

# Community-Focused Exposure and Risk Screening Tool (C-FERST) & Tribal-Focused Environmental Risk and Sustainability Tool (Tribal-FERST)

SHC 2.62 | Jim Quackenboss, National Exposure Research Laboratory



## Purpose/Utility of Research

C-FERST and Tribal-FERST are online tools designed in collaboration with stakeholders to improve public health and well-being by engaging and empowering communities and tribes.

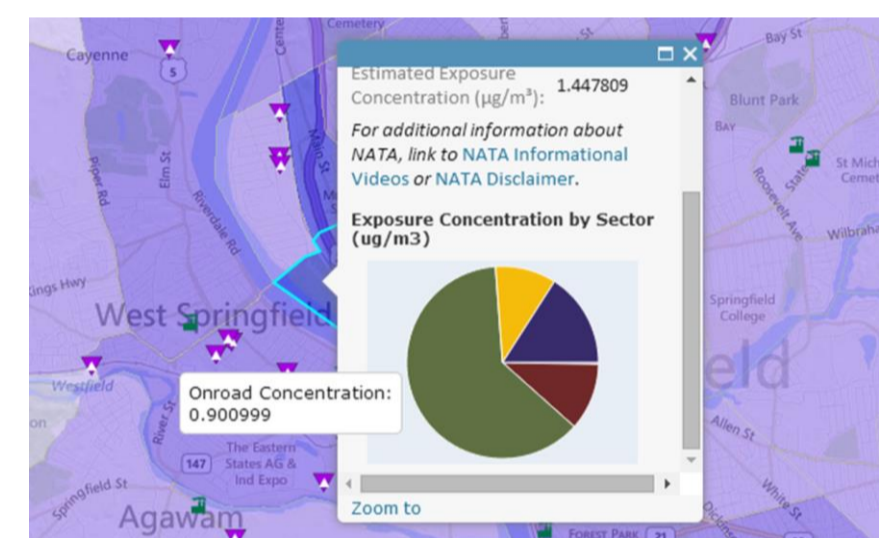
These tools can be used to work with communities and tribes to

- Follow step-by-step community assessment guides
- Build partnerships, identify issues, collect information, develop options to reduce exposures and potential risks



## Highlights

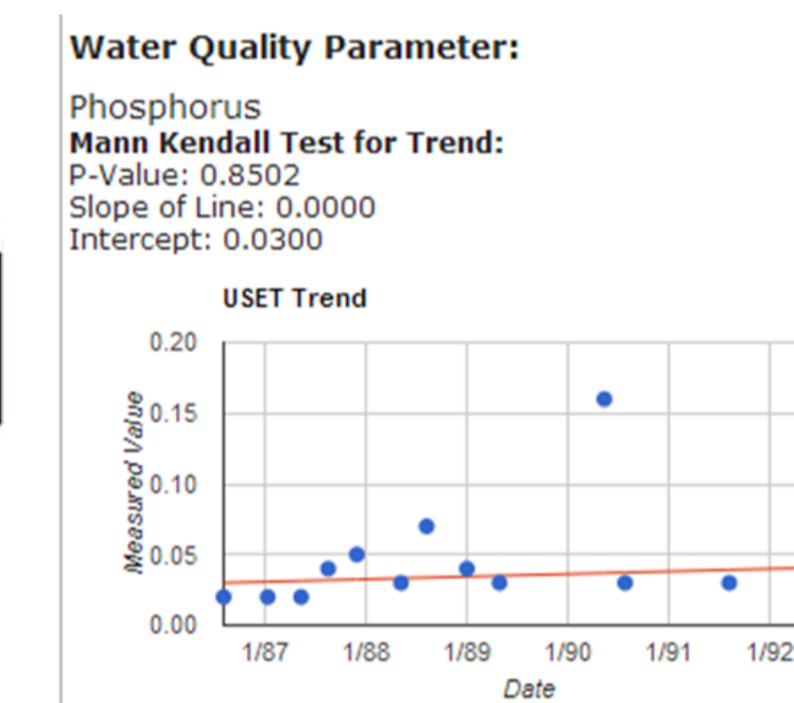
- Online tools help communities learn more about their environmental issues and potential solutions, and perform screening-level assessments of environmental exposures and risks
- These allow users to: view maps of and compare environmental conditions, gather information, and use community and tribal assessment guides
- Contain data on sources of pollution, environmental concentrations, estimated exposures and potential risks, demographics, and community and tribal characteristics
- Provide information on potential solutions, community and tribal projects, guidance, citizen science, and methods for measuring environmental conditions
- For more information on C-FERST or Tribal-FERST visit [www.epa.gov/heasd/c-ferst](http://www.epa.gov/heasd/c-ferst) or contact [CFERSTMail@epa.gov](mailto:CFERSTMail@epa.gov) or [TFERSTMail@epa.gov](mailto:TFERSTMail@epa.gov)



guidance, local exposures and risks, best practices, potential solutions



user-friendly interface, GIS maps, community reports



## Connection to SHC Portfolio

C-FERST and Tribal-FERST

- Are key parts of the SHC Project 2.62: Community Public Health and Well-being; Focus area #1: Community engagement, assessment tools and decision support tools
- Addresses challenges and needs identified by the NRC, NEJAC, others
- Provide a venue for communicating science and EPA recommendations to address environmental issues
- Will help to bring results from this Project, as well as other SHC Projects, to communities

## Application & Translation

C-FERST and Tribal-FERST community and tribal partners have used the tools for gathering information for screening-level community and tribal assessments:

- Springfield, MA grantees used C-FERST air quality data in their risk-screening ranking process
- Baseline conditions for a Health Impact Assessment (HIA) at an elementary school were collected using C-FERST in Springfield, MA
- Grantees in Portland, ME used guidance provided in C-FERST to organize their community assessment process for identifying issues of concern
- The Passamaquoddy Pleasant Point Tribe in Maine used Tribal-FERST maps to assess potential sea level rise conditions; and air quality layers to observe PAH levels in their reservation and interpret sources and impacts
- The United South and Eastern Tribes and the Eastern Band of Cherokee Indians are working with ORD to develop Open Waters for testing the impairment/improvement of Tribal and EPA water quality data over time
- Evergreen State College (Portland OR) is using C-FERST as a classroom learning tool for community engagement (Region 10 RESES)

## Intended End users

C-FERST and Tribal-FERST users Include

- Those with an interest in community environmental public health, and a moderate degree of technical expertise to navigate the tool
- Environmental professionals, state and local risk assessors, or EPA community involvement and EJ coordinators working on local-scale issues

Community groups, the public, and professionals may all benefit from working together with C-FERST and Tribal-FERST to

- Identify and evaluate issues and
- Interpret the data and results

## Lessons Learned

Improving information and data access for community decision-making is critical but presents significant challenges in

- Providing valuable information & science for assessing complex issues
- while keeping the tools easy to use, up-to-date, avoiding bias, and respecting community empowerment

We need to be clear about

- What information, data, and functions are provided
- Their intended uses; not as tools for EPA regulatory decisions or risk assessments
- Limitations in the types of data, geographic coverage, and accuracy of data and model estimates