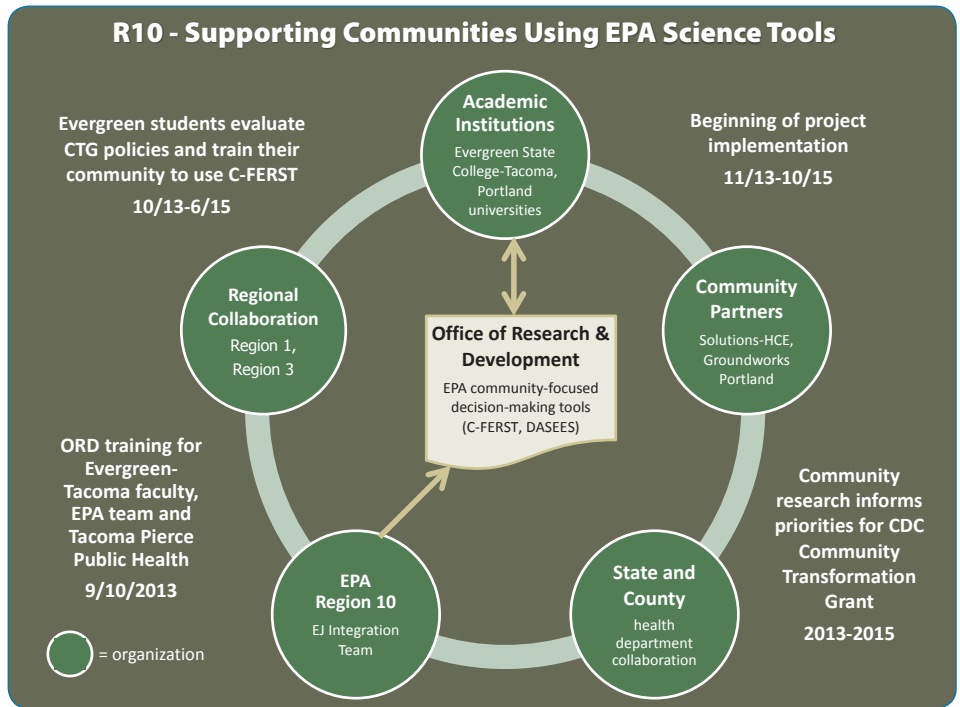


Supporting Communities Using EPA Science Tools

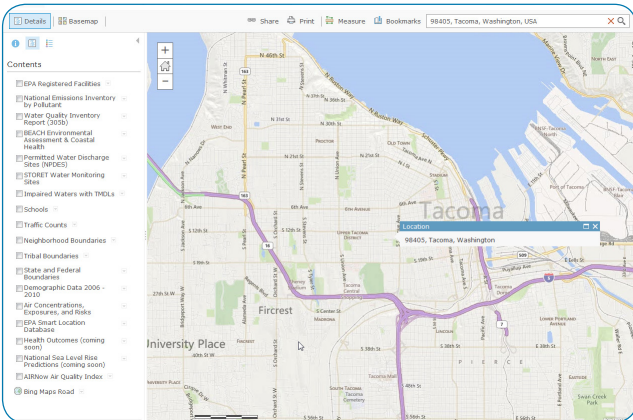
Background

The EPA has developed a distinct environmental information and mapping tool called the Community-Focused Exposure and Risk Screening Tool. C-FERST's goal is to respond to a rising number of communities that are faced with exposure to environmental stressors and environmental justice concerns including transit, exposure to pollutants, water issues and a call to clean up contaminated soil and sediment. EPA Region 10 submitted a successful application to the Office of Research and Development (ORD) for the Regional Sustainable Environmental Sciences Research Program (RESES) in December 2013 to trial C-FERST with communities in Region 10. The name of this RESES research project is "Supporting Communities Using EPA Science Tools." This research aims to identify and assess local community, human and environmental health issues using ORD's science tools. Although C-FERST is in beta stage, Region 10 is examining the tool with local stakeholders in Tacoma, WA and Portland, OR in response to community requests. Best practices gleaned from the initial project location in Tacoma, WA were replicated in other communities including the port city of Portland, OR. The project is supported by Regional Science Liaison Bruce Duncan, PhD and led by Region 10 Environmental Justice Community Liaison Sheryl Stohs, PhD with research support from R10 ORISE Participant Laura Stewart, MSL.



Purpose and Utility of Research

This research project assesses the technical issues, data and user interface of C-FERST with end users at the local level prior to the tool's public release. C-FERST has various functions including a 'Roadmap for Community Projects', 'Environmental and Demographic Data Map', 'Environmental Issue Profile', 'Community Data Table' at the zip code level and 'Solutions and Resources for Action'. Each function was demonstrated, applied, and assessed with project partners including Evergreen State College Tacoma Campus, Tacoma-Pierce County Health Department, Solutions HCE, Concordia University, Right 2 Survive, Groundwork Portland, Oregon Department of Environmental Quality, Multnomah County and other stakeholders. By using the tool in community based participatory research projects, the research responds to Region 10 community needs such as: scientific empowerment, access to agency generated data, transparency, trust building, and sustainable community based partnerships. Feedback from these projects will also be used as part of C-FERST development.



Map of Tacoma, WA 98405 generated using a beta version of C-FERST on 12/21/14

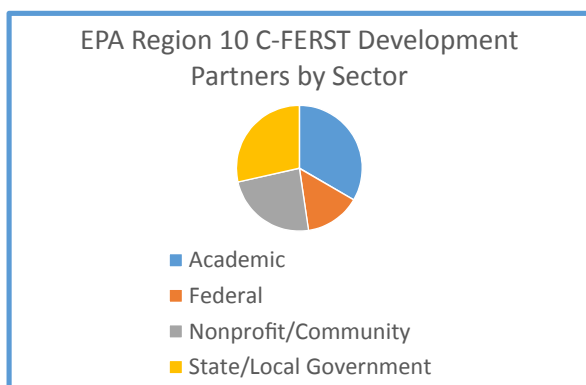
Impact

Project partners in Tacoma and Portland have various environmental justice concerns. Among them are: proximity to EPA registered facilities; air concentrations and exposure; transit issues; children's health; and impacts to minority or low income populations. Working with partners in every sector, the research builds local capacity to respond to grassroots concerns and opportunities for collaborative responses.

To bridge the gap between science and environmental advocacy, EPA Region 10 is working with local authorities to implement local actions. One way this effort has been achieved is through citizen science;

research collaborations between scientists and volunteers, particularly (but not exclusively) to expand opportunities for scientific data collection and to provide access to scientific information for community members. This is essential because communities directly experience the result of ongoing environmental issues.

Reason for Requesting Use of C-FERST	Partner		
	Academic Institutions	State/Local Government	Nonprofit/Community
Concern:			
Children's Health	✓		✓
Diesel PM	✓	✓	
Community Education	✓		✓
Hazardous Waste			✓
Low Income Impacts		✓	✓
Minority Impacts	✓	✓	✓
Ozone		✓	
Transit	✓	✓	✓



Although the work is ongoing, some lessons learned are:

- Community training requires workshops, computer/lab resources and a forum for assistance/questions and answers.
- Strengthening the credibility of the tool will require internal EPA use complimenting community applications of C-FERST
- A virtual 'community forum' on the tool is necessary to share information, projects and resources to support the formation of coalitions
- A regional 'community science liaison' to facilitate citizen science, education, and engagement is necessary.



Concordia University Students discuss best practices and access fact sheets from C-FERST

For more information ...

For more information on C-FERST, visit:

<http://go.usa.gov/ccdmw>


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This document can be made available in other languages by request. If you need this document in an alternative format, contact **Sheryl Stohs** at 800-424-4372, extension 3-0250.

 TDD users please call the Federal Relay Service: 800-877-8339 and give the operator Sheryl's phone number.