

Tribal-FERST:

SUPPORTING SUSTAINABLE AND HEALTHY AMERICAN INDIAN TRIBES

The Issue

Tribes face unique and numerous environmental and human health challenges. As tribal leaders work to build and enhance environmental safeguards in their communities, user-friendly, science-based tools may contribute to sustainable solutions. Tribal-focused tools are needed to prioritize environmental issues, understand exposure pathways, and conduct comprehensive impact assessments - all of which are important in decisions to improve public health and the environment.

A Collaborative Approach

The Tribal-Focused Environmental Risk and Sustainability Tool (Tribal-FERST) is a web-based geospatial decision support tool. Tribal-FERST will serve as a research framework to provide tribes with easy access to the best available human health and ecological science.

Tribes and partners throughout the United States, representing a wide range of interests and issues in Indian Country, are



Sample Tribal-FERST map for the Pleasant Point Passamaquoddy Tribe of Maine

providing input on the design and content of Tribal-FERST. The United South and Eastern Tribes (USET) is partnering with EPA to develop the Tribal-FERST guidance document and connect its water quality exchange database and data transfer network with Tribal-FERST.

The Pleasant Point Passamaquoddy Tribe of Maine is currently piloting Tribal-FERST as part of its sustainable and healthy community effort. This collaboration draws together tribal members, EPA, and the Tribe's sustainable community planning consultants, in order to make informed

environmental and economic decisions about solid waste, sea level rise, and subsistence diet. At the same time, the Pleasant Point Passamaquoddy Tribe will provide input to improve Tribal-FERST and make it a more robust and user-friendly tool. Tribal-FERST will be enhanced through information collected and lessons learned in this and other pilot studies, making it broadly applicable for other tribes as well.

Developing Innovative Solutions for Sustainability

In Tribal-FERST, users will be able to follow step-by-step guidance for identifying priority issues, compiling data,

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ranking and addressing risks, and assessing impacts of actions taken. At each step, relevant information will be provided, such as:

- fact sheets and reports about environmental issues of concern
- a tribal environmental data table providing quantitative information to support risk prioritization
- decision-making guides integrating traditional ecological knowledge and western science
- a geospatial mapping component
- access to best practices and guidance for addressing risks
- links to other tools relevant to tribal environmental decision-making

The Tribal-FERST geospatial mapping component will enable the user to view and overlay demographic information with publicly available data, including environmental concentrations, human exposures, health risks, ecosystem services, sustainability indicators, and sources of pollution. In the future, tribes will have the option to overlay locally collected data and determine whether or not to make it publicly available.

The planned products from Tribal-FERST include:

- a methodology to build capacity and match tribal issues with the best available science
- a user-friendly, science-based tribal environmental decision support tool
- a national tribal environmental data inventory to inform and populate Tribal-FERST
- results from phased pilot projects, providing answers to questions of tribal interest for priority environmental issues and best practices

Benefits of Tribal-FERST

Tribal-FERST is being built in partnership with tribes, with support from EPA scientists. The tool is intended to empower tribes by providing access to relevant science that can be used to develop sustainable, cost-effective solutions for reducing environmental exposures and health risks. Using this web-based geospatial decision support tool, tribes may employ a holistic approach to address environmental concerns and plan for the future. This project directly supports the EPA Administrator's priority to build strong tribal partnerships¹ and EPA's commitment to protect tribal lands.

REFERENCE:

¹L Jackson. (January 12, 2010). Seven priorities for EPA's future. [Memorandum]. Retrieved from <http://blog.epa.gov/administrator/2010/01/12/seven-priorities-for-epas-future/>

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