The convergence of environmental justice and sustainability in remediation offers a chance to address contamination while supporting the social and environmental well-being of affected communities.



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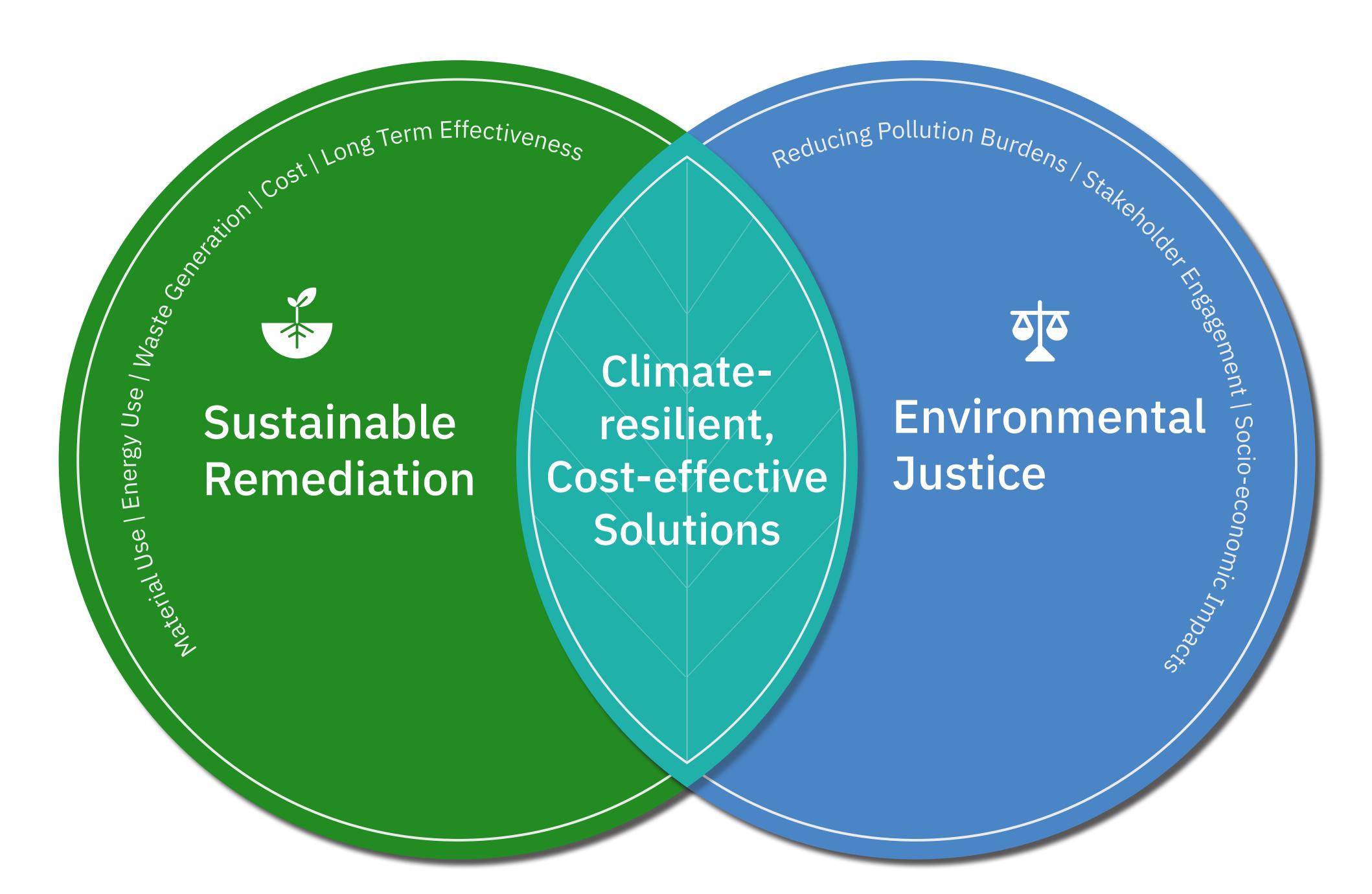
Enhancing Sustainable Cleanup Efforts: The Role of Environmental Justice in Sustainable Remediation Practices

Karah Conklin, P.E., Integral Consulting Inc.

Sustainable remediation has gained significant traction over the past decade as stakeholders seek climate-resilient, cost-effective solutions that garner public support. This approach integrates environmental justice principles to minimize adverse impacts on surrounding communities while promoting long-term environmental and social benefits.

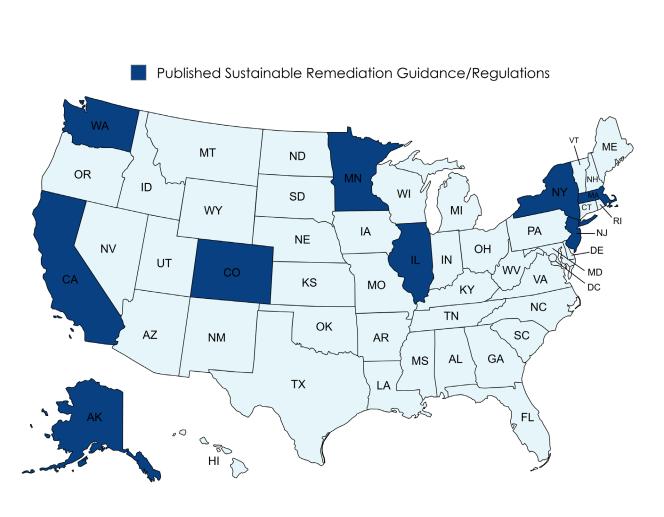
The Convergence of Sustainability and Environmental Justice

- Deploying cutting-edge monitoring systems to track remediation effectiveness and minimize secondary pollution
- Implementing transparent, evidence-based decision-making processes that incorporate geospatial risk assessments
- Prioritizing adaptive management strategies to enhance climate resilience in affected communities.

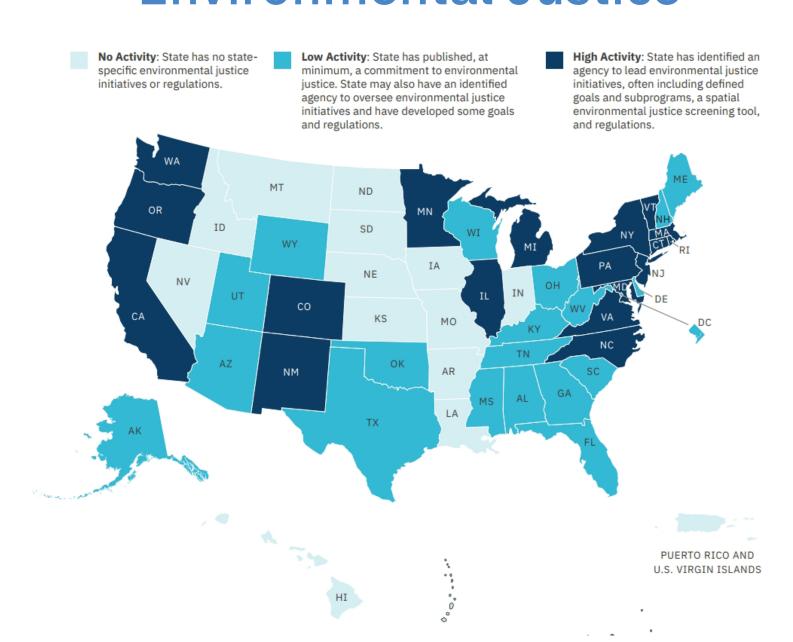


States and the federal government have been incorporating sustainable remediation and environmental justice efforts into regulatory guidance and policies:

Sustainable Remediation



Environmental Justice



Case Studies and Best Practices

Onsite Consolidation of Contaminated Soil at a Former Industrial Site

Contaminated soil was consolidated onsite and capped to reduce exposure. The remedy reduced additional pollution from transportation and eliminated the pollution burden on the communities surrounding the landfill. The capped areas was able to be utilized as a nature center for the community.



Implementation of *In Situ* Colloidal Activated Carbon for Groundwater Treatment of PFAS

Implementation of *in situ* colloidal activated carbon eliminated the need for a groundwater pump and treat system while still meeting the remedial goals of eliminating the per- and polyfluoroalkyl substances (PFAS) exposure for nearby drinking water sources.

Renewable Energy-Powered Remediation

Solar-powered operation of a constructed treatment wetland system is addressing petroleum contamination at the site without a generator or additional external power sources.



Community-Led Remediation Models

Using AI to synthesize remediation and restoration efforts and align with community needs and desires across an environmentally-impacted community.