Berks County PA Geographic Response Plan Development & Exercise

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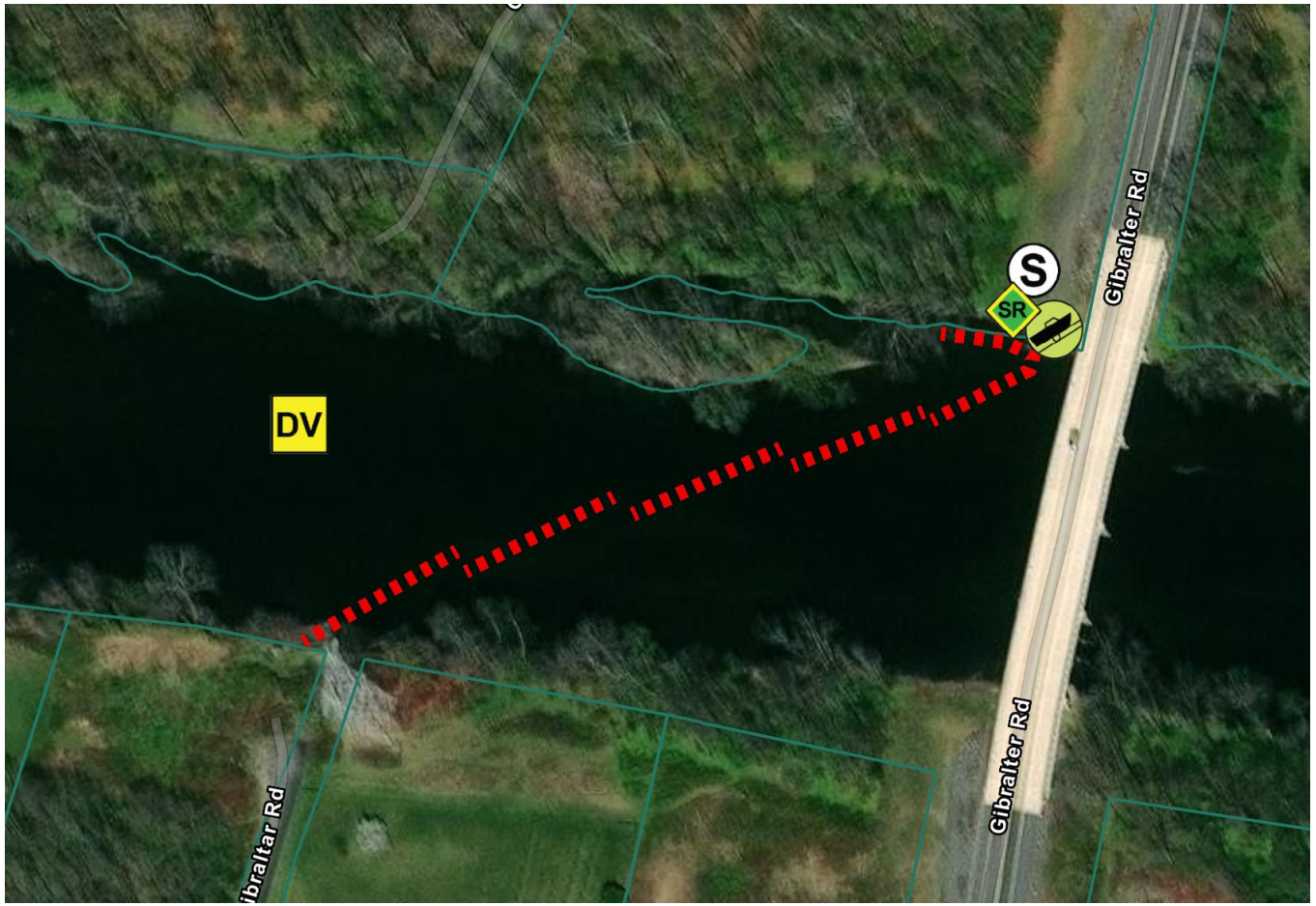
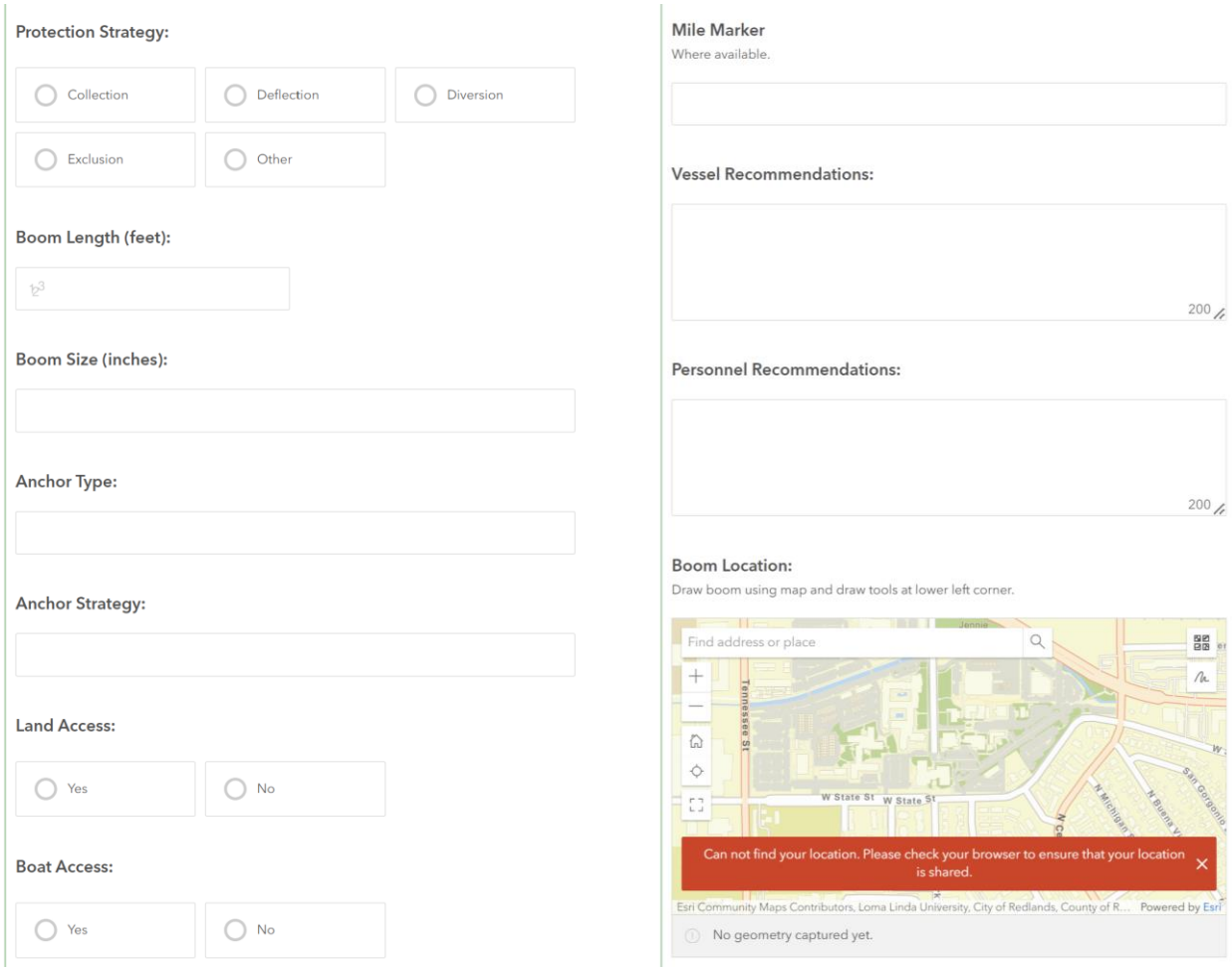
Presentation Outline

- GRP Development
- Responder Training
- GRP Exercise
- Lessons Learned



GRP Development



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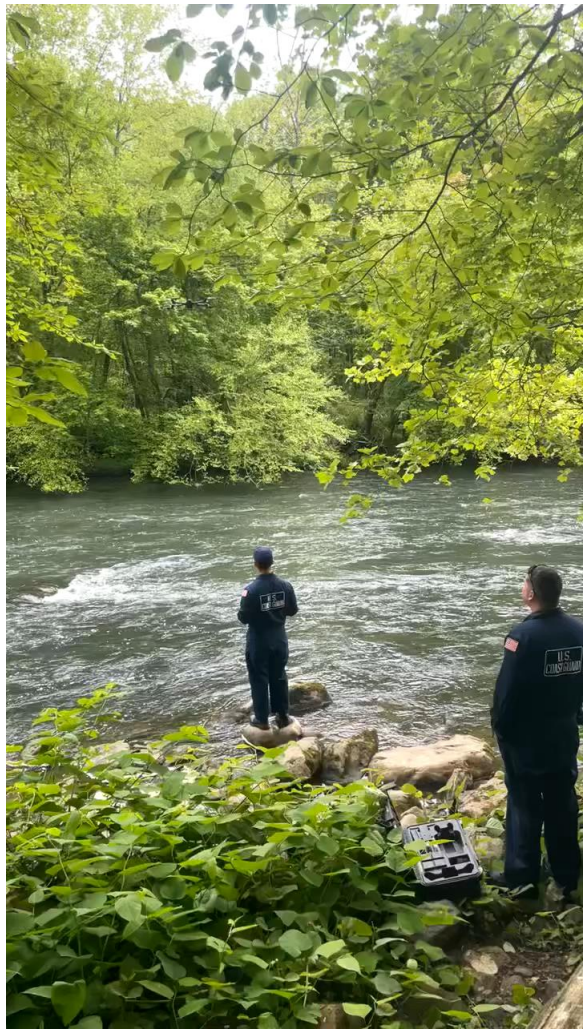

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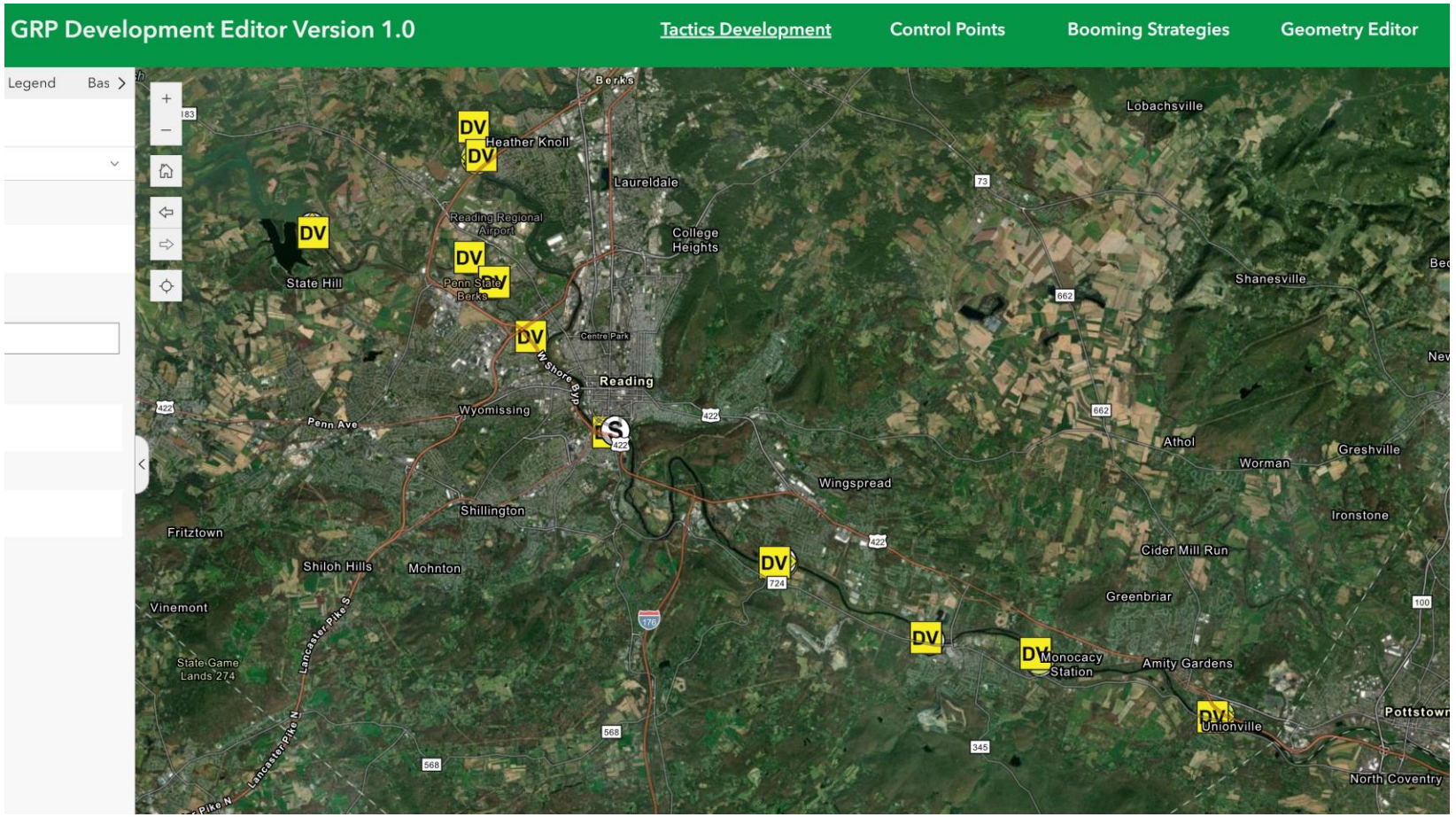


GRP Development

EPA Schuylkill River Geographic Response Plan – Heritage Park — **Schuylkill River SKR-CP-03**

Tactics Legend

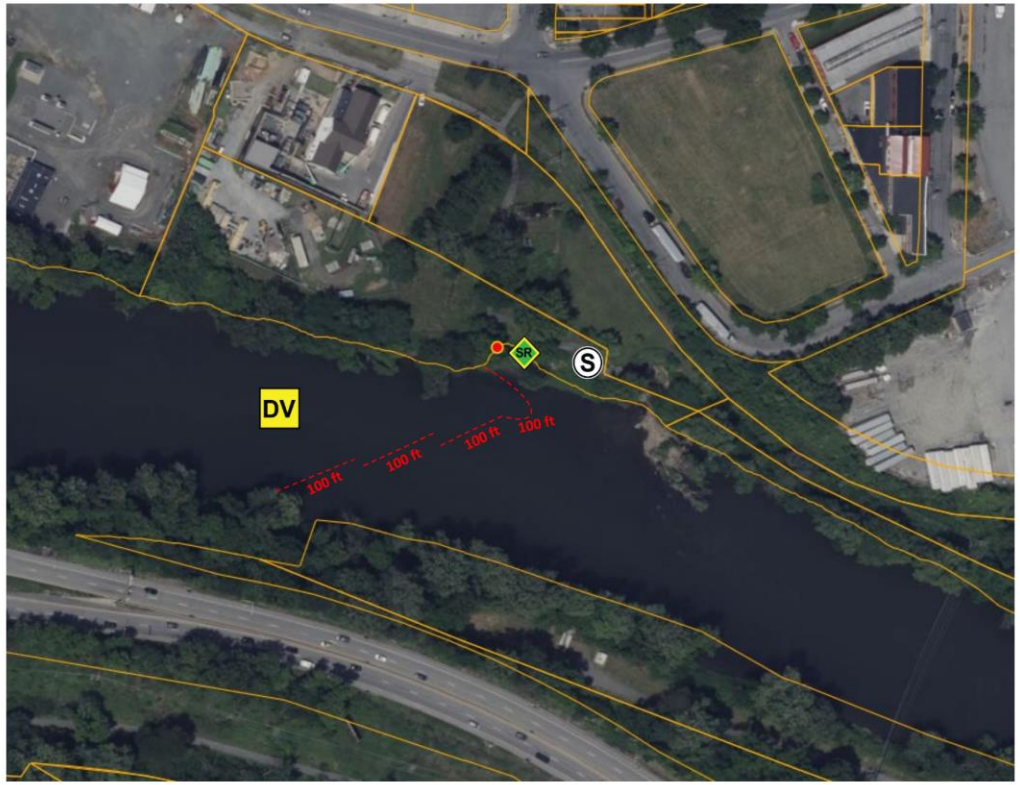
- DF — Deflection Booming
- DV — Diversion Booming
- EX — Exclusion Booming
- FO — Free Oil Recovery
- PR — Passive Recovery
- SR — Shoreside Recovery
- S — Staging Area
- Boat Ramp
- Kayak Ramp
- Railroad
- Protected-Water Boom
- Protected-Water Boom (Ebb Tide)
- Snare/ Sorbent Boom

Equipment - All Tactics

Boom(ft)	400
Boom Skirt (in)	6 & 12
Marine anchors	6
Shore anchors	2
Sorbent Boom(ft)	0
FO Recovery Sys	0
Shore Responders	4
Boat Responders	0
Boats	N/A

Version

12/03/2024



Tactics Deployment, Responder Safety, and GRP Data Information

Always consider on-scene conditions before deploying GRP tactics. Responder safety should always be the priority.

Vessel Requirements: Utilize inflatable vessel capable of operating in river depth conditions less than 5 feet. No suitable boat launch for motorized vessel at this location.

Location Information

Latitude:	40.32284205762562
Longitude:	-75.92530841037409
State	Pennsylvania

GRP Development

EPA Schuylkill River Geographic Response Plan – Heritage Park					Schuylkill River SKR-CP-03
Tactic #	**Purpose**	**Response Equipment**		**Deployment Resources**	**Deployment Notes**
DV-01 	Redirect spilled oil from one location or direction of travel to a specific site for recovery.	400 ft protected water boom 6 marine anchor system 2 shoreline anchor system		4 shore responders 2 response boats 2 boat operators 2 boat crew (min)	**Anchor Type:** Danforth 14, Shoreline anchor points. **Strategy:** Deploy boom as depicted to divert incoming oil to the collection site. Deploy shoreside anchor first. Single anchor system (rebar or U-posts) along shoreline with standard deployment into riverbed. For western portion, utilize 6" skirt boom due to shallow water depth for 200'. Utilize 12" skirt boom remainder. Anchor every 100' section on either end. Anchor shore side recovery skirt boom every 100'. Adjust configuration as necessary to reduce entrainment.
		N/A	**Testing Date**	**N** **Tested**	
SR-01 	Remove spilled oil that has been diverted to a designated recovery site accessible from shore.	1 skimming system 1 storage tank or bladder 1 hoses, pumps, fittings		2 shore responders	**Strategy:** Set up shoreside recovery tactic at general location depicted on map. Parking area as indicated on map may be suitable for storage tank and equipment storage. Consideration for boat trailer/vehicle parking and tanker truck traffic is required.
		N/A	**Testing Date**	**N/A** **Tested**	

GRP Development

EPA Schuylkill River Geographic Response Plan	Schuylkill River SKR-CP-03

Control Point Information

NRC Hotline: 800-424-8802

Address to Boat Launch:
601 Canal St, Reading, PA 19602

Protection Description: The strategy for this location is to anchor a boom along shoreline (tree) to capture oil in slack areas. Staging area for all protection strategies available as boat ramp large enough to deploy assets.

Resources Protected	
Fish	Catfish, Perch, Sunfish, Carp, and Bass.
Birds	Duck, Goose, Woodpecker, Hummingbird, Swallow, Jay, Robin, and various other species.
Threat/End. Species	Monarch butterfly, Tricolored bat, Little brown bat, Bald Eagle, Indiana bat, Northern long-eared bat, and Bog Turtle. No critical habitats found.
Cultural/Historical Resources	No available data.
Human Use	Boat Ramp, Conservation Area, Infrastructure, Groundwater Source, Recreation.
Land Management	The city of Reading
Riverine	Silty mud/gravel riverbed with gently sloped banks consisting of loose vegetation.

Small boat launch that can only accommodate hand carry boat/vessels only.

GPS coordinate location for control point boat launch. Access point near Canal Street.

Stormwater outfalls near boat launch access that could serve as potential boom locations. There are also good anchorage points near control point.

Navigational Hazards	Special Considerations
Lake and river conditions such as flow rate and flood stage vary depending on the time of year and heavy rain or snowfall. If ice is present GRP tactics and strategies must be reevaluated. Vessel operators should have local knowledge and experience operating in riverine environments.	Survey site prior to deployment and modify deployment tactics and techniques as appropriate based on observed river conditions. Upriver dam events (Blue Marsh Creek or Kernsville) may impact river conditions (overall flow and/or current velocity). Discussions with other organizations regarding scheduled dam events may be warranted in a deployment response.

Responder Training

- 3-hour evening session
- 1.5 hours Classroom Booming Training from USCG AST
- 0.5 hours of Classroom Inland Area Oil Spill Case Studies by EPA OSC
- 1 hour of hands-on training with Berks DES equipment including booming trailer, buoys, anchors, waders, etc.

GRP Exercise

At approximately 0800 on September 7, 2024, a derailment involving a 50-car freight train occurred. The derailment occurred on a railroad bridge over the Schuylkill River, heading east.

The incident resulted in a significant conflagration and the potential release of hazardous substances both on land and into the river, posing an acute environmental threat to the Schuylkill River ecosystem and other receptors. Of particular concern were five rail cars carrying a variety of hazardous materials, including waste oil containing polychlorinated biphenyls, vinyl chloride, sulfuric acid, combustible liquids (NOS), isobutylene, ethylhexyl acrylate, and residues from previous storage of benzene and liquefied petroleum gas (LPG).

GRP Exercise

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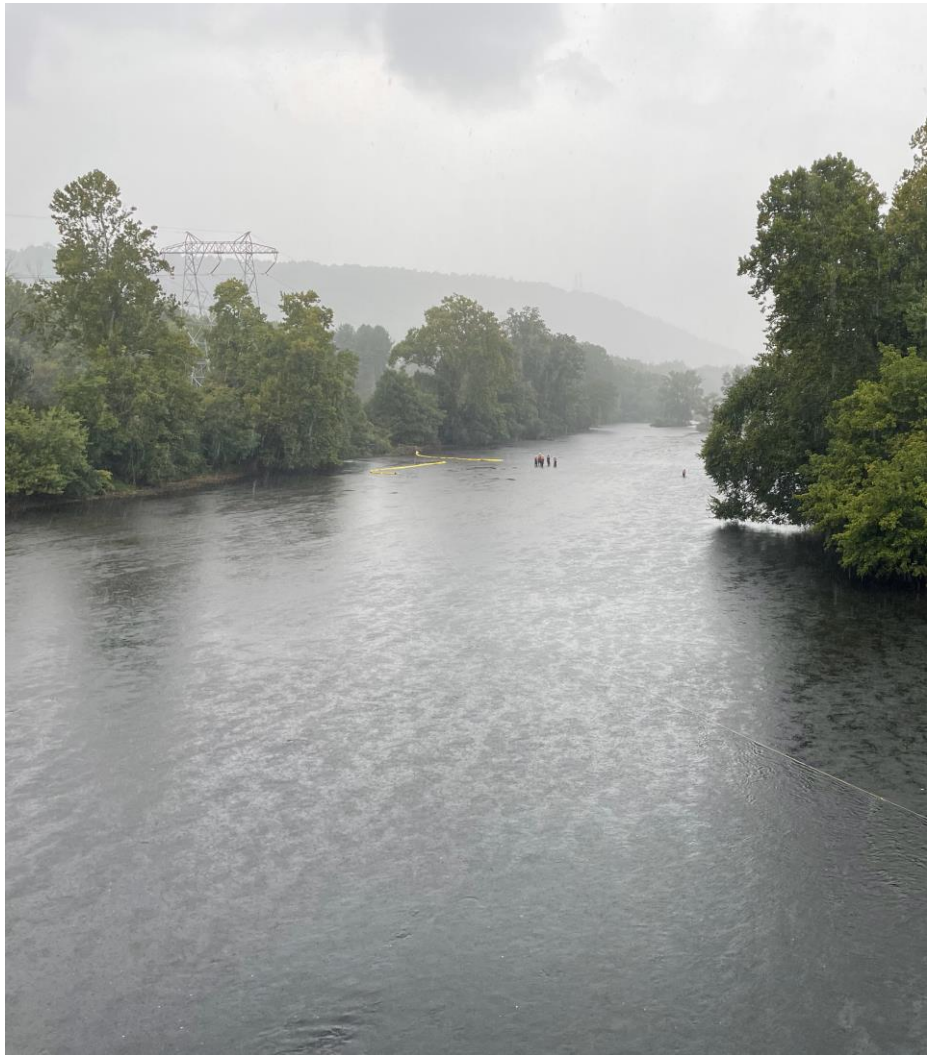

Lessons Learned

Successes

- Attitude of Responders
- Willingness to Adapt to Changing Circumstances
- Safety Focus

Areas of Improvement

- Cross-Organizational Communication
- Insufficient/Inappropriate Equipment

Next Steps:

- Tabletop Exercise to discuss capabilities of response partners and roles
- Focused equipment updates/purchase
- Continued functional and full scale GRP deployment exercises

Questions?