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State of Washington

2017-19 Agency Strategic Plan

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2017-19 Agency Strategic Plan

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Chapter 1. Introduction and Overview

A new strategic plan

This new strategic plan describes the mission, vision, goals, and strategic priorities that guide the Washington Department of Ecology. It describes our work facing the challenges ahead and is both aspirational and practical.

We've engaged in strategic planning according to direction from the Washington State Legislature and with guidance from the Governor's Office of Financial Management. What's new this time? In the past, we've focused our strategic planning as part of the budget development cycle; this time our planning process has included a broad and holistic look at our organization, embracing the Lean principles of:

- Focusing on customer need
- Finding opportunity for improved coordination and process improvement
- Building effective management systems
- Supporting a professional workforce
- Creating a foundation that supports effective and efficient government

We call this effort Results Ecology, and it is intended as a holistic approach to move our organization toward our goals.

This strategic plan encompasses our goals and objectives for the next biennium, and looks beyond these next two years. It reflects our core services and focuses on Ecology's strategic priorities. Through our strategic planning process, we have considered what we know and reasonably anticipate to be opportunities and challenges, so our efforts today produce vital results we know will be sustainable into the future.

Our goals

- Protect and restore air, land, and water.
- Prevent pollution.
- Promote healthy communities and natural resources.
- Deliver efficient and effective services.

Our strategic priorities

- Reduce and prepare for climate impacts.
- Prevent and reduce toxic threats.

- Deliver integrated water solutions.
- Protect and restore Puget Sound.

Our core services

- Administer federally delegated programs
- Establish appropriate regulations
- Issue permits
- Monitor environmental health
- Oversee funding to local partners
- Prevent and clean up pollution
- Provide compliance assistance
- Provide technical and financial assistance for community conservation
- Support a professional workforce

At Ecology, our mission, vision, and commitments are guiding principles that inform how we operationally put into effect projects toward achieving our goals. Our daily efforts contribute to strategic success, as demonstrated by outcome measures that show progress toward specific targets.

Ecology's foundational principles

Collaboration and coordination

All of our work involves local partners. We value our working relationships with tribes and our partnerships with local governments, state and federal agencies, citizen groups, and the business community. This permeates every aspect of our work, and reflects our commitment to the people of Washington to build and maintain cooperative relationships. We:

- Value and build partnerships to achieve common goals.
- We see ourselves as a committed partner to tribes, communities, businesses, local governments, and global neighbors.
- Are committed to improving coordination between Ecology programs and regulatory partners, so that permit applicants have an efficient, predictable, and consistent regulatory experience.

Data-driven decision making

Ecology is a science and principle driven organization, and appropriate, high quality data and information are the critical components of holistic decision-making. Our standard practices

Our Mission

To protect, preserve and enhance Washington's environment for current and future generations.

Our Vision

Our innovative partnerships sustain healthy land, air and water in harmony with a strong economy.

Our Commitments

- Perform our work in a professional and respectful manner.
- Listen carefully and communicate in a responsive and timely manner.
- Solve problems through innovative ways.
- Build and maintain cooperative relationships.
- Practice continuous improvement.

require high levels of integrity and security. This includes data collection, management, integration, analysis, and transformation into meaningful information.

Delivering data and information for the people of Washington

The continuing challenges of our time, and the speed of technology change, calls for innovation. We continuously seek input and listen carefully, and design innovative data collection and information that deliver solutions to meet stakeholder needs.

This means communicating to and delivering information that is accessible and useable by a diverse public audience. Our data and information delivery solutions:

- Provide public access to relevant data and information.
- Consider customer needs.
- Respect local priorities.

We consider environmental justice components so those without resources can access information.

Across Ecology, we are coordinating efforts and improving how we deliver results. This is especially apparent with web-based delivery of information and in how we manage data and records.

Learning from experience: Effectiveness monitoring

We monitor project and program effectiveness and are incorporating analytic and mapping tools to integrate on-the-ground actions with observed environmental outcomes. This effectiveness monitoring enables Ecology to:

- Identify and share highly effective solutions.
- Invest strategically.
- Employ adaptive management strategies.
- Improve customer service to the public and other entities by identifying and communicating results.

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Chapter 2. Strategic Priority: Reduce and Prepare for Climate Impacts

“We are in a race against time.”

UN Secretary-General Ban Ki-moon

We must prepare for the future. This means understanding the impacts from climate change to our communities, natural resources, and economy. We need to work together at local, state, and federal levels to protect our resources, reduce our contribution to climate change, and prepare for increased variability and more frequent extreme conditions.

Outcomes

- A regulatory framework to limit carbon pollution.
- Natural and built communities that are more resilient to climate change impacts.

Objectives

1. Reduce carbon pollution.
2. Increase resiliency of natural and built communities.
3. Understand impacts to natural systems.
4. Prioritize drought preparedness.

Key strategies

- Implement and improve regulatory mechanisms to track and reduce greenhouse gases.
- Pursue integrated planning and adaptive management.
- Understand and advance scientific knowledge to support adaptation planning.
- Collect data and provide analysis to support information-based decision-making.

Background

Our climate is changing, and Ecology is addressing the challenges this creates for Washington. In terms of mitigation, we are working toward practical and responsible approaches to meeting greenhouse gas emission reductions adopted into law in 2008, and Washington is leading state and regional efforts to cap and reduce carbon pollution.

Protecting our communities by ensuring resiliency in our natural resources and economy is informed by Washington's 2012 decision framework, *Preparing for Climate Change: Washington's Integrated Response Strategy*.

As sea levels rise, we will need to prepare for impacts to wastewater treatment facilities. As we experience drought and increased demand placed on groundwater and surface water supplies, we anticipate needing solutions that include using reclaimed water.

Increased water temperatures add stress on already struggling fish populations and increase the need for habitat restoration and canopy trees providing shade.

Events like wildfires deplete state and local resources, and require strong commitment to working with tribes and local, state, and federal partners to develop integrated, community-based response plans.

We are strongly committed to working vigorously with our partners to slow the effects of climate change and build a more resilient Washington.

Objective 1: Reduce carbon pollution

Establish regulatory limits on carbon pollution

- Adopt the Washington Clean Air Rule to establish a regulatory cap on carbon emissions.
- Support work toward cutting pollution from power plants by working with the Washington power sector and others under the federal Clean Power Plan.

Develop practical and coordinated approaches for reducing carbon pollution to targets required by Washington law

- Track and report greenhouse gas emissions.
- Support clean and green energy technologies.
- Promote transportation and fuel-conservation opportunities.
- Continue supporting sustainable materials management, including recycling and waste reduction that reduce energy demands and associated greenhouse gas (GHG) emissions in manufacturing.
- Include reducing our environmental footprint when developing remedies for toxic cleanup sites.

Objective 2: Increase resiliency of natural and built communities

Build resilient communities better able to withstand and adapt to changing climate conditions

- Protect shorelines, reduce flood risks, and improve or restore habitat on major rivers.
- Identify, protect, and restore cold-water refuges for salmon.
- Include climate change when evaluating proposals under the State Environmental Policy Act (SEPA).
- Ensure water quality by protecting and restoring watersheds, riparian areas, and floodplains, and by integrating climate impacts into water quality cleanup plans (Total Maximum Daily Loads (TMDLs)).
- Ensure sustainable wastewater treatment infrastructure.
- Relocate chemical storage and disposal facilities from areas facing significant risk of flooding from coastal inundation.
- Develop options for using reclaimed water.
- Support efforts to sequester carbon in working lands.

Support local emergency and disaster planning efforts

- Increase drought relief funding options.
- Assist communities in preparing for impacts from current and future hazards.
- Improve access to data for communities, first responders, and project partners.
- Identify vulnerable toxic cleanup sites and increase resilience of cleanup remedies.

Objective 3: Understand impacts to natural systems

Monitor trends

- Identify, collect, and share baseline and trend data to help inform climate change related risk planning.
- Collect data to predict responses of freshwater resources in times of stress.
- Monitor to assess groundwater responses to climate change.

Increase understanding of ecosystem responses to climate stress

- Research to identify Puget Sound benthic impacts, nutrient, and food web changes.
- Investigate potential connections between stream flow and water quality.
- Subsequent to each successive global or national assessment of climate change science, consult with the climate impacts group at the University of Washington regarding the science on human-caused climate change. Report to the legislature summarizing that science. Make recommendations regarding whether the greenhouse gas emissions reductions need to be updated.(RCW 70.235.040)

Objective 4: Prioritize drought preparedness

Focus on implementing integrated water solutions in highly vulnerable basins

- Support collaborative approaches to decisions around tradeoffs between instream and out-of-stream uses for water.
- Develop water banks in the Dungeness, Walla Walla, Spokane, and Yakima Basins to help facilitate transfer of water to higher value uses.
- Support tribal and local governments, watershed and regional groups, water managers, and communities in identifying and assessing risks and implementing solutions.

Lead statewide drought planning efforts

- Develop a new statewide drought response plan by working with a task force of state and federal agencies, local governments, conservation districts, and irrigation districts.
- Implement enhanced water conservation and efficiency programs to reduce the amount of water required to be delivered to irrigation, municipal, and industrial users and improve basin water supply.
- In partnership with the Washington Conservation Commission, review irrigation efficiency to verify decreased diversions and improved stream flows.

Chapter 3. Strategic Priority: Prevent and Reduce Toxic Threats

Effectively reducing the threats from past and present use of toxic substances requires cleaning up existing contamination, managing approved uses, and reducing or eliminating future use. Toxic substances are found in some consumer products, in many manufacturing processes, and they end up in the environment. Preventing exposure is the smartest, cheapest, and healthiest way to protect people and the environment.

Outcomes

- Healthy people and environments.
- Safer consumer products in Washington.
- Pollution and toxic runoff prevented from reaching Washington waters.
- Existing contamination cleaned up or remediated.

Objectives

1. Integrate prevention, permitting, and cleanup efforts.
2. Strengthen ongoing toxics reduction efforts.
3. Establish monitoring systems that inform and support implementation actions.

Key strategies

- Reduce the use of toxic materials and prevent them from entering into use in homes and industry.
- Improve knowledge on where and how toxic substances get into products, people, and the environment.
- Integrate Chemical Action Plan recommendations into activities for cleanup, protecting water quality, and preventing spills.
- A flexible and effective regulatory framework for preventing and reducing exposure to toxic substances.
- Promptly respond to releases of oil and hazardous materials to minimize environmental and public health impacts.

Background

Washington is proud of our strong and deliberate efforts addressing legacy contamination. Ecology's strong, ongoing programs to clean up contamination, including overseeing cleanup at the Hanford Nuclear Reservation; clean up spills; and manage polluted stormwater.

These programs, however, were not designed to address the many non-point sources of toxic substances we now find to be problematic. Much of the pollution that enters our environment comes from the small but steady releases of toxic substances contained in everyday products. Toxic substances get into stormwater and from stormwater into waterways. Once in waterways, they enter the food web, get into fish, and into people. Effects on humans from these toxics can include developmental problems, effects to the nervous system, endocrine disruption, immune-response suppression, and cancer.

Ecology's approach has multiple components. Some parts are regulatory, such as Washington State's individual product laws and Children's Safe Products Act, while other actions are voluntary, such as offering technical assistance to companies regarding use of safer chemical alternatives. We gather information about toxic substances through environmental monitoring, product testing, and required disclosure of certain chemicals in consumer products. We collaborate with other states and the federal government.

While much of our work in preventing toxics exposures has relevance statewide, some actions related to toxic substances pertain to large and small localized areas. Examples are cleanup efforts underway in Bellingham Bay, removing area wide contamination from the Tacoma Smelter plume, and cleanup of soil and groundwater from leaking underground storage tanks.

As we continue work on removing legacy contaminants and preventing future toxic threats, we believe that embracing sustainable practices is an option for preventing pollution and delivering a healthy environment to future generations.

Objective 1: Improve integration of prevention, permitting, and cleanup efforts

Protect water quality

- Coordinate cleanup of contaminated water bodies with source control planning so decisions acknowledge multiple regulatory authorities and the goals, priorities, and mechanisms of each.
- Increase use of multi-program and multi-expertise teams within Ecology that coordinate activities.

Avoid health and environmental costs associated with pollution

- Reduce urban stormwater pollution through low-impact development, street cleaning, and other best management practices.
- Implement actions identified in existing Chemical Action Plans by integrating them into new and ongoing activities.
- Prevent oil spills.
- Address nonpoint sources.
- Support infrastructure projects that keep pace with a growing population.
- Encourage the use of safer alternatives in place of more toxic substances.

Objective 2: Strengthen ongoing toxics reduction efforts

Continue building an effective regulatory framework

- Protect those at greatest risk, such as children, from exposures to toxic substances in consumer products.
- Continue our strong state program while working with the U.S. Environmental Protection Agency as they implement recent reforms to the federal Toxic Substance Control Act.
- Where necessary and appropriate, eliminate or phase out use of specific substances or products.

Decrease use of known toxic substances

- Support alternatives assessments where manufacturers look for safer alternatives to toxic substances.
- Complete Chemical Action Plans for priority toxic substances, including for per- and poly-fluorinated alkyl substances (PFASs) (chemicals prevalent in consumer products like carpeting and waterproof fabric).
- Improve the process for developing Chemical Action Plans based on experience gained developing the first five plans.
- Update our understanding of priority toxic substances to reflect new science.

Implement Chemical Action Plan recommendations

- Implement existing Chemical Action Plan recommendations for mercury, flame-retardants, lead, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs).
- Implement the 2015 PCBs Chemical Action Plan recommendations to prevent additional PCBs from reaching the Spokane and Duwamish Rivers.
- Integrate Chemical Action Plan recommendations into cleanup projects, stormwater management, and permitting decisions.

Seek out innovative approaches

- Explore options for combining federal and state regulations and for using existing authorities to support additional toxics reduction efforts.
- Support policies for product stewardship (for example, extended producer responsibility).
- Direct interested Washingtonians to consumer protection information available through the Office of the Attorney General.

Increase use of safer alternatives

- Offer technical assistance to hazardous waste generators for identifying safer alternatives and green chemistry options that will significantly reduce toxic chemical use in Washington.
- Build partnerships to find safer alternatives that remove toxic substances from products and keep them out of the environment. For example, multiple entities continue working together to find safer alternatives to copper-containing boat paint.
- Advocate for creating Technology Innovation Grants to fund marketable, safer chemical alternatives to commonly used toxic substances used in developing consumer products.
- Assist customers in finding safer alternatives by supporting credible labels, such as EPA's Safer Choice.

Advocate for green purchasing

- Support the state of Washington, local governments, and others in using their purchasing power to influence use of safer alternatives.
- Assist the Department of Enterprise Services in developing contracts for environmentally preferred purchasing.

Objective 3: Use monitoring data to inform decisions and prioritize actions

Identify data gaps around emerging toxic substances in products and the environment.

- Engage in long-term monitoring of priority toxic substances to identify trends in the environment.
- Collaborate with other states so businesses can submit information in one place.
- Develop standardized procedures for testing toxic substances in consumer products.

Analyze reported data required by the Children’s Safe Product Act

- Review and analyze data on substances in products to identify priorities for reducing exposures to children.
- Provide publically available data and information in context and in a manner useful for consumers.

Objective 4: Increase the visibility of prevention activities.

Identify specific connections between cleanup activities, stormwater management, and prevention efforts

- Estimate costs associated with removing contaminants compared to preventing contamination.
- Use examples of situations where future costs have been avoided to describe the value of prevention activities. Examples include specific chemicals (copper, mercury, phthalates, and PCBs) and preventing oil spills.

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Chapter 4. Strategic Priority: Deliver Integrated Water Solutions

Integrated water solutions provide a coordinated and collaborative approach to delivering clean, cool water. This approach ensures Washington has clean, adequate water supplies that meet current and future drinking water needs, commercial and agricultural uses, and sustains fish and the natural environment.

Outcomes

- Sufficient water for agricultural, commercial, environmental, municipal, and recreational uses.
- Clean water to meet the present and future water needs of Washington.
- Cool waters and healthy streams that support fish and wildlife.

Objectives

1. Secure sufficient water for Washington
2. Coordinate strategic water project investments
3. Address discrepancies between watershed cleanup plans and discharge permits

Key strategies

- Build strong partnerships with tribes, local, state, and federal governments, water users, and other interested stakeholders in water resource management decision making.
- Aggressively pursue developing water supplies and seek innovative approaches to water right appropriations and transfers. Examples include water banking for mitigation purposes; and, where feasible, using reclaimed water to help protect instream flows.
- Collaboratively complete and implement high priority water quality improvement plans (Total Maximum Daily Loads, TMDLs).
- Expand effectiveness monitoring to provide data helpful for evaluating innovative solutions. For example, using instream flows to influence permitting decisions that will reduce toxics loading to water bodies.
- Seize opportunities provided by projects that simultaneously improve both water supply and water quality. For example, flood hazard reduction projects.
- Prevent and reduce water pollution from point and nonpoint sources, and from stormwater runoff.

Background

Building on work initiated last biennium, we continue to address the unique challenges facing Washington's water systems. Factors such as climate change, increased population, and a growing economy have converged to increase water demand and decrease water supply.

In the face of these growing challenges, we continue to invest and complete large-scale water infrastructure projects like the Odessa Groundwater Replacement Program and the Yakima Integrated Plan. We also anticipate future droughts resulting in reduced water supplies to communities, agriculture, and flows for fish so continue to refine our drought response program and drought response planning approach statewide.

As traditional water supplies become increasingly scarce in rural areas, water users need solutions that provide water for out-of-stream use while protecting surface waters. We are working with stakeholders on solutions that include developing flexible mitigation strategies, reviewing new water use technologies, and acknowledging the limits of new water use opportunities in some areas. In the meantime, we are also working to reduce pending water right applications through innovative approaches to water right appropriations and transfers.

We are increasing water use metering and reporting, maintaining the statewide stream gauging network, and ensuring compliance with water laws. Plus, we are taking a look at groundwater resources across the state.

Our work to ensure water quality remains a high priority, including updating Washington's National Pollutant Discharge Elimination System (NPDES) general permits and water quality standards.

What are integrated water solutions?

A number of principles contribute to an interconnected and multifaceted approach to managing water. Integrated water solutions overlap categories:

- Strategic and coordinated investments for infrastructure
- Innovative partnerships - with local communities, and other interested entities
- Open and transparent decision making
- Commitment to expand and improve access to data
- Plan for the needs of current and future generations
- Balance multiple interests and needs
- Sharing data and resources – within Ecology, with other agencies, with local partners, and with the people of Washington
- Innovative approaches to problem solving

Objective 1: Secure sufficient water for Washington

Support projects through the Office of the Columbia River

- Develop long-term water solutions for both economic purposes and environmental benefits for Eastern and Central Washington’s farmers, communities, industries, and fish.
- Pursue water supplies for both instream and out-of-stream uses, including securing alternatives to groundwater for the Odessa Subarea and updating aging infrastructure in the Yakima, Methow, Wenatchee and Walla Walla basins.
- Provide water for pending water right applications, and secure water for drought relief and interruptible water users.

Senator Maria Cantwell credits the farmers, conservationists, and tribal officials in Washington State for creating a model for other regions struggling with water scarcity made worse by climate change. "We have to put the days of fighting over water behind us and work together to find common ground to solve our collective water challenges," Cantwell says. "Yakima is leading the way."

Implement the Yakima Basin Integrated Plan

- Support the Yakima River Basin Integrated Water Resource Management Plan projects to address the region’s water and aquatic resource needs. Conservation, infrastructure, and fish passage projects continue advancing along parallel paths through planning, design, permitting, funding, and construction.
- Build on an extraordinary collaboration and holistic approach to water management in the Yakima River basin. Work with partners to obtain federal support to complement the significant investments made by the state of Washington.

Develop innovative rural water supply solutions

- Find solutions to support homes, farms, and businesses in the Skagit River Watershed by developing mitigation programs that balance instream and out-of-stream benefits. This includes projects to develop a water exchange and public work infrastructure investments.
- Develop flexible mitigation strategies.
- Acquire water rights to protect, increase, and restore instream flows by working with water rights holders who volunteer to sell, lease, or donate all or part of their water rights to the Washington State Trust Water Rights program.

Use reclaimed water to help meet demand

- Provide tools (updated rules and permit options) for increasing the use of reclaimed water statewide to replace water diverted for various uses, resulting in less demand on rivers, aquifers, and lakes.
- Work closely with the Department of Health, stakeholders, and tribes to provide options for addressing increased demand while protecting public health and the environment.

Objective 2: Coordinate strategic water project investments

Invest in building the partnerships it takes to reach solutions

- Through the new Office of the Chehalis Basin, implement strategies identified by the Chehalis Basin partnership that will address long-term needs for preventing flood damage and restoring aquatic species.
- Encourage low-impact development as an important component of addressing stormwater treatment requirements.

Address long-term funding needs

- Collaborate with our partners in identifying and securing funding for priority infrastructure projects.
- Provide funding to local governments to implement stormwater infrastructure retrofits.
- Target and coordinate cleanup efforts around sensitive water supplies.
- Reduce flood hazards, enhance ecological preservation, and address community needs while protecting the natural and beneficial functions of floodplains.
- Support shoreline and growth management planning that allows appropriate economic development while protecting critical habitat.

Objective 3: Address discrepancies between watershed cleanup plans and discharge permits

Coordinate discharge permit restrictions

- Coordinate decisions around discharge limits in National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge permits so when water supplies are low, permit restrictions do not result in insufficient stream flows.
- Establish structured and regular communication among Ecology permitting programs to identify how and where stream flows influence site-specific water discharge permitting decisions.

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Chapter 5. Strategic Priority: Protect and Restore Puget Sound

Puget Sound is a jewel of the Pacific Northwest, and ensuring its health requires our continued attention. Through science and research, and with our partners, we contribute to understanding, communicating, and addressing the challenges facing Puget Sound.

Outcomes

- A healthy and resilient ecosystem.
- Economic prosperity in harmony with environmental stewardship.

Objectives

1. Increase coordination among funding programs to improve outcomes
2. Improve shellfish health
3. Protect salmon and salmon habitat
4. Accelerate innovative solutions for addressing stormwater, greening our infrastructure, and preventing pollution
5. Prevent oil spills and enhance our response capacity

Key strategies

- Coordinate infrastructure investments and bring multidiscipline teams into early planning.
- Collaborate through the Puget Sound Partnership's Ecosystem Coordination Board to advance the Action Agenda's three Strategic Initiatives: stormwater, shellfish, and habitat.
- Collaborate through Puget Sound Salmon Recovery Council and watersheds to protect and restore habitat
- Leverage cleanup of contaminated properties to improve the environment and spur economic opportunity.

Background

Over a century of development is behind us. In that time, estuaries have been filled, shorelines armored, and land cover converted from natural vegetation to hard surfaces. We have asphalt and buildings in place of trees and wetlands. Impervious land surfaces, polluted runoff, and continued land development present serious challenges to our local environment.

Puget Sound waters collect toxic substances and particulates that flow from our rivers, streams, and estuaries. As we are learning, this poses threats to the health of wildlife, our ecosystems and, ultimately, all of us.

There are many pressures, both old and new including:

- Increasing development converts land cover from natural conditions, reducing the ability for water to slow down and be filtered through soils and vegetation before flowing into our waterways and toward Puget Sound.
- Increased demand for water makes it harder to maintain cool, clean water in the streams that feed into Puget Sound.
- Climate will alter the timing and availability of water supplies and contribute to ocean acidification, impacting shellfish and other fishery resources.
- Crude oil transport volume is increasing and transport methods are shifting, resulting in increased risk of spills.
- Emerging information about how toxic substances affect humans and the environment creates a need to understand and address the impacts of toxics reaching our water bodies.

With our partners, we strive to develop workable solutions, using scientific and research resources, to understand and counter the many challenges of our time. We must be strategic with funding and monitor our investments to inform workable solutions.

Moving forward, Washingtonians are investing in the restoration and protection of Puget Sound.

Objective 1: Increase coordination among funding programs to leverage investments and improve outcomes

Align grant opportunities

- Coordinate grant and loan funding with other investments, including incentives, regulatory authorities, technical assistance, and science.
- Focus on grant and loan programs that benefit water quality and salmon recovery efforts by simplifying the application process, improving collaboration among state funding programs, increasing flexibility for recipients, and maximizing opportunity for environmental outcomes.
- Develop a coordinated strategy so decisions take into account related investments, projects, and timing. Consider upstream investments when addressing downstream effects.

Secure sustainable funding for cleanup and prevention

- Work with public and private partners to identify and secure stable, long-term funding sources for preventing pollution, cleaning up contaminated sites, stormwater programs, source control, and effectiveness monitoring.

Support coordinated cleanup and source control activities

- Administer regulatory structures and authorities to plan, coordinate, and implement multi-agency federal, state, and local efforts and actions to facilitate clean up, prevent recontamination, and improve water quality.
- Work with partners to continue progress in the Lower Duwamish Waterway, Bellingham Bay, and priority bays and locations throughout Puget Sound.

Identify and monitor progress

- Design and pilot a monitoring program to evaluate and share information on how infrastructure projects affect Puget Sound.
- Conduct effectiveness monitoring on programs with significant investments, such as Floodplains by Design and watershed cleanup plans (also called Total Maximum Daily Loads (TMDLs)).
- Use Ecology's Water Quality Index to better understand which Puget Sound basins might respond to a focused investment effort to improve water quality.
- Starting with the Whatcom watershed in 2018, assess how best management practices and restoration projects improve water quality and fish habitat. Monitor projects and the environment to track progress, find workable solutions, and inform decisions.

Objective 2: Increase shellfish health through continued support for the Washington Shellfish Initiative

Ensure clean water

- Support local clean water programs with watershed inspectors to ensure compliance with clean water law.
- Prohibit any type of wastewater discharge from vessels by establishing a No Discharge Zone for Puget Sound to prevent pollution that can harm shellfish beds and swimming beaches.

Monitor ocean acidification

- Secure funding to research and monitor ocean acidification in Puget Sound.
- Identify water quality trends (seasonal and annual) and investigate areas of concern.
- Determine how ocean acidification is impacting the food web in Puget Sound, including impacts to fisheries and other resources.

Objective 3: Protect salmon and salmon habitat

Work with partners to secure needed habitat

- Collaborate with communities and the Washington Department of Fish and Wildlife to identify and implement improved shoreline protections.
- Consistent with existing law, ensure no net loss of wetlands and shoreline function.

Continue Floodplains by Design grants

- Secure and expand funding for Floodplains by Design to implement multi-benefit projects that meet community needs, restore habitat, and improve, water quality.

Objective 4: Accelerate innovative solutions for stormwater infiltration, green infrastructure, and preventing pollution

Promote best practices for addressing impacts of development

- Identify and obtain sustainable funding options for coordinating stormwater treatment, cleanup, pollution prevention, and source control activities.
- Build on improved stormwater treatment practices by placing greater emphasis on green infrastructure.
- Collaborate with local governments to evaluate effectiveness of control measures through the Regional Stormwater Monitoring Program (RSMP).
- Support the collaborative, multi-organization Puget Sound Starts *Here* public awareness campaign to help prevent pollution from reaching Puget Sound.

Objective 5: Prevent oil spills and enhance response capacity

Prevent accidental and deliberate release of contaminants that damage fragile Puget Sound ecosystems

- Update the 2010 Puget Sound Vessel Traffic Risk Assessment.
- Education and outreach to prevent oil and hazardous materials spills.

Enhance response capacity

- Provide local governments, tribes, and first responders with the necessary information, tools, and training to effectively respond to spills.
- Use the best available technology and techniques when responding to oil spills.

Communicate planning, risk, and awareness

- Maintain a clear understanding of the changing spill risks that face Washington State.
- Actively inform tribes, communities, stakeholders, and the public about the changing oil-transportation picture and associated impacts.
- Increase awareness that prevention is a key long-term strategy for protecting Puget Sound health.

Ensure a high level of preparedness

- Secure a sustainable funding source and implement policies to maintain the highest levels of spill prevention, preparedness, and response activities.
- Enhance Geographic Response Plans to ensure swift and effective response throughout the state to protect sensitive resources should spills occur.
- Build on successful spill preparedness efforts, such as contingency planning for vessels and oil handling facilities, to address new spill risks from oil being transported via railroad.
- Require railroads transporting oil to submit contingency plans in case of oil spill accidents.
- Notify local communities, tribes, and the public about key information on oil movement.

Chapter 6. Results Ecology

Our environmental mission and program responsibilities

Ecology’s ten environmental program support our strategic priorities. Our administrative program provides financial, information technology, communications, and human resource services. Together the programs fulfill our environmental mission work toward the agency goals of protecting and restoring land, air, and water; preventing pollution; promoting healthy communities and natural resources; and delivering efficient and effective services

| ENVIRONMENTAL PROGRAM | MISSION |
|---|---|
| Air Quality | To protect, preserve, and enhance the air quality of Washington to safeguard public health and the environment, and support high quality of life for current and future citizens. |
| Environmental Assessment Program | To measure, assess, and communicate environmental conditions in Washington State. |
| Hazardous Waste and Toxics Reduction | To foster sustainability, prevent pollution and promote safe waste management. |
| Nuclear Waste Program | To lead the effective and efficient cleanup of the U.S. Department of Energy's Hanford Site; to ensure sound management of mixed hazardous wastes in Washington; and to protect the state's air, water, and land at and adjacent to the Hanford site. |
| Shorelands and Environmental Assistance Program | To support community conservation efforts for our shorelands, wetlands, and floodplains. |
| Spills Program | To protect Washington's environment, public health, and safety through a comprehensive spill prevention, preparedness, and response program. |
| Toxics Cleanup Program | To protect Washington's human health and environment by preventing and cleaning up pollution and supporting sustainable communities and natural resources for the benefit of current and future generations. |
| Waste 2 Resources | To reduce waste through prevention and reuse; keep toxics out of the environment; and safely manage what remains. |
| Water Quality Program | To protect and restore Washington's waters to sustain healthy watersheds and communities. Our work ensures that state waters support beneficial uses including recreational and business activities, supplies for clean drinking water, and the protection of fish, shellfish, wildlife, and public health. |
| Water Resources | To manage water resources to meet the needs of people and the natural environment, in partnership with Washington communities. |

Effective workforce, business technology, and operational support services

We are committed to providing efficient, effective, and accountable services to the people of Washington.

Financial management and oversight

Our Financial Services Office works closely with environmental programs to provide accounting, payroll, contracts and purchasing, centralized budget support, and fund management services and oversight to the agency. Ecology has over fifty unique fund sources that support our work, and passes through almost 70 percent of our base budget to local communities in grants, loans, contracts and on the ground project work. The proper use and oversight of these resources helps to ensure Ecology continues to receive funding for our core mission and strategic priorities.

Objectives

- Provide credible, timely, and accurate data to support continued investment in our work.
- Analyze and report on financial performance quarterly, alert managers to problems and opportunities and help them find solutions.
- Maintain and enhance the integrity of data in all agency financial systems.
 - Agency Revenue Management System - Our four revenue management systems include a \$1.4 billion loan portfolio and \$375 million in revenue collections each year. These custom-built systems are outdated, no longer meet business needs, and are at risk for system failure. A budget request and close coordination with the Office of the Chief Information Officer is underway to address this risk area.
- Provide up to date policies, procedures, and guidance on financial and budget matters.
- Develop strategies to link financial resources to environmental activities, priorities, and outcomes.
- Ensure control and accountability over the agency's assets and compliance with financial laws and regulations.
- Maintain positive cash and fund balances for the dedicated environmental funds we manage.
 - Model Toxics Control Act (MTCA) Accounts – The three MTCA accounts are projected to have significant negative fund balances in the 2017-19 biennium primarily due to major declines in Hazardous Substance Tax (HST) collections, and appropriations in the past two enacted biennial budgets that exceeded projected revenue. The MTCA funds provide almost 40 percent of the agencies base operating budget and about 25 percent of the capital budget. These dollars support long standing, core environmental and public health protection work at Ecology and with our local funding partners. We are closely working with stakeholders, elected officials, the Office of Financial Management, and other state agencies to help craft options for decision makers for the next legislative session.

- Oil Spill Prevention Account (OSPA) – During the 2015-17 biennium oil train safety legislation was passed by the legislature and funded with a one-time transfer into the OSPA. As we move into the 2017-19 biennium, the OSPA is projected to be negative since only one-time funding was provided. Without a solution, the Spills Program will be unable to fully implement the legislation as planned and other core spills prevention, preparedness and response efforts will be diminished. We are advancing agency request legislation to provide a revenue solution.

Human resources

Our Human Resources Office acts as a strategic business partner to our environmental and administrative programs. We recruit great talent to achieve Ecology’s mission. We value engaged and successful employees, a diverse workforce, and a safe and healthy work environment.

Objectives

- Increase employee satisfaction and engagement.
- Increase the availability and use of workforce data and metrics in business planning and decision-making.
- Build workforce, succession, and leadership development plans that anticipate future business needs.

Business technology and information management

Ecology’s Information Technology Services Office is responsible for protecting, preserving, enhancing, and transforming our business processes and technology solutions, in support of the agency’s data-driven decision-making. We operate in a collaborative, transparent, and nimble fashion with our environmental and administrative program partners. We provide timely, high quality and partner-centric technical support services.

Objectives

- Consolidate and integrate common, agency-wide business processes and business technology solutions, including but not limited to financial management systems, web-based information and service delivery, enterprise content management, environmental tracking systems, application and infrastructure portfolio management.
- Preserve and protect Ecology’s data and information assets by proactively improving our security practices and technologies.
- Develop a strategy and implementation roadmap for leveraging secure, integrated, cloud-based technical services.
- Develop improved enterprise data management, business analytics, and reporting capabilities, especially the increased provision of data accessible to the public.

- Develop and provide technical solutions that support an increasingly collaborative and mobile workforce.
- Develop and implement improved technical infrastructure services that provide high-speed access to data and information.

Managing Ecology records

Thoughtful and systematic management occurs throughout the life cycle of records and information. Our records management strategy addresses the entire life cycle of records, from creation, through their active phases, and to completion.

Objectives

- Develop and maintain electronic content management systems so Ecology meets statutory requirements, public expectations, and agency business needs. Provide timely responses to public records requests and ensure Ecology's records are secure.
- Manage an email vault storage system for collecting all agency email content into a unified environment to centralize enterprise search capacity and improves efficiency.

Risk management

Ecology evaluates risk on an ongoing basis. Feedback from our Executive Management Team and environmental programs is incorporated in our risk planning to ensure alignment with Ecology's mission and current business activities.

Objectives

- Develop an enterprise risk management policy, identifying areas of risk and mitigation measures.
- Update and exercise Ecology's Continuity of Operations Plan (COOP) on an annual basis, so that core services can be resumed efficiently following a disaster or emergency.

Operation support services

Efficient, well-maintained, and sustainable operations help us conduct our work to protect, preserve, and enhance the environment for current and future generations.

Objectives

- Maintain headquarters, regional, and field offices that support staff in meeting current business.
- Monitor environmental performance of facilities and engage staff in targeted improvements that contribute to the sustainability of our operations.
- Deliver shared services (for example, fleet operations, surplus disposal, and mail) in an efficient and sustainable manner.

Strategic planning, performance management, and continuous improvement

Ecology embraces continuous improvement and organizational excellence. Together, our environmental and administrative programs are dedicated to and support a single and unifying mission: to protect, preserve, and enhance Washington's environment for current and future generations.

Our goal is to continuously improve core services and evaluate progress toward our goals and objectives.

At Ecology, four integrated systems guide improving our performance:

1. Understanding and working with our customers

- Public involvement is part of everything we do. We continuously seek out, welcome, and use feedback to improve how we deliver services to the people of Washington.
- Every two years, we survey our permitted and inspected customers about their experiences with Ecology. This helps us identify areas where we can do better.

2. Program planning

- Environmental and administrative programs engage in robust planning discussions with their management teams, staff, and with the Ecology executive management team.
- Program plans integrate customer feedback, budget priorities, and resource availability.
- Each program identifies activities according to their appropriate planning horizon (that is, how far ahead is appropriate for a particular project or set of projects). Plans align with agency strategic priorities.

3. Budget review and development

- Working with OFM, Ecology budget managers track activities, allotments, and spending plans. This iterative process involves input from staff and from the Executive Management Team. Our two-year and supplemental budgets provide specific direction and show how Ecology manages and uses our financial resources to invest in environmental activities.

4. Employee engagement and feedback

- Ecology supports a professional and dedicated workforce.
- The annual survey of state employees, with additional questions targeting Ecology employees, provides information to agency leaders regarding areas for additional focus.
- We believe that building a culture of inclusion and collaboration where employees have opportunity grow in their careers and contribute to Ecology goals and priorities is an ongoing and worthy effort.
- We regularly seek opportunities for staff to engage in meaningful dialog regarding our performance and priorities.
- We believe in and foster a culture of continuous improvement.

Strategic planning and performance management

Through our four strategic priorities:

1. Reduce and Prepare for Climate Impacts
2. Prevent and Reduce Toxic Threats
3. Deliver Integrated Water Solutions
4. Protect and Restore Puget Sound

We are focusing our efforts on improving performance to achieve planned results. Our performance management systems include regular and evaluation by programs of their progress toward goals.

In addition to progress around specific program activities, we evaluate and discuss progress toward meeting budget, customer satisfaction, permit timeliness goals, and employee engagement goals.

- Staff in the programs track progress and provide regular reports on data trends to program planners who provide regular updates to program management teams.
- Ecology program management teams share within programs and between programs, bringing regular discussion to the Ecology executive management team.
- Regional management teams coordinate multi-program projects and communications for the Southwest, Northwest, Central, and Eastern Regional Offices.
- Quarterly all-staff meetings, with regional staff participating via video conference, provide regular updates on Ecology legislative priorities, budget development, and high profile projects.

The planning process at Ecology

Washington budgets on a two-year cycle, beginning July 1 of odd numbered years. During the spring and summer of 2016, we planned for and developed Ecology's 2017-2019 biennial budget; this plan supports that budget. In December 2016, the Governor will propose a new budget.

Even years: Agency strategic planning and biennial budget preparation

Odd years: Program planning and performance measure updates

Program planning helps anticipate and plan for future needs within each program and across the agency. The format and content of the program plans are at the discretion of the program manager.

In 2015 programs developed alignment maps as part of this process. The alignment maps show areas of focus and provide a tool for coordinating projects.

Guiding principles

This strategic plan describes the objectives, activities, and actions that support Ecology goals through commitment to four strategic priorities.

We collect a great deal of data to inform our strategic decisions. One purpose of strategic planning is to look ahead, ensuring coordination within Ecology and identifying key areas for new efforts. In addition, the strategic planning process connects and aligns projects and staff work with Ecology priorities.

Creating this strategic plan

Strategic planning is a continuous and ongoing process.

Over the past two years, numerous individuals and organizations have met with Ecology leadership in formal and informal settings to discuss specific environmental issues and concerns. We routinely work with tribes and hear from a diverse array of stakeholders, including: the Washington Environmental Priorities Coalition, (which includes the Nature Conservancy, the Center for Environmental Policy, Washington Environmental Council, Washington Toxics Coalition, the League of Conservation Voters, and Futurewise); an Agriculture and Water Quality Advisory Committee; The Model Toxics Control Act (MTCA) Stakeholder Group, which includes the Washington Environmental Council, cities, counties, ports and businesses; the Water Resources Advisory Committee, and the Water Quality Partnership.

We believe thoughtful dialog helps foster mutual understanding and shapes our strategic thinking, leading ultimately to better outcomes for Washington.

Armed with an understanding of current demand and projected future needs, our Executive Management Team met in December 2015 to share information, review the agency strategic

priorities, and identify key objectives within those strategic priorities. Over the next four months, Ecology's environmental program managers refined those objectives.

This Plan builds on two additional agency-wide efforts. Throughout 2015, Ecology environmental and administrative programs developed "alignment maps" through a process of dialog and engagement. Each program engaged staff and created a process tailored to its needs. This work will continue to emphasize and reinforce concepts around linking, building, leveraging, and aligning efforts to reach our common goal.

In addition, during 2015, we held a series of multi-program discussions addressing strategic priority topics of Preventing and Reducing Toxic Threats and Protecting and Restoring Puget Sound. All ten environmental programs were represented and Ecology regional staff participated via video conference. Participants included technical experts, policy leads, budget staff, communication managers, IT staff, permit writers, and inspectors. A number of themes emerged, including enhancing collaboration and sharing data across programs, and building partnerships outside Ecology. These meetings helped us inform one another and provided an opportunity to discuss how we can improve effectiveness and collaboration.

The work we do, from measuring stream flows and preparing for climate impacts to responding to oil train derailments, is connected throughout the organization by our commitment to performing our work in a professional and respectful manner. Our front line staff interact with the people of Washington, providing permits, and during inspections, providing technical assistance. Ecology scientists collect and analyze data, and our technical leads, supervisors and managers coordinate multiple projects, working closely with our IT staff. We manage grant programs that support vital infrastructure projects that treat stormwater, clean up contamination, and ensure healthy air and water.

Lean at Ecology is about turning our attention to the results and goals we work toward, in a way that is effective, transparent, and accountable to the people of Washington. Lean at Ecology is about listening to our customers – the people of Washington – and continually improving the services we provide.

Our performance management system is designed to meet the needs of the people of Washington. Historically agency performance measures have tracked budgeting requirements. As we incorporate Lean practices, our performance management system is evolving to reflect our improvements.

This strategic plan provides a broad view of the work in front of us, identifying key objectives and efforts. It is based on authority of our director in response to the directive from Governor Inslee. It is responsive to the people of Washington. It is flexible and anticipates adaption as we first chart then travel the road ahead.

Where the budget is the detailed map, the strategic plan is the wide view showing the terrain ahead.