Bringing Science to the Table

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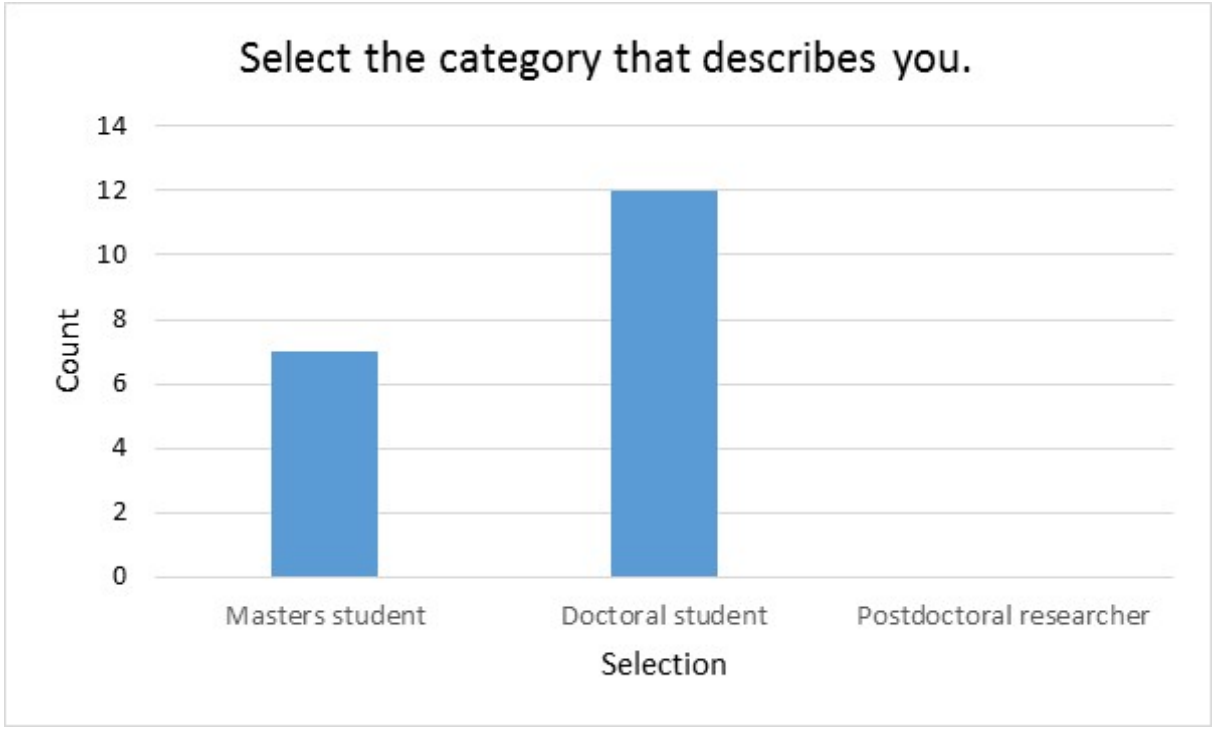
The Engaged Scientist Series is hosted by the new Albert A. Bartlett Center for Science Communication, CIRES Education and Outreach, INSTAAR, and the Office for Outreach and Engagement (OOE). Funding is provided from OOE.

Goals for this workshop

- Develop knowledge of how to approach and scope a community research project
- Learn how to pitch a project to an organization
- Be able to anticipate some common issues and possible solutions
- Define your own idea of what you would like to do
- Get connected with like-minded colleagues

Who is in the room?



- *Aerospace engineering sciences*
- *ATLAS*
- *Atmospheric and Oceanic Sciences (ATOC)*
- *Civil, Environmental, and Architectural Engineering*
- *Environmental Studies*
- *Geography*
- *Geological Sciences*
- *Molecular, cellular and developmental biology*
- *Others?*

What are your interests?

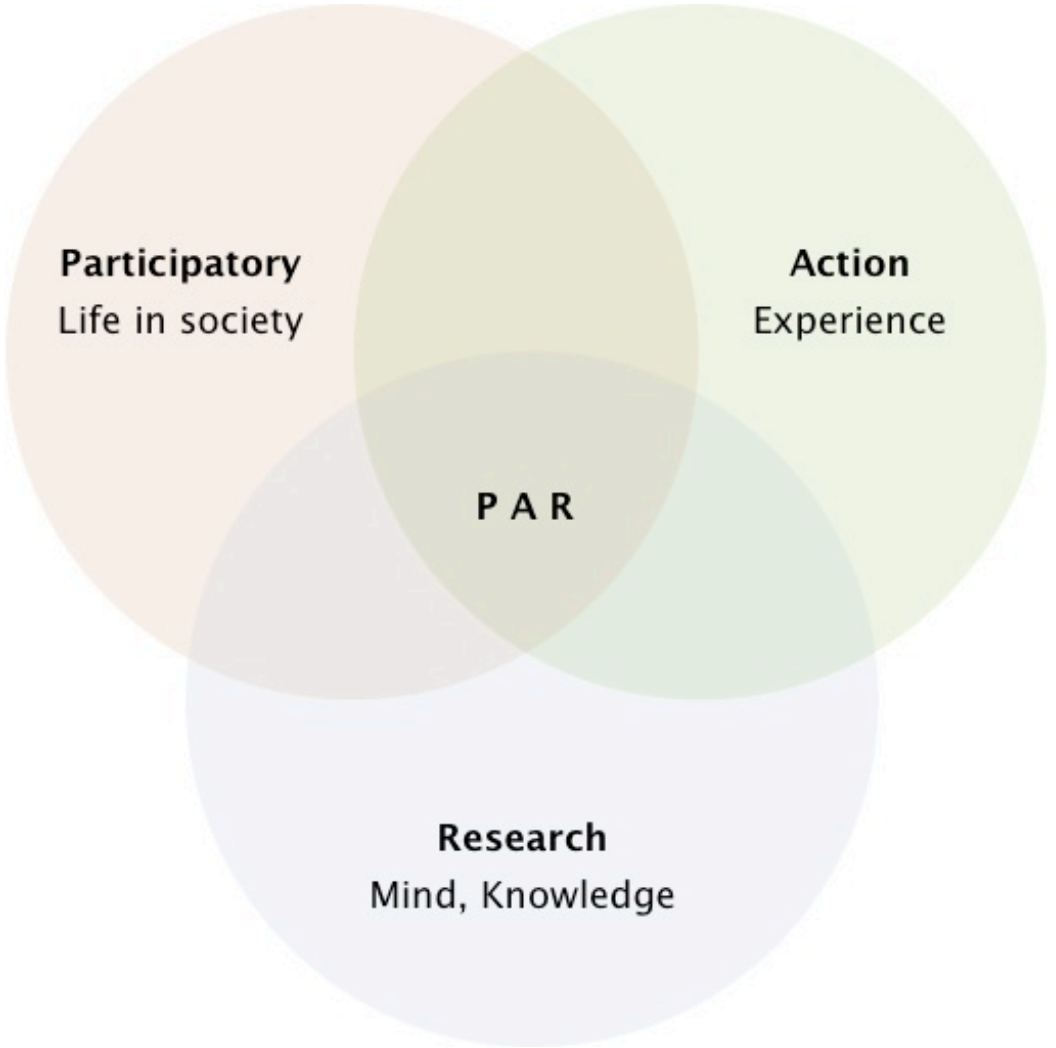
- *…using academic work to solve problems in our society.*
- *…talking to policy-makers as well as the public…*
- *…communicating climate change and scientific research via videos.*
- *…how to engage the public without becoming confrontational*
- *I'm really looking forward to learning more concrete skills for community engagement.*

Get started

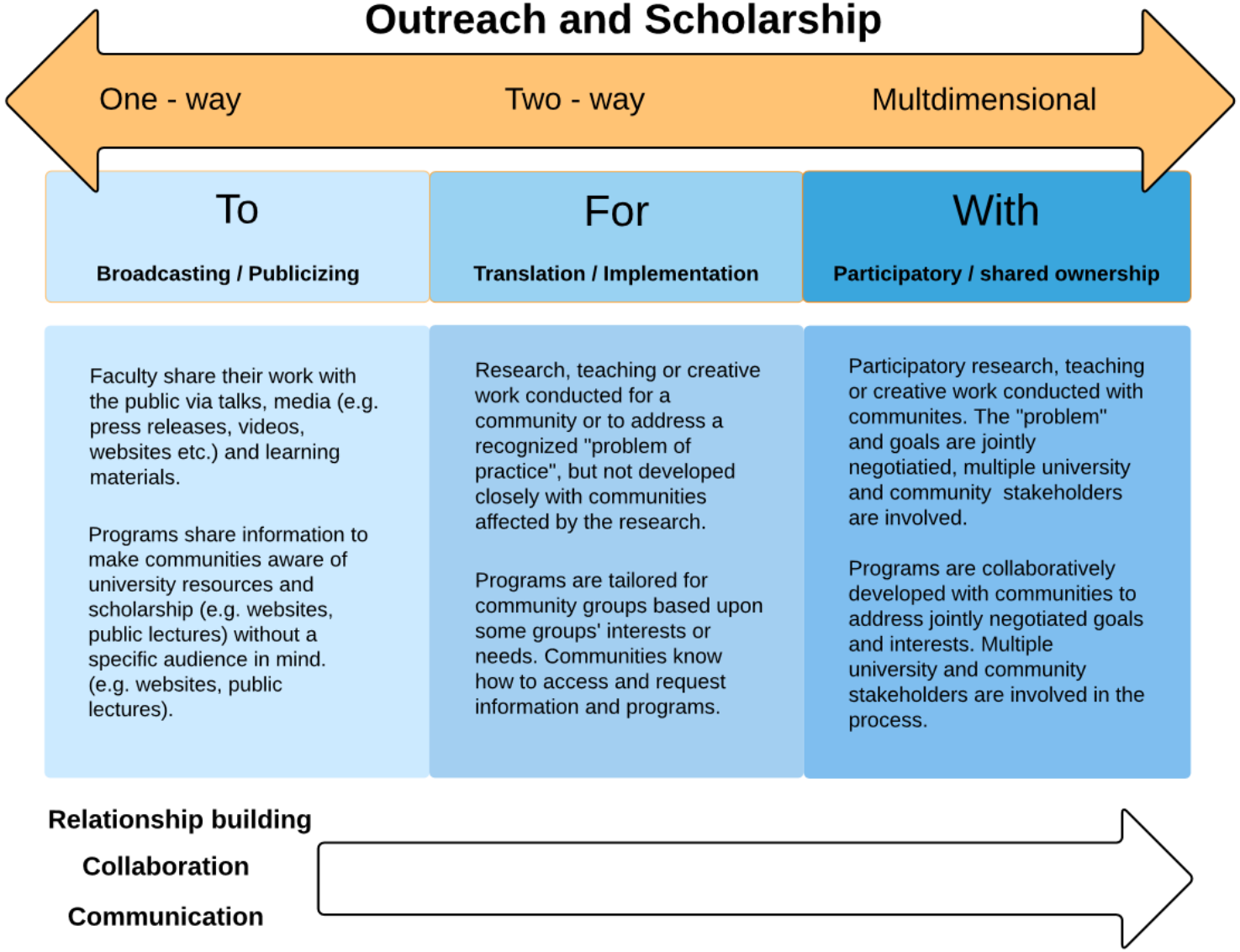
- Handout-don’t put your name on it!!!
- What answers do you have for question 1?
- Some examples of question 2?
- Some examples of question 3?

What is Community Engagement?

- Citizen science possibly
- Service learning possibly
- Community science
- Participatory action research
- What else?
- What is it not?



Continuum of Engagement Conceptual Map



What are some things you need to know and be able to do in your community engagement?

- Write on a post-it, add to the wall
  - Need to know
  - Need to be able to do

The Scoping Conversation-asking questions

Learn to ask questions that get at important aspects of the problem and solution.

Goal: Develop understanding to jointly propose appropriate next steps.

Types of questions:

Q. About who should be included

Q. About community and community capability/expertise

Q. About geoscience-relevant community issues

Q. That get at the scientist's role

Other aspects?

The Scoping Conversation

- Take a few minutes to write questions on your post-its
- Put the post-its up on the wall
- Walk around and read everyone's questions

- Which do you want to ask in the next round with your "community partner"?

Scoping a project: Kennendale, TX

The Scoping Conversation

- Get in groups of 4 (with your “community partner”)
- Ask questions in each of the categories as long as time allows. Note answers briefly on your template.
- With 5 minutes left, be sure you can report out:
  - What is a quick synthesis of what you learned? 2-3 sentences
- Report out (briefly!)

- What time are we back here?
- Pass out pitch handouts

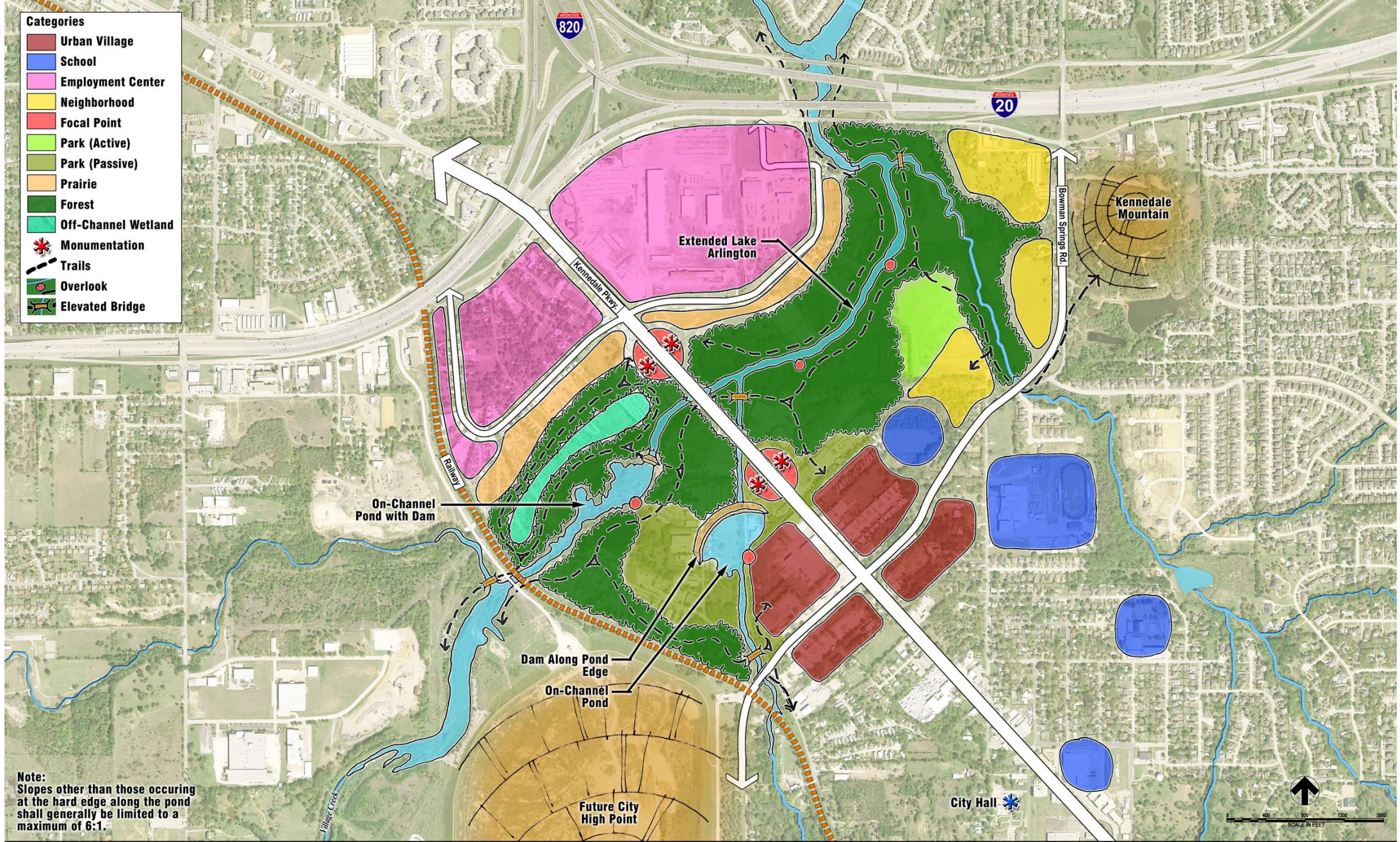
Making Pitches: Kennendale, TX

Making Pitches

- Important to offer options
- Projects you could do in up to 3-4 uninterrupted weeks if you had everything (translates into about a year at ½ day a week or so)
- Things that will make a concrete difference or inform a real decision
- Things that are delivered in the format/way that the audience is used to
- Not necessarily something publishable

Making a Pitch: Kennendale, TX

- Scan the handouts
  - Making a pitch
  - Backgrounder on Kennendale, TX
- In groups, brainstorm ideas for project pitches
- Write down your top 2, put them on the wall
- Report out



March 28, 2012
AVO: 27885

Village Creek Master Plan

City of Kennedale, TX

HALFF

KENNEDALE
You're Here, Your Home

So what happened in Kennendale?

VILLAGE CREEK MASTER PLAN

CHALLENGE: This polluted stream winds through salvage yards and industrial areas, possibly carrying heavy-metals into a drinking water reservoir

LEADS: Alex Sun, Research Scientist, Bureau of Economic Geology, University of Texas at Austin; and Bob Hart, City Manager, Kennedale

ACTION: Review and synthesize several existing studies and evaluate various approaches for restoring the stream and surrounding area

IMPACT: Cost-effective strategy for redeveloping this polluted stream and industrial area into a park, while protecting the drinking water source for more than 500,000 residents

ICMA

Troubleshooting

- Some trouble shooting strategies:
  - Presume good intent
  - Listen
  - Ask questions
  - Be solutions oriented
  - Try to understand their perspective
  - What else?

Troubleshooting

- Get in new groups
- Pick a few trouble scenarios to work with
- Write some solutions on post-its
- Put them on the appropriate big post-it

- Walk and see what others did
- Discuss

Community Partner Wanted

- Describe yourself
- Describe your ideal partner
- Describe ideals of place and time.

What are some things you need to know and be able to do? (Part 2)

- Add anything that isn’t there
- Add a dot to your top 3 priorities.

Wrap up

- What were big takeaways?
- What else do you want in future workshops?
- Optimal days/times?
- Save the Date-January 19, 2017
- Evaluation please!
  - Link: https://www.surveymonkey.com/r/EngagedScientistPostWorkshop
  - Paper

Contact us

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Resources on end slide

Learn More About Climate
Office for Outreach and Engagement
UNIVERSITY OF COLORADO **BOULDER**

CIRES
COOPERATIVE INSTITUTE FOR RESEARCH IN ENVIRONMENTAL SCIENCES

INSTAAR
Institute of Arctic and Alpine Research

Resources from Raj

https://depts.washington.edu/ccph/pdf_files/EducforHealthIsrael.pdf Raj's favorite; kind of policy heavy but implies great practices for community research.

Some other articles Raj really likes are:

http://www.sciencedirect.com/science/article/pii/S0959378010001093

Ballard, H. L., and L. Huntsinger, L. (2006), Salal harvester local ecological knowledge, harvest practices and understory management on the Olympic Peninsula, Washington, Human Ecol., 34(4), 529–547.

Berkes, F. (2004), Rethinking community-based conservation, Conservation Biol., 18(3), 621–630.

Holton, G., and G. Sonnert (1999), A vision of Jeffersonian science, Iss. Sci. Tech., 16(1), 61–65.

http://www.pnas.org/content/100/14/8086.full

Shirk, J., H. Ballard, C. Wilderman, T. Phillips, A. Wiggins, R. Jordan, et al. (2012), Public participation in scientific research: A framework for deliberate design, Ecol. Soc., 17(2), 29

http://www.pacificdisaster.net/pdnadmin/data/original/Macquarie_2008_participatory_research_DRR.pdf

One more – thought provoking diagnosis with a high-level suggestion for new approaches. Pretty new…

http://www.thenewatlantis.com/publications/saving-science