

## **PNW PPA-Strategic Plan Alignment & Implementation Pilot Project: Information Management Initiative**

### **Introduction**

High quality and highly accessible information are critical to the success of environmental agencies in fulfilling their respective missions. We must have information systems that are multi-dimensional and support both scientific and administrative needs. Pacific Northwest environmental agencies are investing in information technology and management, including initiatives to access data from multiple sources. In turn, these data can ‘feed’ applications that add value by enabling people to analyze the information. Pacific Northwest environmental agencies now have an unprecedented opportunity to exploit these developments and achieve functional efficiencies by adopting a collaborative approach to information system integration.

### **Problem Statement**

Some of the more important challenges confronting Pacific Northwest environmental agencies follow:

- 1) Complexity** - The complexity of environmental problem-solving is increasing. Information systems have not kept pace with this trend, hampering our ability to access and leverage the information and tools needed to effectively contend with increasingly complex issues.
- 2) Trans-Jurisdictional Issues** - Agencies are increasingly contending with environmental problems that transcend their own respective jurisdictions. Systems capable of integrating information in these trans-jurisdictional domains are often non-existent, poorly developed, or inaccessible.
- 3) Resource Leveraging** – We have seen relatively recent improvements in both the climate for and realization of interagency collaboration vis-à-vis information system development (e.g., the PNW Water Quality Data Exchange). But some of the IT/IM work undertaken by agencies is duplicative of that being performed by others.
- 4) Stove-Pipe Programs** - 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.

### **Strategy**

The Pacific Northwest environmental agencies propose to enter into a new collaborative arrangement that will systematically address these challenges. This collaboration will embrace several levels of engagement, including:

- 1) Community-Building** - To promote a heightened sense of awareness, collegiality, and community, both information systems 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, academia, and perhaps the private sector to participate in a Pacific Northwest information consortium.

**2. Joint Development Pilot:** The current Pacific Northwest Water Quality Data Exchange project has brought together information systems managers and staff from Pacific Northwest environmental agencies in a collaborative effort to build a tool for sharing water quality information. This collaboration involves developing exchange standards and a common tool to make data accessible from multiple locations via the Internet. While the Pacific Northwest Water Quality Data Exchange project is committed to develop a basic access tool, the project is not funded to deliver a high-quality tool. The Pacific Northwest participants will evaluate and consider RAINS and other information access and delivery systems for development into a high-quality access tool for Pacific Northwest water quality data. Our objective is to facilitate and improve information access and delivery for future data sharing efforts. The Pacific Northwest Water Quality Data Exchange project will deliver three-state data sets in 2004. During 2004, the participants will collaborate on a demonstration application(s) to show how exchange data can be accessed and delivered. Following this demonstration, we will develop a strategic plan to grow a selected software tool(s) for data sharing in the region. Part of the strategic plan will be coming to agreement on division of responsibilities and resources, so that no group member ends up with work but without resources.

**3) Joint Program Reform -** The same group responsible for developing the Pacific Northwest Water Data Exchange Node will jointly select one program (e.g., a Superfund remedial program) for special information management emphasis during CY'04. This emphasis will engage a target environmental program (to be determined) common to Federal and State agencies to combine information in a way that is consistent with intra-agency standards and inter-agency exchange protocols.