

The Northwest Knowledge Network (NKN).

NKN is a cooperative program of the University of Idaho (UI), Department of Energy Idaho National Laboratory (DoE-INL), and the US Department of Interior US Geological Survey (USDoI-USGS). The mission is to make cross disciplinary research data accessible, comprehensible, usable, and secure for data providers and users in Idaho and the northwest region by promoting commonly accepted policies, standards, and protocols and supplying services (e.g. secure data storage, seamless discovery, exploration, transfer of data between and within user groups, etc.) that are adaptive to changing data management and storage needs.

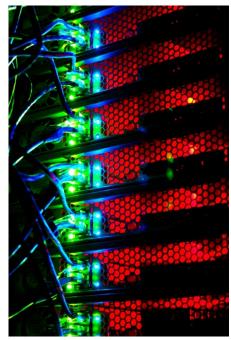
NKN can advance ground and surface water modeling by state and local agencies, help the DoE-INL implement Environmental Impact Assessments and catalog and analyze nuclear reactor test data, enable agriculture and natural resource managers to adapt to environmental change, facilitate the digital collections of Idaho's research libraries, and increase accessibility to INSIDE Idaho GIS data.

Accomplishments FY 2011.

- Established the NKN office in the University of Idaho Library.
- Purchased/installed 200 Terabyte data warehouses in UI library, and at USDoE-INL.
- Awarded status as NW regional data aggregating node for NSF DATANet-DATAOne program.
- Awarded lead institution status for data management and CI in the USDol Northwest Climate Science Center, including funding for 1.3 staff FTEs.
- Awarded \$400K grant from USDolcture for the national network of 8 Regional Climate Science Centers (CSCs) and 23 Landscape Conservation Cooperatives (LCCs), including funding for 5 staff FTEs.
- Identified as lead organization for data management and CI in several new regional, grant-funded climate science programs, including USDA AFRI, NSF RCN; and USDOT UTC.
- Grant funded EPSCoR CI staff will become NKN staff located in the Research Office at UI.
- Developed CI-data management MOU and data management policies among Idaho universities.
- Hired a data architect faculty position, the first of several new faculty positions to populate the NKN CI Research program.

Efficiency through Inter/Intra Agency Collaboration and Networking.

NKN is positioning itself as the go-to data management-Cl infrastructure for large, regional, cross-disciplinary research and outreach programs in the northwest region. NKN provides to groups of institutions, basic data services, data sharing policies and processes, and coordinated faculty hiring to increase the overall efficiency of data management and sharing across higher education institutions and federal and state agencies in the region. This reduces duplication of planning, purchasing, systems build-out and administration and conflict between data management policies; and results in consistent, defensible data management policies and

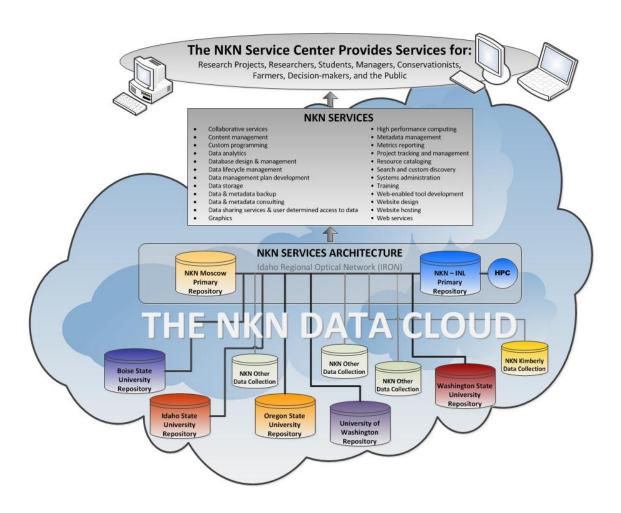


procedures, and increases overall data quality and accessibility to researchers, educators, resource managers, policy makers and the general public.

NKN's has become the core data program for grant funded regional projects involving multiple research universities and multiple federal and state agencies in the region. NKN facilitates connections between institutions by cooperating in network planning with the Idaho Regional Optical Network (IRON) and with larger networks like Internet2, IRON and NSF DATANet.

Next Steps.

Infrastructure establishment costs for a fully functional NKN program are \$6 million, including, core hardware and software, IT and programming personnel, and visualization/simulation capabilities. A sustained NKN would require \$2 million in annual revenue. The UI and DoE-INL have made investments of nearly \$1 million in core infrastructure and start up, and NKN has leveraged approximately \$2 million through grant writing and is adopting a service center model to cover services provided and some of the annual fixed infrastructure maintenance costs. An additional one-time infusion of \$4 million and an annual infusion of \$1 million would augment a realistic fee for services model and allow NKN to operate on a sustainable business model for the next five years.



For more information, please contact: