E-ENTERPRISE for the Environment
Modernizing the business of environmental protection

PARTICIPATORY SCIENCE

Improving how participatory science data is integrated and used at EPA

CHALLENGE

Greater involvement of the public in expanding scientific understanding and knowledge offers substantial opportunities. However, significant investment in infrastructure to support technical assistance, data quality, data management, data use, and data understanding is key to actualizing the potential of these data. Overcoming such challenges will take the collective power of EPA, States, and Tribes working together with participatory science collaborators.

BENEFITS

- **Improve data infrastructure and tools** – Increase capacity to collect, share, analyze, and integrate participatory science data.
- **Elevate data standards and collection methods** – Improve upon existing standards in place for community scientists to collect data to move toward streamlined data and processes.
- **Promote data accessibility and transparency** – Collaborate with partners to share data effectively and efficiently.

ACCOMPLISHMENTS

- Held a data management workshop in 2021 – a facilitated discussion with participatory science data experts, users, and regulatory staff to define a common roadmap to improve data management approaches.
- Finalized the **Roadmap and Theory of Change** with review from workshop participants and other key stakeholders.
- Developed **12 technical case studies** and a set of discussion papers.
- Finalized and released the **EPA vision and principles** for participatory science.
- In coordination with EELC tribal members, developed a **Tribal Science White Paper** detailing tribal case studies to showcase how tribes use participatory science in environmental protection and management. The paper shares best practices for tribal participatory science and identifies ways that EPA, States, and other organizations can improve support for future activities.
- Finalized and released **EPA's Policy Guidelines and Checklist for Participatory Science Projects** to help EPA staff and managers understand key requirements and design considerations for EPA participatory science projects.
- Released **EPA's 2023 Equity Action Plan** in early 2024, which identifies key priority strategies to guide its programs, policies, and engagements in equity, environmental justice, and civil rights. One of these strategies is to support community engagement in participatory science. This effort will help empower communities and inform actions to benefit their health and well-being.

WHAT'S NEXT?

EPA is working on two data management strategies:
- An assessment of the data management requirements to facilitate participatory science data and use – Data Management Assessment & Action Plan.
- The Participatory Science Implementation Guide, which will detail five data management themes and strategies for implementation and use of data throughout the agency.