

AGU's Thriving Earth Exchange: Five Reasons to Join In

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AGU has launched the Thriving Earth Exchange, a new initiative that supports communities as they protect themselves from hazards, adapt to a changing planet, and create sustainable futures. Through the program, AGU members will work with local leaders to contribute their Earth and space science expertise to these significant societal challenges.

The Thriving Earth Exchange is inspired by a series of important questions. What if any community, anywhere in the world and of any size, had the opportunity to pose scientific questions and benefit from research? What if all scientists, regardless of where they were in their careers, had the chance to share their best ideas in meaningful ways? What if new sponsors—foundations, agencies, and even crowdsourcing—could actively support the connection between research and real life? What if people working on these questions were part of a network that shared strategies, ideas, and innovative approaches? What if you were part of that network?

AGU's answer to these questions is the Thriving Earth Exchange. Right now, two pilot challenges—local drought monitoring in Kentucky (<http://thrivingearthexchange.org/2013/08/tex2013-101/>) and community-led water quality monitoring for wild rice in Minnesota (<http://thrivingearthexchange.org/2013/09/tex2013-102/>)—are live on the program's website. A third, focused on urban environmental impacts on human health, is coming soon. We urge you to participate in the Thriving Earth Exchange by contributing your solutions to the pilot challenges, signing up to learn about future challenges, and sharing what you learn with friends and colleagues.

Here's how the Thriving Earth Exchange works:

- Communities of all shapes, sizes, and compositions work with AGU staff to explore the connection between their priorities and Earth and space science.
- Using the program's website (<http://www.ThrivingEarthExchange.org>), communities post highly focused challenges that invite scientific input. As an example, a challenge might be a question like "How could I design a user-friendly protocol to measure air pollution in my neighborhood and uncover potential links to asthma?"
- Scientists—from undergraduate students to senior researchers, alone or in teams—submit their proposed solutions. Instead of long, detailed proposals, we want clear, concise, readable descriptions of potential approaches. The criteria for judging the solutions will be available ahead of time to guide you in writing your solution.

- A panel of judges, including scientists and members of the community that proposed the challenge, select the best and most relevant solution(s) using those criteria.

- The authors of the winning solutions receive a cash prize.
- Meanwhile, AGU works to identify challenge sponsors who are willing to invest their money and collaborate with communities and scientists to implement the winning solutions.
- AGU helps form community/scientist/sponsor teams and encourages them to work together to effectively implement the solution.
- Through the Thriving Earth Exchange network, each team will be connected to other teams working on similar projects. This network will help all the communities learn what works, borrow solutions from other projects, and share their successes.

Five Reasons You Should Check Out the Thriving Earth Exchange

1. *You can make a difference.* The Thriving Earth Exchange aims to make a global impact by working from the ground up. Even as we celebrate the growing understanding of our planet and our interaction with it, many of us are troubled by the gap between what scientists are learning and what society is using. We could manage our exposure to hazards better, we could care for natural systems more effectively, and we could work more proactively to adapt to or even mitigate climate change.

The Thriving Earth Exchange offers the chance to work on these issues, one community at a time, while sharing ideas that work with a larger network. You might end up creating a solution that is adapted by communities around the globe.

2. *You'll get to interact with today's innovators.* Getting involved in the Thriving Earth Exchange is also a way to connect professionally with people you might not get to connect with otherwise. Community questions don't map neatly onto traditional disciplines, so working on these questions opens the door to all kinds of transdisciplinary collaborations.

This means that when you interact with the program, you are engaging with one of AGU's highest priorities and are working with peers you might not have known you had, who join you as some of the most visionary and forward-thinking members of AGU.

3. *You'll get new ideas.* Connecting with new people means being exposed to new ideas and new approaches. Scientific conferences are a great example of this: As people mingle and attend presentations and poster sessions, they meet new people, learn new techniques, and are inspired to refine their research or start new collaborative projects.

The Thriving Earth Exchange allows you to mix, match, and learn from other scientists and the communities presenting challenges without attending a conference.

4. *You'll be part of an experiment.* The Thriving Earth Exchange is AGU's grand experiment. It works with communities to define science questions that advance understanding and address local priorities. The evidence shows that when communities help define science questions, they are more likely to use and benefit from the research around those questions. The program explores whether community-inspired science can offer another approach to the research enterprise, with far-reaching implications for tenure, publication, funding, and public support for science.

You'll also be part of a personal experiment. Community-inspired science requires humility and a respect for all kinds of knowledge, the ability to integrate specialized scientific viewpoints with local and personal knowledge, and the ability to work across traditional social, intellectual, and cultural boundaries. You may find new avenues to apply your skills.

5. *You don't have to change careers.* The Thriving Earth Exchange is designed to be easy, without complicated paperwork, institutional commitment, or long proposals. Originality, readability, and relevance are valued more than an exhaustive description of previous work and qualifications. You can be part of a team that spans institutions without having to sign contracts or negotiate overheads. Because of this, you can work on a Thriving Earth Exchange solution while you pursue your primary research and without jeopardizing your day job. Think about the program as a way to try out community-inspired science without having to rethink your career.

More Opportunities

We're developing more opportunities to get involved with the Thriving Earth Exchange and work with communities that are looking to use science to solve local problems. Check out the current challenges and register to learn about new ones. You are welcome to let us know what you think. We also invite you to check out the Thriving Earth Exchange technical session (U22B) and Town Hall Meeting (TH42B) at the 2013 AGU Fall Meeting.

Your science can make a difference. Are you up for it?

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