The Thriving Earth Exchange: Using Earth and Space Science to make a Difference

ESIP Rant and Rave
13 October 2015

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Call For Solutions

- For Earth and Space science data that advances community priorities
- Projects done with community partners
- Winners receive **$15,000 in Amazon Web Service Credits** to move their solution to the cloud
- Winners featured at an “unhackathon” to share codesign strategies
- **Deadline:** 16 October (+2 weeks)
- **www.thrivingearthexchange.org/sharing-solutions**

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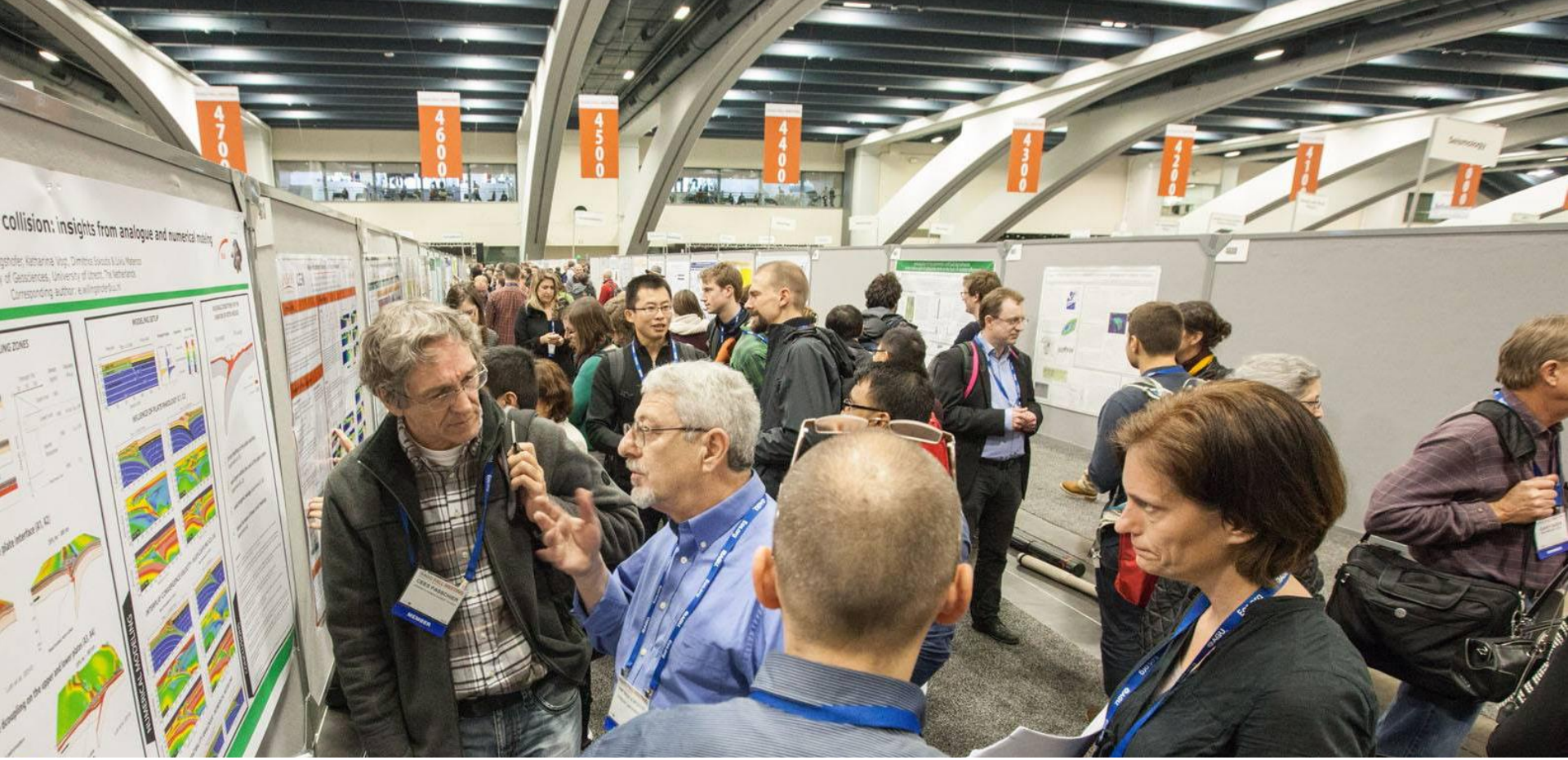
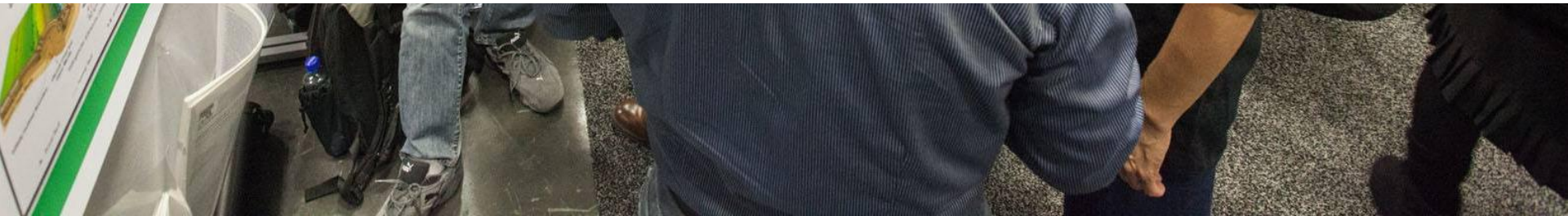
amazon web services™



We promote discovery in the the Earth and Space Sciences

AGU
American Geophysical Union



for the benefit of humanity

Community Science

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Last Mile

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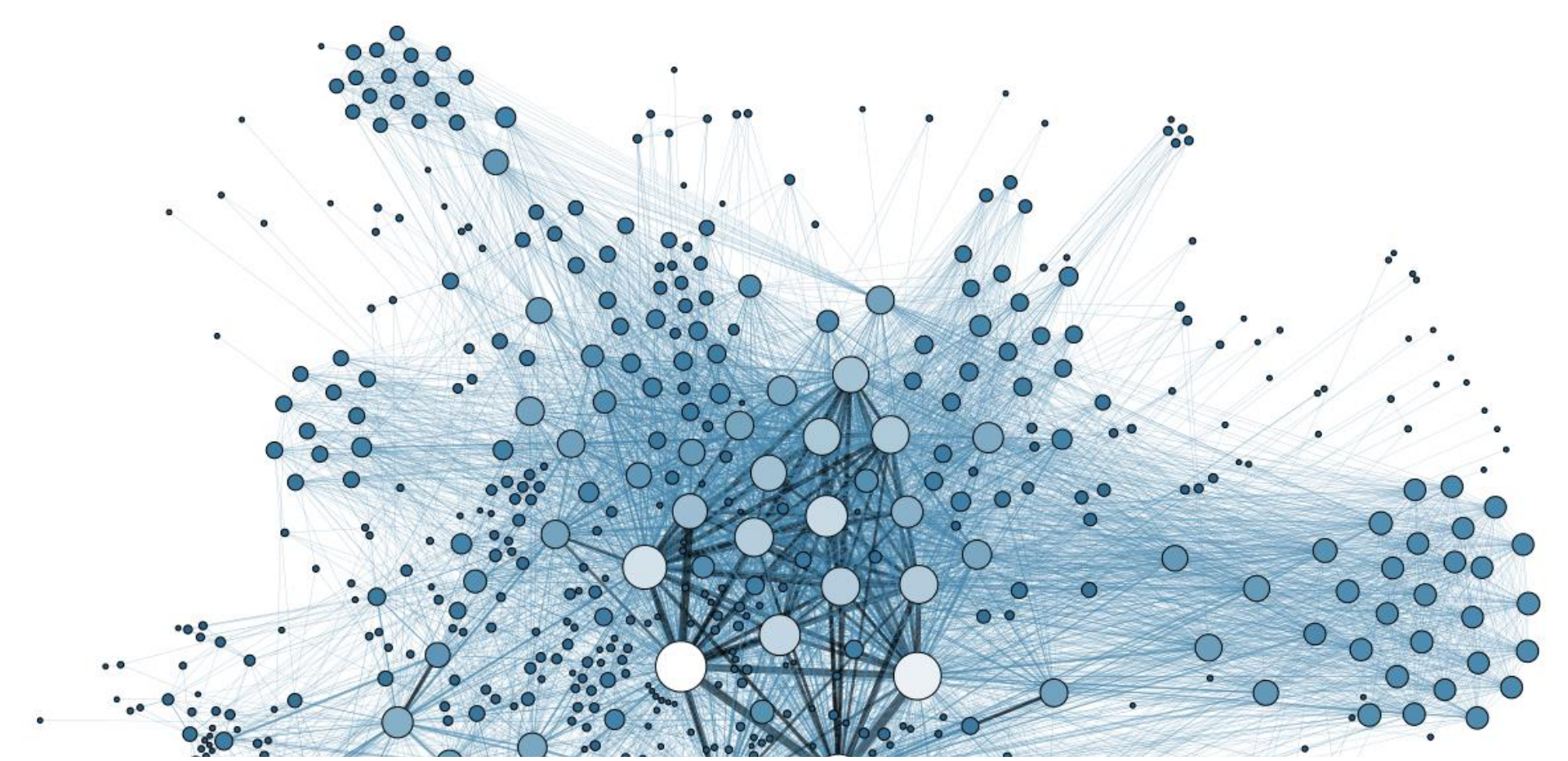

Exchange

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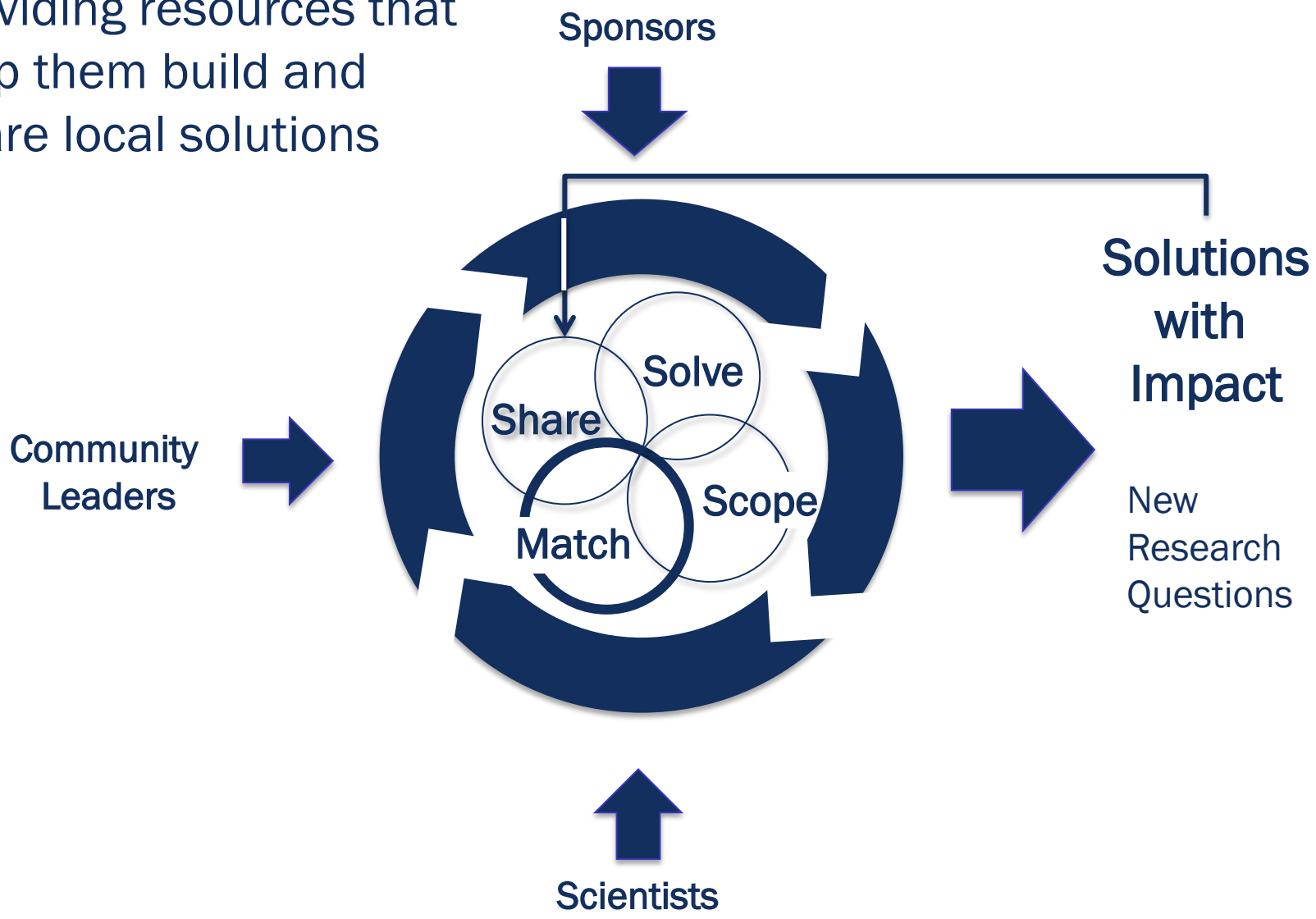
Exchange, connecting scientists, community leaders and sponsors providing resources that help them build and share local solutions



Integrating Met Data for Improved Water Management

Barren River, KY

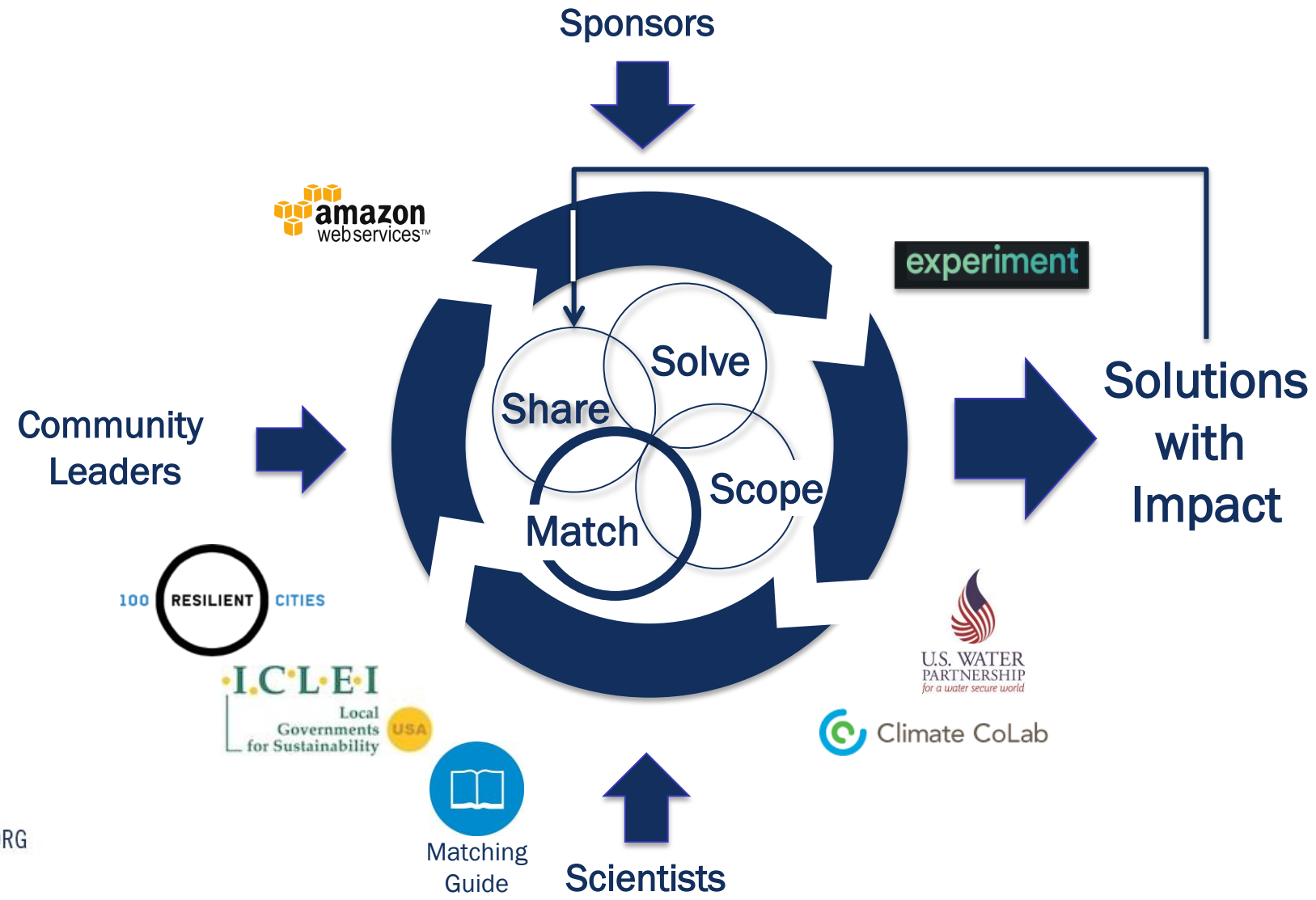
Learning from Pilots

What we learned	How we responded
Connecting with community groups is time intensive; not all are ready for TEX	Work with partners who can introduce us to TEX-ready groups
Many, but not all, AGU scientists have the right skills for community work, even if they haven't done it	Identify scientists with strong collaborative skills and provide modest coaching
Community groups want partners first, solutions second	Focus on matching, then help teams leverage tools, solutions, and resources
Community priorities and academic rewards can be misaligned	Make TEX work pro-bono; define scientist role carefully

2014-2016: Scaling Up

- Develop partners that expand TEX's reach and offerings
- ***Start with Match:*** Help community groups and scientists connect and complete impactful projects
- Use high-touch interaction with people to design infrastructure people can use more independently

Partners Extend TEX Capability



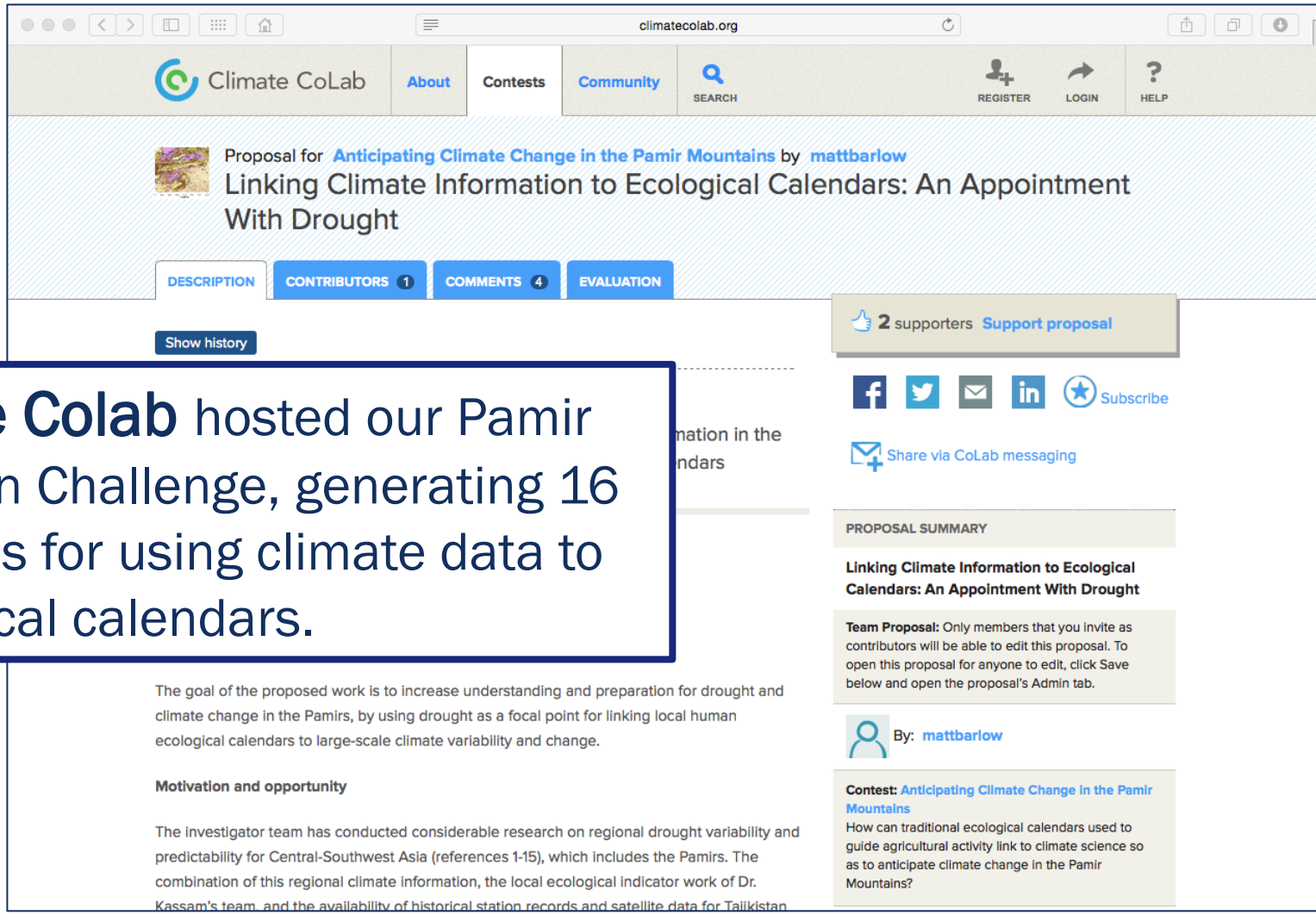
Partners to help us *Match*

Washington DC: heat-resistant development

Granite City IL: engaging community members in air quality monitoring

Horn of Africa Regional Environmental Center looking for remote sensing expertise to guide water and land use management

Partners to help TEX projects *scope* and *solve*



Climate Colab hosted our Pamir Mountain Challenge, generating 16 proposals for using climate data to adapt local calendars.

Experiment.com: Crowdfunding to help TEX projects *solve*

experiment.com

experiment | Search Projects, Topics & Lab Notes | Discover | How It Works | Si

Investigating Indoor Air Quality in Northeast Denver

By Ashley M. Collier, George Ware, PG Iwasaki, LaShonn Billingsley, Debbi Main, Raj Pandya, and Brian Fauver

Backed by Gail Ryan, Denny Luan, Billy Williams, Janice Johnson, Ricardo Piedrahita, Brian Amstutz, Mary McAfee Sealing, Alexa Capareda, Benjamin Fuoss, Kenneth Krueger, Rajul Pandya, Gina McAfee, George Ware, Vidyut Pandya, Brian Fauver, **and 20 other backers**

Denver neighborhoods and University of Colorado researchers are **crowdsourcing** to raise money to test new low-cost methods to test for leaked dry cleaning chemicals

$4,250

Raised

100%

Funded on 8/26/

Amazon Web Services: Cloud Services to *share* TEX solutions

amazon web services™

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Sample Projects

Tools to enable citizens to collect air quality data and identify pollution hot spots.

Using climate model data to help city planners mitigate future heat vulnerability.

Water decision tools that use local mesonets

Competitive Solutions:

- Development team includes city or community member(s)
- Address a local need
- Use Earth and space science data or models
- Make a measurable Impact.
- Are relevant to other communities
- Development team has the capacity to work in the cloud
- ***One winner for best student-led team***

The Judges

J.R. Killigrew
ICLEI USA

Kathleen Bogan
National Integrated Drought Information System

James Pizzuto
University of Delaware

Brad Dispensa
Amazon Web Services

Vijay Raghavan
Cisco

Mahmud Farooque
University of Arizona

Yang Hong
University of Oklahoma and Tsinghua University







Questions?

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