

# NED



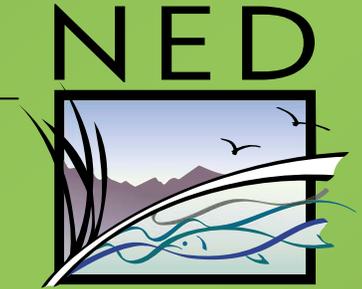
NORTHWEST  
ENVIRONMENTAL  
DATA-NETWORK

---

## 43<sup>rd</sup> Annual Meeting Oregon Chapter American Fisheries Society

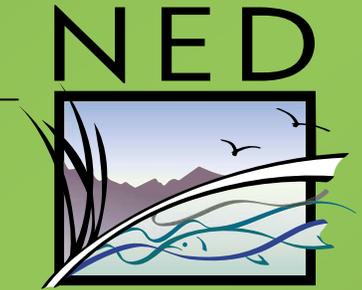
March 1st 2007

**Stewart Toshach (NOAAF) &  
Peter Paquet (NPCC)  
NED Project Coordinators**



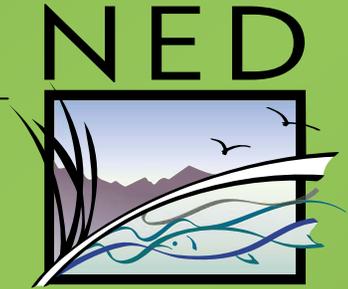
## GOAL

- *To improve the quality, quantity, and availability of regional data and related information on fish, wildlife and water using a publicly supported approach to information systems management*
- See <http://www.nwcouncil.org/ned>

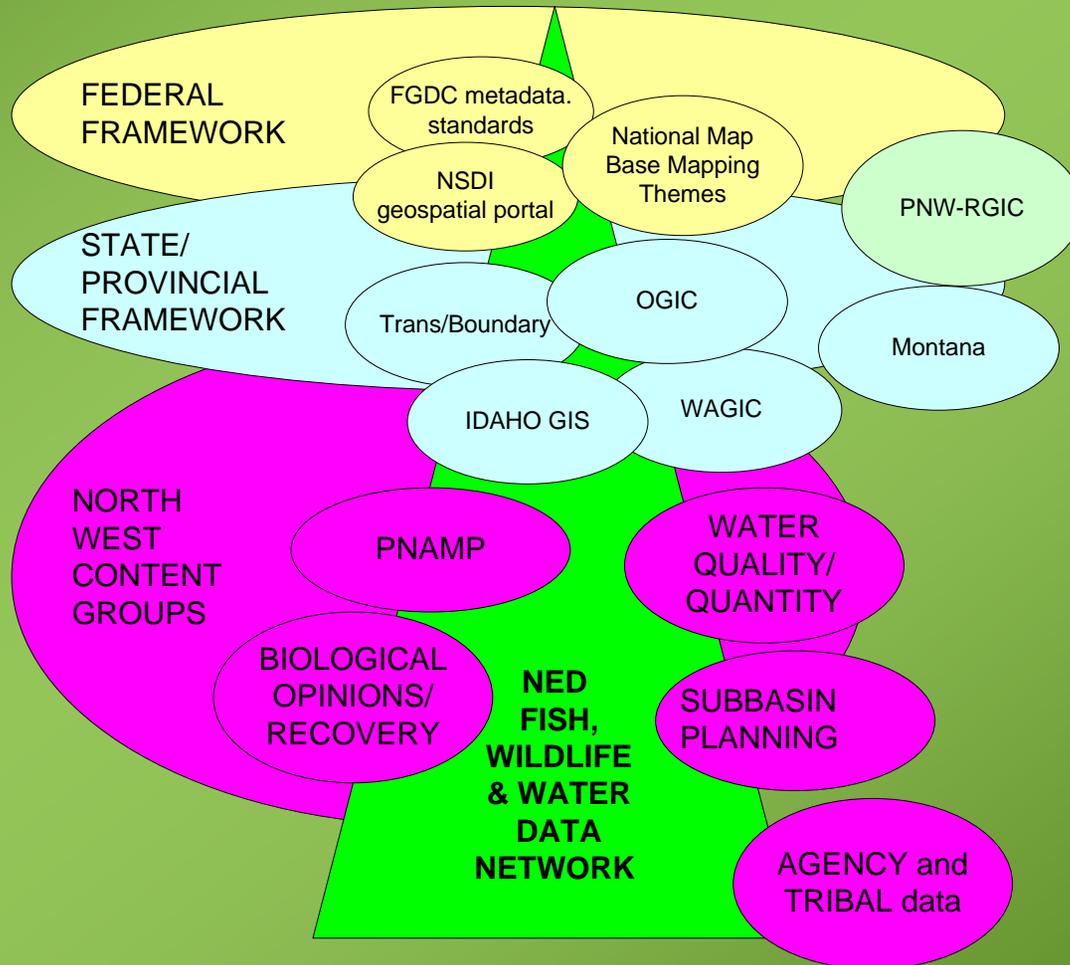


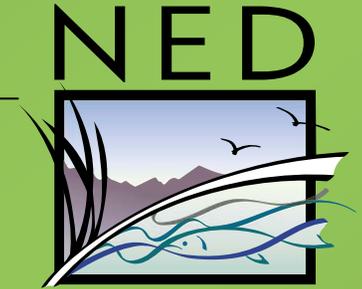
## Challenge: Understanding the Problem

- Independent Scientific Review Panel (2000) identified fundamental problems with regional data management
- Independent Science Applications International Corp. study (2003) recommended regional actions



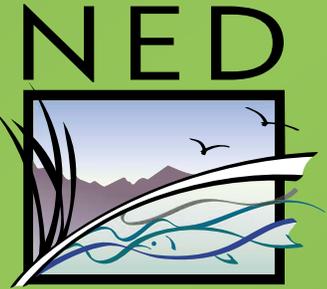
# Challenge – Managing Complexity



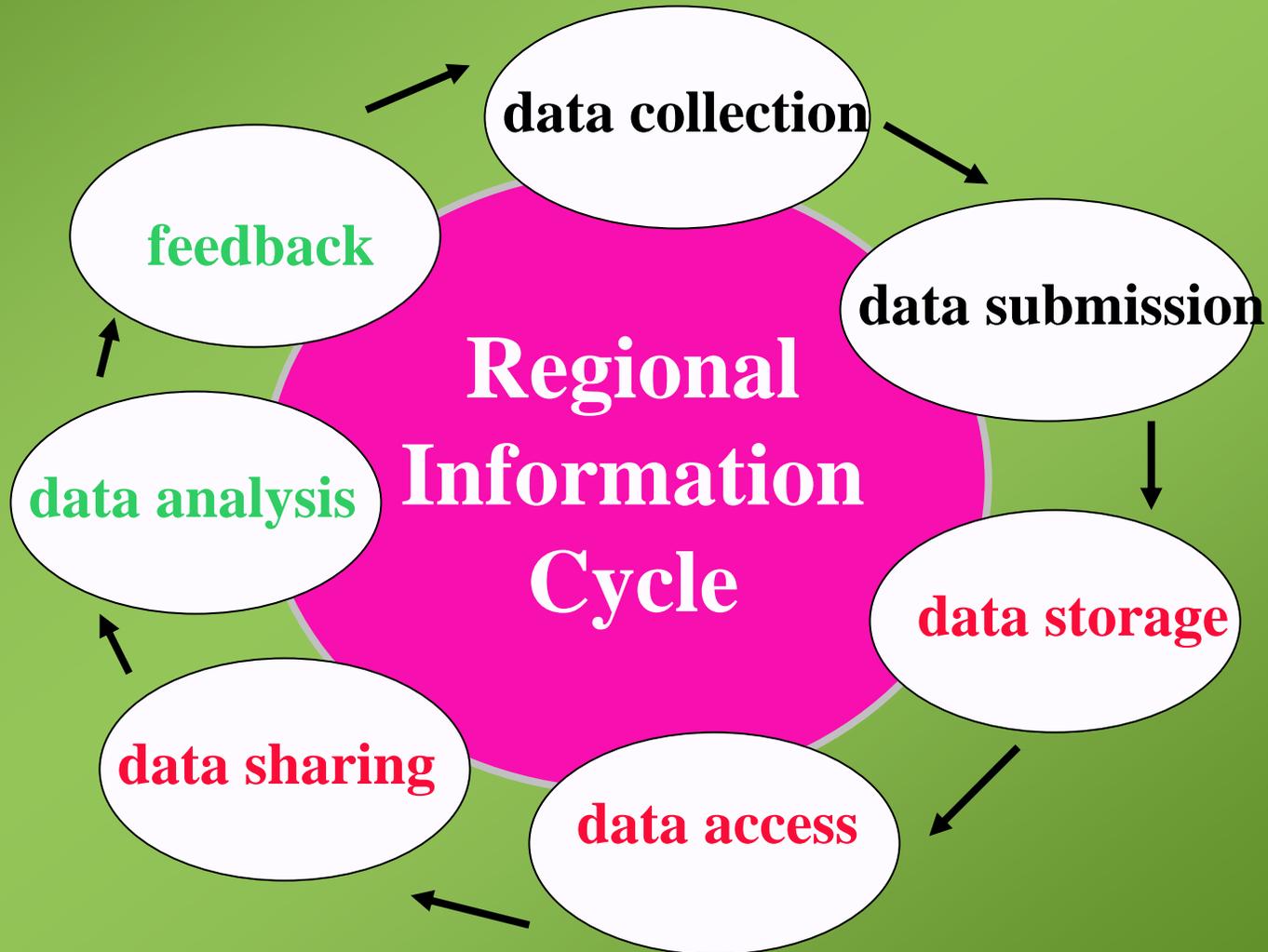


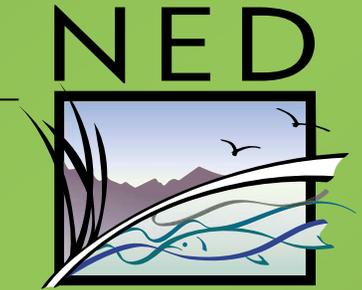
## Challenge – Getting MOU Agreement & Commitments

- Signed MOU and participating: BPA, EPA, NMFS - NWFSC and NWRO, USACE, CRITFC, State of the Salmon Consortium, NPCC, PSMFC, BC Integrated Land Management Bureau, States of Washington and Oregon.
- Not signed but participating: USBoR, USFS, USBLM, USGS, USFWS, NWIFC, States of Montana and Idaho.



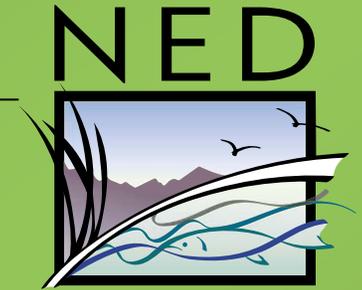
# Challenge: Understanding All Needs





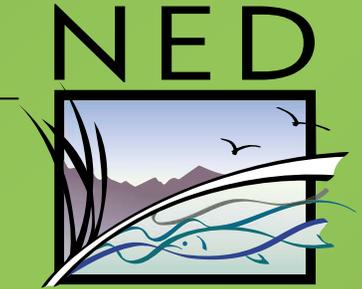
## Challenge: Choosing a Strategy

1. Build participation
2. Get beyond current ad-hoc arrangements
3. Work on data standards, data stewardship
4. Keep standards in web-enabled data dictionary
5. Use a Portal to improve data discovery and sharing
6. Pilot distributed database management solutions



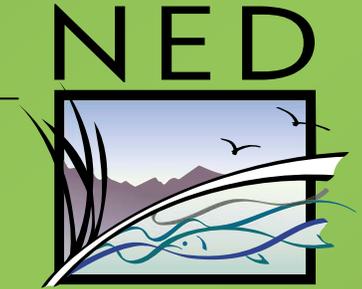
## Challenge: Produce Products

- Inventory of water quality and other related databases for the Pacific Northwest
- Hosted workshops in 2005 and 2006 for regional data specialists and data collectors and documented findings
- Completed data definition inventory for riparian and upland species



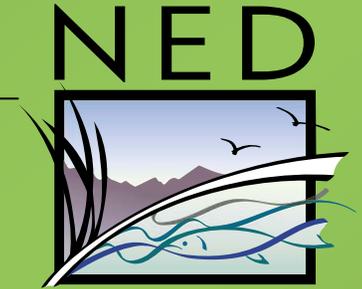
## More Products:

- “Best Practices for Reporting Locational and Time Related Data”
- “Check List for Organizing Field Collection and Management of Data”
- “Best Practices for Data Dictionary Definitions and Usage”
- Raised awareness of need for regional data network resources



## AND a few more.....

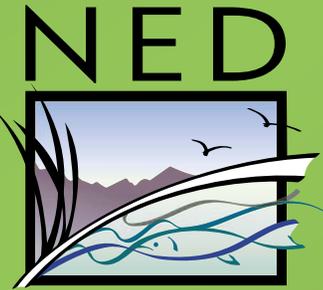
- Compiled Sub-basin planning data - after it had been collected without any reporting requirements
- Organized access to Sub basin Ecosystem Data and Trend data and Reach System data
- Supported consistent protocols for project data for regional data systems eg: Pacific Coast Salmon Recovery Program and BPA PISCES system
- Deployed a regional portal to improve data discovery, sharing and stewardship



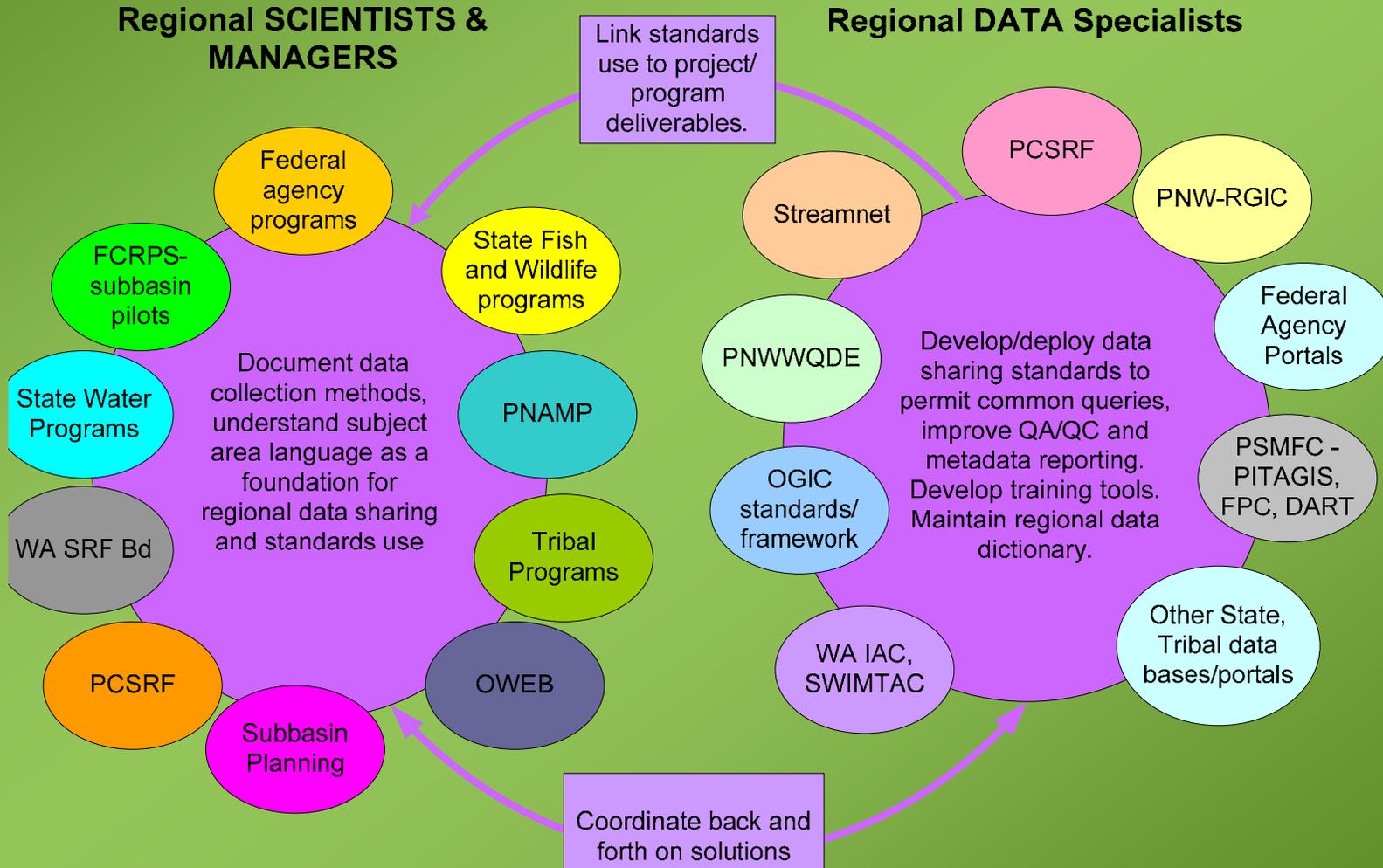
## Realizing Opportunities Depends On:

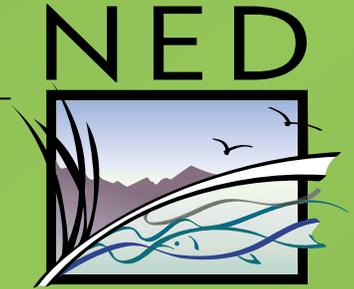
Commitments and practice to:

- Use regional products
- Share data
- Use incentives as a part of business practices
- Apply Best Data Management Practices in organizations/agencies



# Who can benefit from opportunities?



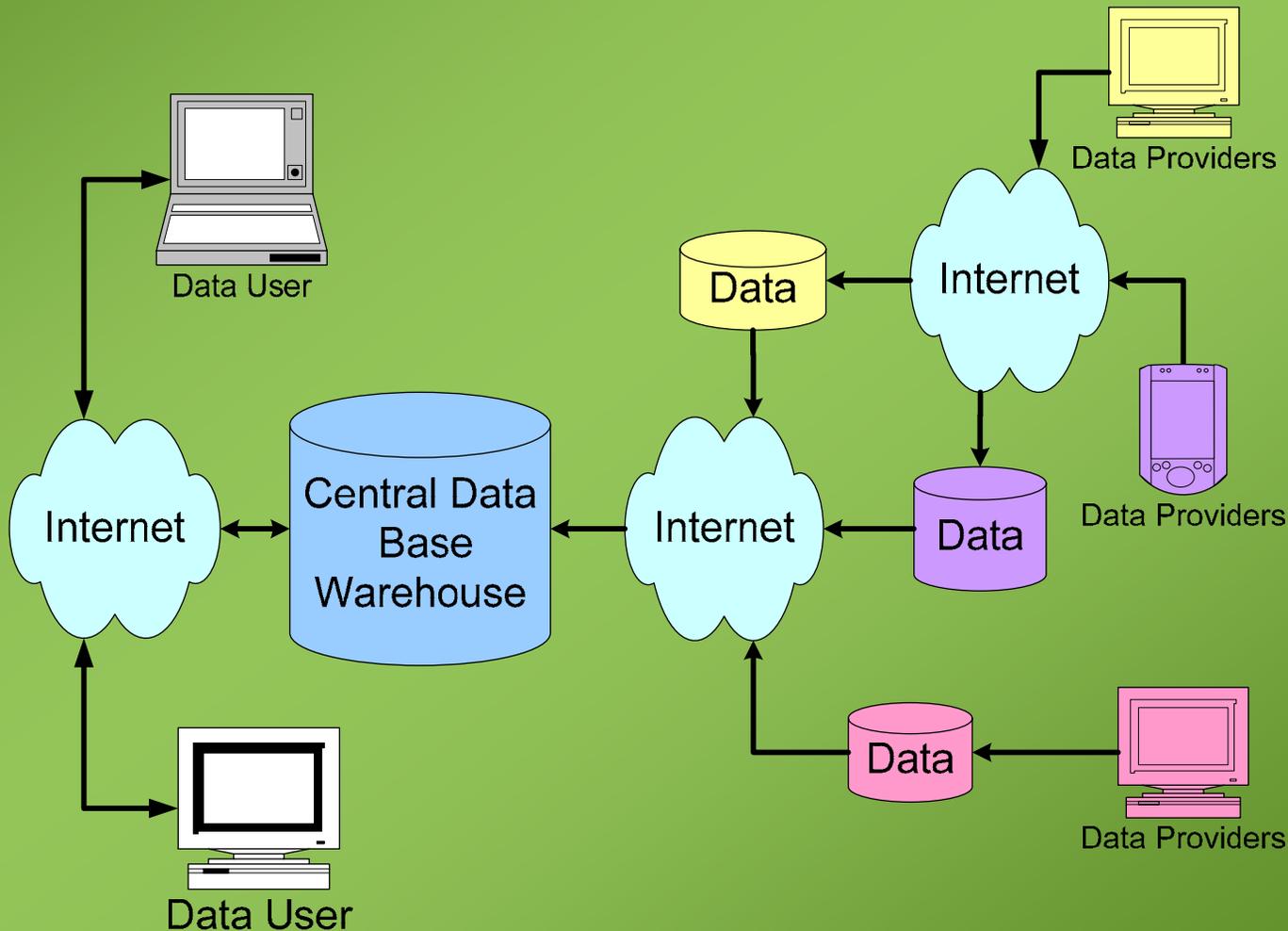


## OPPORTUNITY: Pilot Distributed Database Management System Technology

- Current regional data fishery and habitat data integration is through data warehouses: “smokestacks”– so how do we integrate the warehouses?
- Distributed database management system (DDBMS) or DDBMS and warehouse system hybrids can be used as a viable alternative e.g. Pacific Northwest Water Quality Data Exchange
- So what is the difference?

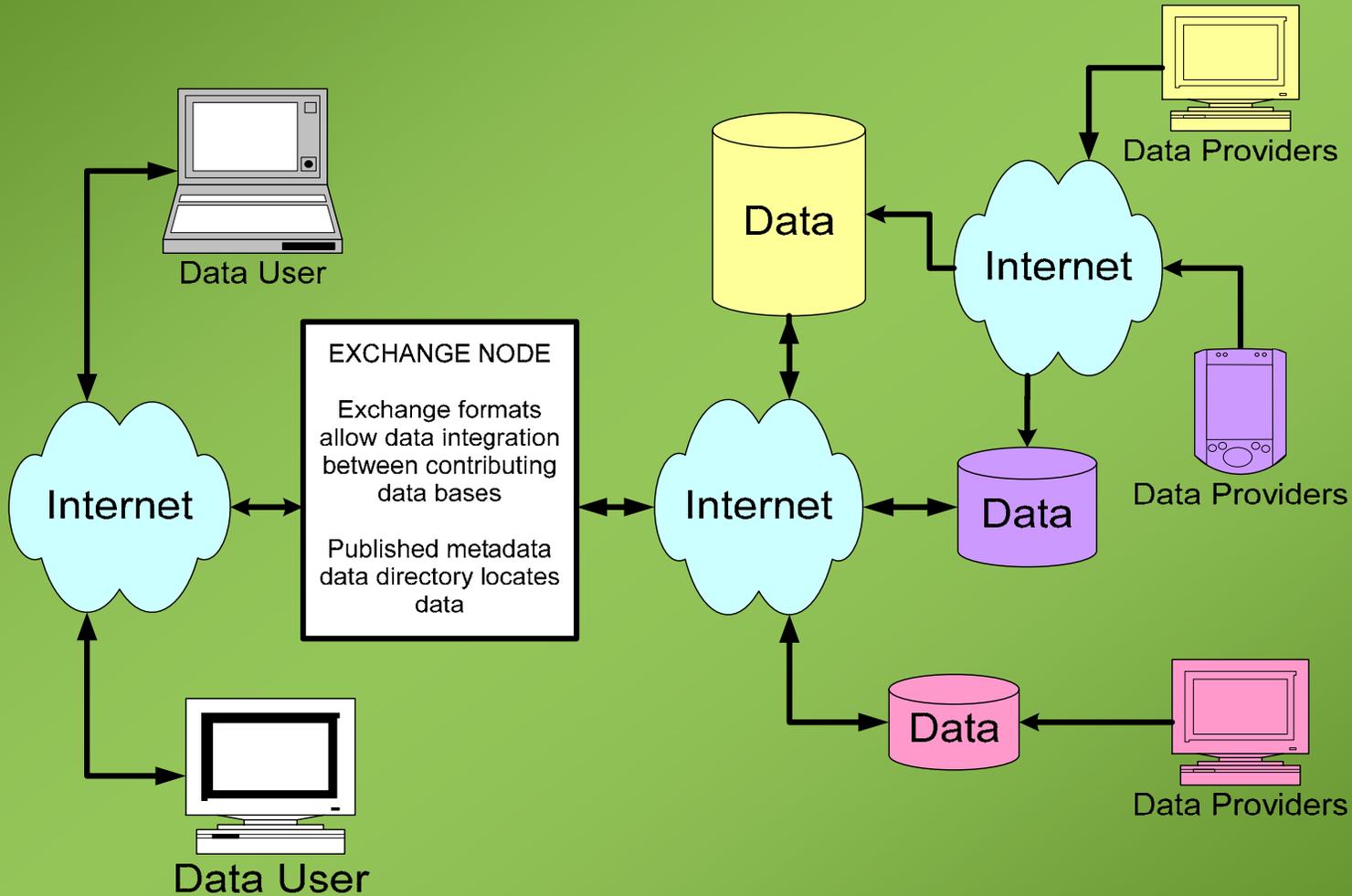


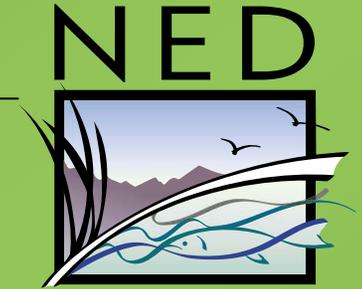
# DATA WAREHOUSE - CONCEPT





# DDBMS - CONCEPT





## Questions and Answers?

### Follow up contacts:

- [Stewart.Toshach@noaa.gov](mailto:Stewart.Toshach@noaa.gov)
- 206-860-3495
  
- Peter Paquet [ppaquet@nwcouncil.org](mailto:ppaquet@nwcouncil.org)
- 1-800-452-5161