

KRADD REGIONAL DISASTER RESPONSE & RECOVERY PLAN

15-Minute Project Overview | From Plan to Partnership



Jonathan Allen, CKEM, AEM
Nesbitt Engineering, Inc.

**A disaster does not recognize
county lines.
Our planning should not either.**

KRRDP MISSION STATEMENT

Create a robust, adaptive framework that manages and mitigates the impact of emergencies across the Kentucky River Area Development District.

- Protect life safety and community lifelines
- Coordinate local, regional, state and federal response
- Start recovery planning during response
- Strengthen preparedness through training and continuous improvement



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WHY THIS PROJECT MATTERED

Eastern KY Flood occurred July 26 – 30, 2022



Residents recover belongings from a flood-destroyed home in Perry County, Kentucky, following the July 2022 Eastern Kentucky floods. Photo: The Courier Journal/USA TODAY Network.



The flooded Appalshop building in Whitesburg, Kentucky, on July 28, 2022. Photo courtesy of Appalshop via Associated Press.



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“Perfection is not attainable, but if we chase perfection, we can catch excellence.” — Vince Lombardi

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*Floodwaters surround the Mike Holcomb Athletic Complex at Breathitt County High School in Jackson, Kentucky
Source: The New York Times; photographer not yet verified.*



Volunteers remove mud and debris from flood-damaged homes in Ogden Hollar near Hindman, Kentucky, July 30, 2022. Photo by Timothy D. Easley/AP



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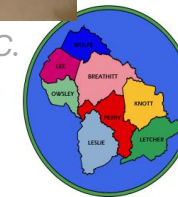


Before and after flooding near Wolverine Road in Breathitt County, Kentucky.

Left: Google Earth imagery captured before the July 2022 flood.



Right: Flooding on July 28, 2022, photographed by Ryan C. Hermens/Lexington Herald-Leader.



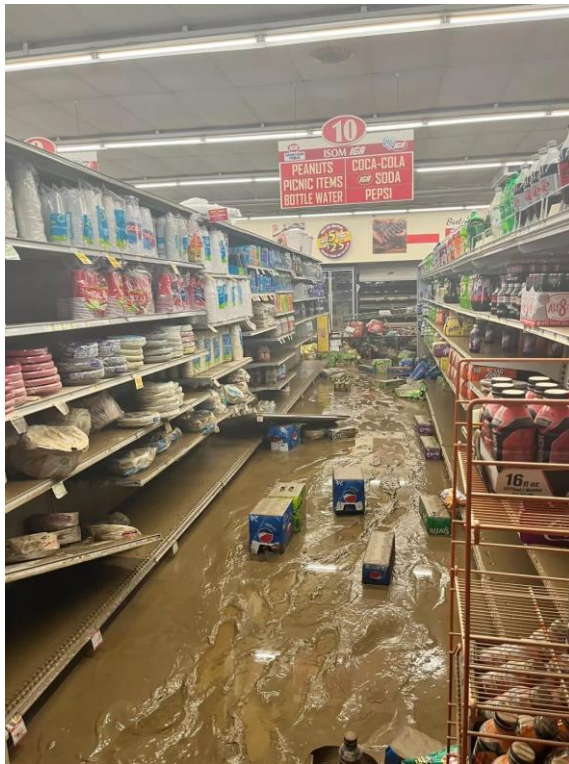
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Flood damage inside Isom IGA in Letcher County, Kentucky, following the July 2022 Eastern Kentucky flood. Photo: LEX 18.

Floodwaters surround vehicles and a bridge in Hindman, Kentucky, during the July 2022 Eastern Kentucky flood. Photo by Tyler Wolfe



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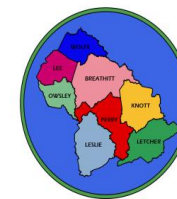


In a photo from the personal Facebook page of Judge Executive Terry Adams, 17-year-old Chloe sits on the roof of a neighbor's trailer with her dog, awaiting rescue.

*Major damage to
Breathitt, Knott, Perry
and Letcher counties*

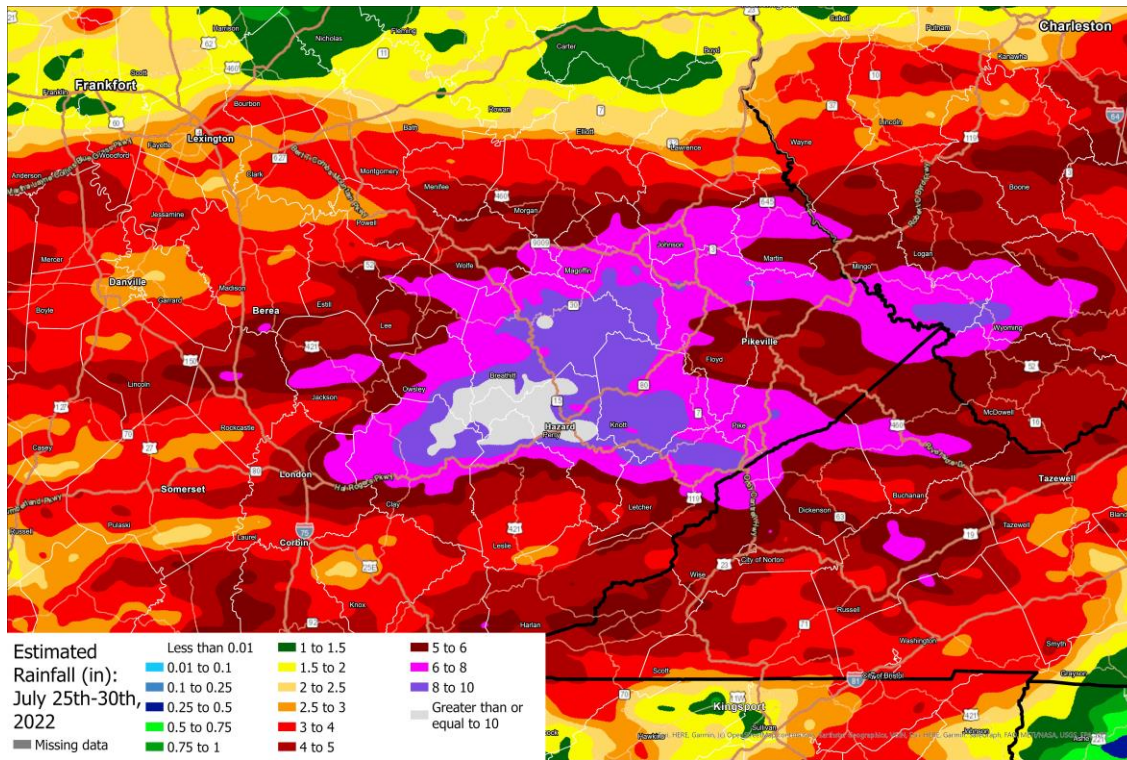
*Moderate damage to
Leslie and Owsley
counties*

*Lee county suffered
localized damage*



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Source: NOAA/National Weather Service, Radar image from July 28, 2022

- *Knott County, Carr Creek Lake: 14.00 inches from July 25–29. Of that, 13.21 inches fell within 48 hours.*
- *Perry County, Buckhorn: 11.76 inches from July 25–29, including 8.00 inches in one 24-hour period.*
- *Breathitt, Letcher, Leslie, Clay and Owsley counties: generally within the core 10–14 inch rainfall band, although totals varied sharply from hollow to hollow and were not represented by a rain gauge everywhere.*



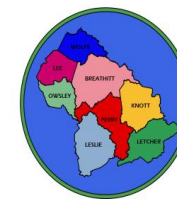
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A bridge across Grapevine Creek at Chavies School Road in Perry County, Kentucky, heavily damaged by flooding on July 28, 2022. Photo by Ryan C. Hermens, Lexington Herald-Leader.

39 deaths in Breathitt, Knott, Perry and Letcher Counties (KY Gov)



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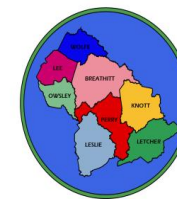
Over 1400 helicopter and boat rescues were necessary (KY Gov)



Flooding near Quicksand, Breathitt County, Kentucky, July 28, 2022. Photo by Ryan C. Hermens, Lexington Herald-Leader, via Associated Press.



Rescue crews travel through floodwaters near the Lost Creek community in Eastern Kentucky, July 28, 2022. Photo: LEX 18.



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Flooding in downtown Jackson, Kentucky, July 29, 2022. Photo by Michael Swensen/Getty Images.

Record River Crest – North Fork of the Kentucky River at Jackson reached 43.47ft breaking the record from 1939 of 43.1ft (NCEI)



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Flood damage and search operations near the Perry-Knott county area following the July 2022 Eastern Kentucky floods. Photo: LEX 18.

Approximately \$1.6 Billion in estimated damages (NOAA)



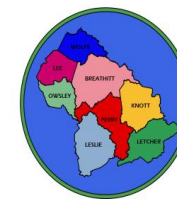
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A house carried onto the KY 931 bridge over Sandlick Creek near Whitesburg, Kentucky, following the July 2022 flood. Photo by Ryan C. Hermens, Lexington Herald-Leader.

8,950 housing units were damaged/lost in the 13-county affected area with 74% located in Breathitt, Knott, Letcher and Perry



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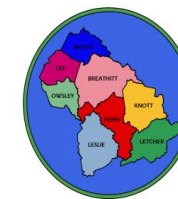
THE KRADD REGION

Eight counties. Shared hazards. Shared recovery challenges.

- Breathitt, Knott, Lee, Leslie, Letcher, Owsley, Perry and Wolfe Counties
- Mountain terrain and rural road networks
- Aging water, wastewater, transportation and communication infrastructure
- Limited local staffing during large incidents
- Communities that depend on one another before, during and after disaster

REGIONAL PLANNING GOAL

One framework
Local control
Shared capability



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LESSONS LEARNED FROM REAL DISASTERS

Repeated federal disasters showed the same operational gaps.

- Documentation and cost tracking varied by jurisdiction
- Resource requests were not always consistent or clearly prioritized
- Public messaging became difficult when impacts crossed county lines
- Response plans often stopped before long-term recovery began
- Recovery requires structure, leadership and years of follow-through



PROJECT DEVELOPMENT PROCESS

The plan was built from local experience, not theory.

1

**Review existing
county plans**

2

**Assess hazards and
capabilities**

3

**Align ESFs and
lifelines**

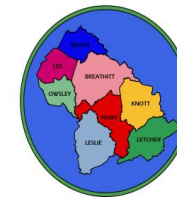
4

**Build recovery
framework**

5

**Create practical
tools**

Inputs included county feedback, emergency management practice, FEMA Public Assistance lessons learned, infrastructure recovery needs and state/federal planning guidance.



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EMERGENCY SUPPORT FUNCTIONS

The plan creates a common coordination language.

- ESF structure organizes agencies around functional responsibilities
- Counties can plug local resources into a regional operating picture
- The framework supports mutual aid, resource typing and request prioritization
- ESFs connect response operations to recovery support needs

ESF = WHO DOES WHAT

Clear roles reduce confusion when multiple counties, cities, utilities and state agencies are operating at the same time.



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COMMUNITY LIFELINES

Lifelines help leaders see what must be stabilized first.

Safety & Security

Health & Medical

Communications

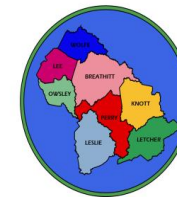
Hazardous Materials

Food, Water, Shelter

Energy

Transportation

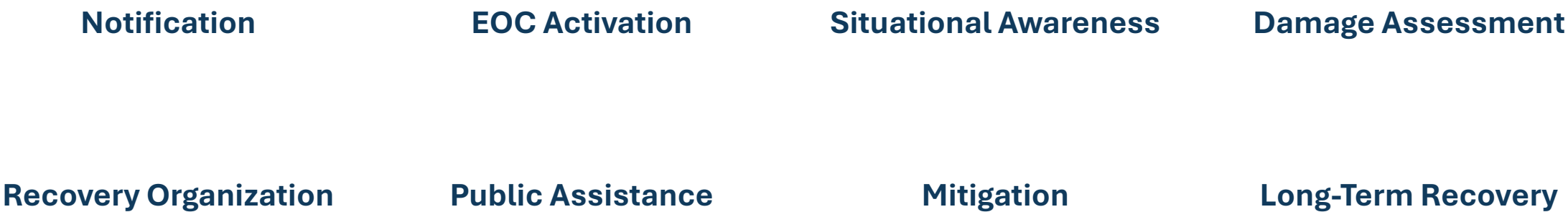
The plan uses lifelines to connect field conditions to executive decisions, public messaging and resource priorities.



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PLAN ARCHITECTURE

One continuous process from response to resilience.



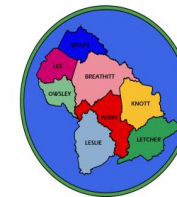
Response and recovery are not separate plans. They are phases of the same event.



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RECOVERY STARTS ON DAY ONE

Every decision made in the first operational period affects reimbursement, reconstruction and public trust.



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PRACTICAL TOOLS CREATED

Designed to be opened during an incident, not stored on a shelf.

- Operational checklists and quick reference guides
- Damage assessment and documentation procedures
- Resource request and tracking guidance
- Public information and rumor-control considerations
- Volunteer and donations management guidance
- Recovery meeting, reporting and decision-support templates



PROJECT RESULTS

What changed because of the KRDRP project.

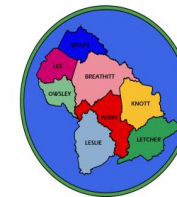
- A shared regional disaster response and recovery framework
- Common terminology across eight counties
- Better connection between response operations and long-term recovery
- Improved documentation posture for FEMA and grant programs
- Stronger relationships before the next incident
- A foundation for exercises, training and plan maintenance



IMPLEMENTATION ROADMAP

The value of the plan grows through use.

- Conduct annual regional tabletop or functional exercises
- Train elected officials, EOCs, utilities and public works on documentation
- Update resource lists, contacts and county-specific annexes
- Integrate Crisis Track or other damage assessment platforms where available
- Capture lessons learned through hot wash and after-action reviews

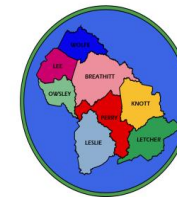


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KEY TAKEAWAYS

**The greatest success of this project was not producing a document.
It was building a regional partnership.**

Plans do not respond to disasters. People do.
The KRDRP gives those people a common roadmap.



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CLOSEOUT

QUESTIONS?

Kentucky River Area Development District Regional Disaster Response & Recovery Plan

Contact:

Jennifer McIntosh, Associate Director of Community & Economic Development, KRADD
(606) 436-3158 Jennifer@kradd.org

Tim Koogler, Regional Disaster Coordinator, KRADD
(606) 436-3158 tim.koogler@kradd.org

Jon Allen, Disaster Recovery Program Manager, Nesbitt Engineering
(859) 685-4545 jallen@nei-ky.com



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