

# APPLYING THE EJ LENS IN FEDERAL FACILITY CERCLA CLEANUPS

Cal Baier-Anderson

OLEM Federal Facilities Restoration and Reuse Office

# EPA EJ Priorities

- **Take immediate and affirmative steps to incorporate environmental justice considerations into their work.**
- **Take immediate and affirmative steps to improve early and more frequent engagement with pollution-burdened and underserved communities.**
- <https://www.epa.gov/newsreleases/epa-administrator-announces-agency-actions-advance-environmental-justice>

# EJ is about protection and engagement

Environmental justice requires that all people experience the **same degree of protection**, and everyone has **equal access to the decision-making process**. <https://www.epa.gov/environmentaljustice>

- **To provide the same degree of protection**, we must first recognize that some people may be disproportionately impacted because of biological, physiological, psychosocial and socioeconomic vulnerabilities and/or higher or more frequent exposures.
- **To ensure equal access to the decision-making process**, the outreach strategies should be tailored to meet the needs of the community.



**WHAT DOES IT LOOK LIKE TO DO THIS  
SYSTEMATICALLY AND TRANSPARENTLY?**

01

With OEJ, assess baseline practices for incorporating EJ in risk assessments

02

Provide seed money to regions to explore EJ considerations at PFAS sites

03

Add EJ considerations to Excellence in Site Reuse Awards

04

Develop and pilot EJ Tips to promote best practices

# Identifying Best Practices

# EPA Region 3 Environmental Justice Pilot

## Three Federal Facilities

- Army
- Navy
- Air Force

## Three States

- Pennsylvania
- Virginia
- Delaware

## EPA Staff

- FFRRO
- EPA Region 3

# Pilot: Five Step Process



# 1. Use Existing Tools to Identify Communities with Potential for Disproportionate Impacts

## Know the factors that may result in disproportionate impacts

- People/communities of color
- Low income
- Tribal, and indigenous populations
- Other vulnerable populations such as the elderly, children, and those with pre-existing medical conditions

## Assess communities for EJ-related factors

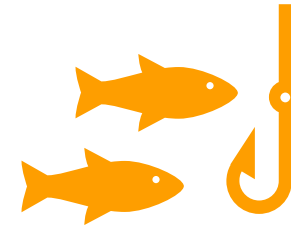
- Local knowledge and experience
- EJScreen
- EnviroAtlas
- CDC EJ Dashboard
- Climate and Economic Justice Screening Tool





**Do all community members have access to information?  
(engagement)**

- Identify community segments of community not engaged
- Employ targeted engagement strategies
- Network with community organizations



**Are there site-specific factors might influence risk?  
(protection)**

- Assess CSMs
- Land use (e.g., fishing, hunting)
- Exposure factors (e.g., activities and behaviors)
- Other sources of environmental contamination and stressors

## 2. Identify What is Known About Current Site Conditions



### 3. What Gaps Need to be Filled?

- Ground-truthing the data is an important next step.
- Formulating questions can help the team develop outreach and engagement strategies.
- There is no substitute for getting out there and talking to people!
- Federal Facilities may have the lead, but there are roles for EPA and the state.
- Be nimble and adjust to new information.



Compare  
EJScreen/Desktop  
tools with current  
community outreach  
information



Strategize how to  
engage  
neighborhoods that  
you might be missing



Update the  
Community  
Involvement Plan



Expand understanding  
of community  
concerns through  
engagement



Convene other state and local  
agencies and other organizations  
to help address community needs  
beyond site-specific issues

## 4. Take Action to Engage

# 5. Take Action to Protect

---

## Use

Use information to understand potential land and resources use, unique activities, etc. that could result in exposures

Include in the Conceptual Site Model  
Inform sampling and analysis

---

## Ensure

Ensure that the relevant exposure scenarios are included in the risk assessment

Assess in the risk assessment  
Identify risks

---

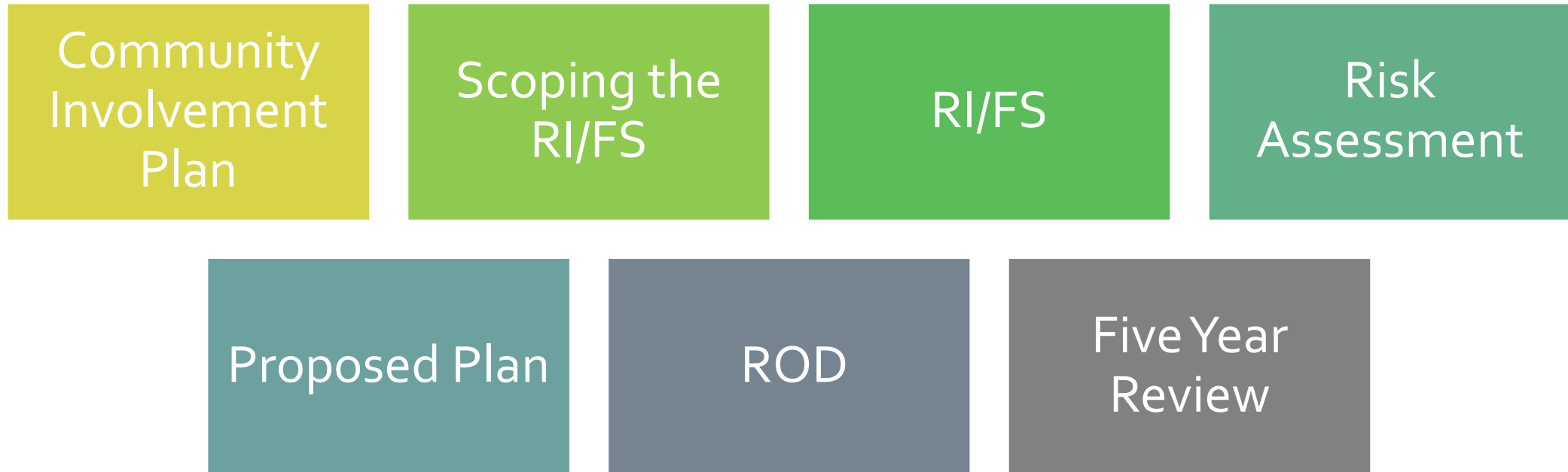
## Consider

Consider other non-site related factors that could influence risk and provide context

Highlight important science-based information that influences risk for decision-makers

---

# It's Never too Late to Consider EJ Factors in the CERCLA Pipeline



# Early Lessons

- Cleanups take time. We did not have a chance to pilot all steps in the process.
- Community outreach takes time, money and expertise.
- CERCLA assigns the OFAs primary responsibility for community engagement, but there are potential roles for EPA and the State.
- Because protection and outreach go hand in hand, it makes sense to include risk assessors and community involvement coordinators in discussions of community characterization early in the project.
- A complete conceptual site model is key to success in outreach and protection.

# PILOT EXAMPLES

---

# Tool: EJScreen EJScreen

<https://ejscreen.epa.gov/mapper/>

**EPA EJScreen** EPA's Environmental Justice Screening and Mapping Tool (Version 2.1) EJScreen Website | Mobile | Glossar

Please note: Territory data (except Puerto Rico) is not available as comparable to the US. It is only comparable to the territory itself by using the 'Compare to State' functionality. Likewise, some of the indicators may not be available

**Additional Demographics**

2016-2020 ACS | 2010 Census

Category: Language

Variable: French, Haitian, or Cajun

Blockgroup Map  Proportional Symbol

Add to Map

**Map Contents**

2016-2020 ACS (Tract)

French, Haitian, or Cajun

- > 51 - 3,731
- > 22 - 51
- > 10 - 22
- > 0 - 10
- 0 - 0

Find address or place

Labels on map: Pleasanton Acres, Oak Grove, Dover, General's Greens, Dover AFB, Highland Acres, Camden, Little Creek Wildlife Area, Port Manon.



# Example: Dover AFB

## ***Questions:***

- Are French/Creole speaking families impacted by PFAS in well water?
- Would they know to ask about their wells? Would they understand risks conveyed in English?
- Are families engaged in subsistence fishing/hunting/foraging in contaminated areas?

## ***Potential Outreach Strategies:***

- Check in with local health department
- Attend community events to establish local connections, meet people, ask questions
- Prepare presentations suitable for smaller, local audiences, with appropriate translations
- Conduct drive-by's to identify potential unregistered wells

## ***Potential Protection Strategies:***

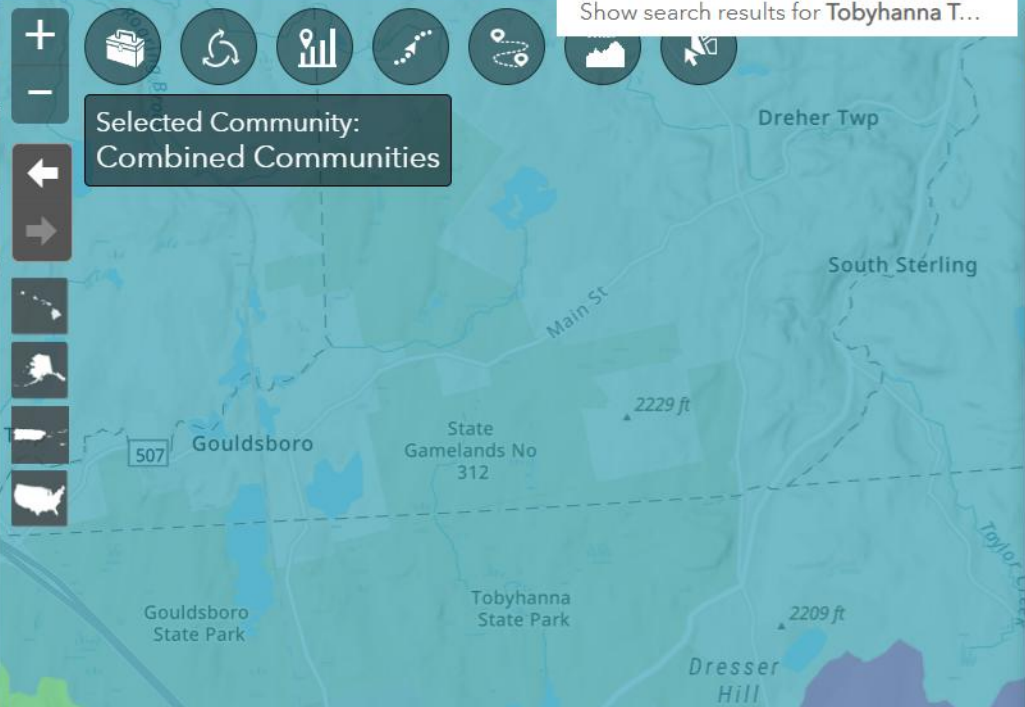
- Update Conceptual Site Model based on findings
- Collect required samples to inform risk assessment
- Assess risk

EnviroAtlas Data

Search All Layers

507 of 507 Maps Expand Hide Icons

- Carbon Storage
- Crop Productivity
- Ecosystem Markets
- Energy Potential
- Engagement with Outdoors
  - Big game hunting recreation demand (day trips per year)
  - Bird watching recreation demand (day trips per year)
  - Day care centers with < 25 percent green space in



Layer List

Layers

- Big game hunting recreation demand (day trips per year)
  - 120,722 - 425,422
  - 34,225 - 120,721
  - 9,671 - 34,224
  - 2,701 - 9,670
  - 722 - 2,700
  - 160 - 721
  - 0 - 159

# TOOL: ENVIROATLAS: LAND USE

# Example: Tobyhanna Army Depot

## ***Questions:***

- Do the communities to the north recognize that they may be impacted by site-specific contaminants, such as PFAS?
- Do the administrative differences between UXO, chlorinated solvents and PFAS cleanups confuse communities?
- Are families engaged in subsistence fishing/hunting/foraging in contaminated areas?

## • ***Potential Outreach Strategies:***

- Work with state natural resources department to identify and engage hunters and fishers
- Work with the schools to reach hunting and fishing families. Use this opportunity for broader engagement

## ***Potential Protection Strategies:***

- Update Conceptual Site Model to reflect hunting and fishing activities
- Collect required samples to inform risk assessment
- Assess risk



# CONTACT

Cal Baier-Anderson

[baier-anderson.caroline@epa.gov](mailto:baier-anderson.caroline@epa.gov)