



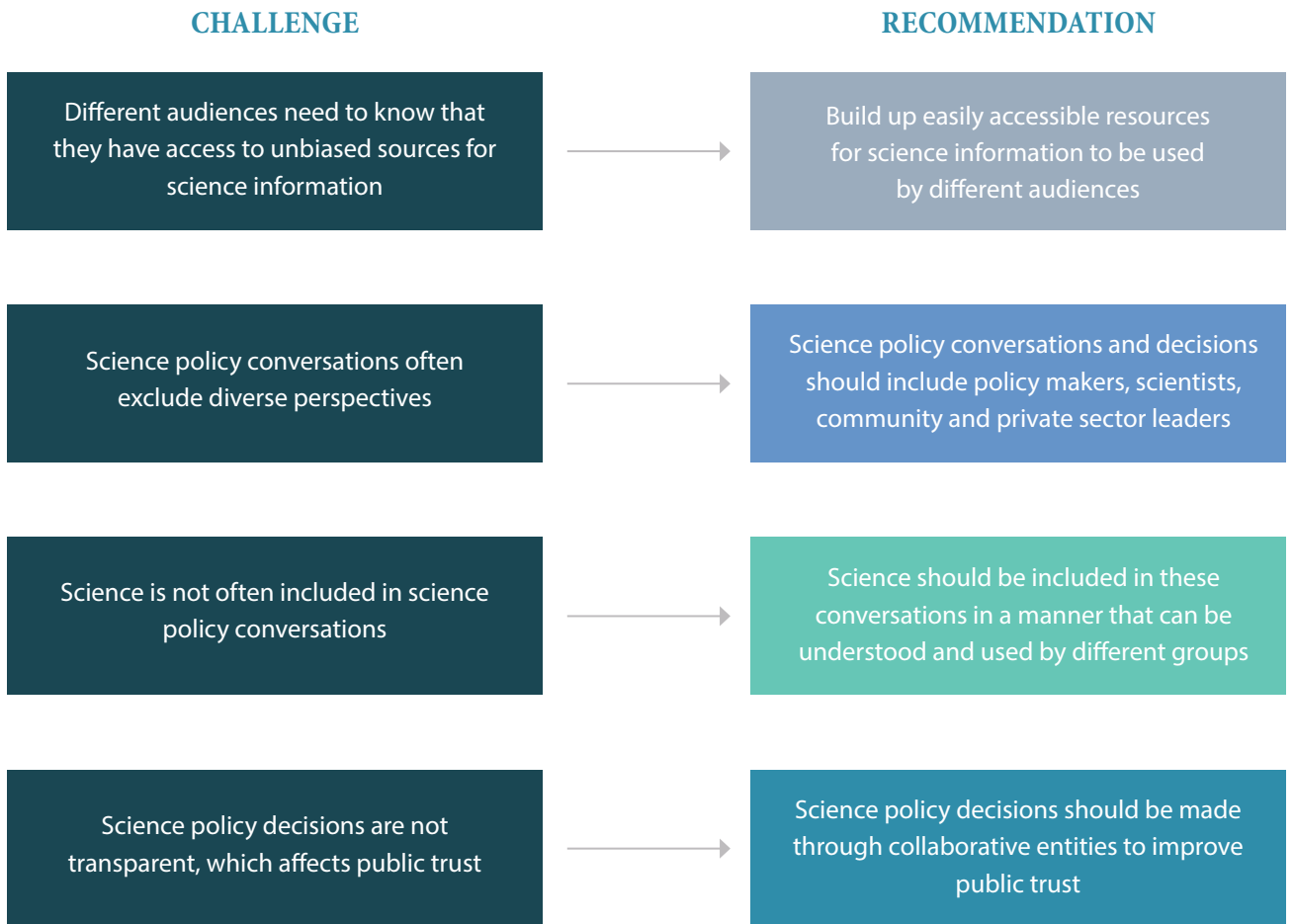
**BRINGING A COLLABORATIVE LENS  
TO SCIENCE AND POLICY ISSUES**

In today's complex world, the biggest science and policy issues require a new approach to thinking. Scientists and researchers, as well as policy makers, industry leaders, and legislators, can no longer operate within their own circles. Meaningful results come from these groups working together in a collaborative process.

GeoPolicy Connect builds trust and fosters collaboration.

The American Geophysical Union hosted the inaugural GeoPolicy Connect (GPC) event in October at Colorado State University in Fort Collins, Colorado. The event brought together a diverse group of individuals to discuss how they can better work together to make science and policy decisions. The discussion was framed around the issue of hydraulic fracturing.

Scientists, state and federal policy makers, and community and private sector leaders came together for two days of dialogue. Purposely diverse groups worked together to craft solutions to problems regarding hydraulic fracturing and to outline next steps to move those ideas to action. The following outcomes and recommendations emerged.





**GeoPolicy Connect Recommendation I:**

**BUILD UP EASILY ACCESSIBLE RESOURCES FOR SCIENCE INFORMATION TO BE USED BY DIFFERENT AUDIENCES**

*“If we can get people to trust a factual base as they create policy, it will change the world.”*

– GAIL KLAPPER, DIRECTOR, THE COLORADO FORUM

GPC participants pointed to a lack of trusted resources to use when making informed science policy decisions. “The public doesn’t know where to go to get good information,” Lexi Shultz, Director of Public Affairs at AGU, said when recapping the discussions.

Participants voiced a need for certain websites and databases to be established as the go-to resources for science policy conversations and decisions. “It’s hard to find a consensus in science but we want somewhere for people to go to that they can use as a resource to find the information,” Kathleen Staks, Assistant Director for Energy, Colorado Department of Natural Resources said. Vicki McConnell, Executive Director, Geological Society of America, called for a “...third party science voice that everyone could agree upon and would accept their findings.”

GPC is in the process of compiling a list of resources like this. If you have thoughts or ideas of what should be included in this list, email them to [GeoPolicyConnect@agu.org](mailto:GeoPolicyConnect@agu.org).



## GeoPolicy Connect Recommendation II:

### SCIENCE POLICY CONVERSATIONS AND DECISIONS SHOULD INCLUDE POLICY MAKERS, SCIENTISTS, COMMUNITY AND PRIVATE SECTOR LEADERS

“With a group of academia and government people in the room, you wind up negating biases because the group is so diverse.”

– KATHLEEN STAKS, ASSISTANT DIRECTOR FOR ENERGY, COLORADO DEPARTMENT OF NATURAL RESOURCES

“It’s important to break down some barriers between academics and industry,” urged Thomas Borch, Professor, Colorado State University. Participants agreed that breaking down barriers allows for a better understanding of a variety of perspectives and how they inform decisions. People are able to come to more substantive and informed conclusions after considering numerous and/or diverse perspectives.

GPC brought people from different professional backgrounds together to talk about science and policy through the frame of hydraulic fracturing. It reaffirmed the need to include the following groups of people in any organized science policy conversation:

- Federally-focused stakeholders, because they bring a national perspective to the discussions
- State lawmakers, because they have first-hand knowledge of the problems on a local level
- Topical science experts, because they bring substantive research to the conversation
- Policy savvy scientists, because they understand how science policy has or has not been effective in the past
- Business leaders, because they have a vested interest in outcomes of science policy conversations



### GeoPolicy Connect Recommendation III:

## SCIENCE SHOULD BE INCLUDED IN THESE CONVERSATIONS IN A MANNER THAT CAN BE UNDERSTOOD AND USED BY DIFFERENT GROUPS

“We need to make science that’s more accessible, and we need to get savvier at how we communicate to the public.”

- WILL FLECKENSTEIN, PROFESSOR, COLORADO SCHOOL OF MINES

GPC participants highlighted that many of the current policies relating to hydraulic fracturing issues are not grounded in science. They attributed a large part of that problem to science not being brought into conversations in an accessible way that policy makers, let alone the general public, can follow.

“There’s no academic discipline that forms a bridge between science and social science,” Eric Apel, Scientist, National Center for Atmospheric Research said. Simona Perry, Research Director, c.a.s.e Consulting Services, lamented the lack of emotion and connectedness in the tone that science is generally presented to the public. “People who are scared to drink their water are afraid to trust data or science studies. They feel emotional and might think that if you start talking about science, you’re ignoring their emotion.”

Throughout the conference, participants discussed ways to bridge this gap so that the science related to the issue is communicated in language that is both relevant and approachable for the general public and the different stakeholders.

Some ideas they landed on were:

- Appoint a Chief Science Officer for each state, who could serve as a decision maker and spokesperson for policy issues that relate to science
- Establish more Governor’s Science Advisory Councils, which advise governor’s offices on policies as they relate to science issues
- Create a council of science journalists who are knowledgeable enough to translate relevant science in appropriate terms
- Organize a council of scientists who have the skills necessary to translate the work of their colleagues for the relevant audience



**GeoPolicy Connect Recommendation IV:**

**SCIENCE POLICY DECISIONS SHOULD BE MADE THROUGH COLLABORATIVE ENTITIES TO IMPROVE PUBLIC TRUST**

“There should be a central entity that is in charge of this. Without that, how can you keep a handle on what’s going on.”

– BRIAN CURRIE, PROFESSOR, MIAMI UNIVERSITY

As GPC came to a close, many participants came to the conclusion that an external and independent entity could help inform local communities on hydraulic fracturing, which would prevent confusion and distrust, and facilitate ongoing dialogue.

“There has to be an organization, a facilitator, that can begin the discussion,” said Treasure Bailey, Geologist, Environmental Protection Agency, Region 8. Neutrality, a stable source of funding, and a wide communications reach were all key aspects of this potential entity that participants envisioned.

Some examples of smaller scale entities that exhibit some of these traits:

- Thriving Earth Exchange: It creates community solutions by helping scientists, community leaders, and sponsors work together to solve local challenges
- Colorado State University, PowerHouse Energy Campus: It fosters collaboration and cooperation among diverse individuals to further the reach of energy research at Colorado State University
- AirWaterGas Sustainability Research Network: It integrates science into decisions about government regulations and policies for unconventional oil and gas development



## CONCLUSION

The inaugural GeoPolicy Connect succeeded in bringing together a diverse group of people and started to break down entrenched barriers to conversations about oil and gas development issues. The resulting recommendations, while formulated in the context of hydraulic fracturing, have wider applicability to a range of science policy issues. The American Geophysical Union, through GPC, looks forward to continuing to connect science and policy more effectively, and facilitating deeper dialogue on contentious issues in this space.

For more information about GeoPolicy Connect visit: [www.geopolicyconnect.agu.org](http://www.geopolicyconnect.agu.org)  
or email [GeoPolicyConnect@agu.org](mailto:GeoPolicyConnect@agu.org).



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