



## Green & Sustainable Remediation (GSR) Resiliency to Extreme Weather Events & Wildfires

### ABOUT ITRC

The Interstate Technology and Regulatory Council (ITRC) is a state-led coalition dedicated to reducing barriers to the use of innovative environmental technologies. ITRC represents over 1,000 individuals, across 50 states, working to produce guidance and training on innovative environmental solutions. Bringing together teams of state, federal, tribal, industry, academic, and stakeholder experts, ITRC broadens and deepens technical knowledge and reduces barriers to expedient regulatory approval.

ITRC is a program of the Environmental Research Institute of the States, managed by the Environmental Council of the States (ECOS). This partnership is based on a commitment to protect and improve human health and the environment across the country.

### GSR AND RESILIENCY

Green and Sustainable Remediation (GSR) is the site-specific employment of products, processes, technologies, and procedures that mitigate contaminant risk to receptors while making decisions that are cognizant of balancing community goals, economic impacts, and environmental effects. GSR has emerged as a

beneficial approach to optimize all phases of site remediation, from site investigation to project closeout. The ultimate goal of remediation is to protect human health and the environment. Through GSR, this goal is optimized to address environmental, social, and economic impacts while meeting regulatory objectives.

An integral aspect of GSR is the Conceptual Site Model (CSM) that synthesizes and summarizes what is already known about a site that is pertinent to decision-making requirements into the future. As current weather events become more frequent and extreme, resiliency to extreme weather affects a site's CSM. Extreme weather events such as flooding and sea level rise may have

significant impacts on contaminated sites. Floodwaters may release contaminants and expose humans and the environment to harmful levels of toxins. Wildfires may also impact contaminated sites by devastating infrastructure and releasing contaminants into the surrounding environment. Extreme weather events and wildfires may also undermine the effectiveness of the original site remediation design, so they must be considered in the CSM when implementing GSR.



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## ABOUT THE RESILIENCY TEAM

Released in 2012, the [ITRC GSR Guidance Document](#) was a fresh look at how to best manage environmental assessment and remediation. After seven years, environmental professionals have learned many lessons that need to be captured and shared to allow more effective implementation of GSR. In addition, resiliencies to extreme weather events and wildfires need to play a more substantial role in the planning process. The Resiliency Team will focus on updating the ITRC GSR Guidance Document to include the frameworks, tools, and implementation strategies necessary to further support acceptance of GSR principles. The Team will also focus on the considerations of resiliency and adaptation strategies to extreme weather events. The updated guidance document and new fact sheets will include topics such as:

- \* Integrated vulnerability and GSR assessment and adaptation strategies
- \* Best Management Practices (BMPS) developed by states
- \* The benefits of rehabilitated land in strengthening community, economic, and ecosystems resilience
- \* A compilation of principles, procedures, and case studies
- \* An examination of technical, statutory, and regulatory barriers and opportunities
- \* Guidance and procedures to address resiliency for flooding, coastal flooding, and wildfires
- \* Guidance on sustainable infrastructure
- \* BMPs on incorporating disaster preparedness into long-term institutional and engineering controls
- \* BMPs and guidance on establishing and maintaining vegetative cap coverage in high drought areas

### JOIN THE TEAM!

By joining the Team, you will have the opportunity to develop the resources and training curricula. Register here: <http://itrcweb.org/Membership/TeamRegistration>

### GENERAL PROJECT SCHEDULE

There will be monthly conference calls and bi-annual in-person meetings. The guidance document and fact sheets will be publicly available in 2021.

**For more information, please contact the Resiliency Team Leaders:**

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