests concerned with stewardship of our natural resources, including farmers, foresters, tribal members, shellfish growers, environmentalists, business interests, academics, and officials from local government, conservation districts, and state and federal agencies. The recommendations in this document benefit from this diversity of interests—the multiple perspectives, a healthy discussion of differences, and a strong desire from all members to present a bold strategy that can move the state forward to a new era of cooperation and collaboration to sustain and enhance our state’s vital biodiversity resources.

### Vision and Goals

Early on in its deliberations, the Council articulated a vision for the future of the state’s biodiversity that has served as the driving force behind the development of the strategy:

In our lifetimes, the native plants and animals, along with their air, water and land habitats, 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.

As the Council moved to translate this vision into action, it reached consensus on the objective of making significant progress towards conserving, protecting, and restoring the state’s biodiversity over the next thirty years. Accordingly, this strategy has been created so that Washington State will:

- **Protect quality of life for people**, by making significant progress in ensuring that healthy natural systems sustain and support a high quality of life for humans. Indicators of success related to achieving this goal could include:
  - Increasing access to nature for cultural and spiritual enrichment and recreation.
  - Ensuring Washington has clean air and climate mitigation opportunities by storing carbon emissions in forests, lakes, and other natural resources.
  - Providing clean water and flood control through protection of wetlands and forested watersheds.
  - Improving soil stability and productivity.
  - Sustaining the productivity of our natural resources.
- **Conserve species diversity**, by making significant progress toward conserving and restoring viable populations of native species. Indicators of success related to achieving this goal could include:

- Maintaining populations of plants and animals that are currently healthy.
- Improving the health of populations and species that are currently at risk.
- Maintaining the broad spectrum of native species currently living in the state.
- **Restore and care for ecosystems,** by making significant progress toward restoring and protecting intact, functioning ecosystems. Indicators of success related to achieving this goal could include:
  - Improving the health of natural systems that are currently at risk.
  - Maintaining natural systems that are currently healthy and functioning.
  - Measuring the quality of waters flowing through watersheds around the state.

The Council recognized that Washington State as a whole is making important progress toward achieving this vision and these goals. Washington citizens, businesses, nonprofits, local governments, and state agencies, along with federal agencies, are organizing and taking actions that help conserve and protect our biodiversity resources. Many landowners and commercial operators, from small farmers to large timber companies, provide shining examples of outstanding stewardship, where farming, forestry, and fishing are done in such a manner as to sustain the vitality of both the environment and the economic base. At the local level, many governments have taken action to protect important species, habitats, and landscapes. State and federal agencies including the Washington State Department of Natural Resources, Washington Department of Fish and Wildlife, and the Washington State Department of Ecology are actively pursuing strategies and implementing programs that support conservation of biodiversity.

Yet with many ecosystems and species in decline statewide, much more needs to be done. The recommendations presented in this report are a strategic mix of actions, activities, and programs intended to have an immediate impact and to build capacity for lasting change to support conservation of the state's biodiversity.

Achieving these goals means, for example, that in the coming years we will take the steps necessary to restore Puget Sound to health, that we will protect the vitality of our waterways and riparian habitats so that salmon and bald eagles can thrive, that we will do what we can to ensure that native species and habitats are sustained in the face of unprecedented climate change, and that we will be proactive in preserving unique natural areas of our state, including the native grasslands and remaining shrub steppe habitats of eastern Washington.

## Guiding Principles

The following core principles have guided the Council's work since its inception, and together they form the foundation for its strategy and recommendations.

- **Recognize existing efforts and maximize coordination.** The quantity and scope of ongoing efforts to conserve Washington's biodiversity on the part of federal, state, and local governments as well as nonprofits, citizens, and the private sector is truly impressive. This strategy is designed to build on these existing activities, facilitating improved coordination, whenever possible.

- **Expand the focus of conservation to include ecosystems.** While protection of individual species is important and serves as the basis for many of our existing laws and programs, conservation of biodiversity necessitates a broader ecosystem or ecoregional approach. An ecosystem focus offers the greatest potential for enabling at-risk species to survive, for keeping common species abundant, and for ensuring that healthy lands and waters support our quality of life and economic vitality.
- **Build on sound science.** Effective and efficient natural resource policies and programs must necessarily be based on sound science. Our scientific understanding of the complexity of natural systems and the factors needed to sustain life’s diversity in the face of trends such as rapid population growth and climate change continues to develop. Nevertheless, science provides the foundation for this strategy, particularly the Conservation Opportunity Framework in Chapter 4.
- **Recognize and encourage active stewardship by private landowners.** More than 60% of Washington’s lands are privately owned. Thus, private landowners are on the frontlines of efforts to conserve biodiversity. The Council’s strategy recognizes their central role and seeks to foster good stewardship through positive recognition, incentives, and market-based mechanisms rather than increased regulation or mandates.
- **Foster local decision making.** It could be said that all biodiversity is local. While the benefits of biodiversity resources may be regional and even international in scope, control and management of the resource is often in the hands of local decision makers (except for federal and state-owned lands and regulated waterways). Accordingly, this strategy seeks to give local decision makers, both public and private, the capacity, tools, and understanding to make sound decisions about their biodiversity resources and how best to conserve them.
- **Work across political boundaries.** Species, ecosystems, and landscapes do not recognize political boundaries. This strategy seeks to facilitate effective biodiversity conservation through cooperation among local jurisdictions; between Washington, its neighboring states and province, and federal entities; and among private and public landowners.



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## Why a Biodiversity Conservation Strategy

With resources, time, and funds being invested in biodiversity conservation across agencies and organizations, the need for a comprehensive strategy is essential and widely supported. At the same time, habitat fragmentation and other impacts related to growth mean action is needed now to conserve biodiversity for our benefit and for the benefit of future generations.

As a result, the Biodiversity Conservation Strategy was designed to emphasize voluntary action, establish priorities, build a strong scientific foundation, engage citizens and support local governments.

The strategy consists of a comprehensive set of recommendations in six areas intended to secure Washington's natural heritage for the next 30 years. While the Council recommends phased action on all recommendations, three broad initiatives form the heart of the strategy. Taken together, these three initiatives offer a bold new approach to defining priorities, fostering widespread landowner engagement and measuring our progress

The Strategy proposes:

- **A new landscape approach to guide investments and actions** so that we will indeed conserve our most important biodiversity where we work, play, and live.

As part of its efforts, the Biodiversity Council developed a tool to classify lands and waters by their biodiversity significance and the risks faced by growth and development. Maps were created for different ecological regions of the state that provide the basis for identifying the highest priority lands for conservation and identifying conservation strategies that can be tailored to different landscapes. With technical and financial support from the state, this tool can be used by local governments, state agencies, and others to adopt a landscape approach to conservation, and promote better coordination, efficiencies and outcomes.

- **Better incentives and markets for landowners**, to improve the value proposition for conservation on working lands and open spaces.

Now is the time for organizations with expertise in this arena to join together to offer an expanded, integrated suite of incentives and market based programs to private landowners. These programs should be easily accessible, and make voluntary stewardship and conservation a practical and rewarding option. Simply put, the goal is for landowners to increase their income through conservation actions. These incentive programs must be structured to especially 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 where engaged adults and students under the guidance of scientists are counting and cataloguing biodiversity resources in the streams, forests, and fields near

where they live, work, or go to school. A Science Panel and related Science Center are needed to spearhead this initiative, which offers the promise of building our knowledge and keeping us accountable for improvements at a fraction of the cost of traditional approaches.

Multiple benefits are associated with developing and implementing this strategy:

- **Coordinating responses to overlapping natural resource issues will increase the impact and efficiency of our efforts.** Through implementation of the strategy, biodiversity will become an organizing principle and a common underlying framework to link together the state's many different natural resource agencies and programs. State agencies have already increased cooperation on natural resource issues as a by-product of development of this strategy. In the future, biodiversity can become a common thread which links people, integrates government, and generates effective action on natural resources.
- **Informing the state's efforts to fight and manage the impacts of climate change.** New bio-based energy strategies will need to be implemented in such a way that our biodiversity resources are maintained and even strengthened. Over time, wildlife and plant life corridors will likely be needed to allow for the migration of species vital to our state's natural resource and economic base. And our state's forests and stewardship farms will contribute as carbon offsets for our commercial and industrial activities.
- **Addressing conservation needs proactively to help avoid future ecosystem collapses.** By taking action now, we can seek to avoid massive clean-up and recovery efforts such as that occurring in Puget Sound.
- **Emphasizing incentives and voluntary actions to conserve biodiversity** to build support from a broad base of stakeholders, citizens, businesses, and landowners, and represent an alternative approach to achieving outcomes.
- **Using a system-wide approach to better protect species** of interest at lower cost and with less friction.
- **Supporting related high-priority initiatives** of Washington's citizens and businesses, including the following:
  - The strategy supports and embraces the work of the **Puget Sound Partnership**. Going forward these efforts will be linked in many ways, as the Partnership will essentially be adopting a biodiversity conservation approach to restoring the vitality of Puget Sound.
  - The strategy provides a landscape-based approach to implementation of the state's **Working Lands Initiative**, as well as new tools and incentive programs that can benefit farmers, foresters, and other owners of productive working lands. The Council envisions that the newly established Office of Farmland Preservation will be directly involved in implementing several of the recommendations

- The strategy links directly to the Governor’s **Environmental Education** priority, with learning about the state’s biodiversity resources becoming a cornerstone of that initiative.
- Finally, the strategy is intricately related to the work of the **Invasive Species Council**. It will help establish priorities for action to manage invasive species. Achieving success here will require understanding the ecology of native species and their habitats—a product of the science-related research recommendations.

Ultimately, biodiversity is the basis for our prosperity, economic vitality, and quality of life. Protecting biodiversity now ensures we will continue to enjoy its benefits.

### Strategy Development: A Collaborative Process

In the course of developing this strategy, the Council conducted background research on critical issues and consulted with groups of experts and stakeholders from a variety of disciplines, including educators, scientists, landowners, business interests, and environmentalists. The Council also funded two pilot projects, which explored education and incentive based approaches to conservation, and met frequently with project participants to discuss findings. The Council itself met many times, and engaged in vigorous discussions as it developed a framework for the strategy and worked through a multitude of issues. Council members participated in workgroups and technical committees involving outside experts.

### Research Projects

The Council conducted research on issues that have informed the development of this strategy. Projects included a baseline report on the status of and threats to biodiversity in Washington, an analysis of existing and potential landowner incentives in Washington, and a study on the potential impacts of climate change on biodiversity. These reports are available on the Washington Biodiversity Project website (<http://www.biodiversity.wa.gov/>) and are listed in Chapter 5.



## Existing Plans and Strategies

Staff reviewed existing state conservation plans for important background and guidance in developing the Biodiversity Conservation Strategy. These plans included the Washington Natural Heritage Plan, the Comprehensive Wildlife Conservation Strategy, the Puget Sound Action Plan as well as the Washington Biodiversity Conservation Committee's Strategy Report.

## Pilot Projects

Pilot projects in Pierce County and in north central Washington explored different approaches to educating and engaging citizens in conservation and to making conservation incentives work for landowners. These projects spanned 18 months and involved a number of partnering organizations. Members of the Council met regularly with pilot project participants and discussed challenges, successes, and opportunities to integrate pilot project findings with emerging recommendations of the strategy.

Reports and background information for each of the pilot projects can be found in Appendix B.

## Stakeholder Engagement

The Council and its staff met formally and informally with many stakeholders, sharing early recommendations and listening to issues, concerns, and new ideas. Collectively, these conversations served to identify new directions and highlight priorities for the Council. They have played a critical role in shaping this document. A list is found in the Acknowledgements.

In particular, the Council worked with a number of partners to host the Washington Forum for Conservation Incentives in January 2007. This event drew an over-capacity crowd and featured working sessions on specific issues and opportunities in the area of advancing incentives and markets for private landowners. The results of these working sessions helped to frame a number of the Council's strategies and recommendations. Full proceedings from the Forum can be found on the Washington Biodiversity Project website (<http://www.biodiversity.wa.gov>) and are listed in Chapter 5.

## Strategy Organization

Chapter 2 of this Biodiversity Conservation Strategy provides an overview of biodiversity in Washington State—what it is, why it matters, the current status of our biodiversity, and key threats. Chapter 3 consists of recommended strategies and actions to move forward and address key gaps in current approaches to biodiversity conservation. Chapter 4 presents the results of the Council's work to identify conservation opportunities, priorities, and strategies on the land, considering both areas that are potentially at highest risk and areas that contain the most significant biodiversity.



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