

# ADDRESSING AND ACHIEVING

# Environmental Justice

Environmental justice is achieved when everyone, regardless of race, culture, or income, enjoys the same degree of protection from environmental and health hazards, and of equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

Pacific Northwest National Laboratory (PNNL) partners with the U.S. Department of Energy, the U.S. Nuclear Regulatory Commission, federal and state agencies, and industry to identify and engage minority, low-income, resource-dependent, or other historically disadvantaged populations in regulatory decision-making, environmental assessment, and impact estimation of the consequences of large and complex federal polices and projects.

## **CAPABILITIES**

- » Conducting demographic analysis to identify minority or low-income populations potentially affected by federal actions.
- » Performing local area reconnaissance, including desktop and dashboard, along with direct engagement with stakeholder organizations representing environmental justice populations.
- » Identifying potential environmental or health impact pathways linking federal projects with environmental justice populations.

# INNOVATIVE TOOLS TO SUPPORT ENVIRONMENTAL JUSTICE

**FACET** is a science-based framework to transparently evaluate tradeoffs among complex environmental, economic, and social issues. It offers customizable support for policy and

business decisions, resulting in risk-informed, socially equitable, and defensible evaluations for all stakeholders

This framework differs from traditional decision-making tools because of its flexibility in adapting to long-term, environmental factors, like climate change, or unpredictable extreme events. Its advanced analytics can integrate shifting environmental baselines and mitigation alternatives to best protect communities and the environment. FACET helps identify challenges and potential solutions, increasing situational awareness and ultimately improving stakeholder outcomes.

» Uniform Valuation Challenge – fair, balanced, and equitable solutions to environmental and socioeconomic issues. FACET offers a defensible valuation system for quantifying stakeholder costs and benefits, including: economic, social, cultural, recreational, and ecosystem impacts. » Multi-Stakeholder Tradeoffs Challenge – FACET's tradeoff analyses leverage an understanding of resource relationships and values for optimal, equitable, and transparent decision-making.

**Executive Order 13985 Compliance and Guidance Development.** We provide population screening analysis, impact pathway identification, and development of prescriptive techniques for agency staff to utilize in assessing environmental justice impacts of federal actions.

**Stakeholder Engagement.** Our public outreach expertise—four decades of experience with developing and managing stakeholder engagement campaigns, from facilitating large meetings to conducting individual interviews—enables input on both the beneficial and negative potential impacts of complex projects on communities or groups of individuals, including underserved communities.

#### **Comment Response Management System.**

PNNL developed this proven and effective knowledge management tool to provide a rapid and effective way to efficiently synthesize public and stakeholder comments at both large scales and broad scopes. It has been used successfully to process tens of thousands of comments, shortening agency response time, while facilitating consistency and ensuring comments and concerns are captured and incorporated into the decision-making process and record.

## **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.



PNNL's Environmental Justice approach includes researching data using tools from Google Earth to the census, then conducting on-site field observations of the area surrounding the project, like this one outside the Grand Gulf Nuclear Station in Port Gibson, Mississippi.



A vital element in the environmental justice process is engaging with and interviewing local officials and organizations that serve an area's underserved communities. (Photo | U.S. Nuclear Regulatory Commission)

#### **ENVIRONMENTAL JUSTICE CONTACTS**

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pnnl.gov/projects/environmental-justice

