Environmental Protection Agency Office of Research and Development Center for Environmental Solutions and Emergency Response

Brittany Kiessling I Kiessling.Brittany@epa.gov

Background

The Equitable Resilience Builder (ERB) is a downloadable application that supports communities in resilience planning, focusing on equity. It engages users in a guided process to inclusively assess local hazards, equity, and the resilience of different sectors. It then guides users to work collaboratively with community members to prioritize actions.

In Summer 2022 and Spring 2023, EPA contractors and EPA Office of Research and Development (ORD) piloted ERB in three EPA Regions: 5, 4, and 2. Lessons learned from the pilots were used to refine ERB content before wider public release of the tool.



Using community case studies to test the Equitable Resilience Builder

Brittany Kiessling, Emily Eisenhauer, Keely Maxwell, Susan Julius, Meridith Fry, Marissa Matsler, Lauren Oliver, Ian Reilly, Maureen Shacklette, Kelli Roemer



Mapping activity at the Waynesboro workshop (Adaptation International).

Community outcomes

Piloting the ERB process in these communities led to:

- Stronger peer-to-peer relationships
- New data and information
- Shared set of actions to address concerns
- Individual commitments to advance equity goals

Barnwell, SC and Waynesboro, GA (EPA Region 4)

Barnwell and Waynesboro are historically underserved communities located in the Central Savannah River Area (CSRA). The area has extensive environmental contamination from years of heavy industrial use along the Savannah River, including a multi-reactor nuclear research and weapon manufacturing plant.

Case study goals: To use ERB as a

prototype for building a CSRA-wide, faithbased emergency preparedness and climate resilience movement that addresses equity disparities.

ERB Activities:

Two workshops focused on:

- Hazards and vulnerability
- Identifying solutions and actions.



Demonstration (CDA)

Grand Rapids, MI (EPA Region 5)

An alliance of local governments formed the Lower Grand River Organization of Watersheds (LGROW). LGROW has been working on a Lower Grand River Watershed Resilience Action Plan. This plan will offer resilience strategies and action geared towards existing and potential climate change impacts.

Case study goal: To consider equity and the needs of subwatershed communities in the development of the Lower Grand River Watershed Resilience Action Plan.

ERB Activities:

Three workshops focused on:

- Understanding root causes of vulnerabilities and connections to resilience
- Identifying specific actions for improving resilience and equity



Buck Creek workshop (Climate Resilience Consulting).

Lessons learned

- Must allow for flexibility and customization of ERB process
- Success breeds success start with quick wins
- Include a trauma-informed approach
- Partner with trusted leaders as facilitators
- Use terminology that resonates with the community

United States Environmental Protection Agency

The views expressed in this poster are those of the author(s) and do not necessarily represent the views or policies of the U.S. Environmental Protection Agency. This poster has been reviewed in accordance with U.S. Environmental Protection Agency policy and approved for publication.

Buffalo, NY (EPA Region 2)

Buffalo, NY suffers from air pollution, as well as persistent poverty and environmental justice concerns. Recent tragedies, including a mass shooting, highlighted a need for processing trauma. In response, a small group of State and Federal agency representatives formed the COVID/Smart Growth/Brownfields Equitable Resiliency Partnership.

Case study goals: To understand the impacts of hazards, build local capacity for recovery and resilience, and maximize and leverage access to resources. The pilot focused on East Buffalo, NY.

ERB Activities:

The case study included:

- Trauma-informed engagement training
- Stakeholder meeting focused on community needs and priorities
- Resource planning workshop