

PROJECT SUMMARY

Participatory science data can provide diverse environmental information that otherwise would not be available due to time, geographic, or resource constraints. For that reason, these data may be used to augment environmental data collected by EPA, states, and tribes.

PROJECT LEAD

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RESOURCES

Community science session at the EE2020 virtual webinar in October 2020: [Improving the Management and Use of Community Science Data: What Can We Learn from State and Tribal Programs?](#)

[15 case studies](#) and [best practices](#) that describe how participatory science is used as a tool in both regulatory and non-regulatory environmental programs by states, tribes, and local governments.

[Tribal Science White Paper](#)

[Multi-Stakeholder Roadmap](#)

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 November 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** – workshop participants and other key stakeholders reviewed these products following the workshop.
- Developed **12 technical case studies** and a set of discussion papers that seeded the agenda and discussion at the November 2021 data management workshop (coming soon to the EPA participatory science website).
- 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 and better understand how tribes use participatory science in environmental protection and management. The white paper shares best practices for tribal participatory science and identifies ways that EPA, states, and other organizations can improve support for future tribal participatory science activities.

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 Pathways for Implementation which will detail five data management themes and strategies for implementation and use of data throughout the agency.