Integrated Approach to Environmental Assessments



Nearly 50 years of proven, data-backed analyses and tools for better, risk-informed environmental decision-making







For nearly 50 years, Pacific Northwest National Laboratory (PNNL) has produced scientifically credible, trusted, and legally defensible analyses to meet federal, state, and local environmental regulations and guidelines. With over 70 environmental reviews to our credit, we have a long history supporting agencies, such as the Nuclear Regulatory Commission, the Department of Energy, Department of Defense, Bonneville Power Administration, and the National Nuclear Security Administration.

Our expertise crosscuts complex challenges including energy infrastructure siting, flooding potential, atmospheric dispersion, and contaminant fate and transport. With a team of over 40 staff, our in- house expertise spans every technical specialty necessary to complete the most scientifically challenging or legally demanding assessment.

What We Do

We work interactively with clients and stakeholders to support complex environmental decision making, including through the National Environmental Policy Act (NEPA) process using tools and techniques that efficiently analyze the trade-offs between costs, benefits, environmental and public risks, and stakeholder values. Our NEPA expertise includes the following areas:

- Environmental Impact Statements, Environmental Assessments, and Categorical Exclusions
- Technical resource assessments
- Categorical exclusions
- Project management and coordination
- Cumulative effects
- Endangered Species Act and Magnuson-Stevens Act consultation support
- Regulatory compliance/coordination (National Historical Preservation Act, Endangered Species Act, Clean Water Act, and Clean Air Act)
- Administrative record maintenance

- Fact witness testimony
- Strategic stakeholder engagement and facilitation
- Contaminant-specific fate and transport modeling
- Comment delineation, binning, and response
- Advanced ecosystem modeling
- Support for federal, state, local, and Tribal outreach and coordination
- Cost/benefit valuation for complex environmental and socioeconomic issues
- Effects of extreme weather and changing baselines



Efficient Solutions, Proven Experience

PNNL's expert team utilizes its proven expertise to deliver efficient solutions. We use the following approaches to:

Integrate Complex Assessments: We offer a multi-resource, interdisciplinary approach to assess complex environmental, economic, and social issues, with an experienced staff of subject matter experts to develop streamlined and comprehensive assessments.

Address Environmental Changes: PNNL is continually developing and applying innovative methods to inform environmental reviews, critical infrastructure protection assessments, and adaptive management of resources to encompass shifting baselines and aid in tradeoff analysis for complex decision-making.

Inform Environmental Policy: PNNL has experience in helping federal agencies prepare

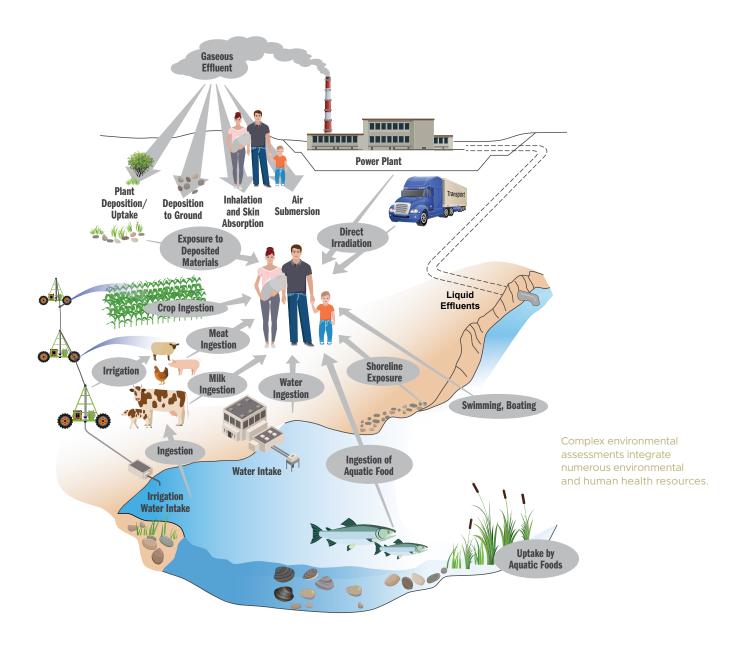
guidance and policy to help streamline review and analysis processes and to respond to new regulations, emerging issues, and new technologies.

Facilitate Effective Stakeholder Engagement:

PNNL supports state and federal agencies during regulatory decision-making processes with strategic engagement techniques, such as stakeholder analysis, interviews, soliciting input and values, engagement plans and event coordination, facilitation, and incorporating value into programs.

Enable Efficient Responses to Public

Concerns: PNNL has developed web-based and Artificial Intelligence solutions for analyzing, sorting, tracking, summarizing, and responding to public comments. These tools streamline the labor-intensive process of accepting and resolving public feedback and integrates comments into projects and programs. The tool is scalable, accommodating large volumes of public feedback.



For More Information, Contact:

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About PNNL

Pacific Northwest National Laboratory

draws on signature capabilities in chemistry, Earth sciences, and data analytics to advance scientific discovery and create solutions to the nation's toughest challenges in energy resiliency and national security. Founded in 1965, PNNL is operated by Battelle for the U.S. Department of Energy's Office of Science. DOE's Office of Science is the single largest supporter of basic research in the physical sciences in the United States and is working to address some of the most pressing challenges of our time.