

THRIVING EARTH EXCHANGE

Envisioning a future where all communities can participate in, contribute to, and guide the use of scientific knowledge

WHAT WE DO

The [American Geophysical Union's Thriving Earth Exchange](#) connects communities with scientists and supports them as they work together to tackle local challenges related to sustainability, climate resilience, environmental health, natural hazards and [much more](#).

Community science happens when communities and scientists do science together to advance community priorities. That includes defining questions, designing protocols, collecting and analyzing data, sharing and communicating learnings, and using scientific knowledge in decision making. Community science projects begin with community voice, are guided by community knowledge, and end in community impact. **We strive to help communities access information and find solutions with long term environmental, social and financial benefits.**

Thriving Earth's community science projects typically span 6-18 months and launch in quarterly cohorts. **Scientific support for communities is completely free and volunteer-based.**

Thriving Earth Exchange Projects:

Project teams have three main components: community leads, scientists, and community science fellows.

Community Leads: Project design starts with communities! Thriving Earth works with a variety of diverse communities including local or regional governments, tribal governments, community-based organizations, grassroots organizations or other advocacy or non-profit groups, launch a project with us! We'll match you with a Community Science Fellow and Community Scientist(s) to drive local impact.

Community Scientists: Volunteer community scientists work together with community leaders to address a local priority. They bring their scientific knowledge, networks and skills to the table to help refine the project and ensure it succeeds.

Community Science Fellows: Fellows are the glue that holds together the project team, and serve as project managers, facilitators and connectors. Community science fellows join

a cohort of people from all backgrounds and career stages interested in growing their practice of community science while guiding a project from idea to impact.

ABOUT THRIVING EARTH

Since our inception in 2013, we have worked with nearly 200 communities in 39 states and 10 countries. We work with a variety of partners, including scientific organizations, academia, federal institutions and community-serving organizations. We also support organizations outside of the United States seeking to adapt Thriving Earth's approach to community science for their region or country.

CASE STUDIES

Greenhouse gas inventory helps Durango set priorities – and save money

In 2008, a baseline greenhouse gas inventory was conducted for [La Plata County](#) using data collected in 2005. In the years since inventory was conducted, the city has scaled up its sustainability efforts for both internal operations and in the wider community; however, no action has been taken to update the 2008 inventory or benchmark progress on emissions reduction. Thriving Earth Exchange worked with the municipality of Durango, Colorado to update La Plata County's greenhouse gas inventory, as part of its commitment to taking proactive steps to measure and curb its emissions. The new inventory will be used to set priorities for future actions to reduce GHG emissions throughout the city. By working with Thriving Earth, the city was able to divert approximately \$50,000 allocated for the GHG inventory to stormwater management.

Spending smart on environmental health – and seeking environmental justice

In early 2016, the city of [Evanston, IL](#) settled a lawsuit with a waste transfer station, receiving 1.26 million in cash funds. The facility spurred decades of complaints and health and environmental concerns from neighboring residents, who historically have been predominantly African-American. The city and residents needed to determine how to allocate the funds to effectively monitor, evaluate and mitigate the negative impacts of the facility on the surrounding neighborhood - but were hesitant to fund a large environmental impact study, given the city's funding allocation limitations. Through Thriving Earth Exchange, the city sought technical assistance to address the primary obstacles of limited allocation and lack of staff. The Thriving Earth team worked with the city and delivered a sampling plan and equipment recommendations, helping Evanston take smart action for its residents' health.

What's in your water? Money-saving research will help create a new pond for residents to safely enjoy

The Town of [Berlin, MD](#) purchased approximately 60 acres of private property previously owned by Tyson Chicken, Inc, which includes a chicken processing plant which has not been in use for over 10 years. The Town intends to redevelop the land with recreational uses in mind. Because E. coli had been found in the ponds previously, the town partnered with Thriving Earth Exchange to undertake microbiological risk assessment of the ponds at the site.

The results of the Thriving Earth Exchange study showed that there were no microbiological hazards. For Berlin, it means they don't need to take immediate steps to remediate the ponds, or even remediate them at all. This is significant: the town's environmental consultants indicated it would cost approximately \$7m to remediate the three ponds. Even if they decide to remediate, Thriving Earth Exchange gave Berlin time to make a plan and figure out how to pay for remediation without having to treat it as a crisis situation.

MEDIA

To learn more about our projects, check out the recent media coverage of our Thriving Earth Exchange communities across the United States, below!

- Detroit, MI: [Hamburg Township residents band together to find solutions to flooding](#)
- Columbus, OH: [For the first time, Columbus metro area passed its annual air quality test](#)
- New Orleans, LA: [7th Ward neighbors fight back against flooding by creating a green zone](#)

CONTACT US

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