



# Northwest Environmental Data-Network Portal Development

Executive Meeting for Northwest Environmental  
Data Network (NED)

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Northwest Power and Conservation Council

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## Background

- There is agreement that we all need a better way to find and use fish, wildlife, and water data. The NED Pilot Portal meets regional data discovery and sharing needs identified by Scientific Applications International Corporation (SAIC) in their Regional data needs assessment. The software chosen for the Portal meets all of SAIC's recommended specifications. The Portal supports and leverages other national, regional, state, and local efforts, including the Federal Geographic Data Committee (FGDC), Geospatial One-Stop (GOS), National Spatial Data Infrastructure (NSDI), E-Government initiatives, and state Portal development. The NED Portal integrates existing resources from a wide array of entities, compiling lots of disparate data in one place. Just as there is a hierarchy of data (from national, to regional, to state-level), there are partnership arrangements that must be developed to ensure that the Portals work together. Regional support for developing improved data sharing and discovery tools was verified at the NED Workshop in May.

## What the Portal is and what it can do [<http://nppc.bpa.gov/Portal>]

- Discover distributed data (i.e., from different web sites) by doing searches based on geographic boundaries, key words, or pick a known location from a standard list. The key words search in the metadata records.
- Share data (tabular or spatial) by posting its metadata to the Internet in industry standard format.
- Look at the data, in spatial (or map) form.
- Overlay different data sets in map form.
- Print, save and recover, or email a copy of data or a map you create.
- Discover tabular data.
- Download tabular data for local use.
- Indexes and organizes tabular data, spatial data, and other electronic products such as publications.

## Features of the NED Portal

- Cost effectiveness. Builds upon and ties together comparable national and state-level efforts.
- Compliant with National and International standards, including the National NSDI and FGDC.
- Based on off-the-shelf technology. In this case ESRI's Portal Tool Kit which is also running the nation's Portal at: <http://www.geodata.gov/>.
- Focused on data needed for Pacific Northwest natural resource policy, planning, and management.
- One place to go to find all of the data you are looking for.

## What it will take for the Portal to Succeed

- Completion of the NED Portal pilot deployment and operational transition.
- Development of Operational and Business rules.
- Identifying a Portal Administrator. The Administrator will make sure that the Portal continues to run and that data posted to the system complies with agreed standards for metadata and has certified data quality.
- Posting of data. Agencies and entities completing work must post their data to the Internet so that the Portal can find it. Use of a web map service (or other industry standard web accessible services) will enable the interactive overlay of these layers. Fortunately this is easy to do and guidance is currently being developed.

- Participants must also post their metadata. Metadata is the library catalog card that the queries are based on. Regionally specific FGDC compliant metadata standards can be developed if needed. The Portal can also be set to automatically harvest metadata from specific entities.
- Agencies or entities that cannot post data may need help posting (and/or hosting) their metadata and/or actual data sets.

## What it is likely to cost to populate and maintain the Portal

- Infrastructure and staff. A Portal Administrator is needed in a full time capacity. Over time and depending on the use of the system more resource data subject-specific content managers (data stewards) could be needed.
- Fiscal Year 2006 budget needs are covered under the GIS for Subbasin Plans project (\$200,000). Out year budget proposed to be included in new BPA/Council Regional Data Management Planning and Coordination item consistent with Independent Scientific Review Panel guidance to make scientifically credible data available for fish and wildlife planning and management activities.

## Policy Commitment

- The system will only work if the metadata are posted to the Portal, the raw data are available on the Internet, and the quality of the data is assured by the data providers. The final test for success will be with users. If they can easily find the data they want and trust the data, they will use the Portal. Therefore, data quality and credibility are the keys. Regional Executives will need to support the common use of basic standards and protocols for data quality and metadata. These requirements can be attached to contract work and internal work of multiple agencies throughout the region.

## Conclusion

- The Portal is a technology evolution, not a revolution. It can make regional data sets (regarding fish, wildlife and water) discoverable and available in their native formats once their metadata is posted. The Portal will allow anyone to discover and use the data that are available to help solve natural resource problems. There is an opportunity to tap into national assistance at Geospatial One-Stop to further develop both the technology and people partnerships that will be necessary for NED to succeed. The Portal encourages an adaptive management approach to regional information system development as we work together to enhance our existing knowledge and tools in support of the NED project's goals. We ask for your suggestions, enthusiasm, and support.

Tom Pansky, Energy Resource Specialist, Bonneville Power Administration  
NED Technology for Data Discovery and Sharing Work Group