

# EPA Tools and Resources Webinar: Finding EPA Resilience Resources with the Environmental Resilience Tools Wizard

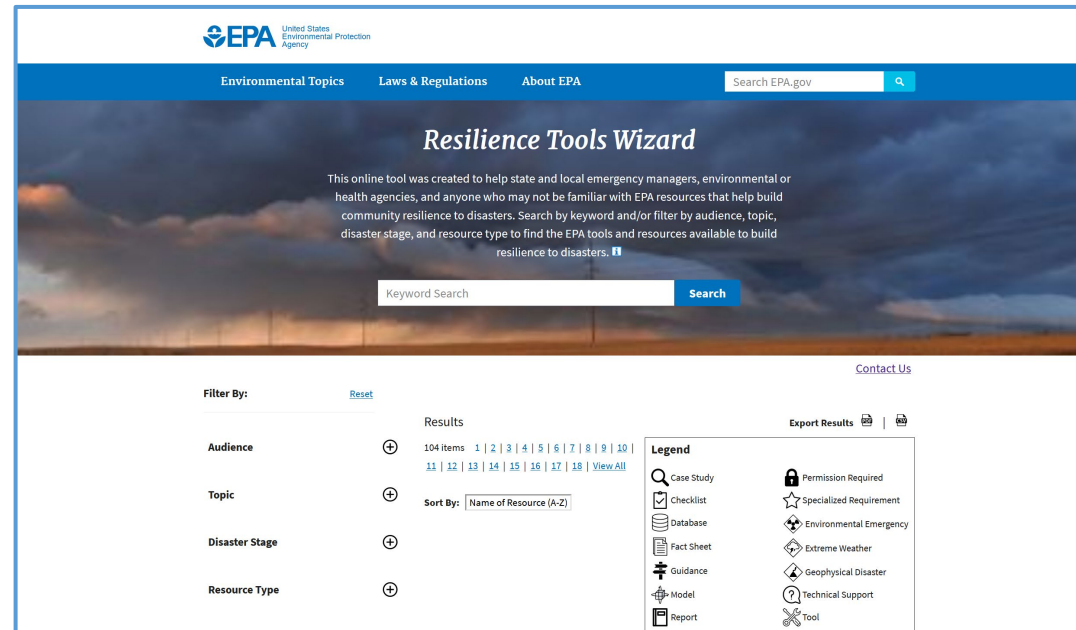
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**December 1, 2021**

# What is the Environmental Resilience Tools Wizard?

*An online ‘wizard’ that contains tools produced by EPA that address environmental concerns in disaster mitigation, preparedness, response and recovery. The wizard helps you find the right resource to meet your needs.*



<https://www.epa.gov/emergency-response-research/environmental-resilience-tools-wizard>

# Agenda for Today's Training

## 1. Problem framing

Disasters, resilience, and the environment

## 2. Problem solving

EPA resilience tools inventory, development of the environmental resilience tools wizard

## 3. Solution

User scenarios & demo of the wizard

## 4. Q&A

# Problem Framing

1. Disasters pose risks to human health & the environment. Building resilience is necessary to reduce these risks.
2. State environmental, public health, and emergency management agencies are increasingly tasked with helping communities build *environmental* resilience.
3. EPA has produced many resilience tools and other resources, but it's not easy for potential users to find these resources or figure out how to apply them to build resilience.

# Types of Disasters Covered by the Wizard



# Disasters & the Environment

- **Ecological impacts**
  - Oil spills and wildlife
  - Changes in salinity on coastal ecosystems
- **Critical environmental infrastructure**
  - Chemical contamination in drinking water utilities
  - Flooding of wastewater utilities
  - Interdependencies between energy and water systems
- **Secondary impacts, interdependencies**
  - Waste & debris generated
  - Waste collection disrupted (e.g., Hurricane Ida)



Joplin, MP tornado debris & waste (FEMA)



Treatment plants needed repairs after Hurricane Sandy (EPA)

# Disasters, Human Health & the Environment

- **Human health**
  - Indoor air quality in flooded homes (mold, asbestos, lead)
  - Flooding or tornado at a brownfield or Superfund site—contaminants potentially released?
  - Wildfires & air quality
- **Environmental Justice (EJ)**
  - Waste & debris disposal—where does it go?
  - “Cumulative impacts” on top of existing health concerns, environmental exposure
  - Cascading socio-economic consequences
  - Having a voice in response, recovery



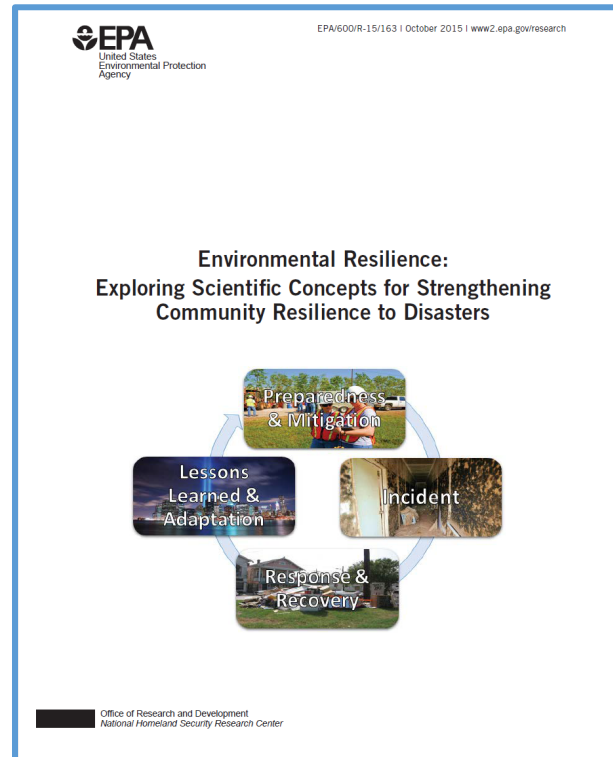
Moldy walls after Hurricane Sandy (FEMA)



Wildfire smoke produces fine particulate matter (USGCRP)

# Building Communities' *Environmental Resilience*

*“Minimizing environmental risks associated with disasters, quickly returning critical environmental and ecological services to functionality after a disaster while applying this learning process to reduce vulnerabilities and risks to future incidents.” (EPA 2015)*



<https://go.usa.gov/xeEng>



# EPA Resilience Tools & Resources

## The Positives

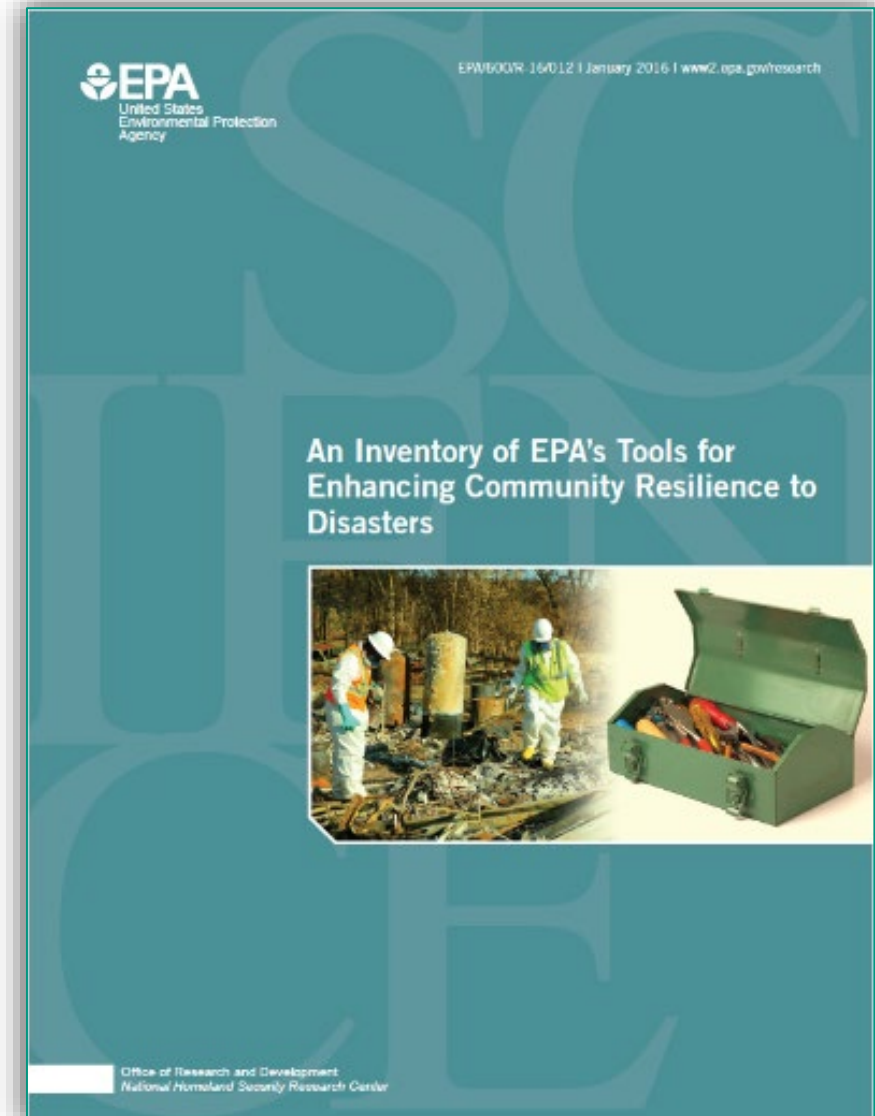
- Broad array of tools, models, guidance, case studies, fact sheets, reports, databases
- Support disaster mitigation, preparedness, response and recovery
- Cover many types of disasters
- Address many environmental issues, including drinking water, air quality, EJ

## Challenges for potential users

- May be hard to find
- Resilience application may not always be clear
- Technical jargon

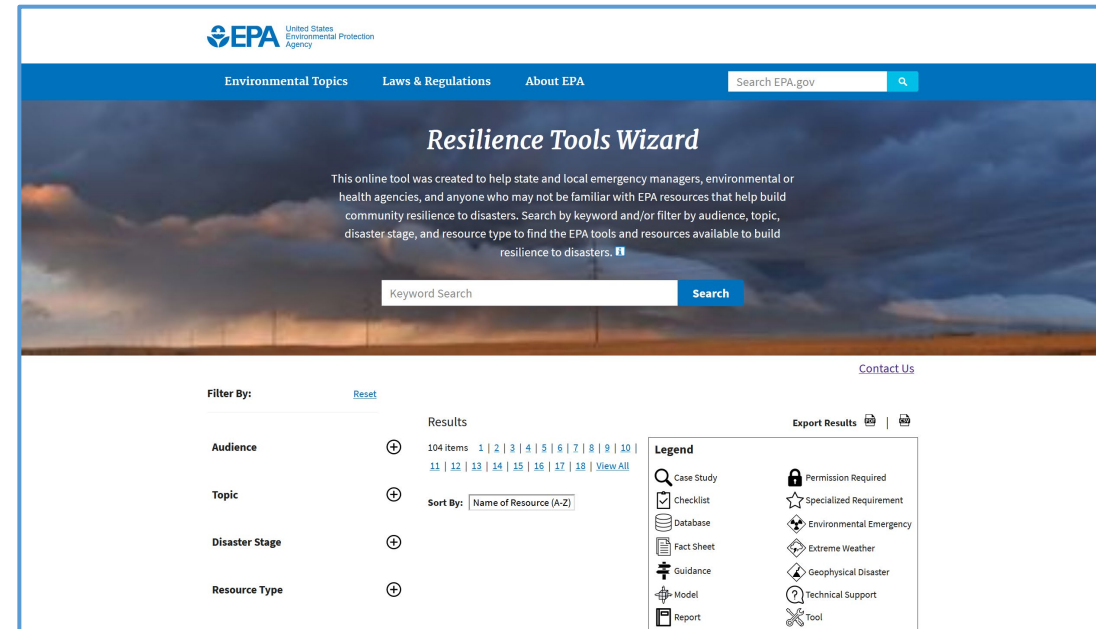
# Problem Solving Approach

- Inventoried & categorized EPA resilience tools & resources
- Developed the [Environmental Resilience Tools Wizard](#)
  - Agile development
  - Usability testing
- Will undergo annual updates



# Solution: Environmental Resilience Tools Wizard

- Demo – walk through features
- User scenarios



<https://www.epa.gov/emergency-response-research/environmental-resilience-tools-wizard>

<https://www.epa.gov/sites/default/files/widgets/resilience/>

# Take Home Messages

- The Environmental Resilience Tools Wizard can help state environmental, public health, and emergency management agencies find the EPA-produced resilience tools and resources that best meet their needs.
- Check out the wizard at: <https://www.epa.gov/emergency-response-research/environmental-resilience-tools-wizard>
- We welcome your feedback to improve this tool!

# Contact

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