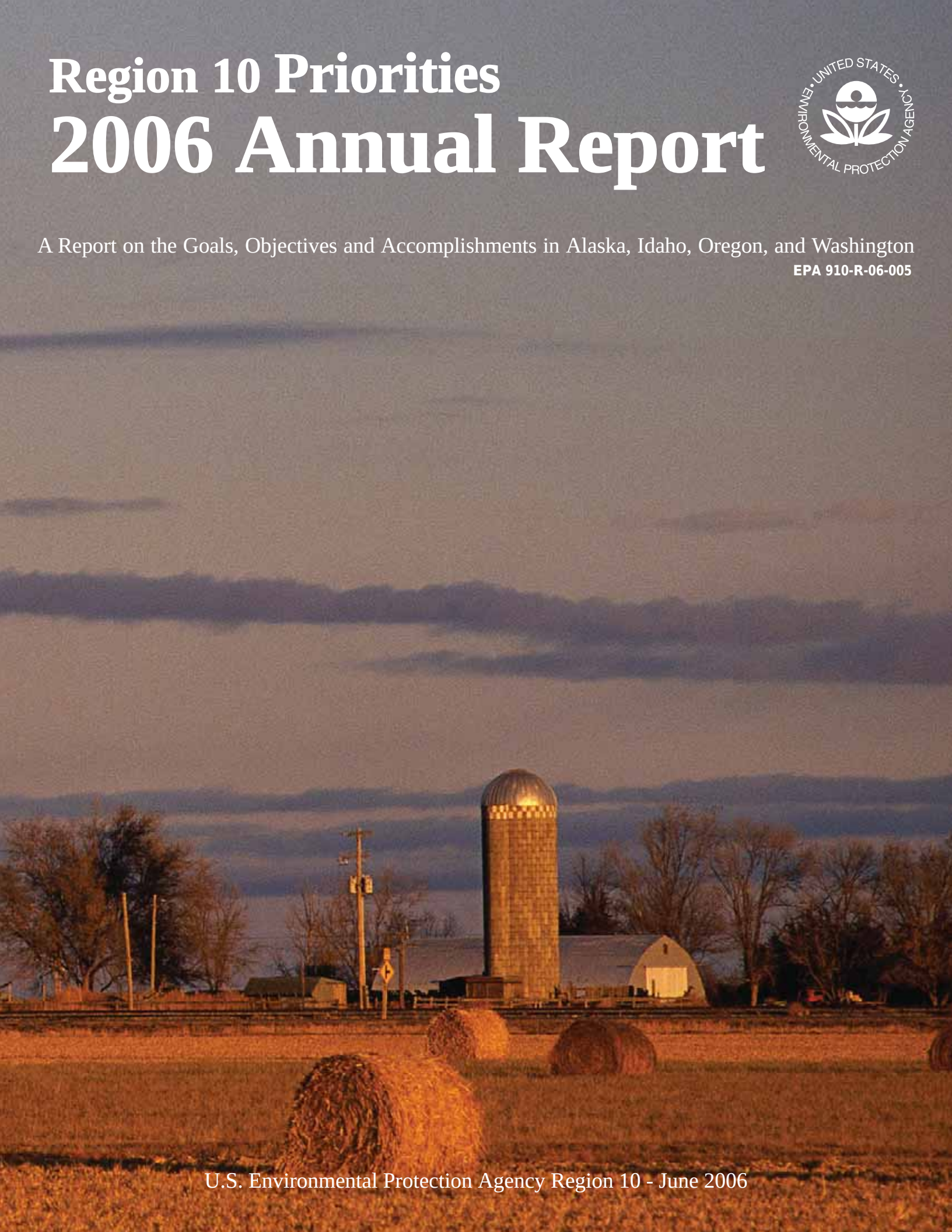
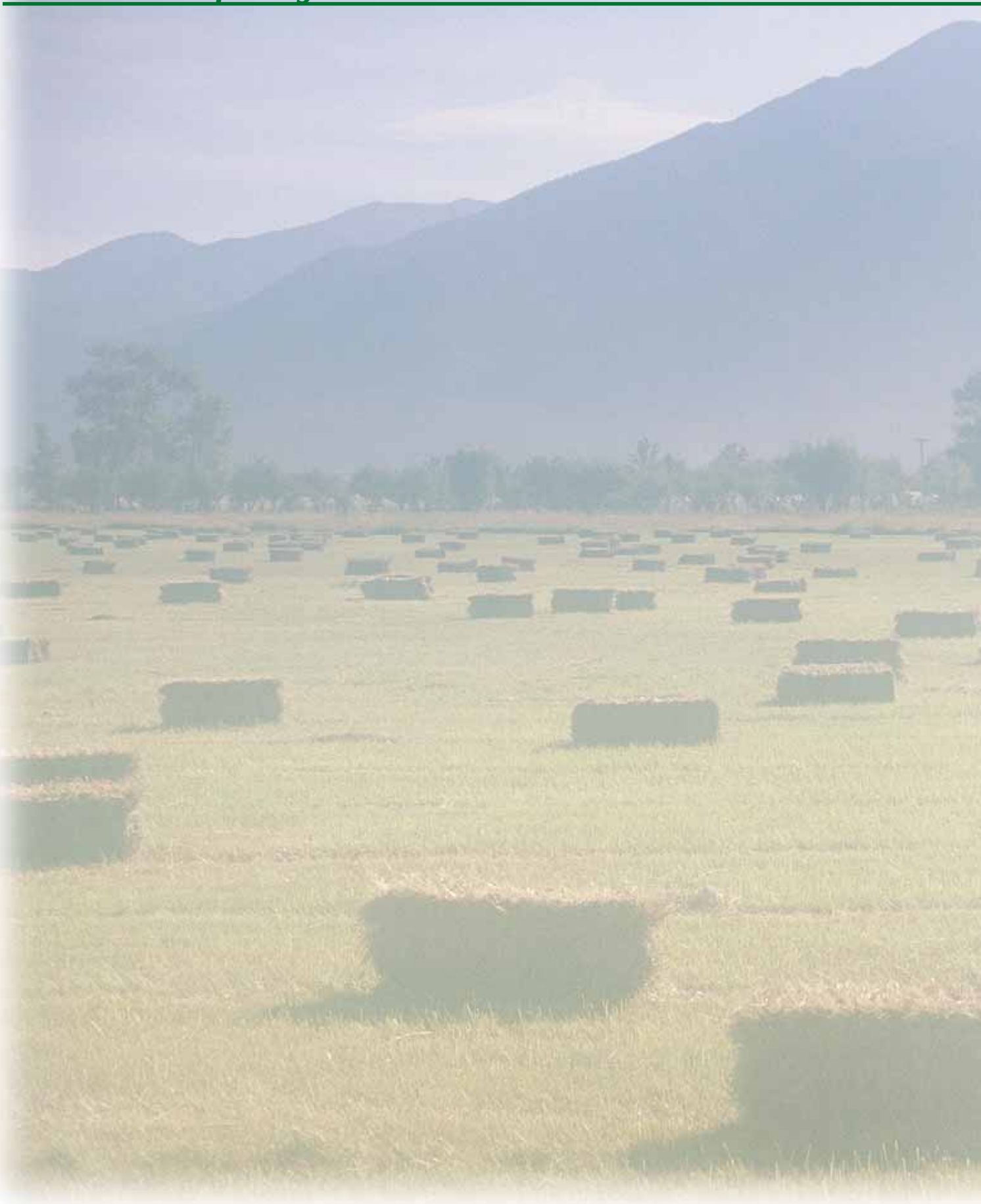
Region 10 Priorities
2006 Annual Report

A Report on the Goals, Objectives and Accomplishments in Alaska, Idaho, Oregon, and Washington

EPA 910-R-06-005



U.S. Environmental Protection Agency Region 10 - June 2006



A Message to the Residents of Alaska, Idaho, Oregon, and Washington

For 35 years, EPA's mission has been, "To protect public health and the environment." Since the creation of EPA on December 2, 1970, much has been accomplished. As Administrator Johnson has said, "Over our 35 years, EPA has not just changed the way our environment looks, EPA has changed the way we look at our environment."

While I only arrived to this position in August, 2005, I am proud of the Region and the accomplishments we have made over the last year. It is also incredibly exciting to participate in the work that is currently underway, and that which lies ahead. The issues are enormously challenging, resources often in short supply, and the deadlines frequently impossible to comprehend.

President Bush and Administrator Johnson have directed us to accelerate the pace of environmental protection while maintaining the Nation's economic competitiveness. It is also clear that we need to be results oriented and accountable to the public. The Region is well-positioned to fulfill this charge with risk-sharing, collaboration, and innovation. EPA is forging new State, federal, and Tribal partnerships to pool resources, talents, and dollars. It is through these partnerships that we can achieve environmental outcomes not otherwise attainable.

This annual report is a description of our current environmental priorities for the coming year. I hope you find it illuminating.

L. Michael Bogert,
Regional Administrator
EPA Region 10

Introduction

This document describes the seven environmental priorities established by EPA Region 10 for its work in the Pacific Northwest. It outlines our reasons for their selection, what we hope to accomplish, what we plan to do, and how we will measure our progress.

It would be fair to ask why we have bothered to establish priorities at all.

Priorities are necessary. The demands of modern life require all of us to set priorities of one sort or another in our everyday lives. EPA is no different. The challenges we regularly face in protecting human health and the environment and in providing assistance and value to the public we serve, frequently outstrip our capacity to respond with a satisfying level of quality or timeliness. At their core, the priorities we select are the product of increasingly hard choices calculated to deliver the greatest positive difference in the safety and quality of the environment in which our citizens live.

Priorities are provocative. For instance, should one always choose protecting human health over restoring and maintaining the environment? Does one opt for protecting more people who are moderately at risk or fewer people exposed to more profound hazards? We are rarely confronted with issues sharply cast in black or white, and we reject the impulse to make 'either/or' choices. We are responsible for both respecting the abundant complexity of the issues spread out before us and focusing on those where we can and must make the greatest difference.

Priorities are useful. Priorities not only naturally mass resources to get work done, they attract the sort of notice that opens doors to new sources of capacity and capability. In committing to sustained and active purpose, priorities can also protect an organization against the whipsawing effects that volatile, short-term issues and events can induce. Finally, priorities affect the way organizations perceive and exploit opportunity by viewing the wide field of information through a more focused lens.

Background

In 2002, Region 10 established six regional priorities. Since that time, we have made significant progress in achieving the various objectives we originally set out (see "Region 10 Priorities 2004 Annual Report"- EPA 910-R-04-007). We also fulfilled our commitment to periodically re-visit our priorities when, in 2005, we evaluated whether they were still relevant, on target, or substantially complete, and identified new and emerging areas of concern. During this process, we decided to remove "Clean-Up of Contaminated Sites" from the list of Regional priorities. This priority had served its purpose in bringing greater focus and coordination to our ongoing cleanup work. At this same time, we augmented our remaining priorities by identifying Puget Sound-Hood Canal, Spokane River Basin, and Grants Management as areas deserving of special emphasis.

The Region's priorities share a number of attributes in common. It is no coincidence that most of our priorities are closely aligned with those of our state, local, and Tribal partners. We recognize that the most effective way to achieve our goals and objectives is through interagency collaboration. Our priorities emphasize environmental results over process. They are multi-dimensional in character, involving restoration, preservation, and prevention efforts. The geographic reach of our priorities is broad, often spanning interstate and international boundaries. And they invariably entail complex technical and policy issues, requiring innovative problem-solving and coordinated multi-media approaches. In all, our priorities meet head-on many of the most difficult, high-profile environmental issues confronting the citizens of the Pacific Northwest.

Region 10 priorities. . .

- **Columbia River Basin -** The Columbia River Basin provides great environmental, economic, and social benefit to many public and private interests. However, hydro-electric power generation, agriculture, and other human activities have disrupted natural processes and impaired water quality in some areas to the point where human health is at risk and historic salmon stocks are threatened or extinct. This priority provides a sharper focus on reducing toxics contamination in the Columbia River Basin by enhancements in information sharing and leveraging resources in existing programs and initiatives with our many partners.

- **Tribal Environmental Health -** Members of Pacific Northwest and Alaska Tribes are beset by some of the worst environmental conditions in the Region. Solid waste disposal, sanitation, and polluted drinking and surface water top the list of problems. Complex intergovernmental relations, rural or isolated communities, and limited capacity all hinder an effective response. This priority focuses on bolstering the capabilities and capacities of Tribal governments to address environmental issues by providing active technical, programmatic, and financial assistance. The priority also guides the Region's direct delivery of environmental programs when a Tribe lacks the capability or authority.

- **Oil & Gas in Alaska and Mining in Region 10 –** The Region is rich in natural resources and their development is a high priority for states, Tribes, and the Nation. Alaska boasts vast oil, gas and mineral resources. Mining is an important industry in our other states, primarily Idaho. Environmental degradation, regulatory requirements, transportation issues, and tribal trust responsibilities are only a few of the elements that we must address in fulfilling our mission. The goal of this priority is to maximize protection of public health and the environment while expediting environmental

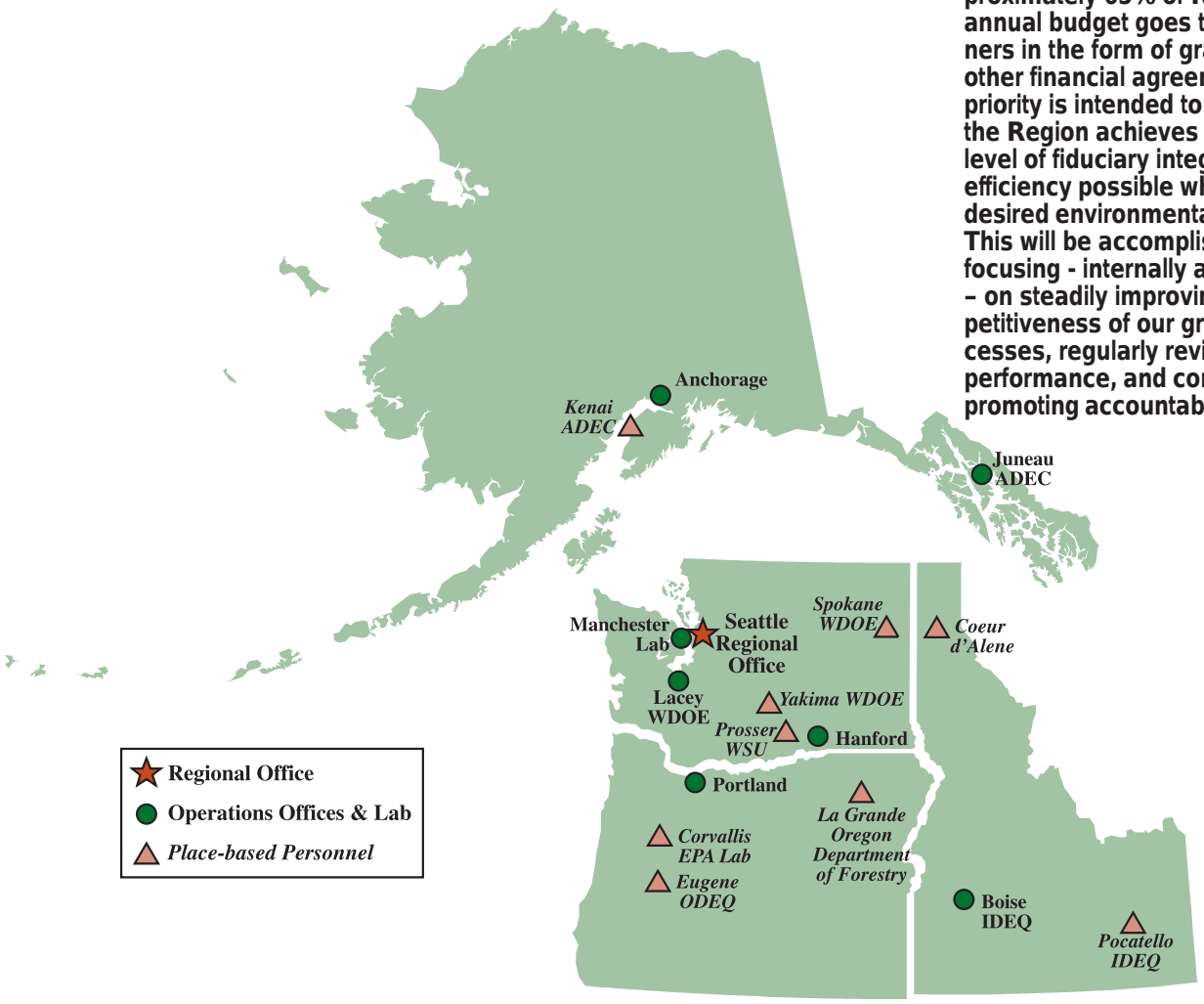
decision-making using a proactive, interdisciplinary, and coordinated approach with our state, Tribal, and federal partners.

- **Diesel Emissions –** Diesel engines power much of the economy of the Pacific Northwest, from marine and land-based transportation to agricultural production. However, diesel emissions have been associated with significant adverse health effects, particularly in urban environments. This priority is aimed at accelerating diesel emissions reductions to yield improvements in public health using a voluntary, market-based approach. A wide array of initiatives will be implemented to achieve this goal, including: anti-idling programs, clean exhaust technologies, engine replacement, and alternative fuels.

- **Coeur d'Alene and Spokane River Basins –** The Coeur d'Alene and Spokane River Basins in northern Idaho and eastern Washington are home to diverse ecosystems and natural resource and tourist industries. However, more than 100 years of mining activities discharged nearly 100 million tons of pollutants into the air, water, and land. The resultant contamination over a vast landscape continues to pose threats to human health and the environment. A comprehensive, multi-disciplinary, and collaborative approach, employing a carefully crafted blend of voluntary initiatives and regulatory tools, is needed to achieve short- and long-range progress in restoring these Basins to a healthful, productive state.

- **The Puget Sound Basin -** The fjords, archipelagos and river basins of Puget Sound, Hood Canal and the Northwest Straits, are home to an abundant number of aquatic species, remarkable recreational pursuits, and diverse commercial interests. The level and effect of current development, coupled with robust projected population growth, exert enormous pressures on the natural processes and biological integrity of resources in the Basin, and its economic productivity. The goal of this priority is to renew and enhance the Region's collaborative efforts with state, Tribal, local, and federal agencies on restoring and protecting Puget Sound.

- **Grants Management -** The American people expect that their government is a responsible steward of the mission, authorities, and enabling resources that have been entrusted to its care. Approximately 65% of Region 10's annual budget goes to our partners in the form of grants and other financial agreements. This priority is intended to ensure that the Region achieves the highest level of fiduciary integrity and efficiency possible while yielding desired environmental outcomes. This will be accomplished by focusing - internally and externally – on steadily improving the competitiveness of our grant processes, regularly reviewing performance, and continuously promoting accountability.



The Columbia River Basin (Washington, Oregon, and Idaho)

Description of the Challenge…

Why is it a priority?

At 1,214 miles in length, boasting a 260,000 square mile drainage basin, the Columbia River spans portions of Oregon, Washington, Idaho, Wyoming, Nevada, Utah, Montana, and a substantial portion of British Columbia. The Columbia River Basin is comprised of ecosystems that are home to a diverse array of biologically significant plants and animals. The Basin is also a dynamic economic engine driving many industries vital to the Pacific Northwest, including sport and commercial fisheries, agriculture, transportation, recreation, and, with 55 hydropower dams, electrical power generation.

Columbia River salmon and steelhead runs—once the largest on earth—are now a fraction of their original size. EPA studies and state monitoring programs have found significant levels of toxins in fish and the waters they inhabit, including dichloro-diphenyl-trichloroethane (DDT), PCBs, and dieldrin. EPA and its partners adopted a three-dimensional approach to the problem of toxins in the Columbia River system, emphasizing remediation, prevention, and protection efforts. Oregon, Washington, Idaho, Columbia Basin tribal governments, the Lower Columbia River Estuary Partnership, local governments, citizen groups, industry, and other federal agencies are actively engaged in efforts to remove contaminated sediments, bring back native anadromous fish, restore water quality, and preserve, protect, and restore habitat, as illustrated below:

- Working locally with agriculture producers to reduce pesticide use through the Pesticide Stewardship Partnership,
- Providing an anonymous opportunity to collect banned toxics and pesticides,
- Implementing total maximum daily loads through sediment reductions and riparian restoration,
- Cleaning up the Portland Harbor Superfund site and PCB contamination in the Columbia River at Bradford Island,
- Restoring wetlands and habitats at Mirror Lake and Ridgefield through the Lower Columbia River Estuary Partnership with Targeted Watershed Program funding.

Goals and Objectives…

What are the desired long-term outcomes?

Our goal is to protect public health and the environment by:

- Reducing toxic loads in the Columbia River Basin,
- Reducing toxics in fish that people eat.

Strategy and approach…

How do we anticipate achieving our desired goals and objectives?

EPA, state and Tribal partners, and the Lower Columbia River Estuary Partnership have launched a Columbia River toxics strategy to identify and clean up contaminated sediments, restore critical wetlands, and reduce toxics in water, land, and fish. Under this strategy, EPA, states, and Tribes are systematically expanding key actions in the Columbia River Basin based on available resources, such as fish, water, and sediment monitoring; pesticide stewardship partnerships; targeted pesticide/toxic collections; precision agriculture; and related activities. The National Estuary Program also plays a key role in addressing toxics and restoration of critical wetlands in the Lower Columbia River estuary.

Previous accomplishments include:

- A data gathering effort in Lake Roosevelt above Grand Coulee Dam was completed in the Spring and Fall of 2005. This effort included collection and analysis of over 400 sediment samples and 200 fish composites. The fish tissue work was accomplished through a joint effort with the Spokane Tribe of Indians, the Confederated Tribes of the Colville Indian Reservation, the Washington Department of Ecology, the U.S. Geological Survey and EPA. Results from this sampling are expected in September 2006,
- Fifteen thousand cubic yards of pure tar were removed from the Willamette River at the former Gasco site. This site, located between the St. Johns and Railroad bridges on the southwest side of the Willamette River, was a former manufactured gas plant which deposited wastes into upland tar ponds,
- A collaborative effort was initiated involving the states of Oregon, Washington and Idaho; Columbia River Tribes, and others to address toxics reduction in the Columbia River Basin. This toxics reduction effort will initially focus on the area below Grand Coulee Dam. The Lower Columbia River Estuary Partnership will lead the toxics reduction efforts below Bonneville Dam. EPA will take the lead for the area from Bonneville Dam to Grand Coulee Dam including the Snake River and major tributaries.

The following actions are identified for 2005 – 2008:
In the next three years, we anticipate the following achievements:

- Identify contaminants of concern,
- Share information on toxics monitoring, and toxics reduction actions, and establish baseline data to measure improvements,
- Establish new monitoring efforts to fill data gaps for understanding toxics in water, fish, and sediment,

- Identify and implement agricultural best management actions including pesticide stewardship partnerships, erosion reduction and precision agriculture,
- Work with industry on demonstration projects to design, develop and implement stormwater management control,
- Continue to support and coordinate priority activities identified by EPA in 2003:
  - Decommission PCB-laden electric transformers,
  - Study contaminated sediment and risk above the Grand Coulee Dam,
  - Oversee clean-up at the Hanford site,
  - Develop state water clean-up plans (Total Maximum Daily Loads (TMDLs)) for water bodies in the Basin,
  - Restore habitat in the lower Columbia River estuary,
  - Support salmon recovery in the Basin.

Who else is working in this area?

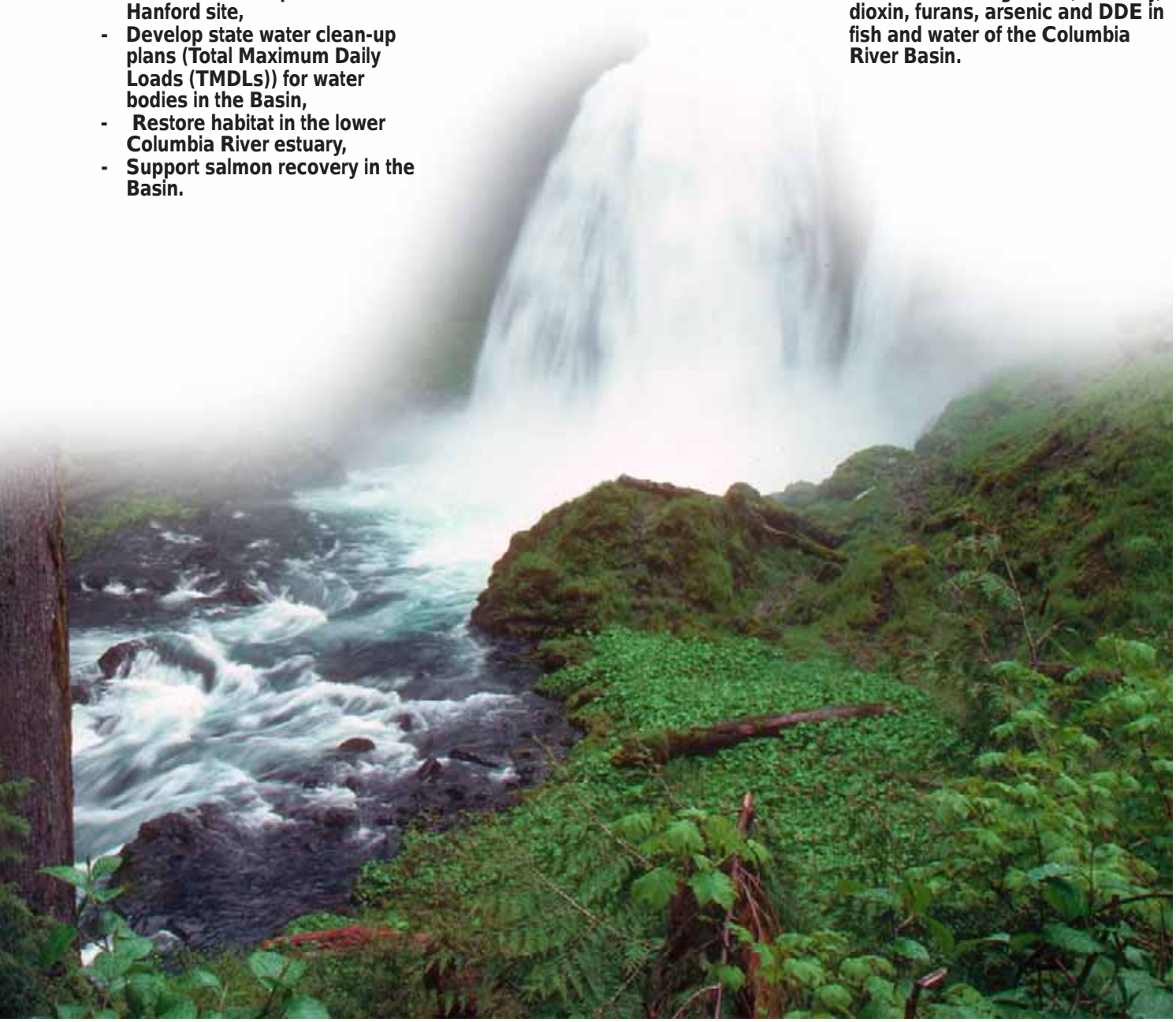
To engage others, EPA has divided the river into three geographic areas and is meeting with partners to reach agreement on priority actions. federal, state, local, and Tribal governments and other partners have all indicated a willingness to develop common goals, identify and specify roles and responsibilities, and develop a joint toxics reductions workplan for each geographic area.

Measures of Success…

How will we know we have achieved success when we get there?

We have identified the following measures of success for our toxics reductions efforts. We will track:

- The clean up of contaminated sediments in the Lower Willamette and Columbia River,
- The protection, restoration, and enhancement of wetland and upland habitat in the Columbia River Basin,
- The reduction of contaminants of concern including PCBs, mercury, dioxin, furans, arsenic and DDE in fish and water of the Columbia River Basin.



Tribal Environmental Protection

Description of the Challenge…
Why is it a priority?

There are 271 federally recognized Tribal governments in the Pacific Northwest and Alaska. Region 10 serves more than 47% of the total number of Tribes within the United States. The environmental health challenges facing Tribes in Region 10 are as complex and unique as the Tribes themselves.

For the 229 Alaska Native Villages, health and resource issues are basic and severe. Solid waste disposal, sanitation, and contaminated surface waters lead the list of problems. Beyond these immediate threats to human health, climate change and pollution jeopardize the availability and safety of subsistence foods so critical to both the health and culture of Tribal members. The limited jurisdictional authority and scarce economic resources of most Tribal governments in Alaska, combined with the logistical challenges posed by climate and geography, complicates the task of finding and applying appropriate solutions to these pressing issues.

For the 42 Tribes with reservation and trust land within the borders of Idaho, Oregon and Washington, a stronger legal and economic base has allowed some of the Tribal governments to develop effective environmental protection programs. However, much work remains to address ongoing threats to health and natural resources. Solid and hazardous waste, unsafe drinking water, habitat and contamination threats to fish and seafood, and air quality concerns lead the list of Pacific Northwest concerns. As in Alaska, finding appropriate approaches and leveraging available resources are critical elements for long-term success.

Goals and Objectives…
What are the desired long-term outcomes?

- Our goal in this priority is to ensure that the natural resources on which tribal communities rely for their physical, cultural and economic well-being are fully protected, and
- Respect and support the sovereignty of Tribes as they develop and operate their own environmental programs, or choose to partner with other entities to manage natural resources.

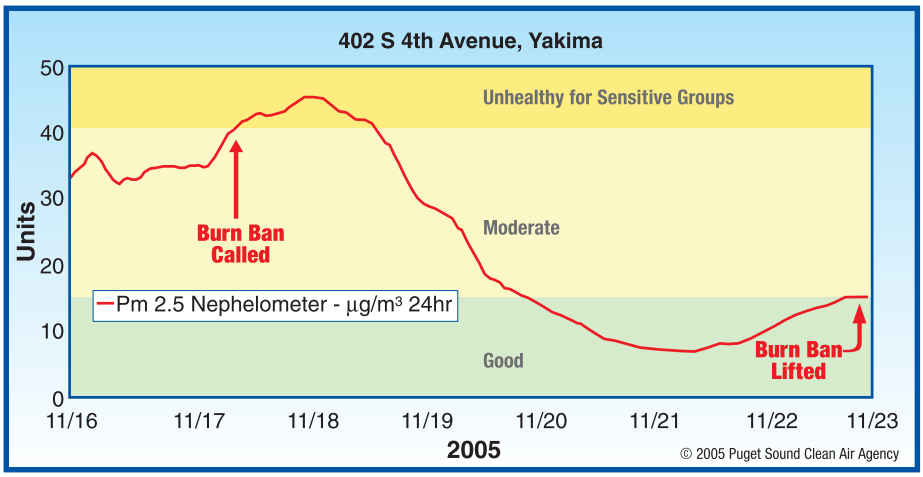
Strategy and Approach…
How do we anticipate achieving our desired goals and objectives?

Recognizing its government-to-government relationship and its trust responsibility to each of these 271 Tribes, EPA Region 10 addresses environmental protection needs through a number of complementary routes. Where necessary, the Region exercises federal authority directly over businesses operating in Indian Country. At the same time, it supports Tribes' growing capacity to implement their own programs. Finally, the Region also fosters multi-partner collaborative approaches where appropriate.

Current projects illustrating the use of all three approaches include:

- The Federal Air Rules for Reservations, which became effective in June of 2005, put into place for the first time federally-enforceable air quality regulations applicable to 39 reservations in Idaho, Oregon and Washington. This direct implementation effort involves significant partnering with Northwest Tribes, who participate in education and outreach, monitoring, and enforcement. In these roles, partner Tribes also build capacity to assume the parts of an air quality management program they choose,
- Region 10 is developing technical tools, such as fish consumption risk evaluators and watershed maps with highlighted areas of Tribal interest, to assist Tribes in either proposing approvable water quality standards or more effectively advocating for stronger measures protecting aquatic resources,

Yakama Reservation Burn Ban Call



Because of an air stagnation and build up of pollutants, EPA in coordination with Yakima Regional Clean Air Authority both issued a burn ban for the area on November 17, 2005. Actions were taken to reduce emissions and air quality began to improve. The burn ban was lifted on November 23, 2005.

- The Region 10 Integrated Waste Management Strategy combines the efforts of EPA, Tribes, and other federal agencies such as the Bureau of Indian Affairs, Indian Health Service, and the Department Housing and Urban Development. This coordinated approach promises notable results in closing and cleaning up open dumps, increasing waste minimization and pollution prevention, and decreasing the health hazards from improperly managed solid and hazardous waste (toxics inhalation, ground water contamination, and contamination of subsistence foods),
- Region 10 is issuing inspector credentials to Tribal staff trained by EPA to enforce a variety of the laws the Agency implements within Indian Country. Having Tribal staff conducting education and enforcement activities within their own jurisdictions not only supports Tribal sovereignty and builds Tribal capacity, but also more effectively educates tribal communities and increases compliance levels.

Foothills Disposal Site, March 2005

Same site along Nooksack River, September 2005

Who else is working in this area?

EPA Region 10's primary partners in the protection of Tribal health and resources are of course the 271 Tribal governments themselves. In addition to formal government-to-government consultation, we engage in joint planning through workgroups, Regional Tribal Operations Committee meetings, the annual Tribal Leaders Summit, and discussions held in conjunction with conferences and trainings. We also share information about work that we do with other partners.

EPA and Tribes also work cooperatively with numerous organizations to create and implement workable approaches to environmental protection. A variety of other federal agencies share trust responsibility with EPA, such as the Bureau of Indian Affairs, Indian Health Service, Department of Housing and Urban Development, Army Corp of Engineers, and Forest Service. In many instances, state and local governments play an important role in managing resources of interest to Tribes. Finally, non-governmental organizations, such as watershed councils and community redevelopment associations contribute to planning and management efforts. The more EPA Region 10 is able to identify and coordinate with all appropriate partners to collaboratively pursue solutions to shared environmental problems, the more effective each partner's contributions become. While each partner plays a valuable role, the Region remains mindful that the most appropriate advocates for Tribal interests are the Tribal governments themselves.

Measures of Success…

How will we know we have achieved success?

- All Tribal governments will have assessed and prioritized their environmental concerns, and will have developed programs or partnerships to address them,
- Air quality outdoors and within Tribal homes will be improved, reducing the incidence of respiratory illness within tribal communities,
- Traditional resources and subsistence foods will remain available to and be safe for consumption by Tribal members,
- All homes within Tribal communities will have access to safe drinking water,
- Baseline data on contaminants in traditional and subsistence foods will be complete, and used to set appropriate standards and measure progress in decreasing concentrations of known pollutants,
- All solid waste disposal within Tribal communities will be handled in a safe and legal manner through integrated waste management plans that emphasize prevention.
- Sub-standard sanitation methods in Alaska Native Villages will have been replaced with safe, appropriate technologies, reducing illness and water contamination.

Oil and Gas in Alaska and Mining in Region 10

Description of the Challenge…

Why is it a priority?

Extraction of oil, gas, and mineral resources in Alaska and development of mineral resources in the Pacific Northwest are important economic activities in Region 10 and the Nation as part of the National Energy Plan. Changing technologies, coupled with market value, have increased exploration, extraction, production and processing. As projects proceed from identification through development, EPA is responsible for the implementation of regulatory and permit requirements to protect public and environmental health and to fulfill the federal government's Tribal trust responsibility.

EPA Region 10's task is to keep pace with the accelerating and expanding efforts of industry and its regulatory partners. The Agency is responsible for reviewing proposed projects, issuing permits, and enforcing compliance with environmental law, policy, and executive orders.
Large projects pose unique technical and regulatory challenges for federal and state agencies and a necessity to coordinate our actions. Major projects typically include large areas of land disturbance, loss of habitat, changes in water quality and quantity, potential air quality concerns and a variety of secondary and tertiary impacts, including the need for significant new infrastructure to support proposed activities. Additionally, for mining projects where financial assurance is inadequate or companies go bankrupt, remediating impacts is left to state and federal agencies, including EPA.

Goals and Objectives…

What are the desired long-term outcomes?

Our goal is to maximize protection of public health and the environment while expediting environmental decision making through an interdisciplinary approach and coordination with other state, federal and Tribal partners. The outcome of this goal will be minimized habitat disturbance, protected water and air resources, and preserved subsistence resources.

Strategy and Approach…

How do we anticipate achieving our desired goals and objectives?

Region 10 has a cadre of staff with specialized oil, gas, and mining expertise, along with the responsibility and authority to fulfill EPA obligations. We will complete the review of environmental impact statements, prepare comprehensive NEPA documents, and exercise regulatory and permit obligations in a timely manner. Communication, coordination, and understanding of regulatory requirements will be enhanced by identifying a single point of contact for each major project and engaging with industry, Tribes, other federal and state agencies at the earliest possible opportunity. We will also coordinate permit and NEPA schedules to the extent possible, identify and resolve issues early in the process with a single voice, and make consistent decisions.

Accomplishments for 2005 include:

- Inspection of 53 facilities for compliance with federal air, wastewater and UIC permits and with spill/facility response plans, including necessary follow-up enforcement actions,
- Continued development of offshore oil and gas permits for wastewater management and groundwater protection, and determination of appropriate air pollution control technology for facilities. Developed and issued NPDES permits for management and discharge of wastewater for mining operations in Alaska and Idaho,
- Completed NEPA and permitting training for Tribal governments and communities to support capacity development and participation in environmental decision-making,

EPA and other concerned parties are working to ensure the coexistence of Alaska's abundant wildlife with oil and gas extraction efforts.

- Completed review and comment on federal agency NEPA documents for onshore and offshore leasing, coastal management and for sequestration of carbon dioxide by underground injection. Reviewed and commented on federal agency NEPA documents for new mining operations in Alaska, Idaho, and Washington,
- Updated the Region 10 mining strategy that describes EPA's regulatory program obligations over the next three years and identifies actions to support meeting these obligations and guiding mining program improvements. A draft of the updated strategy was shared with the state and federal agencies, Tribes, industry, and organizations that we work with on mining issues and EPA met with many of these groups to discuss the strategy.

Who else is working in this area?

The Oil and Gas Sector in Alaska and Regional Mining Sector work with every major EPA program, multiple state and federal agencies, Tribes, industry, and other stakeholders. The following is a brief description of how these groups relate.

Region 10 Offices: Air, water, waste, ecosystems and Tribal programs coordinate and leverage their respective efforts to maximize implementation of programs and environmental decision-making.

Federal and State Agency partnerships: EPA staff and programs work closely with other federal and state resource management and environmental agencies involved in oil and gas and mining. Coordinating with other agencies enhances efforts, leverages resources and streamlines decision-making processes where appropriate.

Tribal governments: We work with Tribes to understand their issues and concerns and collect traditional ecological knowledge for use in EPA decision-making. Through this process and the investment in capacity building it represents, Tribal governments will have greater opportunity to participate in future environmental decisions.

Other stakeholders: Non-government organizations, industry and industry groups, and Regional Citizens Advisory Councils provide a unique opportunity to EPA to leverage knowledge and expertise to assist in Agency decisions.

Measures of Success…

How will we know we have achieved success?

- Effective and timely Agency actions including issuance of UIC, NPDES and air permits and EIS and 404 permit reviews,
- Meaningful consultation with Tribal governments,
- Enforcement of permit provisions and other Agency actions which minimize environmental damage,
- Environmental resources protected to the maximum extent of the law and environmental regulations,
- No unacceptable risk to human health and the environment,
- EPA efforts complement rather than duplicate those of other regulatory agencies.

Oil extraction in the fragile arctic conditions of Alaska's north slope presents unique challenges.

Diesel Emissions

Description of the Challenge…
Why is it a priority?

Diesel engines contribute to unhealthy levels of fine particles, ozone (or "smog") and air toxics. Fine particles are associated with increased risk of premature death, increased hospital admissions, increased respiratory symptoms such as asthma, and other adverse health effects. Long-term exposure to diesel exhaust may pose a lung cancer hazard to humans. Children are more susceptible to air pollution than healthy adults because their respiratory systems are still developing and they have a faster breathing rate. Recurrent childhood respiratory illness is a risk factor for increased susceptibility to lung disease later in life. The elderly and individuals with existing conditions are also susceptible to adverse health effects from air pollution.

Even though most of the Pacific Northwest meets the National Ambient Air Quality Standards (NAAQS), including standards for particulate matter, until recently there has been little evaluation on the residual risk from ambient air toxics even after attaining the NAAQS. Our National Air Toxics Assessments (NATA) of 1996 and 1999 indicate levels of concern for excess cancer risk from a number of ambient pollutants. Similar assessments by state and local agencies in Oregon and Washington indicated that projected cancer risk from diesel was much greater than for any other air toxic or combination of air toxics.

Goals and Objectives…
What are the desired long-term outcomes?

Our goal is to protect public health by ensuring the maintenance of the NAAQS and achieving our States' self-identified air toxics goals. Washington and Oregon have set goals of 1 to 10 in a million lifetime cancer risk as their goal for 2015.

Strategy and Approach…
How do we anticipate achieving our desired goals and objectives?

A variety of tools and processes will be used to advance cleaner diesel technologies and fuels in the Pacific Northwest. EPA supports the *National Clean Diesel Campaign (http://www.epa.gov/cleandiesel/)* that includes both voluntary and regulatory approaches.

Region 10 uses regional and local partnerships to motivate early action, share information, provide incentives, track progress, supply technical expertise and leverage outside resources. The primary vehicle for this effort is the West Coast Collaborative. In addition, the Federal Network for Sustainability, the Puget Sound/Georgia Basin Partnership, Clean Cities Coalitions (Puget Sound, Willamette/Columbia, Treasure Valley), State Performance Partnership Agreements and other regional/local collaborations will contribute to overall success.

Region 10 plans to use a "clean diesel" approach to reducing diesel emissions, which is regarded as the most cost-effective strategy available. It requires the use of a fuel with much lower sulfur contamination than is found in currently available highway fuel. This ultra-low sulfur diesel fuel provides some emission reduction benefit by itself but, more importantly, enables the installation of advanced exhaust after-treatment devices, even on existing in-use vehicles. This clean fuel-retrofit combination is effective in reducing the most harmful pollutants found in diesel exhaust by upwards of 95 percent. Bio-diesel, a fuel refined from vegetable oils and recycled animal fats, is also an environmentally attractive ultra-low sulfur diesel fuel. Typically blended with petroleum diesel because of cost and operational considerations, it can be used to complement other clean diesel technology.

One of the biggest challenges in addressing diesel particulate risk is EPA's limited regulatory authority over the primary contributors: on-road and non-road diesel powered vehicles. While clean diesel efforts have been promoted by the Puget Sound Clean Air Agency, the Oregon Department of Environmental Quality, and other state and local agencies throughout the region, the focus has been on voluntary efforts supported by incentives. Several notable successes have already been achieved, but widespread acceptance will require additional financial assistance, to make "clean diesel" a cultural expectation for fleet operators and the public.

Who else is working in this area?

West Coast Collaborative (www.westcoastcollaborative.org)

The main mechanism for both Regions 9 and 10 to achieve diesel emission reductions is through the West Coast Collaborative (Collaborative). Convened in April 2004, the Collaborative's vision is to build an ambitious partnership between leaders from federal, state, and local government, the private sector, and environmental groups in California, Oregon, Washington, Idaho, Arizona, Alaska, Hawaii, Nevada, Canada and Mexico committed to reducing diesel emissions along the West Coast. The Collaborative is part of the National Clean Diesel Campaign.

The Collaborative has focused on the following sectors:

- **Agriculture,**
- **Marine vessels and ports,**
- **Locomotive/rail,**
- **Construction,**
- **Trucking,**
- **Cleaner fuels, and**
- **School buses.**

The Collaborative will:

- **Raise public awareness of the need for diesel emission reductions and promote the many highly successful state, Tribal, local, and regional voluntary projects,**
- **Create a forum for information-sharing among diesel emissions reduction advocates,**
- **Implement regional projects, leverage funds from a variety of sources, achieve measurable emissions reductions, and create momentum for future diesel emissions mitigation efforts.**

Measures of Success…

How will we know we have achieved success?

- **We will 'touch' every legacy diesel engine with cleaner technologies by 2015 (except large marine and locomotive),**
- **Virtual elimination of idling on the interstate corridors by 2015,**
- **Truck Stop Electrification (TSE) of all spaces in Oregon, Idaho and Washington by 2015,**
- **Full implementation of the national Ultra Low Sulfur Diesel and Low Sulfur Diesel fuel requirements on or before mandated dates,**
- **Use of bio-diesel and other alternative fuels will increase every year,**
- **Amount of biofuel produced regionally/locally will increase,**
- **Amount of biofuel feedstock grown regionally/locally will increase,**
- **Number of retail sites will increase. This measure tracks alternative fueling sites, covering compressed natural gas (CNG), 85% ethanol (E85), liquefied petroleum.**

EPA grants help provide newer, cleaner schoolbuses for children like these from Purdy Elementary in Gig Harbor, Washington. Pictured are Purdy Elementary students, Peninsula School District Superintendent Jim Coolican, Puget Sound Clean Air Agency Director Dennis McLerran, U.S. Congressman Norm Dicks, Region 10 EPA official Tom Eaton, Purdy Elementary's Principal Jim Rudsit, and Annie Bell, who initiated the grant process.

Older schoolbuses can be a source of significant diesel emissions. Cooperative efforts from EPA and local partners can help replace older buses with cleaner ones.

The Coeur d'Alene-Spokane River Basin

Description of the Challenge…
Why is it a priority?

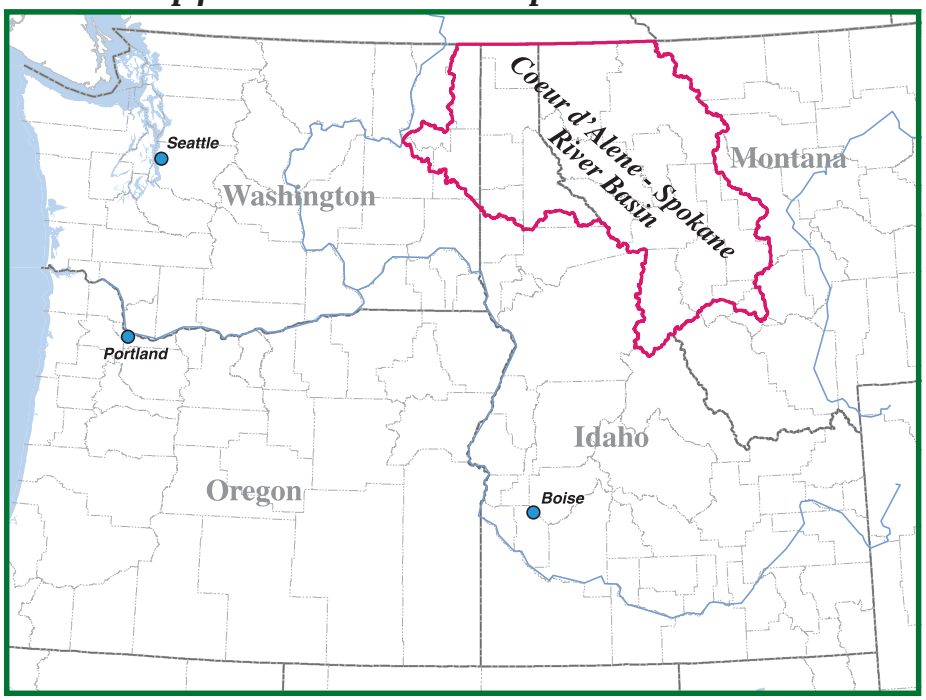
The Coeur d'Alene-Spokane River Basin is located in northern Idaho and eastern Washington. It has been severely impacted by more than 100 years of mining, logging, and nutrient enrichment activities from agriculture, urban development, and municipal waste-water treatment plants. Mining contamination has affected more than 166 river miles of the Coeur d'Alene River corridor, adjacent floodplains, downstream water bodies, tributaries and fill areas. Significant measurable risks currently exist to humans (e.g., children with blood lead levels above the national CDC standards) and the environment (e.g., major tributaries devoid of aquatic life, yearly die-off of migrating waterfowl, such as swans and ducks). The contaminants are primarily metals, and the affected media are soil, sediment, surface water, and groundwater.

Contamination in surface water exceeds applicable criteria in the South Fork Coeur d'Alene River basin by up to 200 times for dissolved cadmium and as much as 90 times for dissolved lead and zinc. The most heavily impacted areas, such as lower Canyon Creek, are devoid of aquatic life, while other areas provide only partial support for fish and other aquatic species (e.g., suitable for migration but not spawning and rearing).

In the North Fork Coeur d'Alene River watershed, land use has impacted the health, habitat and abundance of salmonids and other aquatic life, primarily because of excess sediment loading and hydrological changes to the system.

In the Spokane River, nutrients from human activity cause severe algae blooms and depressed dissolved oxygen levels in Long Lake. The Washington State Department of Ecology has determined that loading of nutrients, especially phosphorus, must be dramatically reduced if these water quality conditions are to improve. The overwhelming source of pollutant loading during the critical warm, low flow summer months are the discharges into the river from municipal wastewater treatment plants in Washington and Idaho. Also, a health advisory has been issued for consumption of fish in the Spokane River because of contamination by PCBs and heavy metals.

Location Map for the Coeur d'Alene - Spokane River Basin



Goals and Objectives…
What are the desired long-term outcomes?

EPA, in collaboration with state, local, and Tribal partners, will reduce human exposure to lead and other metals, attain water quality criteria, reduce wildlife exposure to lead in floodplain soil and sediment, reduce particulate lead in surface water and downstream migration of contaminated sediment. TMDLs will be established for nutrients for Black Lake and the Black Lake Watershed, dissolved oxygen (nutrients) and PCBs in the Spokane River and for sediment and temperature in Hangman Creek and the Little Spokane River.

Strategy and Approach…
How do we anticipate achieving our desired goals and objectives?

EPA Region 10 is a member of the Basin Environmental Improvement Project Commission. The Commission was established by the State of Idaho to direct and oversee clean-up efforts. It includes commissioners from Idaho and Washington, the Coeur d'Alene Tribe, the Federal Government, and Shoshone, Benewah, and Kootenai counties. A Memorandum of Agreement outlines the decision making process and implementation of cleanup. A Citizen's Coordinating Council provides community input to the Commission. The areas affected by mining have been designated as the Bunker Hill Mining and Metallurgical Complex National Priorities List (NPL) facility. In addition, EPA has undertaken a number of actions to protect water quality in the Spokane River. We will continue to address protection of human health, the beneficial uses of Coeur d'Alene-Spokane River Basin waters (e.g., drinking water and aquatic life support), and long-term cleanup of the environment.

There are three priorities for the environmental cleanup to address; dissolved metals in surface water (particularly zinc and cadmium), lead in floodplain soil and sediment, and particulate lead in surface water.

Previous accomplishments include:

- Human Health Cleanup: The 2005 construction season marked another successful year of on-the-ground cleanup work in the Basin. About 530 residential properties were cleaned up. More than 3,800 residential properties have been cleaned up in the site since 1989. In addition, mine and mill site cleanups moved forward in 2005. EPA and the State of Idaho worked together to complete the design and construction of the Sisters mine cleanup, and EPA and the Bureau of Land Management initiated the cleanup of the Constitution mine site,
- Ag to Wetland Conversion: After several years of planning and months of negotiations EPA and the Schlepps, a private landowner, have reached agreement on EPA's purchase of an agricultural to wetland conservation easement. Approximately 400 acres are very desirable for a conservation easement. The area is relatively low in metals concentrations, close to high waterfowl use areas, and has low potential for recontamination,
- Box Consent Decree: On December 5, 2005, the 9th Circuit Court of Appeals reversed a Judge Lodge decision modifying the 1994 Consent Decree with the Upstream Mining Group (UMG). The Decree identifies UMG's obligations, which include residential soil cleanup and funding for the Institutional Controls Program. In 2001, UMG indicated they would not comply with the Decree work obligations. While these issues were being disputed, EPA and the State of Idaho proceeded with a partial work takeover of the residential soil cleanup during the 2002-2004 construction.

In the next three years we expect to:

- Implement mine water management remedy and resolve long-term funding for continued operations to prevent contaminated minewater discharges into the South Fork,
- Complete work in the populated and non-populated areas of the Bunker Hill Box,
- Identify priority environmental pilot studies for water treatment, wetlands cleanup, and sediment removal, and
- Identify, in support of State of Idaho efforts, appropriate site-specific water quality criteria that are protective of resident aquatic life.

Measures of Success…

How will we know we have achieved success?

Community properties and recreational areas are cleaned up to safe levels of lead in soils. Metals loading to streams is reduced. Waterfowl feeding habitat areas are safe.

Results from North Fork Coeur d'Alene River watershed assessment will support the TMDL Implementation Plan.

Black Lake annual measurements of total phosphorus, chlorophyll a, and Secchi Depth will provide a baseline of trophic state for trend analysis over time. Total phosphorus concentrations in all inlets to the lake are reduced. Effluent and receiving water monitoring requirements and effluent limits for nutrients in NPDES permits for Idaho and Washington will be met for the Spokane River.

Construction crews removing lead-contaminated soil from properties in the Coeur d'Alene Basin

The Puget Sound Basin

Description of the Challenge…
Why is it a priority?

The Puget Sound Basin includes the sub-basins and archipelagos of the Straits of Georgia and Juan DeFuca and the Hood Canal. The Basin is home to over 200 fish species, 26 kinds of marine mammals, 100 sea bird species, and thousands of marine invertebrates and plants. Puget Sound is a cornerstone of the region's quality of life and economy. Salmon fisheries, sport fishing, shellfish production, tourism, and other endeavors rely on a healthy Sound. However, this uniquely valuable estuary faces increasing pressure from growth and development.

From the top of the food chain to the bottom, the Sound's living resources are in decline, both in diversity and quantity. While recent declines in salmon and Orca have received particular attention, concurrent declines in forage fish, ground fish, and shore birds signal broad ecosystem problems. Healthy habitat and undeveloped shoreline are key to maintaining robust fish, marine mammal, and marine bird populations. However, since the late 1800's over half of the shallow water habitats in Puget Sound have been lost to development, including the loss of 75% of intertidal salt marsh habitat and upwards of 90% loss of aquatic habitat in the major urbanized estuaries.

Low flushing rates and poor mixing make Puget Sound waters vulnerable to build up of pollutants. Nutrient overloading threatens both Hood Canal and southern Puget Sound. Central Puget Sound still has many areas with toxic-contaminated sediments and groundwater.

Goals and Objectives…
What are the desired long-term outcomes?

The goal of this priority is conservation and recovery of orca, salmon, forage fish, and groundfish populations through protective water quality and habitat management, reduction of harm from stormwater runoff, and clean-up of contaminated sites and sediments. We will protect shorelines and other critical areas that provide important ecological functions, restore degraded nearshore and freshwater habitat, and prevent nutrient and pathogen pollution caused by human and animal waste.

Strategy and Approach…
How do we anticipate achieving our desired goals and objectives?

The 2005-2007 Puget Sound Conservation and Recovery Plan is an ambitious workplan crafted by the Puget Sound Action Team, a partnership of state, Tribal, local, and federal governments. The Plan focuses on the work of state agency partners. To supplement the Action Team's plan, EPA is developing its own complementary action plan organized around the same priorities to support state and local programs and interagency priority teams.

In addition, EPA has agreed to help coordinate and align federal resources into a coherent interagency workplan. This integrated federal workplan would parallel the state's interagency biennial work plan and budget priorities for Puget Sound and will help integrate EPA activities with other important federal, tribal and state programs and actions.

As in many EPA efforts, we provide our partners financial support. Work in the Puget Sound Basin follows that tradition. In 2005, EPA awarded

Residents and visitors to the Puget Sound area should be able to expect a clean and beautiful marine environment.

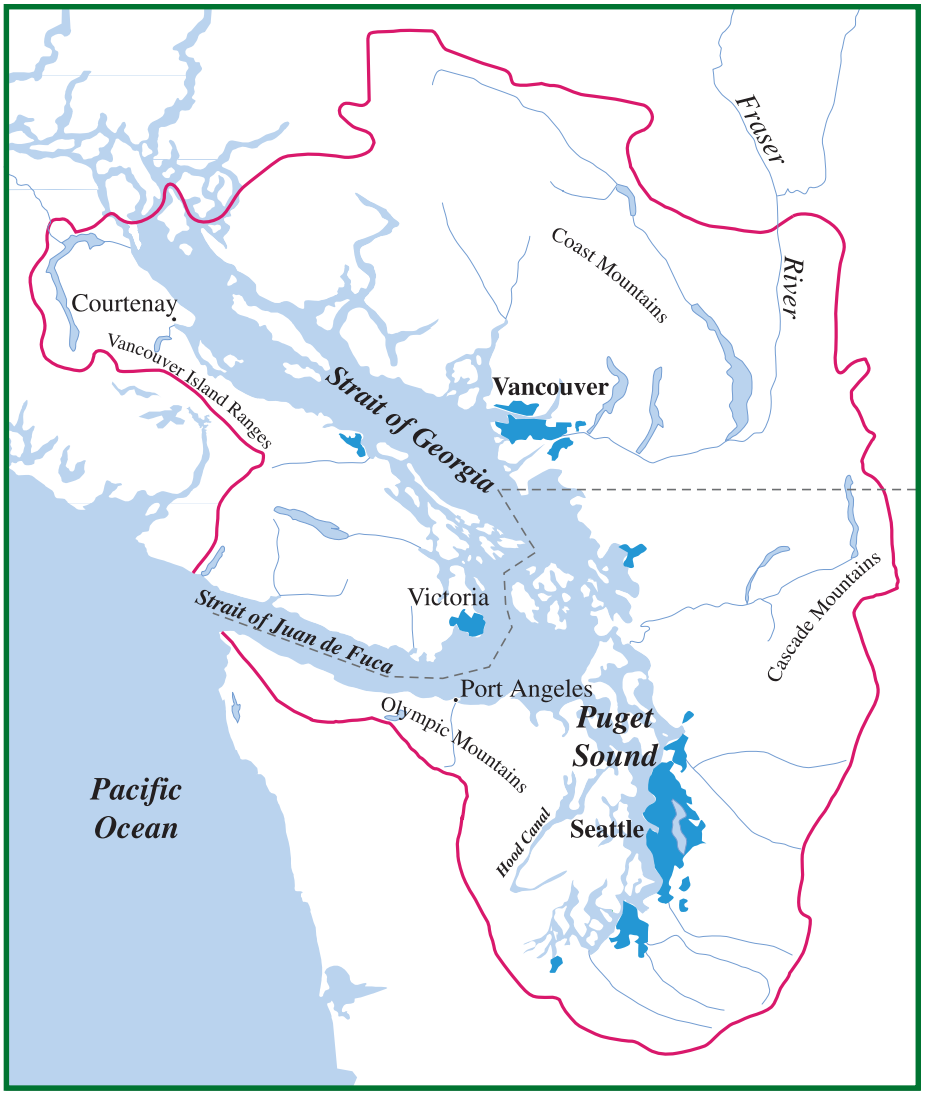
approximately $6 million to Puget Sound Tribes to build the technical and administrative capacity to identify, manage, and correct environmental problems. Puget Sound communities received a number of EPA grants that support environmental education and public participation in local projects and initiatives. EPA has promoted the incorporation of evolving technical and scientific understanding into environmental decision making. Approximately 47 million federal dollars have been provided to a variety of Puget Sound agencies to implement various portions of the conservation and recovery plan. We will continue diligent management oversight of these grant funds to assure environmental results.

EPA will work with other agencies in Puget Sound to identify gaps in the overall management of stormwater, particularly in the areas where land use is changing from rural agricultural and forest to urban. EPA will promote development and implementation of smart growth and low-impact development strategies.

Superfund Site and sediment cleanup investigations continue in Commencement Bay and Eagle Harbor, throughout the Lower Duwamish Waterway, and at the Puget Sound Naval Shipyard. Investigations and cleanup are also under way at the remaining upland National Priority List sites not already addressed.

Investigations and cleanups are also ongoing at many sites in Puget Sound managed by EPA's RCRA program, which works with hazardous waste facilities. EPA will participate on interagency toxics assessment, monitoring, and source control strategy teams for mid-scale estuaries. We will make substantial contributions to restore an additional 3,500 acres of wetland and nearshore habitat by 2011. EPA's future efforts will involve work with the state, local jurisdictions, and Tribes in sensitive and high value estuaries to reduce pathogen and nutrient contamination. EPA will make substantial contributions in recovering the use of shellfish bed growing areas through improved waste management and controlling pathogen and nutrient pollution sources.

The Puget Sound Basin



Measures of Success…

How will we know we have achieved success?

- Habitat destruction is stopped and trends are reversed,
- Declines in natural resources are reversed and numbers begin to increase,
- Water quality improves.

Grants Management

Description of the Challenge…
Why is it a priority?

EPA's Office of the Inspector General (OIG) identified several deficient areas in the management of our financial assistance programs. These deficiencies include: lack of grant competition, poor oversight of grantee procurement, failure to identify and achieve environmental results, and EPA's weak oversight controls. Similar criticisms have been voiced by the General Accounting Office (GAO) and Office of Management and Budget (OMB). In response, EPA has taken steps to strengthen management oversight of its financial assistance programs. Why is grants management a 'big deal' in Region 10? Over half of EPA's budget is awarded to state, local, Tribal, educational and non-profit partners. In Region 10, financial assistance to our partners in fiscal year 2005 was just under $330 million, which accounts for 65% of our annual budget.

EPA should spend tax money to achieve the greatest return on our investment - environmental results. We cannot afford to fund activities or organizations that do not show results. Our work in this priority area will focus on improved competition in award of grants as well as compliance review and monitoring of grant outputs and products. EPA and our partners must be able to demonstrate to management and more importantly, to the public, that we wisely spend each tax dollar.

Goals and Objectives…
What are the desired long-term outcomes?

Region 10 is committed to ensure that its grant programs meet the highest management and fiduciary responsibilities and further the Agency's mission of protecting human health and the environment. Region 10 embraces EPA's national goals identified in the 2003-2006 National Grants Management Plan:

- Enhance the skills of EPA personnel involved in grants management,
- Promote competition in the award of grants,
- Leverage technology to improve program performance,
- Strengthen EPA oversight of grants,
- Identify and achieve environmental outcomes.

Strategy and Approach…
How do we anticipate achieving our desired goals and objectives?

Region 10 will continue to provide training for all new Project Officers and managers of Project Officers. Each quarter, Region 10 will provide Post-Award Monitoring training. Training is mandatory for all Project Officers.

Many grants are awarded to state, local, and Tribal governments to support their ongoing programs to meet federal requirements. Competition for these grant monies may not be appropriate since EPA relies on state, local, and Tribal governments to carry out their legal obligations. Achievement of environmental outcomes for these grants will entail greater oversight and ultimately, may entail reducing future grant awards or withholding of grant money for non-performance.

Information technology will be used to speed administrative processing of grant application, award, and payment. Region 10 will provide training to project officers in The Integrated Grants Management System (IGMS). This system is used to process grant

EPA's Grants Management specialists have a responsiblity to taxpayers to make sure that grant dollars are used wisely and correctly.

awards and amendments, as well as post-award compliance monitoring. IGMS can also provide information on grant projects to Congress and the public. We anticipate the expansion of system capabilities to receive and respond to electronic applications via "Grants.gov." Region 10 will pilot "on-line" application procedures for financial assistance application and award processing.

Region 10 will emphasize oversight and compliance. By identifying grantees having difficulties in achieving and maintaining compliance with agreement terms and conditions and/or the regulations governing the management of assistance agreement funds, we can provide the assistance needed to bring the grantee into compliance.

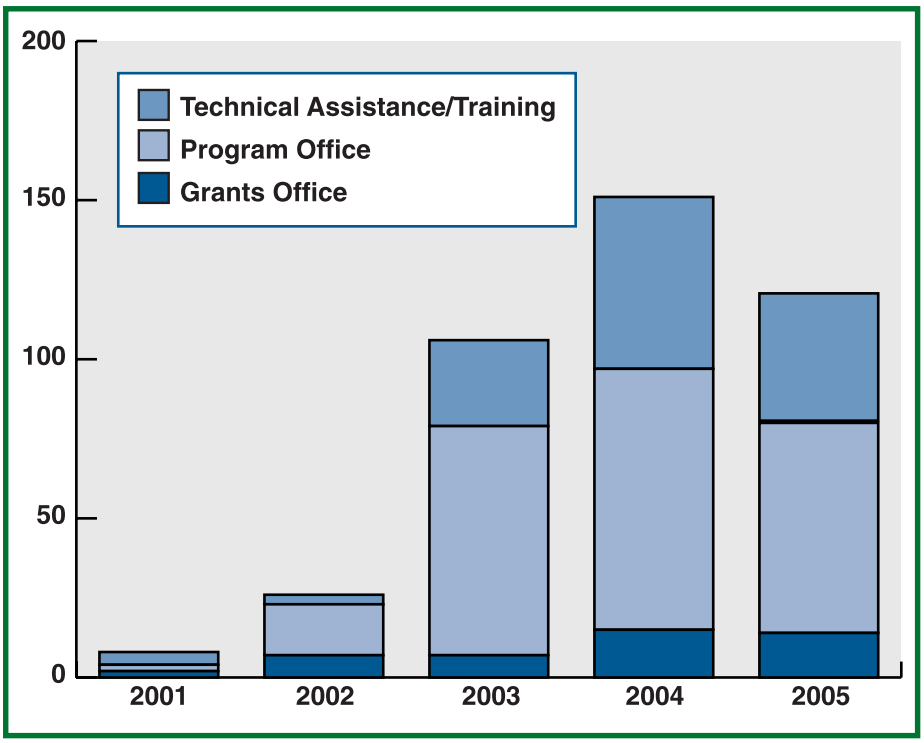
When recipients are not responsive, remain in non-compliance, and when post-award monitoring fails, Region 10 can limit its financial liabilities and take appropriate enforcement action.

We will ensure that continuity between post-award monitoring and compliance enforcement will receive greater emphasis than in the past. Region 10 will expedite close-out of expired grant agreements. Timely close-out will speed return of unexpended grant funds to program budgets for future projects.

The Region 10 Grants Management Officer has presented a Consolidated Post-Award Monitoring Plan to the Office of Grants and Debarment (OGD). The goals of this plan fall into two categories:

- All active assistance agreements will be monitored for basic compliance with terms and conditions,
- Advanced Post-Award Monitoring (APAM) of a minimum 10% of the baseline monitoring assistance agreements. APAM provides greater scrutiny of performance and involves either a detailed telephone interview or on-site review.

Post-Award Monitoring Activities



Who else is working in this area?

The work is primarily within EPA Region 10. It will involve the Grants Management Office as lead with program office support throughout the Region. The results of this work, however, will be felt throughout the Region's state, local, and Tribal governments as well as the educational, non-profit, and for-profit organizations that receive financial assistance from EPA.

Measures of Success…

How will we know we have achieved success?

Success will be measured by the number of timely close outs. We plan to reduce the number of grants open past the 90-day deadline. In addition, we will reduce the number of A-133 audits referred for action by the OIG. The number of problems divulged by Advanced Post-Award Monitoring reviews will be reduced and the response time for follow-up by EPA staff and resolution by the grantee will be shortened.

Environmental Indicators: Each program office will be required to establish criteria for reporting environmental results. The measure of success will be the establishment of concrete environmental results for each financial assistance agreement and documented achievement of those results.

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