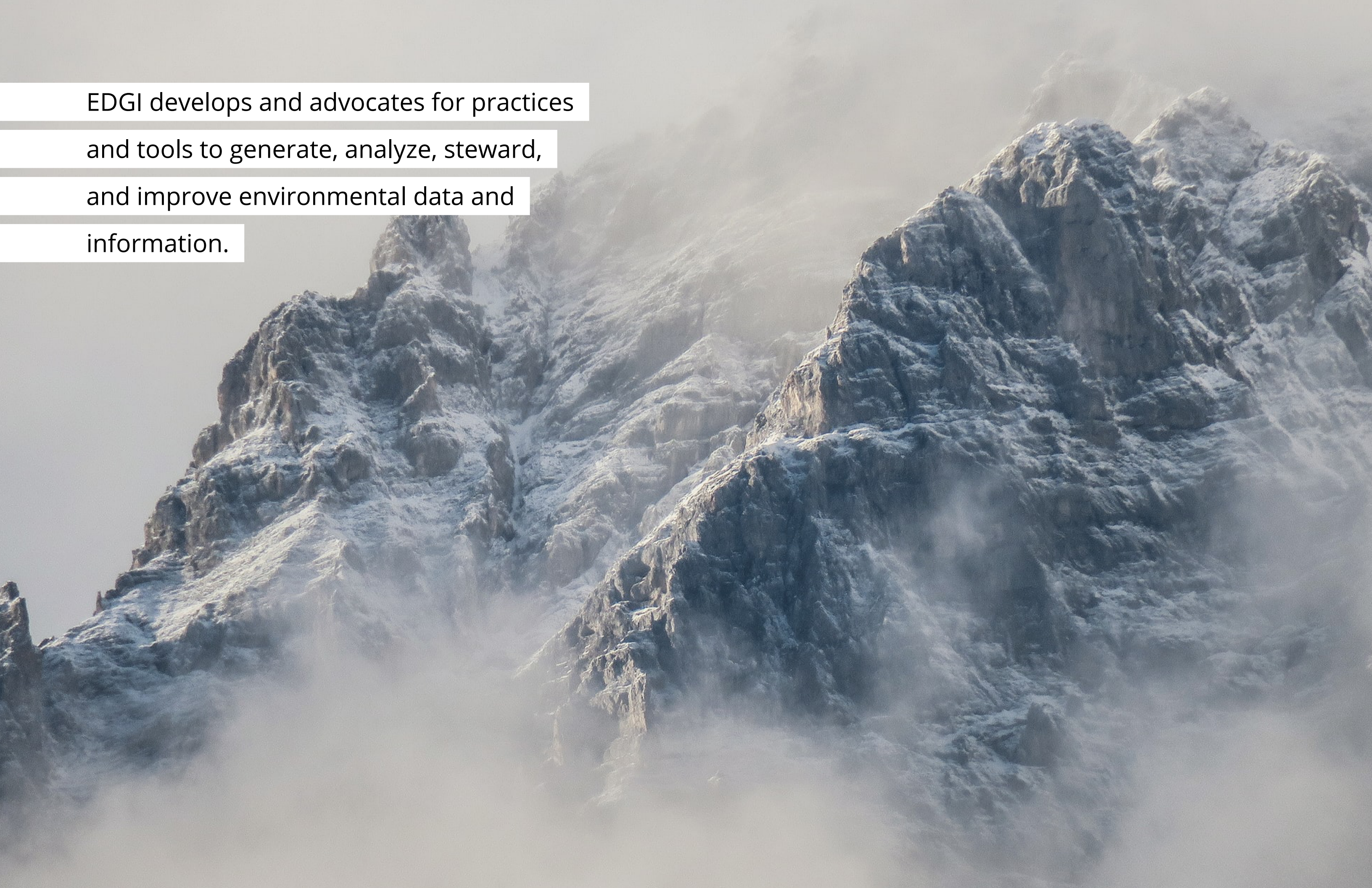




# ANNUAL REPORT 2022

**EDGI** Environmental Data  
& Governance Initiative

EDGI develops and advocates for practices and tools to generate, analyze, steward, and improve environmental data and information.



# A Letter from Our Coordinating Committee

We are very grateful to present this annual report for fiscal year 2022. In the midst of the intensifying climate emergency and growing evidence about the dangers of pollution, we are relieved to see the federal government working to address environmental injustices, especially for communities disproportionately burdened.

We are coming to realize however just how difficult it has become to turn the “ship” of environmental data production and governance around to favor communities – especially

disadvantaged ones – over polluters, despite having an administration that declares its intent to do so.

Still, we enter 2023 hopeful. EDGI has maintained its critical role as a watchdog, checking the rhetoric and public intentions of our federal government against the realities of our permission-to-pollute system of environmental governance; our relationships with agencies like the EPA and NASA are strengthening; network members are showing up to drive this work forward; and, in partnership

with communities, we see that systemic change is on the horizon.

We made significant contributions in 2022. Our open letter to the EPA, co-authored by the Sierra Club and other groups, warned against the sunset of a critical public archive and resulted in the agency announcing a year long extension and review. We co-developed and debuted a publicly-accessible database of Freedom of Information Act EPA disclosures. Our feedback on multiple public EPA environmental tools led to improvements. And a timely EDGI report brought attention to the EPA data gaps and disparities that undermine new and forthcoming environmental justice mapping tools.

We also launched a new organizational strategy developed over the past year to increase our impact and more explicitly support the advancement of a critical component of environmental justice: the Environmental Right to Know (ERTK). Following the guidance of the Louisville Charter, the vision of the ERTK that we pursue is a “right to know, participate, and decide,” emphasizing the agency of impacted communities that uses information as a cornerstone for meaningful participatory governance.

It’s clear that the federal data practices and policies of yesterday won’t suffice. Inadequacies in our environmental and information policies persist,

leaving critical data vulnerable and inaccessible, environmental conditions unknown, and communities without the necessary resources for protecting their wellbeing and effecting change. We will continue advocating for, envisioning, and prototyping infrastructures for environmental data governance that strengthen the ERTK, and help ensure that progress towards real environmental justice – with communities – is made possible.

We are grateful for your support as we pursue this vision, and excited for the year to come. Thank you for being a part of this movement.

– EDGI’s Coordinating Committee

EDGI is the preeminent watchdog tracking  
and assessing modifications to federal  
environmental information resources  
and their accessibility.



# Sharing Our 2022 Highlights

- Our open letter to the EPA, warning against their planned sunseting of a critical public web archive with hundreds of thousands of environmental documents, resulted in the EPA announcing a year long extension and review.
- We presented on the importance of information policy and the protection of information and its integrity at the Internet Archive's event 'Building Democracy's Library'.
- Our feedback on multiple public environmental tools prompted the EPA to make improvements, including adding a new ECHO Notify feature that enables the public to subscribe to permit violation notifications for areas of concern.
- In collaboration with the Sierra Club and Toxic Docs we debuted a publicly-accessible searchable repository of Freedom of Information Act EPA disclosures.
- We created auto-updating "report cards" for every congressional district in the United States showing permit violations across the Clean Water Act, Clean Air Act, and Resource Conservation and Recovery Act.
- We served on an Amnesty International and Fight for the Future panel to discuss the environmental impact of Web3, now and in the future.
- We hosted the National Association of Science Writers workshop 'What's in the Water: Stories in Federal Environmental Data' to teach science writers how to use our open-source data science tool to uncover stories from EPA records.
- We brought attention to the EPA data gaps and disparities that undermine new and forthcoming environmental justice tools in our timely report 'How Gaps and Disparities in EPA Data Undermine Environmental Justice Screening Tools'.
- We made several interactive data research Jupyter notebooks publicly available for individuals and communities to generate graphs and maps of environmental data relevant to their geographies.

***"EDGI's power comes from collaborative power: the power that we gain from working from many different angles and perspectives."***

*Eric Nost, EDGI Member*

- Our Environmental Enforcement Watch notebooks were used to help communities write reports and more informed public comments, and in workshops with community members and journalists.
- We published what is to our knowledge the most complete catalog that exists of federal open data tools for environmental governance, which is found on the "External Resources" page of our Environmental Enforcement Watch website.
- We published a report presenting key changes to federal environmental information and its access on agency websites at the one year mark under President Biden and assessing the extent to which those changes address acute harms inflicted by the Trump administration and make forward progress.
- We co-hosted the workshop 'The Climate Crisis: Early Americanists Respond' with the McNeil Center for Early American Studies, the Penn Program in Environmental Humanities, and other groups to help support scholars developing new lines of inquiry on the climate crisis.
- We published a public comment on the draft version of the White House's Climate and Economic Justice Screening Tool and provided recommendations for improvement.
- In collaboration with Olin College's Public Interest in Technology group we published a notebook and report that summarizes publicly-reported greenhouse gas emissions in terms of corporate ownership rather than geography.
- We participated in the UNBOUND (Understanding Needs to Broaden Outside Use of NASA Data) Environmental Justice Workshop series, which was hosted by ESIP and NASA's Earth Science Division.

# Mission & Approach

EDGI is an action-oriented research collaborative dedicated to strengthening the Environmental Right to Know (ERTK). To us, the ERTK means:

- People should be able to know and make decisions about environmental conditions of concern affecting their livelihoods and maintain rights of consent, refusal, and self-determination in environmental decision-making.
- The collection and stewardship of environmental information should equip people, communities, and workers to protect their health and support the flourishing of surrounding ecosystems.
- All people, but especially minoritized communities who experience disproportionate harms, should have equitable access to comprehensive and legible environmental information in order to seek redress for past and accumulated harms, if they so desire, and build relations that emphasize responsibility and accountability.

To work towards this mission, we apply three key strategies:

Information: We develop, envision, and critique practices and tools to generate, analyze, steward, and improve environmental data and information. We take a feminist approach to contextualize information with its social, political, and personal histories; question how different types of knowledge are perceived as more legitimate than others; and respond in ways that value diverse backgrounds and perspectives.

Boundary Org: We connect across organizations and agencies to demonstrate problems and solutions for better environmental governance and are a trusted partner and resource to diverse groups, including minoritized communities, communities of practice, academics, and civil servants.

Network: We foster a thriving, cross-disciplinary network of activists, researchers, and the wider community envisioning how environmental information can support governance and be governed democratically in a manner that promotes environmental data justice. We cultivate spaces that promote non-hierarchical and open engagement with integrity.

# Our Working Groups

## Environmental Enforcement Watch

The Environmental Enforcement Watch (EEW) is the collaboration of two of EDGI's working groups, Environmental Data Justice (EDJ) Working Group and Data Working Group. EEW brings together data from the United States Environmental Protection Agency (EPA) as well as the communities who bear the brunt of toxic industries in order to explore how data used in environmental governance in the US can support community goals, and to identify problems and limitations with the data itself.

EEW uses the framework of environmental data justice to center data analysis around community goals, acknowledging flaws and biases in data and what counts as data, and reflexively using data despite its flaws, acknowledging that it may be "good enough" to demonstrate environmental harms. EEW consciously challenges what we typically understand as "data" to include both the stories, histories, and lived experiences of impacted communities as well as machine-readable numerical data.

The EEW project, in partnership with Stony Brook University's Geospatial Center, maintains a live-updating, SQL-queryable mirror of the EPA's Environmental History and Compliance Online database, which is substantially more extensive than the database EPA itself makes available through its API.

Our database is primarily designed to support Jupyter Notebooks, also built and maintained by EEW, as interactive and accessible sites of analysis for people and communities to understand permits and violations under US environmental protection laws in terms of relevant geographies such as ZIP codes, watersheds, and congressional districts. The Notebooks have been used to help communities write public comments with more information, to generate "report cards" on enforcement and compliance for the districts of legislators with oversight duty of the EPA, and in numerous workshops with community members and journalists seeking to better understand environmental protection in areas they care about.

## Environmental Historians Action Collaborative

The Environmental Historians Action Collaborative (EHAC) works together to bring the insights and skills of environmental history to bear on the major environmental, climate, and political crises of our time. We aim to participate in current debates through special reports and public commentary, promote conversations among historians and history educators about environmental crises, and amplify existing research and pedagogy for a wider audience.

This past year, EHAC largely focused on engaging other scholars in applying their expertise to the most pressing issue of our time, climate change. We co-organized a two-day workshop, "The Climate Crisis: Early Americanists Respond," to support scholars developing new lines of inquiry on the climate crisis. The workshop was held virtually with in-person hubs at the McNeil Center for Early American Studies at Penn and at the Early American Studies Institute at the University of Southern California. We had 25 participants, 70 audience members and a strong conversation. EHAC also organized and spoke in a panel on climate crisis pedagogy at the American Society for Environmental History meeting. This generated materials for EHAC's teaching and learning project, offering resources to historians who want to incorporate environmental history and the climate crisis in their university classes.

In addition to engaging other historians on the climate crisis, EHAC also engaged historians to speak out against the proposed closure of EPA archives. The president of the American Society for Environmental History read EDGI's blog that sounded the alarm about the EPA's plan to sunset its online archive, and asked EHAC to draft a letter in defense of the EPA web archive. Co-signed by major historians' organizations, including the American Historical Association, the largest organization of professional historians in the U.S., this letter helped push EPA to save the archive, at least temporarily.

As EDGI underwent a change in organizational focus over the past year, EHAC decided to become a sister organization going forward. We're excited to continue supporting and amplifying the EDGI mission both by connecting EDGI projects to relevant historical experts, and by incorporating EDGI tools and projects in our Teaching and Learning resources page on our forthcoming website.

***"EDGI is made up of energetic, open-minded people willing to think creatively about challenges."***

***Steve Young, EDGI Member***

## Civic Science Fellows

The Civic Science Fellows (CSF) program is progressing toward a culture of civic science to build fresh knowledge, collaboration, and methods to work across disciplines and sectors. The Rita Allen Foundation, Packard Foundation, and EDGI are part of a number of growing collaborations that are addressing complex issues such as climate change and science literacy. This partnership reveals the importance of diverse viewpoints to innovate paths that will benefit society. From the civic science network to the communities where EDGI works, CSF Kelsey Breseman reminds us that this kind of partnership is our civic responsibility—recognizing that whenever we engage together in science and in society, we shape our future.

EDGI has found it meaningful to have Kelsey Breseman and Mark Chambers take part in the community of Civic Science Fellows to cultivate an inclusive culture of civic science to help communities effectively solve problems of inequity. Kelsey and Mark continue to bring different skills and perspectives to help EDGI understand how government approaches to and reliance on environmental data and science can be reconciled with more community-based approaches exemplified by civic science.

CSF Kelsey Breseman is an activist and engineer whose fellowship project brings the principles of environmental data justice to span multiple spheres of influence: from working directly with environmental justice communities to engage their current projects with federal data through EEW's Notebooks, to helping federal agencies including EPA and NASA improve their design processes to better incorporate environmental justice communities' needs into their online data tools, to influencing emerging decentralized web technologies by developing principles for developers that highlight environmental justice and bringing more environmental justice perspectives into the design space.

CSF Mark Chambers is an educator at Stony Brook University in New York, with expertise in American and environmental history. He's interested in the intersections between society, environments, and technologies and his CSF project assesses whether or how well current EPA processes incorporate important forms of public participation in decision-making, especially in communities bearing the greatest environmental risks. To recast the role of community participation in environmental decision-making, the project will advocate for policies at the EPA that engage communities in research and move beyond current decision-making paradigms to improve health.

## Policy Monitoring and Interviewing

The Policy Monitoring and Interviewing Working Group analyzes changes to federal environmental, energy, and climate policy and institutions. We are particularly focused on agency expertise, the use of science by agencies, the morale and culture within agencies, budgets, regulation, and the enforcement of regulations. Interviews with current and former staff, Freedom of Information Act (FOIA) requests, agency data and documents, and other sources form the basis of our research. We produce in-depth reports, white papers, public comments, fact sheets, letters to Congress, and FOIA requests, among other things.

Over the past year, our working group developed a project on "Data, Science, and Environmental Justice at the EPA" that in July, 2022, led to our receipt of a National Science Foundation grant. Centering on a problem of "cumulative exposures" that an environmental justice movement has long highlighted, our investigators will research how EPA approaches to data and science have both resisted and sought to incorporate the multiple hazards and stressors faced by environmental justice communities. We are collaborating with two Environmental Justice groups on this research, the Community In-power and Development Association of Port Arthur, Texas, a refinery town that is majority Black and Latinx, and the Alaska Coalition against Toxics, which has strong ties to Indigenous communities.

We've also continued developing "A People's EPA", a website which helps illuminate the complex history, present day struggles, and future direction of the EPA. On top of its weekly feed of top EPA news, we've added longer explainers, visuals, and updates on the EPA's on-going work such as in enforcement and environmental justice, while amplifying public access to our extensive collection of oral histories with EPA staff. The website's growing resources for journalists, activists, scholars, students, and other members of the public interested in the EPA's recent history is our repository of documents obtained from inside the executive branch through the Freedom of Information Act.

Additionally our working group also inaugurated a project concentrating on New York State climate legislation and related initiatives, to analyze and report on their equity impacts. With ties to NY Renews, the coalition that has successfully pushed through this state's pathbreaking Climate Leadership and Community Protection Act in 2019, we are seeking to provide guidance for how proposed or future climate bills, as well as existing climate programs, may more justly distribute the burdens as well as benefits of state-level government action.



## Website Governance

EDGI has worked at the critical intersection between environmental and information policy since 2017, and our Website Governance Team has established a reputation as the leading authority on changes to federal environmental websites and an ardent advocate for the improvement of federal website governance. Over this past year our primary focus has shifted from monitoring federal websites and bringing information suppression to light, to focusing on ways to address the practices and policy gaps that allowed for such suppression.

This year we have brought public and key stakeholder attention to website governance issues like resource discovery and preservation. We sounded the alarm on the EPA's plan to sunset its online archive. After we wrote an open letter, co-signed by 20 organizations, urging the EPA to not only maintain but improve its online archive, the agency decided to extend the timeline and reconsider its plans with the archive. We have also elucidated the longstanding challenge of connecting data with relevant information, particularly through a workshop we led at the Earth Science Information Partners annual meeting, Context is Key: Enhancing Data Access, Use, and Understanding. Throughout the year, we've been in conversation with federal agencies like the EPA and NARA, as well as the organizations leading the transparency and scientific integrity movements.

The two white papers we published this year examined federal web governance practices and delivered recommendations. In 'Crossing the Line', we assessed EPA news releases during the Trump administration and identified troubling patterns of flagrant politicization, as well as provided recommendations to address them. Turning our attention to the Biden administration, in our report 'Work in Progress: Governance of Digital Environmental Information in the Biden Administration's First Year', we examined the administration's federal website practices in its first year. We observed improvements in federal websites that addressed specific damage done to public information by the Trump administration, but noted that the Biden administration has not made progress toward federal information policies that would protect information from the kinds of abuses we've observed.

Looking forward, we will continue to press federal agencies to develop digital information policies that protect public information, build websites that can foster civic scientific literacy, and provide opportunities for public oversight and agency accountability.

***“Whenever we engage together in science and in society, we shape our future.”***

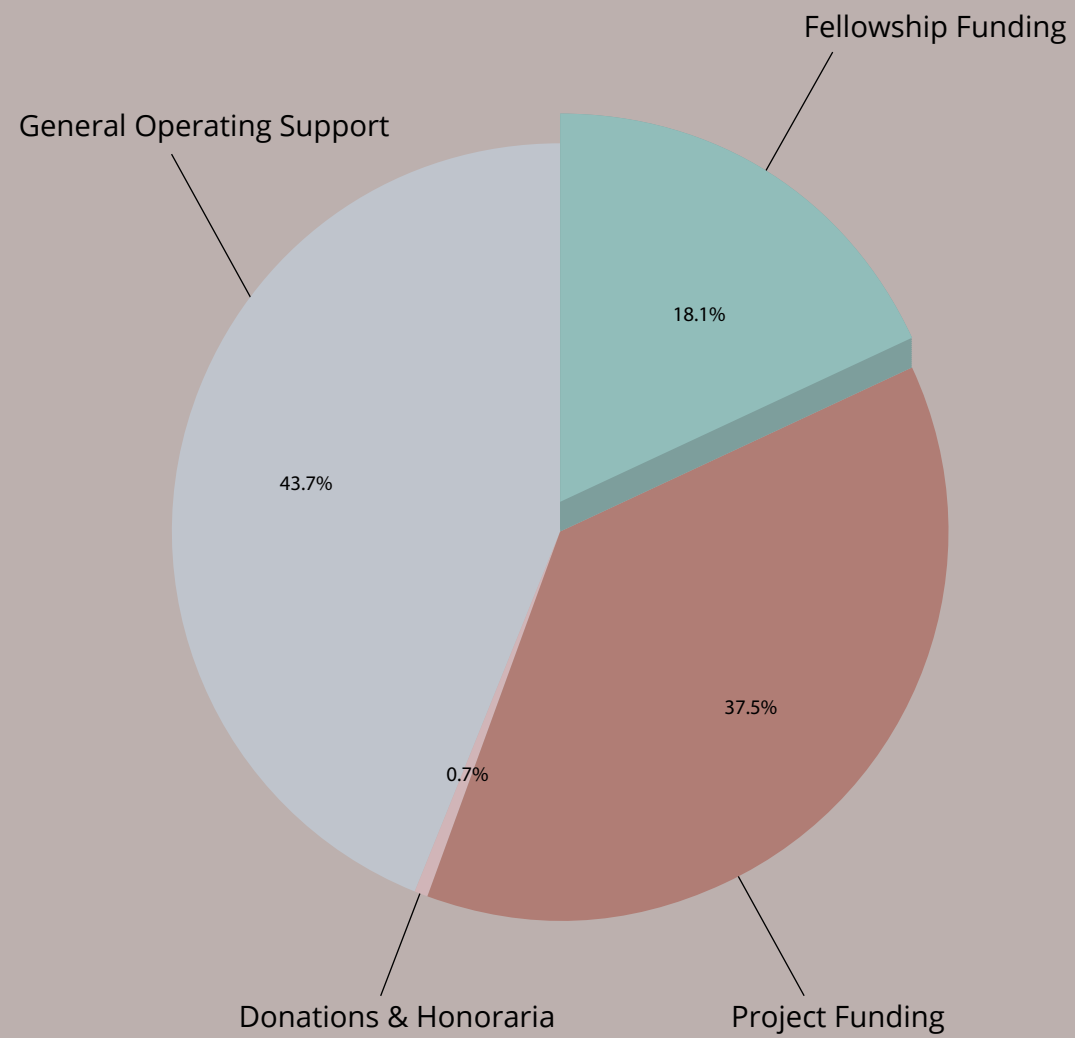
***Kelsey Breseman, EDGI Member***

EDGI is a trusted partner and resource to diverse groups including minoritized communities, communities of practice, academics, and civil servants.



# Financials

### Revenues



### Expenses

