

**Statement of Paul Gruber, P.G.
on behalf of the
National Ground Water Association
before the
Subcommittee on Water Resources and Environment
of the
Committee on Transportation & Infrastructure
U.S. House of Representatives**

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Chairman Gibbs, Ranking Member Napolitano, and members of the Subcommittee, thank you for the opportunity to testify. My name is Paul Gruber, and I am testifying on behalf of the National Ground Water Association, an international organization committed to the protection, management, and use of the world's groundwater resources. I am a licensed professional geologist in multiple states and a member of NGWA's Groundwater Protection and Management Subcommittee. My testimony will highlight the importance of using science-based decision-making for the investigation, remediation, and redevelopment of Brownfield sites and the importance of preserving and improving the availability of our nation's groundwater resources.

The federal Brownfields Revitalization and Environmental Restoration Act is an excellent example of the right law for the right reasons, successfully generating economic development, while protecting human health, and improving the local environmental quality, while permitting beneficial reuse of formerly impacted properties. The goal of Brownfields redevelopment, as currently practiced, identifies and manages risks by employing engineering and science-based tools to guide effective site remediation, ensuring successful cleanup of these unusable sites, balancing protection of public health and the environment, while optimizing the beneficial land uses within the local setting.

The National Ground Water Association (NGWA) is a trade association and professional society of over 11,000 groundwater professionals within the United States and internationally. NGWA represents scientists and engineers who conduct academic research, assess groundwater quality, availability, and sustainability, and water well contractors responsible for developing and constructing water well infrastructure for residential, commercial, and agricultural use. NGWA is excited about the Subcommittee's interest in Brownfields reauthorization, as it is a critical program not just for environmental improvement and protecting public health, but also

promoting economic development and providing employment opportunities for thousands of Americans in urban and rural areas.

On a typical Brownfields project, NGWA members, both contractors and engineering and scientific professionals, are engaged in assessing the site, its soil, and surface water and ground water quality conditions, in order to effectively plan the needed remediation measures to restore it to productive use. NGWA members work alongside a variety of other technical professionals: engineers, scientists, field technicians, and landscape architects, among others, to ensure site restoration to an appropriate standard for functional reuse.

NGWA members' roles in projects require collaboration and coordination of all stakeholder interests from the initial site assessments, public participation and risk communication, and finally to development of a sequenced remediation approach, and long-term monitoring and operations and maintenance of remediation progress. Work activities can involve a broad range of technical disciplines and tools, such as sophisticated groundwater models. These can be used to predict the public health impacts of various remediation alternatives, such as: excavation and treatment of soil; groundwater remediation alternatives; and other technologies, that ultimately can return the site into a springboard for community revitalization—drawing new businesses to the area, increasing property values, all while improving the local environmental condition.

As evidenced by the range of witnesses at today's hearing, Brownfields cleanup projects require cooperation by a diverse group of stakeholders, from federal and state regulatory officials to local governments and the private sector. Currently, the Act serves as a testament to the effectiveness of these partnerships, both between local, state, and federal governments, but also public private partnerships for redevelopment.

The Brownfields program serves as an important kick-starter for redevelopment, providing the inertia to generate additional investment from governments and stakeholders. Whereas federal program eligibility limits applicants to local and municipal government, as well as quasi-government agencies, like redevelopment authorities, state programs often provide incentives directly to developers, incentivizing important buy-in from the business community. Having the initial Brownfields grant from EPA to conduct activities like site assessments and/or remediation, builds confidence in the business community, providing certainty in outcomes and allowing pursuit of longer terms plans for redevelopment.

While the success stories of Brownfields redevelopment are often publicized in urban, metropolitan areas, I want to be sure to emphasize the need to promote rural Brownfields redevelopment. Potential Brownfields sites in rural areas include a variety of abandoned sites, whose legacy operations led to economic development in the area. Examples include Manufactured Gas Plants; Fertilizer Plants, Tanneries; and small businesses, like gas stations or dry cleaners. As these sites, in rural areas were abandoned, in particular, the impact of soil, surface, and groundwater contamination can be much more critical. Often in rural areas, groundwater quality impacts and remediation can be cost-prohibitive and will have a larger impact on the local community, who relies more heavily on groundwater for their potable supply.

However, in rural areas the presence of ample green spaces often minimizes the perceived need to clean-up and restore a Brownfields site. Rather than an “either/or” scenario, Brownfields and green spaces should be viewed in tandem. By restoring Brownfields sites in rural areas, communities can expand and preserve existing natural systems, not currently impacted by development, which allows for preservation of surface water quality and quantity, maintenance of important groundwater recharge systems, and storm water management. This is particularly

relevant in many rural areas, currently undergoing unprecedented drought conditions. By improving and preserving these natural systems, local communities are now more resilient and are better equipped to sustain themselves and react to both short and long-term changes in climate conditions.

EPA's Brownfields program is a well-crafted and effective program, but as the Subcommittee considers reauthorization of the program, NGWA would like to offer the following observations and recommendations:

- As business owners weigh their options for development of Greenfield versus Brownfield sites, clearly long-term liability is a significant risk for development. Why incur the potential liability associated with a Brownfields site when, in rural areas, ample green space is available for redevelopment? Congress should consider incentives to Brownfields grants that not only limit liability, but also encourages clean-up and redevelopment of existing sites, thus increasing community resilience and maintaining critical natural systems, allowing them to perform their functions of maintaining water resources and ecosystem functions, thereby enriching the community.
- The Brownfields Act should continue to promote and provide mechanisms to enhance flexibility in decision-making based on qualified scientific and engineering professional input, integrating site-specific conditions, and realistic risk assessment. Site-specific flexibility to design cleanups based on objective scientific and engineering evaluations and the incorporation of anticipated future land use in determining clean-up levels provides communities with the mechanism to develop and implement cost-effective reuse strategies. Effective Brownfield reuse plans can be vehicles to ensure efficient and

productive methods to assess, manage, and monitor long-term improvement in environmental quality of all media ensuring the maintenance and improvement in public health and environmental quality.

- As Brownfield sites are developed, monitoring of groundwater quality throughout project life cycle, beginning with the initial site investigation, clean up, post remediation, and during development is critical for maintenance of public acceptability of these sites. EPA should ensure that in some areas, where groundwater clean-up is not feasible that adequate groundwater and vapor monitoring programs are in place to contain and detect any potential spread of contaminated groundwater plumes or vapors in an effort to protect the local residents in the community. As America's water resources become more constrained, areas that were previously not considered drinking water sources could become a source in the future.
- The Committee should consider increasing incentives for rural applicants by directing EPA to prioritize funds for rural communities where local groundwater supplies are impacted.
- Public-Private Partnerships are effective vehicles to leverage investment and create economic benefits for all stakeholders, where single entity investment, may not be feasible. Encouraging beneficial reuse of Brownfield sites and providing liability limits while maintaining site conditions, as designed by engineering professionals, improves local economic opportunity,
- EPA should continue to focus research funding to develop new technologies and methods of site restoration and develop combined remedies that integrates risk-based assessment

of future use. NGWA continues to encourage the development of science-based remediation technologies tailored to specific site conditions. Consensus building and local community participation in outcomes is essential to the decision-making process and must involve all affected stakeholders. Often site remediation technologies are dynamic and reflect advances in engineering solutions, new innovative technologies, and scientific breakthroughs. Recognizing this dynamism between state and federal programs highlights the need to preserve flexibility and allow for process modifications, in order to deal with new information and long-term cleanup goals.

- The regulatory review process of remedy selection can often be lengthy. . An initial, expedited remedy decision that allows cleanup to begin while maintaining flexibility for later adjustments is preferable to a review process that can last years, allowing contamination to spread while awaiting decisions.

EPA should continue its efforts to expand the Brownfields and Land Revitalization Technology Support Center (BTSC), Their Technical Assistance to Brownfields Communities (TAB) Program, and the Interstate Technology Regulatory Council (ITRC). Efforts to expand and develop guidance criteria to facilitate property transfers that incorporate site condition assessment and monitoring data permitting normal economic activity to proceed is critical. EPA's current guidance provides a framework for assessment of site conditions, while allowing flexibility and integration objective science-based risk-decision tools for the varying site conditions encountered can facilitate property transfers. The NGWA encourages the EPA to refine its technical guidance and continue to develop tools, engaging qualified and trained professionals to conduct and implement site assessment and remediation activities and test technologies and strategies to streamline the site investigation and clean-up process.

Since its inception in 1995, EPA's Brownfields program has provided a vehicle to investigate and clean-up abandoned sites and has had a positive impact in both urban and rural locations. The Brownfields program has changed the way we approach development and reutilization of contaminated sites. In rural areas, in particular, Brownfields grants and clean-up are instrumental in re-invigorating economic activity and increases the ecological value of natural systems, preserving their function, without encouraging development in Greenfield locations, while increasing community resilience. But with over 400,000 Brownfields sites across the country, the work needed to clean-up these sites is far from complete, which is why reauthorizing this program is critical. Thank you for the Subcommittee's attention to this important matter, and I look forward to your questions.
