

# Output 10.3 Pathways to Revitalization and Resilience that Build Community Capacity

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Product 2 Lead: Jessica Daniel, CPHEA

Product 3 Lead: Keely Maxwell, CESER

Products that  
meet partner  
needs

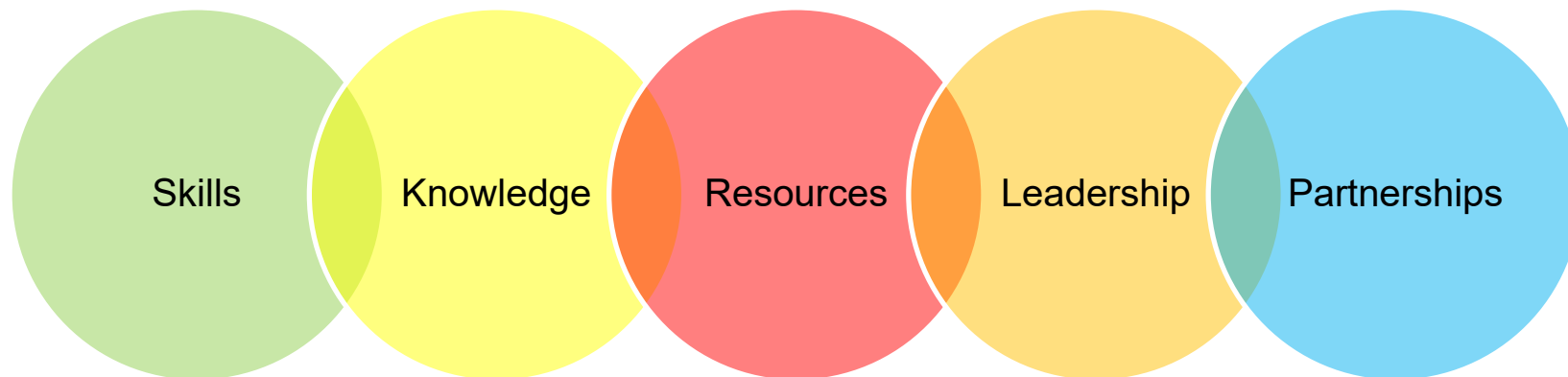
E.g. Tools and  
Trainings

Translational  
Science

Studying  
community  
capacity and tool  
use, development,  
and support

## Why focus on capacity?

- Many communities have difficulty accessing and using EPA tools
- Ability to use EPA tools is affected by capacity
- Using tools can help increase community capacity



## Background

- Builds on previous work to support community decision making
- Responds to StRAP input from OEJ and Regions:
  - Develop tools through partnerships with programs and stakeholders
  - Better alignment with the needs of communities
  - Need for *“Tools that assist communities as they move along a pathway from identifying environmental and public health hazards to developing partnerships and strategies... for revitalizing and making communities healthy, economically viable, resilient and sustainable.”*
  - Help communities build capacity



## Goals and Impact

1. ORD and EPA develop tools that are better targeted for community needs and capacity.
2. ORD and EPA provide better support for tool use by communities.
3. Communities increase their capacity through using EPA tools.

## Key Questions

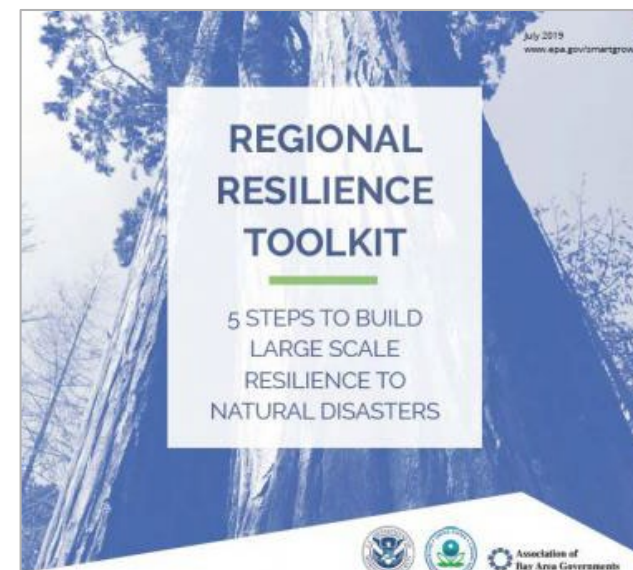
1. How do we better understand the ways that communities respond to extreme events and disasters so we can develop products that meet the need for information and tools at critical points for improving resilience? **Products 1,3**
2. How can using information and tools help build community capacity? **Products 1,2**
3. What supports are needed beyond just information and tools, and how can working in partnership with programs better align tool development with these supports?  
**Products 2,3**

# Product 1: An Examination of EPA Tools through a Capacity Lens

- **Product Team:** Mary Clare Hano, Ana Rappold, Marilyn ten Brink, Greg Grissom, Emily Eisenhauer, Allen Brookes
- **Partners:** Regional Offices, OAR, OEJ, OCHP, OCR, HUD, FEMA, CDC, USFS
- **Objectives**
  - Provide a better understanding of community capacity factors, needs and barriers with respect to the use of tools for increasing resilience
  - Provide methods and recommendations for considering community capacity in tool development
- **Product**
  - Framework and assessment method to account for community capacity factors during tool development.

# Product 1 Activities

- Characterize the barriers to increasing community resilience
  - Examine use of existing EPA tools and technical assistance programs, e.g. Brownfields grants and OCR Resilience Toolkit
  - Methods: Literature review, focus groups and semi-structured interviews with EPA, HUD, FEMA staff, state and local agencies
- Investigate the ways that community capacity influences the ability to use and benefit from EPA tools
  - Context: responding to extreme events (Wildfire smoke)
  - Methods: Case-based, mixed method design, observations, interviews, surveys, focus groups





## **Product 2: Building Community Capacity in Revitalization and Resilience Planning through Partner Training**

Jessica Daniel, Marilyn ten Brink, Brian Dyson, Timothy Canfield, Anne Neale

- **Partners:** Region 3, SPIRAL network, Oregon State University
- **Objectives:**
  - Build the capacity of Regional staff and their stakeholders to use ORD tools to better implement protection of environmental and human health.
  - Assess and develop strategies to support effective use of tools
- **Strategies:**
  - Innovative design methods such as Agile and Human-Centered Design.
  - Developing “How-to” use cases through application of tools in Regional projects
  - “Train-the-trainer” to increase Regional capacity to train others

# Product 2 Activities

- Development of an on-line Regional Tool Hub for educational institutions and localities.
- Train Regional and community-based partners on ORD tools (EnviroAtlas and DASEES) through application to Regional projects
  - NEPA review, stormwater management and city planning
- Collect feedback and design training and support materials for Regions and stakeholders
- Assess effectiveness of tool support strategies:
  - Interviews, focus groups, in-person training workshops with Regional staff and stakeholders
  - Training evaluations by participants



**Use Case Example:** Prioritizing management option selection and resource allocation with the Puget Sound Partnership and Region 10.

# Product 3: Social considerations in disaster waste management

Keely Maxwell

- **Objective:** Investigate the social context of Disaster Waste Management to improve EPA's ability to support communities in the aftermath of disasters.
- **Research:**
  - Comparative case studies of recent incidents to identify key variables underlying DWM social dynamics
  - Design & test new resources/ practices

*Collaborators:* **ORD** (HSRP); **Programs** (OLEM ORCR & OEM); **Regions** (Disaster Recovery Coordinators, On-Scene Coordinators)



Debris removal after 2011 Joplin tornado (photo credit: FEMA)

# Output Translation and Communication

- On-going synthesis and learning within the output and SHC
  - Other outputs with translational activities – 9.2, 10.5
- Collecting interim products and resources to make available within ORD and EPA
- Sharing interim findings through networks: Cross-ORD Tools Group, EPA Social-Environmental Science Exchange, Translational Science CoP, Program, Regional, and subject-matter webinars and conferences
- Work with ORD's Office of Science Advisor, Partnerships and Engagement (OSAPE) to inform efforts to evaluate and improve ORD tool development and translational research



**Thank you**