

## **SECTION III - CROSS GOAL STRATEGIES and ISSUES**

### ***Partnerships with State Agencies***

From September 2003, to the present, EPA Region 10 and the State Environmental Agencies from WA, ID and OR have had a series of designed to integrate state and regional priorities and incorporate them into Region 10's Strategic Plan. Over the course of several meetings and phone calls, the group ultimately decided to jointly develop strategies to address four issues that are shared priorities throughout the region, and include these in the Region's Strategic Plan. The four priorities are:

- Air Quality: Reducing sulfur emissions from existing diesel engines through a coordinated effort to promote the use of low sulfur fuel throughout the region
- Agricultural Nonpoint Source Pollution
- Information Technology - Increase IT discussions amongst regional and state management, and using the Rapid Information System (RAINS) as a model for developing cross jurisdictional data platforms.
- Innovations in Permitting and Compliance - Evaluating alternative enforcement approaches for specific sectors, and working to provide a more streamlined permitting process.

In addition, the group has affirmed the Columbia River and Cross Border Cleanups as joint priorities in the current Regional Plan.

Scoping papers are being developed for each of these efforts, and the work should be further clarified as the regional strategy is finalized in 2004.

### ***Partnerships with Tribal Governments***

Environment and human health challenges facing the 271 federally recognized Tribes in Region 10 are as complex and unique as the Tribes themselves. EPA tries to assist in government to government coordination on environmental issues. EPA also administers capacity building grants to tribes for purposes of developing tribal environmental programs. This includes the Indian General Assistance Program (IGAP) grant.

Region 10 has also entered into TEAs with several Tribal governments. Future Tribal/EPA Agreements (TEAs) will include provisions to empower tribal governments to more fully participate in their future development in areas such as: 1) the exploration for, financing of and operation of new sources of drinking water, 2) the planning, financing, and implementation of tribal solid waste programs, and 3) the planning and financing of upgrades to wastewater

## ***Information Management***

High quality and highly accessible information are critical to the success of Region 10's plan and to the missions of our state partners. Region 10 and its state partners have identified Information Management as a key joint priority over the next three to five years

Several challenges are shaping our strategic efforts. Information technologies have not kept pace with the growing complexity of environmental issues, hampering our ability to access and leverage the information and tools needed. Systems capable of integrating information in multi-jurisdictional domains are often non-existent, poorly developed, or inaccessible. Some of the IT/IM work undertaken by agencies is duplicative of that being performed by others. Finally, media-specific and other special emphasis programs often yield data, information, and applications that do not share common architectures, standards, and protocols. This problem leads to internal agency inefficiencies and discourages intra- and inter-agency exchanges and integration

A key feature of this portion of the Regional Plan is a new collaborative initiative that will systematically address these challenges. This collaboration will embrace several levels of engagement, including:

**1) Community-Building** - Information Managers and technical staff from Pacific Northwest environmental agencies will meet annually to share information on their respective capabilities, challenges, business needs, opportunities, and initiatives. In the future, this initiative will include an outreach activity to invite other resource agencies, Tribes, and other stakeholders.

**2) Joint Development Pilot:** The Pacific Northwest participants will develop a set of software and protocols called the Rapid Access Information System (RAINS) into a high-quality access tool for Pacific Northwest water quality data. Our objective is to then expand RAINS into a single access point for future data sharing efforts as well. Part of this element of the initiative will include an equitable allocation of work and resources amongst the participants.

**3) Joint Program Reform** – EPA and state IT managers will jointly select one program (e.g., SF remedial program) for special information management emphasis during CY'04. This emphasis will engage a target environmental program (TBD) common to Federal and State agencies to combine information in a way that is consistent with intra-agency standards and inter-agency exchange protocols.

Specific progress indicators are included in the December 2003 scoping paper included in Appendix A.

## ***Innovation Work***

EPA Region 10 is currently engaged in innovation work that spans three dimensions-creating a more innovative organizational culture and systems; adopting and integrating innovative programs; and work related to innovative pilot projects.

Under the umbrella of creating a more innovative organizational culture and systems, innovation leadership in Region 10 is provided by a Regional Innovation Council comprised of senior managers and staff from across the region. The Council supports the implementation of EPA's Innovations Strategy as well as the work of the Innovation Action Council. The Regional Innovation Council manages the region's Innovation Award program, provides guidance and direction thru the region's Innovation Philosophy, assists regional programs identifying and addressing barriers to innovation, supports the innovation partnership with state environmental agencies, and provides resources to support emergent innovation. Other culture and systems change activities include sponsoring innovation speakers and workshops, creativity training and innovation coaching and consulting services.

Innovation work is also ongoing in the area of adopting and integrating innovative programs. Region 10 is actively engaged in implementing the National Environmental Performance Track program including recruiting new members, tracking, monitoring and reporting on members environmental performance and providing member services. Other program scale innovation work includes the Federal Network for Sustainability, adoption and diffusion of Environmental Management Systems, and development of market-based incentives such as Water Quality Trading.

Region 10 actively promotes and supports the vigorous testing of new approaches thru the use of innovative pilots. Innovative piloting work is unfolding in the areas of TMDL development, regional strategic air planning, permit streamlining and information technology to name but a few. Region 10 also seeks to support innovative pilots in the states thru state leadership programs, the State Innovation Grant program and Performance Partnership Agreements.

### ***Human Capital***

The most critical tool to improve the environment is our workforce. Good work and innovative solutions are not manufactured out of thin air, but are shaped by a knowledgeable, creative and empowered workforce. Region 10 is committed to maintaining a technically strong as well as an increasingly diverse workforce to ensure that we reflect the public we serve.

To accomplish this, our ongoing recruitment and hiring efforts include outreach to candidates at both entry and senior levels, locally and outside the regional area. Our Strategic Plan for Diversity addresses the importance of effective orientation to ensure smooth transition for new employees. The plan also includes programs to enhance all employees' understanding about diversity help create an open and accepting environment for all employees.

EPA is fortunate in its ability to attract a wealth qualified and technically sound candidates. The challenges intrinsic in environmental protection are compelling and attractive to many people. Yet attracting good people is not enough, we must support the continued development of our workforce. EPA provides a variety of training, and seeks to aid employees in the maintenance and expansion of their technical credentials.

Additionally, over the past few years, we have developed a mentoring program that provides all employees with access to a more senior employee for guidance and counsel. This mentoring program has been effective in helping employees at entry level grades to supervisors. Since its inception in 2000, 120 employees have participated in this program.

Communication is the cornerstone for continued personal and professional development. Region 10 actively promotes promote better communication and feedback among the workforce as well as between supervisor and employee. Managers and employees alike are encouraged to obtain peer feedback as part as part of their annual review. Methods for feedback and active listening are regularly taught and many programs employ 360 degree feedback as a standard component of business. Additionally, many second line supervisors actively seek and encourage feedback on candidates for first-line supervisory positions.

In many agencies, becoming a supervisor is often seen as the only means of obtaining a promotion. Region 10 has promoted the creation of a dual career path, where regional employees who have exceptional abilities and knowledge and who are deemed national experts can be promoted to senior grade levels.

## *Science*

From the initial assessment of risk to the creation of tools to prevent or remediate this risk, as well as assessing the condition of the environment, science is at the heart of EPA's work. Region 10 is committed to developing new tools and providing sound and thoughtful scientific bases for our regulatory decisions. We also seek to advance the integration of scientific endeavors on a geographic, cross media basis to better enable the pooling of limited resources.

Throughout this plan, we have provided specific examples of how Region 10 continually develops scientific capacities in assessment, monitoring and research directed at regional priorities. For example, Region 10 identified smoke emissions from burning as one of its Six Priorities due to the potential threat to human health from fine particulate matter. Historically, smoke management programs and their relatively simple dispersion models have been unable to deal with the cumulative impacts from multiple burns and other pollution sources. Region 10 sought to systematically address this need through partnerships with academia, the Forest Service and other resource protection and environmental agencies. This work has culminated in the development of BlueSky-RAINS that assesses particulate matter impacts from forestry burning. The BlueSky-RAINS system allows users to take modeled forecast weather data and projected prescribed burning information to initialize air quality dispersion and trajectory models to forecast smoke concentrations. This prototype system has achieved some technical breakthroughs for the display of forecast model output in a GIS environment on the Internet.

Another example of Region 10's applied research is our work on tribal exposure pathways. Recognizing the large number of tribes in the Region, we are actively trying to assess and define risk and exposure pathways faced by tribal members due to cultural and dietary differences. Our work with the Columbia River Tribal Fish Commission is an example of this work. The primary contaminants have been identified; the next step is to determine their sources and methods for most effectively reducing them in the food chain. A study is also underway to assess the exposure of Port Gamble/S'Klallum Tribe to arsenic from shellfish and drinking water. Better characterization of risk also enables us to develop regulatory tools and remediation options that can efficiently address these risks. Additionally, the Region is involved in the development of software for Tribes to use to obtain scientifically sound data for site-specific uses such as the development of ambient water quality criteria and risk characterization associated with consumption of contaminated fish.

The Region provides funds for the Western Environmental Monitoring and Assessment Program (WEMAP) methodology. WEMAP is used to assess the condition of watersheds across large geographic areas such as states or eco-regions and employs standardized monitoring and assessment methods that are providing improved information on chemical, biological and physical needs of fish and wildlife. Due to extensive resource protection concerns including impacts to listed and endangered species, the Region works closely with resource protection and land management agencies at the federal and state level to better characterize the stressors and needs of different ecological systems. The Region has a number of projects underway to address the protection and restoration of salmon and other species endemic to the Pacific Northwest. The Region seeks to ensure that species' temporal and spatial distribution as well as reproduction and spawning habits are appropriately considered when establishing water quality standards and, in Total Maximum Daily Load calculations. The Region has a project underway to assess lab aquatic toxicity testing tools. Bioassays are performed on two native fish, sculpin and trout, to assess their relative sensitivity to metals toxicity. Another project is attempting to answer the question "Do salmon habitat restoration projects actually result in more salmon? It involves the development of a study design and associated protocols to evaluate ecological outcomes of watershed restoration efforts by specifically monitoring the relationship between salmon habitat restoration and salmon productivity. A

third project, the assessment of ecological risks to fish from a variety of toxic contaminants in the Columbia Basin, aims to develop a conceptual model of chemicals of concern and a plan for future work.

The Region is working on the development and utilization of isotopic and tracer tools to help identify the sources of nitrate contamination to ground water in the Region. We are also engaged in the development of a process for consistent, up-to-date approaches to characterizing and monitoring the consequences of temperature and contaminants that move through the ground to surface water ecosystem.

The Region's Manchester Laboratory is affiliated with the Centers of Applied Science. The Lab is involved in cutting-edge analyses and method development. Several examples follow: environmental chemistry that includes "advancing" PCB analysis from aroclors to congeners; trace metals analysis that includes arsenic speciation, improved procedures for determining Method Detection Limits, and exploring new detection systems capable of achieving the needed lower detection limits; the development of unified digestion, extraction and analytical techniques for fish tissue with lower detection limits and a wider array of analytes; method development to separate, isolate, concentrate, detect and quantify polybrominated diphenyl ether (PBDE) congeners using state-of-the-art instrumentation; and, the X-ray diffractometry capability. This method, complementary to conventional chemical methods, is used to identify particular compounds and the compounds that make up the surrounding matrices. It is another tool for aiding in pollutant characterization and fate and transport evaluation. Microscopic Particulate Analysis developed in Region 10's Lab is used nationally to assist water utilities and primacy agencies in the determination of ground waters under direct influence of surface water microorganism contaminants. The Lab is also advancing techniques to measure direct exposure to asbestos. Finally, the Manchester Lab is one of only two regional labs that has become proficient at *Giardia* and *Cryptosporidium* analysis.

Region 10 is faced with numerous scientific challenges, from characterizing the long-term impacts from sediment leaching to determining appropriate containment of radiation at the Hanford Nuclear Reservation. We will continue to work cooperatively with other agencies and parties interested in promoting sound science in the Pacific Northwest.

### ***Homeland Security***

Within the scope of EPA's mission to protect human health and the environment are certain homeland security responsibilities. Region 10 is committed to these efforts in 2004.

Region 10 will work with the states, tribes, associations and others to protect critical infrastructure in the water and chemical sectors. Tools, training, and technical assistance will be provided to water utilities in vulnerability assessments, security improvements, and response to terrorist incidents. Region 10 will contribute to a national workgroup devoted to developing guidance and tools in these areas. Outreach to local water purveyors, local and state responders and health departments will address gaps and needs. Current criminal and civil regulatory programs that address areas related to homeland security will be implemented. Clean Air Act, Risk Management Plan, and Off-Site Consequence Analysis data will be shared with members of the EPA CID and FBI Joint Terrorism Task Forces as needed. Implementation of accident prevention programs related to CAA Risk Management Program will be managed to reflect homeland security issues.

Region 10 will establish or maintain partnerships with the environmental response organizations, Local Emergency Planning Committees, State Emergency Response Commissions, area committees, trade associations, and other response-related local and state organizations. Region 10 will maintain the

number and capability of emergency response personnel in the region needed to enhance all counter-terrorism preparedness, response, and recovery functions. Staff will be provided to work on national initiatives to improve preparedness, response and recovery, the National Approach to Response initiative, and the National Core Emergency Response Program. Training and exercises will be conducted to maintain a high state of readiness. Region 10 will support formation of one of the five national Incident Management Assistance Teams being formed, and will develop a Regional Incident Management Team. Region 10 will continue procuring and deploying response equipment as resources allow. The Regional Incident Coordination Team and Regional Response Support Corps will be maintained and further developed as needed. Employees will be provided with appropriate information, training, and support to respond to emergencies and incidents.

Communications abilities will continue to be physically and procedurally enhanced. An adequately sized and equipped Regional Response Center will be established, and will include sufficient methods of primary and backup communications abilities and procedures. Routine training and practice will occur to ensure backup communications capabilities. Region 10 will explore the possible development of the capability to make emergency public service recordings and announcements, as well as other communications innovations.

Region 10 will encourage state, local, and citizen roles in prevention of terrorism and minimizing impact to indoor and outdoor air from terrorist attacks. The Region will address Homeland Security laboratory issues with other Federal Agencies and will aid in the development of intergovernmental response networks of environmental and health laboratories' capabilities and capacities for the analyses of conventional and non-conventional chemical, biological and radiochemical compounds support of emergency response/WMD events. The Region will coordinate with response networks of federal, state and local government laboratories capable of environmental sample analyses for biological, chemical and radiological contaminants of concern for all media (soil, water, and air) and varied matrices (tissue, oil, etc.).