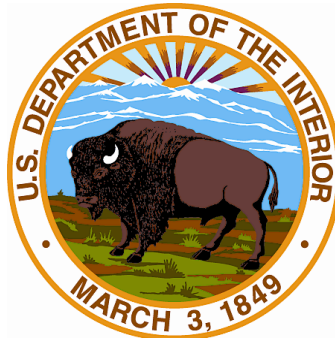


Federal Multiagency Collaboration on Unconventional Oil and Gas (UOG)

A Multi-Year Strategy for Collaborative Research

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December 9, 2013



Government Accountability Office (GAO)

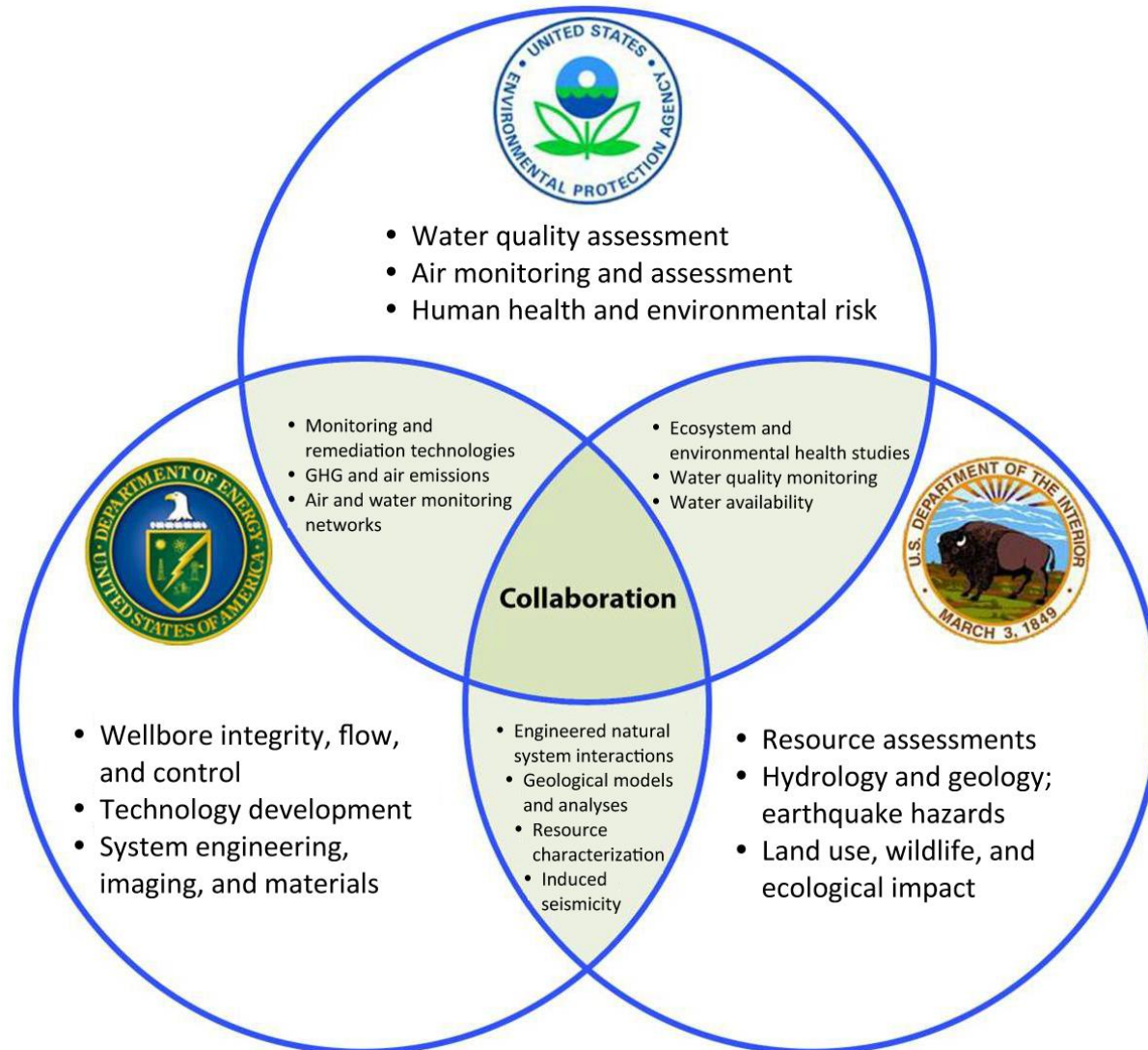
“Information on Shale Resources, Development, and Environmental and Public Health” (September 2012)

- “The magnitude of potential adverse effects or likelihood of occurrence cannot be determined for several reasons.”
 - “First, it is difficult to predict how many or where shale oil and gas wells may be constructed.”
 - “Second, the extent to which operators use effective best management practices to mitigate risk may vary.”
 - “Moreover, risks of adverse events, such as spills or accidents, may vary according to business practices which, in turn, may vary across oil and gas companies, making it difficult to distinguish between risks associated with the process to develop shale oil and gas from risks that are specific to particular business practices.”
- Potential changes to federal, state, and local regulatory environments and the effectiveness of enforcing regulations will affect the activities of oil and gas operators and the level of risk associated with future development of oil and gas resources.

The Multi-Year Strategy is responsive to...

- OSTP Memo M-13-16 on science and technology priorities, which recommends agencies “give priority to R&D that strengthens the scientific basis for decision-making...including but not limited to health, safety, and environmental impacts” (July, 2013).
- OMB Circular 2012-12, which calls for coordination among Federal Agencies and a reduction in duplication of tasks.
- E.O. 13605 *Supporting Safe and Responsible Development of Unconventional Domestic Natural Gas Resources*, which charges Federal Agencies to pursue multidisciplinary, coordinated research (April, 2012).
- DOE/DOI/EPA Memorandum of Agreement, which commits to developing a plan to address the highest priority research questions associated with safely and prudently developing unconventional oil and gas (UOG) resources (April, 2012).

Core Competencies



Steering Committee Members

- **Lori Caramanian, DOI-Chair**
- Paula Gant, DOE
- Lisa Feldt, EPA
- Dave Russ, DOI (USGS)
- George Guthrie, DOE (NETL)
- Kevin Teichman, EPA



Federal Research Strategy Topics

Water Availability
Reduce, reuse, recycle

Unconventional Oil and Gas Resources
Inform policy decisions

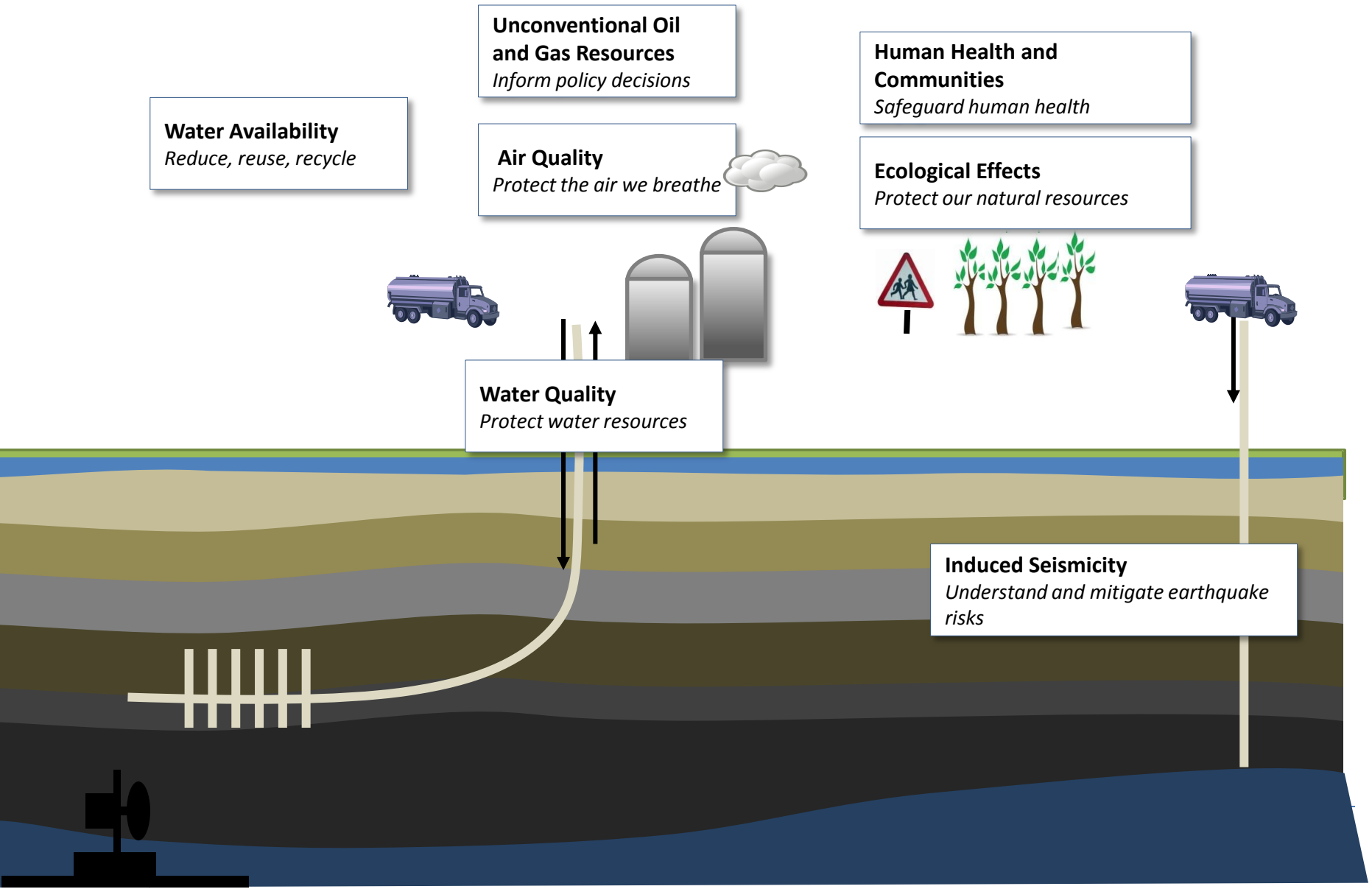
Air Quality
Protect the air we breathe

Human Health and Communities
Safeguard human health

Ecological Effects
Protect our natural resources

Water Quality
Protect water resources

Induced Seismicity
Understand and mitigate earthquake risks



Goal and Policy Implications

- The multiagency effort is...
 - Outlining an approach to identify and address the highest research needs associated with safely and prudently developing UOG resources
 - Providing the foundation for engaging stakeholders in identifying and prioritizing the challenges and benefits associated with UOG production activities
 - Guiding the Agencies in designing and implementing future efforts, including the creation of more-detailed research plans to address priority topics.
- The primary goal of this effort is to ensure coordination and collaboration among the Agencies and partners in the development of timely, policy-relevant science and technology research that informs the design of policy options.

