

Last updated: 2018



Thriving Earth Exchange Statement on Integrity in Community Science

Definition

Community science is defined as the process by which scientists and communities do science together to advance one or more community priorities. Doing science includes defining questions; designing protocols; collecting and analyzing data; and using scientific knowledge in decision-making and planning. Communities can be communities of geography, interest, or practice.

Mutual Benefits from Community Science

Community science benefits communities and science.

- It **advances** community priorities and scientific knowledge.
- It **drives** new research investigations.
- It **expands access** to science, especially for communities that historically have been underserved and underrepresented in science.
- It **welcomes and nurtures** new voices and perspectives and **broadens** participation in science.
- It **augments** a community's ability to influence, contribute to, and leverage science for its benefit.
- It **promotes** transparency and equity in decision-making and planning.
- It **increases** communities' understanding of science and scientists' understanding of communities.
- It **grows** the capability and knowledge of all participants.

Purpose

Designed by Thriving Earth Exchange participants, this document is intended to be a foundation for community science projects launched through Thriving Earth Exchange. It is also a reference for anyone interested in doing community science.

It also serves as a framework for identifying shared values at the start of a collaboration. Many cultural traditions and a growing body of research suggest that articulating shared values and responsibilities at the start of a cooperative project improves outcomes and impact.

Community science depends on creating and sustaining partnerships that harvest the benefits of many perspectives. Thriving Earth Exchange hopes to inspire the larger scientific community and encourage strong and expanded collaboration between communities and scientists.

Foundations

Community science is based on the highest standards of integrity in research and follows the highest standards for ethical engagement with communities. Foundational statements that guide AGU and Thriving Earth Exchange include

- Singapore Statement on Research Integrity, which AGU has used as the foundation for its Scientific Integrity and Professional Ethics Policy.
- Principles for the Ethical Practice in Public Health, developed by the Public Health Leadership Society and set out by the American Public Health Association and the Association of Schools of Public Health.

Principles

- *Mutual Respect*: Community science does not assume that science is the best or the only way to make decisions; instead, community science offers scientific methods and data as useful and important tools that can be part of complex decision-making. Community science welcomes local and indigenous knowledge systems and practices.
- *Mutual Planning and Implementation*: Community leaders, community members, and scientists are active partners in project planning, project execution, and sharing results. This is a more rigorous standard than the informed consent ([link to HHS.gov 45 CFR 46](#)) that is used in many research projects involving human subjects.
- *Shared Leadership*: Community leaders and scientists set priorities and make decisions, including budgetary decisions, together.
- *Co-ownership of Data*: The data collected in community science will be co-owned by, available to, and accessible to all community members. Data will be used, shared, and stored only in ways approved by all project participants and community members.
- *Community Benefit*: Community science is designed for tangible, concrete benefit to communities, and the outcomes of the project should reflect that. Publications for a scientific audience are less important than community impact. Articles and presentations should be created together for community and scientific venues.
- *Inclusiveness*: Community science strives to engage and benefit the whole community, making special effort to include, educate, learn from, and benefit community members and scientists who historically have been marginalized or underserved.
- *Do No Harm*: Community science projects strive to do good, to solve real problems, and to rejuvenate communities. Community science projects do not inhibit opportunities, damage natural systems, or harm people.