



# 2019 **EDGI** ANNUAL REPORT



**EDGI** Environmental Data  
& Governance Initiative

April 8, 2019



# 2019 EDGI ANNUAL REPORT

Steven Braun  
Kelsey Breseman  
Leif Frederickson  
Gretchen Gehrke  
Stephanie Knutson  
Michelle Murphy  
Kevin Nguyen  
Christopher Sellers  
Nick Shapiro  
Kyala Shea  
Marianne Sullivan  
Aparna Sundar  
Sara Wylie  
EDGI

April 8, 2019

The [Environmental Data & Governance Initiative](https://envirotatagov.org) (EDGI) is a North American network with members from more than thirty different academic institutions and ten nonprofit or grassroots organizations, as well as caring and committed volunteers who come from a broad spectrum of work and life backgrounds. EDGI promotes open and accessible government data and information along with evidence-based policy making.

# TABLE OF CONTENTS

<a href="#"><u>Executive Summary</u></a>	<b>3</b>
<a href="#"><u>Maintaining Vigilance &amp; Fostering Legibility</u></a>	<b>8</b>
<a href="#"><u>Interviewing</u></a>	8
<a href="#"><u>Website Monitoring</u></a>	12
<a href="#"><u>Visioning &amp; Building Alternatives for Socially Just Environmental Governance</u></a>	<b>15</b>
<a href="#"><u>Environmental Data Justice</u></a>	15
<a href="#"><u>Archiving</u></a>	17
<a href="#"><u>Prototyping an Alternative Organizational Structure</u></a>	<b>20</b>
<a href="#"><u>Alternative Organization</u></a>	20
<a href="#"><u>Communicating &amp; Engaging in Various Spheres of Influence</u></a>	<b>22</b>
<a href="#"><u>Publications</u></a>	22
<a href="#"><u>Partnerships and Events</u></a>	29
<a href="#"><u>Financial Overview</u></a>	<b>33</b>
<a href="#"><u>Where We're Headed</u></a>	<b>35</b>

## EXECUTIVE SUMMARY

Welcome to the second annual report of the Environmental Data & Governance Initiative (EDGI). Thanks to sustaining funding from the David and Lucile Packard Foundation and the Doris Duke Charitable Foundation in 2018, we have had the opportunity to grow and mature as an organization, to make important contributions to highlighting the dismantling of federal environmental protections, and to think proactively about models of environmental data justice.

EDGI employs four core strategies to achieve our [organizational vision](#) of a future in which justice and equity are at the center of environmental, climate, and data governance, and where industries and governing agencies are held accountable through transparent, collaborative, community-centered environmental research, technology, and decision-making. In this report, we highlight our work and accomplishments for the past year under these strategies.





## Maintaining Vigilance and Fostering Legibility

Our work tracking and making publicly legible changes in federal environmental governance informed over 70 news articles in 50 different news outlets.

EDGI's **Interviewing Working Group** released a pathbreaking summary and analysis of the decline in enforcement at the Environmental Protection Agency (EPA) entitled: "[A Sheep in the Closet: The Erosion of Enforcement at the EPA](#)". The report:

- Made evident major declines in accountability for environmental violations
- Drew significant media coverage and attention from lawmakers
- Instigated the House Energy and Commerce Subcommittee on Oversight and Investigations hearing in February 2019 entitled "EPA's Enforcement Program: Taking the Environmental Cop Off the Beat"
- Provided crucial evidence for the above hearing both through citation by congress people and EDGI's direct testimony

Our **Website Monitoring Working Group** monitors over 25,000 federal web pages, and publishes reports detailing significant reductions in environmental information access and content changes on federal agency web pages. We also develop open source software for website monitoring. The Web Monitoring team has:

- Published nine reports, including detailed analysis of the removal of EPA's and the Department of the Interior's climate change pages
- Supported significant media scrutiny of these otherwise silent erasures of public knowledge
- Implemented our use of Scanner, our custom software to identify and automate base analyses of website changes
- Collaborated with the Internet Archive on a project to track changes to any of the billions of web pages crawled by their Wayback Machine

## Visioning and Building Alternatives for More Just Environmental Governance

EDGI's **Archiving Working Group** continues to build on its grassroots Data Rescue efforts that involved events in over 40 cities and towns across North America and ended in mid-2018. Our archiving work has:

- Enhanced the public accessibility of downloaded data
- Established partnerships with software companies, QRI and Protocol Labs, to develop "Data Together," a set of protocols and technologies for decentralizing data storage online
- Advanced a collaboration with Science 2 Action to build systems to better identify still vulnerable federal datasets and effectively copy them
- Launched the beta-version of our Environmental Impact Statement search tool in consultation with the Sabin Center for Climate Change Law at Columbia University

In pursuing our goal to inspire and co-create alternative and more just forms of environmental governance and data gathering, EDGI formed the **Environmental Data Justice (EDJ) Working Group**. In its inaugural year EDJ:

- Hosted its first public online event entitled "Environmental Data Justice: Visions and Values" bringing together advanced practitioners in both data justice and environmental justice and garnering over 200 registrants
- Developed infrastructure and resources for building out EDJ, including reading lists, hosting collaborative events, and connecting with partner organizations across the globe
- Presented at the Data 4 Black Lives conference
- Developed the EDJ vision in four peer-reviewed academic publications

## Prototyping an Alternative Organizational Structure

An exciting new development this year was the formation of the **Alternative Organization Working Group** that is helping to steward our professionalization, growth, and sustainability. The group has begun:

- Working with consultants to enhance our internal organizational effectiveness and external communication and partnerships
- (Re)drafting protocols, improving decision-making practices, and exploring alternatives to our current Steering Committee structure.

## Communicating and Engaging in Various Spheres of Influence

In addition to the reports and academic articles, EDGI members share our work through blogs, op-eds, and public comments. Our 2019 annual meeting identified communications as a vital but underdeveloped sphere of EDGI's work; it is a sphere we seek to build significantly in the future to ensure the work in EDGI's other three areas is interconnected and effectively shared with our many constituents, including non-profits, the general public, researchers, and regulators.

As in the past, we continue to rely on and benefit from the steady support and encouragement of our fiscal sponsor, the Public Laboratory for Open Technology and Science. Importantly, EDGI continues to be a volunteer organization, and the commitment of the many volunteer technologists, professionals, community members, students, and academics is what makes EDGI work on a daily basis.

This annual report is a place to learn about our work, celebrate where we've come from, what we've accomplished, and what we hope to become. Thank you so much for all your support.





# MAINTAINING VIGILANCE & FOSTERING LEGIBILITY

## Interviewing

In November 2018, EDGI published a report examining enforcement at EPA under the Trump Administration using multiple data sources. The heavily footnoted, 74-page report entitled “[A Sheep in the Closet, the Erosion of Enforcement at EPA](#)” is a detailed look at how enforcement has weakened over the last two years. We primarily drew on two sources of data: EPA’s publicly available online data from October 2018 available through the Enforcement and Compliance History Online (ECHO), and interviews of EPA staff. ECHO contains data on EPA enforcement activities including inspections, civil cases initiated and concluded, the amount of injunctive relief imposed, and penalties, among others. We also conducted one hundred total interviews with current as well as recently retired EPA staff, which provide an unprecedentedly rich portrayal of the human and social dynamics behind the quantitative trends in enforcement actions we’ve studied.

The publication of “A Sheep in the Closet” resulted in a large number of media interviews and stories published on our findings. Original stories appeared in the *Pacific Standard*, *High Country News*, *Energy & Environment News*, the *Christian Science Monitor*, the *Globe Post*, *Bloomberg News*, *The Hill*, and *Liberation*, with reprints in many other publications such as *Mother Jones* and *Grist*. Our work was cited in posts and reports by the Society of Environmental Journalists, Lexology, and the Union of Concerned Scientists. We also published an article in [The Conversation](#) publicizing our findings which garnered further interest in our work and was reprinted in dozens of other publications including the *Houston Chronicle*, the *Telegraph*, the *San Francisco Chronicle*, and the *Raw Story*. Two members of the working group also published an [op-ed in The Hill](#) informed by “A Sheep in the Closet.”

## Captured: How the Fossil Fuel Industry Took Control of the EPA

The Globe Post • Last month



## Trump's EPA Doesn't Seem to Want to Punish Law-Breaking Polluters

Mother Jones • Jan 2



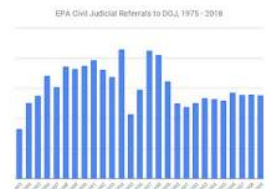
## Trump's EPA is reluctant to punish law-breaking polluters

High Country News • Dec 28   



## Under Trump, the EPA's enforcement efforts fall to a 40-year low in this one key area

MarketWatch • 26 days ago



In addition, we discussed our findings in-depth with investigatory bodies such as the Government Accountability Office and several Congressional committees including the House Energy and Commerce Committee; the Science, Space and Technology Committee; the Appropriations Committee; and the Oversight and Reform Committee. In the Senate, we briefed the Environment and Public Works Committee. We also briefed the staff of several senators and congressional representatives.

Our discussions with the House Energy and Commerce committee led to an invitation to participate in the February 26, 2019 oversight hearing. Dr. Chris Sellers represented EDGI and delivered our [testimony](#). Our analysis of EPA's final end-of-year numbers, which were released in February 2019, were included in the testimony, cited by several representatives, and covered in an article by MarketWatch.



**Photo description:** Chris Sellers testifying at the House Energy and Commerce committee oversight hearing on February 26, 2019.

Other outputs from the Interviewing Working Group include a number of blog posts by Leif Fredrickson which help to explain EPA's enforcement numbers and provide analysis of them for journalists and others. One of these posts, on the Trump administration's pollution and hazardous waste reduction numbers, was picked up for coverage by *The Hill* in a widely-shared article. The House Energy and Commerce Committee also cited the post in its announcement of investigations into EPA enforcement.

The remainder of the Interviewing Working Group's work is less visible but no less important. This includes ongoing interviewing, transcription of interviews, coding of interviews, analysis, planning of future work, and producing Freedom of Information Act requests.

With the Interviewing Working Group's work on EPA enforcement, EDGI has reached new heights of influence in steering national debates. No less a figure than Andrew Wheeler, the Administrator of the EPA, made a point of attacking EDGI's "A Sheep in the Closet" report during his confirmation hearing in January. Rep. Diana DeGette (D-CO), the chair of the House Energy and Commerce sub-committee on Oversight and Investigations hearing, shared EDGI's findings that "the total number of facilities that the EPA inspected last year is the lowest since 1994. The total number of civil cases it initiated is the lowest since 1982. And the number of cases it referred to the Department of Justice - the lowest since 1976" in [her opening statement](#) and referred to a [Christian Science Monitor article](#) based on EDGI's report. Congresspeople who questioned the head of EPA enforcement Susan Bodine at the hearing frequently invoked EDGI figures and news articles in which our researchers were widely and prominently quoted. Indeed, the very title of the hearing - "EPA's Enforcement Program: Taking the Environmental Cop Off the Beat" - mirrored that of our report put out two months before. The testimony was actively followed and shared on social media; over 15,000 people viewed one of our tweets about the event.



## Has the EPA lost its teeth? House to investigate dwindling enforcement.

Christian Science Monitor • Last month



We plan to keep up our scrutiny of EPA enforcement, while also looking at other aspects of what seems to be a continuing assault on our best means for protecting public and environmental health.

## Website Monitoring

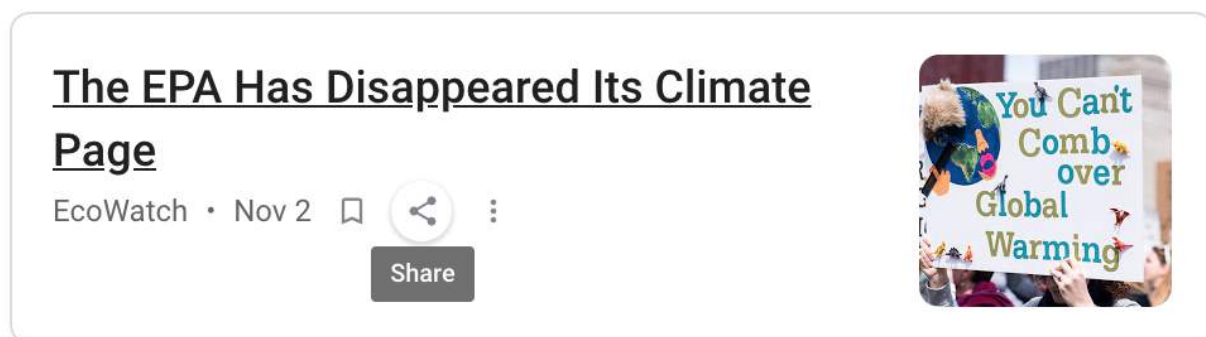
The data and information created by the federal government are public resources, and the government has both the opportunity and the responsibility to provide access to key resources and assist the public in interpreting them. Federal agency websites are primary avenues for agencies to present information and interpretations to guide public knowledge. To understand if and how the presentation of environmental information is shifting, EDGI has been monitoring changes to federal environmental, climate, conservation, and energy websites since January 2017.

EDGI's [Website Monitoring Team](#) consists of a software development team and an analyst team. We rely on our partner, the [Internet Archive Wayback Machine](#), to crawl and capture daily versions of more than 30,000 webpages identified by our team.

Our Website Monitoring Development Team has [built open-source software](#) that queries archived versions of those webpages, compares and stores the analyses of differences, and presents those differences through a user interface. Starting from a list of monitored sites, EDGI's software uses an automated differentiator to generate a list of the web pages that have been altered in any way in the preceding week.

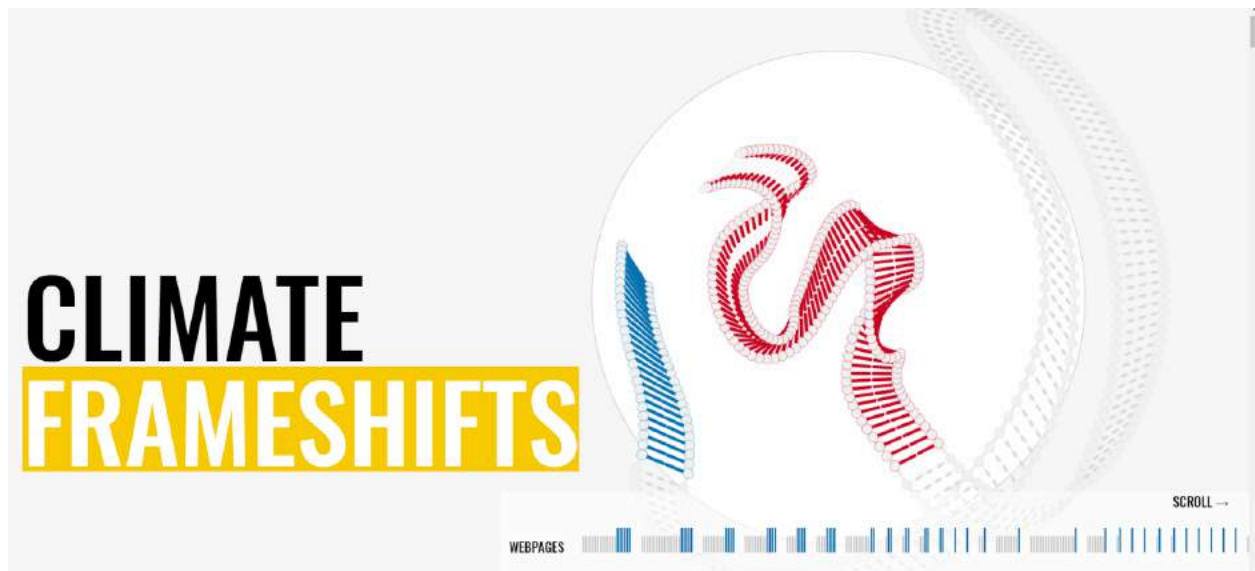
The Website Monitoring Analyst Team inspects each website alteration and evaluates its significance. The team meets through weekly video conference calls to discuss significant changes and prioritize report writing and broader research. Through a rigorous review process, the team produces [reports](#) which document and contextualize website alterations they've discovered, and sends reports to a large pool of environmental journalists and other organizations for broad dissemination. The Website Monitoring Team also synthesizes and analyzes arrays of website changes relating to specific topics, and releases findings through white papers and public comments.

In 2018, the Website Monitoring Team wrote reports on topics ranging from the [deletion of EPA's climate change website](#) to the [restriction of access to BLM web resources regarding the sage grouse](#). The team led [EDGI's public comment on the proposed repeal of the Clean Power Plan](#), which focused on significant alterations to web resources pertinent to understanding the purpose, strategy, and implementation scheme of the Clean Power Plan and its proposed repeal. The team also contributed to [EDGI's public comment on the proposed Strengthening Transparency in Regulatory Science](#), with a critique of the misinterpretation of transparency as accessibility and a recommendation for genuine information accessibility for public audiences.



Our web monitoring work is inspiring others to pursue this mode of governmental transparency. The Sunlight Foundation started The Web Integrity Project (led by two EDGI members) to monitor changes to federal websites beyond environmental protection. The Web Integrity Project recently released an important public report about [web censorship](#) across federal web domains under the Trump administration that heavily features our work.

In 2019, EDGI's Website Monitoring Team will be focusing more on synthesizing and analyzing the landscape of website changes we've seen over the past two years. For the first of these products, the team is gearing up to release a paper discussing how the use of climate-related keywords on federal agency websites changed from the last year of the Obama Administration to the second year of the Trump Administration. A [stunning visualization based on this research](#) has already been developed by our colleague Steven Braun, which depicts the changes in keyword usage as mutations to our federal government informational DNA.



Changes in keyword usage on federal agency websites. Visualization by Steven Braun  
<https://www.stevengbraun.com/dev/climate-frameshifts/index.html>

Throughout the year, the team will continue to focus on web resource alterations regarding climate change and will provide synthesis reports on other pressing topics such as water governance and international environmental agreements. Our software development work will continue, with a focus on building new tools for more comprehensive mapping and archiving of web domains, and we'll continue to support the Internet Archive Wayback Machine as they adapt our differentiating software to operate at their scale and with their public user interface. It'll be an exciting year of expanding our technical and analytical capacities!

# VISIONING & BUILDING ALTERNATIVES FOR SOCIALLY JUST ENVIRONMENTAL GOVERNANCE

## Environmental Data Justice

The Environmental Data Justice (EDJ) Working Group focuses on building better frameworks and analyses of alternative visions for creating, caring for, and sharing environmental data. The EDJ Working Group also interacts with the other EDGI working groups, bringing EDJ analyses to EDGI projects, particularly in the Archiving Working Group. Finally, the EDJ Working Group networks and builds peer support between environmental justice projects, both projects that are community based and projects oriented towards engaging problems with government data practices. The EDJ Working Group meets weekly with its volunteers.

We continue to develop the EDJ principles and framework in publications, including four major academic papers this past year: “Situating Data in a Trumpian Era: The Environmental Data and Governance Initiative” in the *Annals of the American Association of Geographers*; “Data Resistance: A Social Movement Organizational Autoethnography of the Environmental Data and Governance Initiative” in *Mobilization: An International Quarterly*; “Practicing Environmental Data Justice: From DataRescue to Data Together” in *Geo: Geography and Environment*; and “When Data Justice and Environmental Justice Meet: Formulating a Response to Extractive Logic through Environmental Data Justice” in *Information, Communication & Society*.

EDJ held its first public online event on February 29th entitled “Environmental Data Justice: Visions and Values.”



# ENVIRONMENTAL DATA JUSTICE: VISIONS AND VALUES

FEBRUARY 28, 2019 - FROM 7 TO 9 PM (EST)



Building on the principles of Environmental Justice, we invite you to participate in creating the visions and values of what we might call “**Environmental Data Justice.**” This is an open online event for community organizers, practitioners, researchers, and students working at the front lines of environmental and data justice struggles. All are welcome.

## AIMS:

- Start a co-learning community around Environmental Data Justice
- Build towards the development of an Environmental Data Justice inspired by the principles of Environmental Justice and Data Justice
- Create a syllabus that can be shared online

The program of the event is accessible on [eventbrite](#).

If you are interested, please register on eventbrite to receive a link to join the webinar, or contact the Environmental Data Justice Group: [EDJ@ENVIRODATAGOV.ORG](mailto:EDJ@ENVIRODATAGOV.ORG)



**Environmental Data  
& Governance Initiative**

The event featured presentations from six environmental data justice projects: a representative from the US Indigenous Data Sovereignty Network building Indigenous community data ownership and Indigenous-led data research; six high schools students from Chelsea MA (GreenRoots ECO team) who visualized regional Clean Water Act violations with glowing lanterns; a citizen scientist and community organizer who led a successful campaign to ban petcoke storage in Chicago; a Detroit community organization working to build community-owned internet infrastructures; a Toronto-based digital justice organization responding to Google's "smart city" project; and a collective that documents gentrification and evictions in the San Francisco Bay Area through community mapping and storytelling. The event attracted 200 registrants, and had 50+ participants during the event. It began a conversation about how these projects and fields intersect and could productively co-develop. It was recorded and has been [disseminated](#) online.

An extended public-facing EDJ peer-to-peer community has come out of the event, which brings together practitioners across environmental justice projects. This public-facing EDJ work includes the development of an EDJ syllabus that will share resources, frameworks, principles, and exemplary projects. It will be disseminated online in April 2019. The EDJ Working Group is building on its first online public event to launch quarterly events organized around demoing and supporting environmental data justice projects.

## Archiving

Archiving is perhaps the most-changed of EDGI's areas of work. A year ago, Archiving was the home of a lot of direct work: hosting large data-archiving events and building software tools to support the identification and storage of data. But in the last year, Archiving has become more reflective, quieter, and theory-focused. Archiving continues to hold the data that was harvested in previous years, but now the group gives most of its attention to thoughtful design of data archiving technologies.

There are two main reasons for the shift in focus. One is highly pragmatic: the sheer bulk of volunteer labor required to continuously host events and build software tools was unsustainable. The second reason is more a mark of our organization's maturation. EDGI's core strength is not in its capacity to do work; rather, it is in its ways of being, doing, and thinking. **EDGI's unique value is its**

**interdisciplinary site at the crossroads of justice, environment, data, and technology.**

As such, Archiving has been focusing on Data Together, an ongoing and inclusive conversation between EDGI and partners QRI and Protocol Labs, both of whom are building foundational technology for storing data in a decentralized internet. All of the partners think daily about data provenance and ownership and sharing models.

The first annual Data Together meeting, in August 2018, yielded the Data Together mission:

*Data Together empowers people to create a decentralized civic layer for the web, leveraging community, trust, and shared interest to steward data they care about.*



First Annual Data Together Meeting, Toronto, August 2018

The group also completed the first “semester” of a monthly reading group. Through carefully curated reading lists and 90-minute group discussions, the partners covered the topics of: the decentralized web; ownership; commons; centralization vs. decentralization vs. peer-to-peer or federation; privacy; and justice. This is a place for partners to seat their work in broad, theoretical contexts.

We anticipate that the Archival functions within EDGI will continue to change as the organization continues to learn.



# PROTOTYPING AN ALTERNATIVE ORGANIZATIONAL STRUCTURE

## Alternative Organization

Ordinarily, we think of EDGI in the context of its Working Groups: Website Monitoring, Interviewing, Archiving, and Environmental Data Justice. These are all groups represented largely by their public outputs: reports and software, primary data and reports, archives and community meetings, and theory and academic papers, respectively. But additional, necessary work also occurs in a small group that has never held regular meetings: the work of building and maintaining EDGI as an organization.

EDGI is proud to be scrappy, minimally bureaucratic, and highly autonomous. This is possible in large part because our public sponsor, the Public Laboratory for Open Technology and Science, takes on many of the more bureaucratic oversight functions. But the organization was built as a rapid response to a single political moment. As EDGI matures, it requires conscious maintenance in order to sustain itself.

For many in EDGI, the development of an inward-focused working group was exciting: how do we build an organization that is truly decentralized? What are the core tenets of a place to do good work that helps people stay accountable to each other, while fostering an openness to members' humanness and fallibility? How do we support each other, promote transparency, and make visible the work that has been taking place invisibly?

In many organizations and spheres of work in our society, the administrative work and mental labor that go into keeping an organization running smoothly remain unrecognized and underappreciated. That work is often seen as secondary to the primary objectives and outputs of the organization. EDGI seeks to reveal this invisible labor and recognize that it is as essential to what we do as publishing reports and monitoring websites. It is also vital to supporting the humans that make up EDGI and to helping them stay creative and engaged.

Here is some of the invisible-seeming work that EDGI has accomplished in the last year:

- Producing grant proposals and reports
- Interviewing members of the EDGI community
- Keeping financial records
- Organizing meetings – in person and online
- Taking, summarizing, and sharing notes
- Trying to explicitly build community across a large group of volunteers who may have never met in person
- Maintaining energy and morale amongst unpaid volunteers who have been donating their time and effort for upwards of two years
- Planning and visioning for the organization as a whole
- Hiring paid contractors for EDGI

With input from our wonderful organizational effectiveness consultants, Zulayka Santiago of Libélula Consulting and Susi Moser of Susanne Moser Research and Consulting (supported by the Packard Foundation's Organizational Effectiveness grant), a new working group, "Alternative Org," was formed during our Annual Meeting as we reoriented our work around EDGI's four points of purpose. We seek to be the locus of change and support for EDGI as an organization, celebrate emotional and other sustaining work, and commit to continuous experimentation with our processes and structures.

We're (re-)drafting protocols, improving internal communications, implementing a stewardship program, and exploring readings to inform a shift in our current Steering Committee structure. We're inspired by other decentralized organizations, such as Enspiral, Ouishare, and the examples in Laloux's *Reinventing Organizations* and are learning from them.

We hope to build a better EDGI by prototyping future ways of working, and to share our lessons as we go.

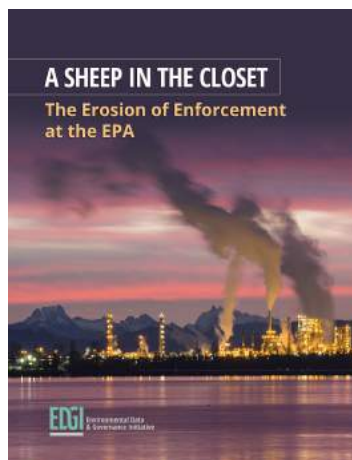
# COMMUNICATING & ENGAGING IN VARIOUS SPHERES OF INFLUENCE

## Publications

EDGI continues to place a priority on timely, public-oriented writing, while also pursuing publication in academic journals. In the past year we published one major report based on EPA data and interviews, several website monitoring reports detailing both access assessment and content change, two public comments, an op-ed, and several blog posts. We continue to be committed to data transparency and open peer review in our reports. EDGI members have also co-authored five peer-reviewed articles in scholarly journals.

## Reports

In the tradition of EDGI's [100 Days Reports](#) brought out over 2017-2018 - "[The EPA Under Siege: Trump's Assault in History and Testimony](#)"; "[Pursuing a Toxic Agenda: Environmental Injustice in the Early Trump Administration](#)", and "[Changing the Digital Climate](#)", EDGI published a major report in November 2018.



## A Sheep in the Closet

### The Erosion of Enforcement at the EPA

*November 19, 2018*

This report examines environmental enforcement at the U.S. Environmental Protection Agency (EPA) nearly two years into the Trump administration. Based on extensive interviewing with EPA employees and recent retirees as well as in-depth wide-ranging research into EPA data and documents as well as news coverage, we conclude that the EPA is no longer capable of fulfilling its mission to ensure competent enforcement of federal environmental laws. In place of the “gorilla in the closet” role characterized by its first administrator, William Ruckelshaus, it has become more of a sheep in the closet. The EPA’s retreat, which shows little sign of stopping, has all but ensured significant deterioration of our nation’s public health and environment in the years ahead.

## ***Website Monitoring Reports***

### [DOI Further Restricts Access to Climate Change Web Pages](#)

[Department of Interior \(DOI\)](#) | Report written: *February 28, 2019* | Since Summer 2018, the Department of the Interior (DOI) has restricted access to its primary climate change webpage: <https://www.doi.gov/climate>. This change extends previous content removals from the page reported on by EDGI in 2017. DOI has also removed “Climate Change” from its linked menu of “Our Priorities” on the agency’s home page and restricted access to: <https://www.doi.gov/climate/carbonfootprint>.

### [Website Actions by Federal Environmental Agencies During the Government Shutdown, Including Broad Restriction of Access on NOAA Websites](#)

[National Oceanic and Atmospheric Administration \(NOAA\)](#) | Report written: *February 25, 2019* | Different federal agencies managed their web resources differently during the recent 35-day partial government shutdown. Many agencies, such as the Environmental Protection Agency (EPA) placed a banner at the top of webpages to inform the public that websites would not be updated, and did not update public datasets. Another agency, the National Oceanic and Atmospheric Administration (NOAA), blocked access to many web resources by redirecting URLs to a simple government shutdown notice. The partial government shutdown offered a window into key vulnerabilities of our public federal data.



### [Reduction in Access to Sage Grouse Conservation Information and Resources on BLM Websites \(screenshots\)](#)

[Bureau of Land Management \(BLM\)](#) | Report written: *December 18, 2018* | The U.S. Department of the Interior's Bureau of Land Management (BLM) removed and altered web resources regarding conservation efforts for the sage grouse during the period between March and December 2018, when sage grouse conservation plans have been under revision by BLM.

### [EPA Discontinues Updates to Climate Change Websites \(screenshots\)](#)

[Environmental Protection Agency \(EPA\)](#) | Report written: *October 31, 2018* | Since April 2017, EPA has substituted their climate change subdomain with a splash page stating that these sites were being updated to reflect the views of the Trump administration. In October 2018, EPA modified that splash page to remove any mention of "updating" and to simply state, "We want to help you find what you are looking for." EPA also removed links to the outgoing administration snapshot (January 19, 2017 snapshot) of the climate change website main page and to the press release about the initial removal of the climate change websites.

### [Changes to EPA's "Natural Gas Extraction – Hydraulic Fracturing" Webpage \(screenshots\)](#)

[Environmental Protection Agency \(EPA\)](#) | Report written: *October 9, 2018* | The Environmental Protection Agency's (EPA's) former "Natural Gas Extraction – Hydraulic Fracturing" webpage has been updated to entirely remove the page title and change it to "Unconventional Oil and Natural Gas Development." A section detailing EPA stakeholder outreach called "Promoting Transparency and Conducting Outreach" was removed. A section called "Convening Stakeholders" was added that highlights EPA partnerships with oil and natural gas sectors. Content and links related to EPA guidance and compliance material on hydraulic fracturing were removed.

### [Removals of Access to Migratory Bird Treaty Act and Incidental Take Resources on the DOI's U.S. Fish and Wildlife Service Website](#)

[Department of Interior \(DOI\)](#) | Report written: *September 25, 2018* | The U.S. Department of Interior's (DOI) U.S. Fish and Wildlife Service (FWS) has removed links and content related to the Migratory Bird Treaty Act and to "Incidental Take" from

three web pages in the FWS domain. The FWS “Incidental Take” page itself has also been removed. Additionally, a “public involvement initiative” website of FWS – [birdregs.org](http://birdregs.org) – that focused on the incidental take of migratory birds, is no longer accessible. The website changes described in this report occurred between December 28, 2017 and April 6, 2018.

### [Removal of Climate Change Mentions, Links, and Information from the CDC’s National Institute for Occupational Safety and Health Website \(screenshots\)](#)

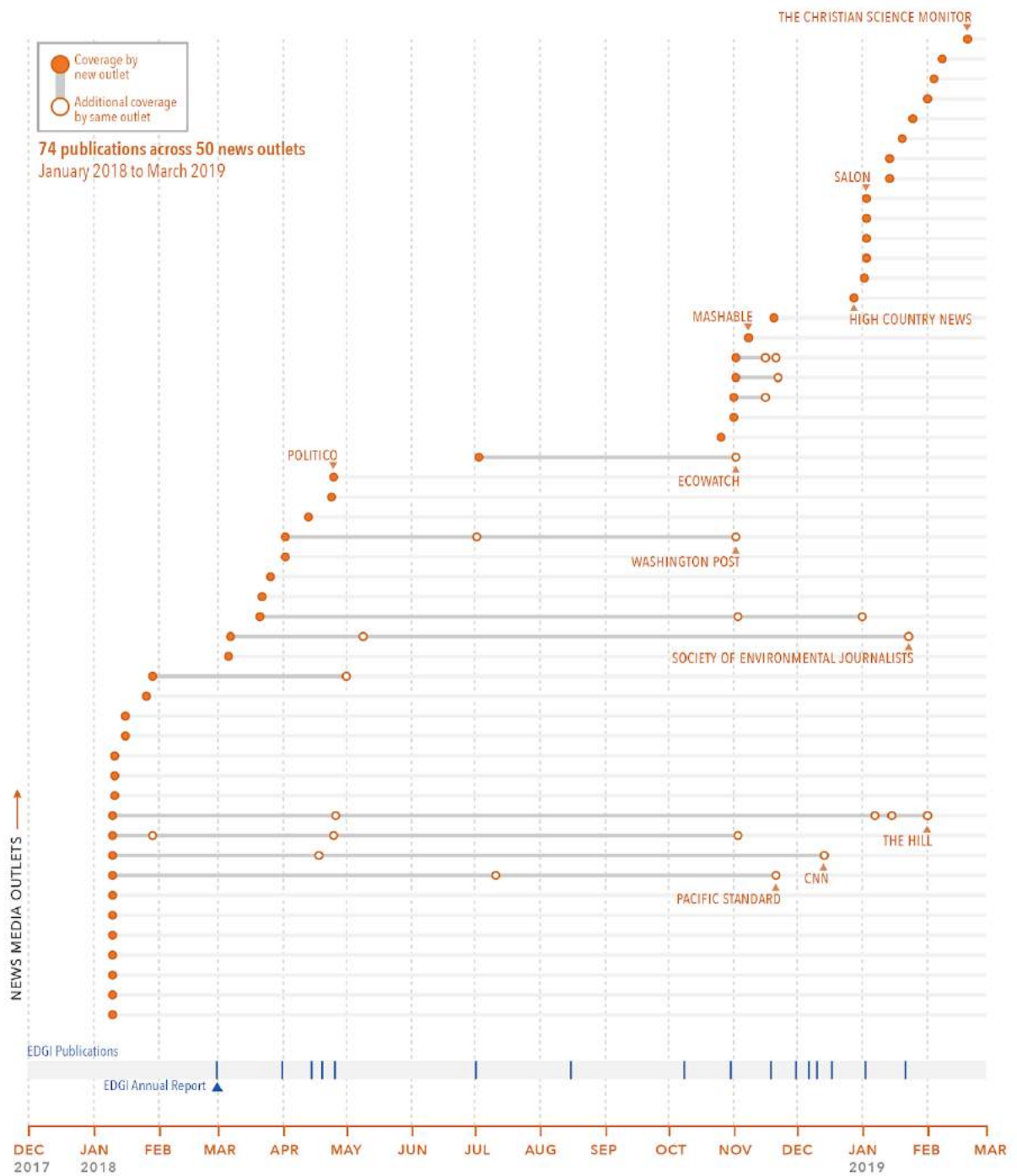
Department of Health and Human Services (HHS) | Report written: *July 2, 2018* | In late 2016, the Centers for Disease Control and Prevention’s (CDC) National Institute for Occupational Safety and Health (NIOSH) web pages on climate change were altered to remove mentions of the impact of climate change on occupational safety and health. Climate change mentions and information, including many sentences and a chart detailing the relationship between climate change and workplace health and safety, were removed from pages. An entire page linking to government and academic publications addressing the impact of climate change on worker health and safety was removed.

### [Removal of EPA’s “International Priorities” and “International Grants and Cooperative Agreements” pages, as well as corresponding links, from the International Cooperation Website \(screenshots\)](#)

Environmental Protection Agency (EPA) | Report written: *April 23, 2018* | The EPA has removed its “International Priorities” page, which listed “Strong Environmental Institutions,” “Climate Change,” “Air Quality,” “Clean Water,” “Toxic Chemicals,” and “E-Waste” as priority areas. Likewise, the “International Grants and Cooperative Agreements” page and links to information about priorities and grant applications were removed from EPA’s International Cooperation website.

## ***Impact of the Reports***

Collectively, over 74 news articles have described, commented on and publicized our reports. A full listing is available [here](#). The reports have been retweeted hundreds of times.



Coverage data visualization. Credit Steven Braun.

## ***Public Commentaries, Op-Eds***

Op-Ed: [The EPA has backed off enforcement under Trump - here are the numbers](#)

Marianne Sullivan, Chris Sellers, Leif Frederickson, Sarah Lamdan. *The Conversation*, January 3, 2019.

EDGI's Public Comment on Proposed Rule [Strengthening Transparency in Regulatory Science](#)

EPA's Proposed Rule Uses the Idea of Transparency to Reduce Real Transparency and Delay Protecting Environmental and Public Health.

Environmental Data & Governance Initiative (EDGI)'s Comment on the Environmental Protection Agency (EPA) Proposed Rule: Strengthening Transparency in Regulatory Science (Docket No. EPA-HQ-OA-2018-0259) August 16, 2018.

[EDGI's Public Comment on Clean Power Plan Proposed Repeal](#)

Continued Access to Online EPA Resources Relevant to the Clean Power Plan is Important for Public Engagement in Rulemaking.

Environmental Data and Governance Initiative's Comment on the Environmental Protection Agency (EPA) Proposed Rule: Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (Docket No. EPA-HQ-OAR-2017-0355-14998) April 26, 2018.

Fact Sheet: [Steep Drop in Environmental Protection Agency \(EPA\) Enforcement in Fiscal Year 2018](#) (December 11, 2018) (Fact Sheet)

## **Peer Reviewed Articles**

### **Published**

#### [Situating Data in a Trumpian Era: The Environmental Data and Governance Initiative](#)

Lindsey Dillon, Rebecca Lave, Becky Mansfield, Sara Wylie, Nicholas Shapiro, Anita Say Chan & Michelle Murphy. *Annals of the American Association of Geographers*, published online 22 January 2019.

#### [Data Resistance: A Social Movement Organizational Autoethnography of the Environmental Data and Governance Initiative](#)

Lourdes A. Vera, Lindsey Dillon, Sara Wylie, Jennifer Liss Ohayon, Aaron Lemelin, Phil Brown, Christopher Sellers, Dawn Walker, and the Environmental Data and Governance Initiative. *Mobilization: An International Quarterly* December 2018, Vol. 23, No. 4, pp. 511-529.

#### [Practicing Environmental Data Justice: From DataRescue to Data Together](#)

Dawn Walker, Eric Nost, Aaron Lemelin, Rebecca Lave, and Lindsey Dillon. *Geo: Geography and Environment* 5, no. 2 (2018): e00061. First published: 31 October 2018.

#### [The Environmental Protection Agency in the Early Trump Administration: Prelude to Regulatory Capture](#)

Lindsey Dillon, Christopher Sellers, Vivian Underhill, Nicholas Shapiro, Jennifer Liss Ohayon, Marianne Sullivan, Phil Brown, Jill Harrison, Sara Wylie, and the “EPA Under Siege” Writing Group. *The American Journal of Public Health*. April 2018, 108(S2), S89-S94.



## [History of US Presidential Assaults on Modern Environmental Health Protection](#)

Leif Fredrickson, Christopher Sellers, Lindsey Dillon, Jennifer Liss Ohayon, Nicholas Shapiro, Marianne Sullivan, Stephen Bocking, Phil Brown, Vanessa de la Rosa, Jill Harrison, Sara Johns, Katherine Kulik, Rebecca Lave, Michelle Murphy, Liza Piper, Lauren Richter, and Sara Wylie. *The American Journal of Public Health*. April 2018, 108(S2), S95-S103.

### **In Press**

Vera, L., Walker, D., Walker, M. Murphy, M., Mansfield, B., Ogden, J., When Data Justice and Environmental Justice Meet: Formulating a Response to Extractive Logic through Environmental Data Justice. *Information, Communication, & Society*.

## **Partnerships and Events**

EDGI is proud to work together with a broad variety of partners from coalitions of scientists, technology partners, and policymaking groups. Strong partnerships give us the capacity to access broad reach, deep expertise, and critical technologies while operating with a small, mostly volunteer core. In turn, we provide reports and advice from our areas of expertise, give feedback on tools we use, and share the tools and frameworks that we build.

In the past year, a few of the key partners for us have been the Internet Archive, the Science to Action Community (S2AC), the Technoscience Research Unit (TRU), the Social Science Environmental Health Research Institute (SSEHRI), Stony Brook University's Center for the Study of Inequalities, Social Justice, and Policy, and QRI and Protocol labs through Data Together.

The Internet Archive is a free non-profit library of data, including historical copies of web pages. The Internet Archive Wayback Machine archives daily approximately 30,000 URLs requested by EDGI. We draw this information every week in order to complete analyses for our Web Monitoring efforts, and reference pages stored in the Internet Archive Wayback Machine in all of our reports. We are one of the most frequent programmatic users of the Wayback Machine, and thus well-equipped to

give feedback on challenges we encounter and help improve the public service they provide. This year, the Internet Archive has even added some of EDGI's open-source software to the Wayback Machine.

S2AC is an informal network of scientists working on climate-change related projects. EDGI has been working with S2AC over the last year to put together a workshop bringing together scientists, activists, archivists, and technology creators to discuss what federal climate adaptation datasets are vulnerable and valuable. The cross-disciplinary workshop is set for early May 2019.

The Technoscience Research Unit (TRU) at the University of Toronto is another important partner. The TRU hosted our annual meeting as well as our Data Together meeting, facilitates some of our staffing, and contributes computing resources through their work with Compute Canada.

QRI and Protocol Labs are EDGI's partners through Data Together. We collaborate to create a vision for just data ownership through decentralized web technologies. Over the next year, we expect this partnership to strengthen, as more EDGI-identified datasets are hosted on QRI and as Archiving supports in-person education events teaching Protocol Labs' decentralized web protocol IPFS.

The Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University and the Center for the Study of Inequalities, Social Justice, and Policy at Stony Brook University play central institutional roles, using their centers' stature, visibility, and resources to facilitate faculty and student participation in many EDGI functions. Both centers support EDGI's interviewing work with university approved IRBs. Both groups hosted summer research interns to assist with coding and analysis of EDGI's interviews.

EDGI courses: Two universities hosted course work that collaborated with EDGI's web monitoring group to teach practice based environmental health research. Lizz Ultee (PhD candidate in Climate Science at University of Michigan) created a course "Knowing Climate Change" with Justin Schell, (EDGI member and director of the Shapiro Design Lab at the University of Michigan Library). The class documented over 2000 changes across 13 web domains, 180 of which were deemed important. They investigated web pages under the EPA, NASA, and NOAA, areas the EDGI team had been unable to cover because of limited bandwidth. One student [reflected](#):

*"Through website monitoring, I felt that I was successfully able to be involved in climate change conversation with a hands-on approach. It was a powerful feeling to be able to contribute to the preservation of climate change information and knowledge. I think that our EDGI work throughout the semester was successful in creating a body of knowledge on climate change action and government accountability."* – Student Reflection

Building on this model Sara Wylie (EDGI co-founder and Assistant Professor of Sociology/Anthropology and Health Sciences at Northeastern University) developed a graduate level sociology course in Environment, Health and Society, where students also participated in web monitoring to learn about practice-based, networked research. As Ultee describes, this practice-oriented learning makes it possible for students to learn and create new knowledge in the process: *"Imagine trading in some of those exams and papers for an active role in public-interest research: You wouldn't just learn the facts of your subject, you'd create new knowledge to share with the world."*

Illustrating this, Jesse DiValli, a student in Wylie's course, wrote a midterm paper about his experiences analyzing changes to the Department of Interior's (DOI) webpages. In it he noted that the DOI's official biography for David Bernhardt (nominee for the Secretary of the Interior) omits mention of his long history of work for fossil fuel interests. Jesse turned this finding into a widely circulated [blog](#).

In addition to ongoing partnerships, EDGI collaborates across groups through events and conferences:

Kevin Nguyen and Jake Wylie represented EDGI at a day-long conference in November 2018 at the CUNY School of Law entitled "Separating Facts From Fake News: Environmental FOIA In The Trump Era" organized by EDGI member Sarah Lamdan and others. This was an opportunity to share EDGI's work and attract new members.

Matt Price attended an annual forum for Preservation of Electronic Government Information (PEGI) in December 2018 in Washington, D.C., representing EDGI and discussing challenges to preserving digital data.

Kelsey Breseman and Lourdes Vera hosted an EDGI information table at the Data for Black Lives (D4BL) Conference in Boston in January 2019.



**Photo description:** Lourdes Vera and Kelsey Breseman at the EDGI table at the D4BL Conference, Boston, January 13 2019

## FINANCIAL OVERVIEW

Two years into EDGI's mission to respond to threats to government environmental regulation and science, our work is still driven by a core of passionate volunteers. But in 2018, EDGI was thrilled to receive two large, two-year grants which have provided support, not only for our projects, but also for some of the general administrative expenses of the organization, and to hire a number of part-time contractors to help us in our endeavors. These grants have been enormously helpful in helping EDGI envision and begin to build a sustainable, longer-term future for our organization and our work.

The first grant we received was from the David and Lucile Packard Foundation. This \$500,000 grant provides funding to continue and expand our work in archiving federal environmental data; monitoring and reporting on changes in federal websites involving environmental issues; interviewing past and present staff of EPA and other agencies; producing analyses of federal environmental reports and rules changes; publishing lay and academic articles on federal environmental concerns; and working with data justice organizations to develop new democratic approaches to environmental data production, access, and use; as well as additional general organizational support. The grant runs from April 2018 to March 2020.

The David and Lucile Packard Foundation also gave us the opportunity to apply for an Organizational Effectiveness grant, which we received last summer. This grant allowed us to hire two organizational effectiveness consultants who worked closely with our members to determine EDGI's strengths and challenges and to help us plan for our future and ensure that we are effective in our work, living our values, and providing a supportive and energizing community for everyone who works with us.

Our second large grant, from the Doris Duke Charitable Foundation, provides \$250,000 over three years to help support our Website Monitoring and Archiving work. This grant runs from June 2018 to May 2020, with an earlier grant in 2017.

Donations to EDGI from members of the public have become a much smaller percentage of our revenue over this past year, but we are still incredibly grateful to



those who donate. Donated funds allow us the flexibility to use them wherever they're most needed.

Many thanks to our donors, the David and Lucile Packard Foundation and the Doris Duke Charitable Foundation, and our fiscal sponsor, The Public Laboratory for Open Technology and Science, for their support of all we do. It is people like you who help us keep our government accountable.

**Your support  
makes this work possible**

**DONATE NOW**

## WHERE WE'RE HEADED

In our recent annual meeting, we discussed the future of EDGI in various hypothetical political futures. We realized that although changing political futures might change our focus, we imagined an important role for EDGI in all of them – maintaining vigilance on behalf of the public, and building visions and frameworks for a just and healthy environmental future. We are striving to create the kind of organization that can sustain the passion of people towards environmental and data justice across many years to come.

In the next year we aim to make Scanner publicly available as a tool for web monitoring and to further develop Environmental Data Justice through quarterly public activities and meetings. We will continue to inform the public of meaningful changes to federal environmental governance through our interviewing and web monitoring groups and offer recommendations for improving federal website management. We aim to expand EDGI's courses to other universities, and through our Science 2 Action collaboration and Environmental Impacts Statement search tool to continue to archive and make more accessible important federal environmental data.

The process of identifying strategies to increase our internal and external organizational effectiveness has helped us identify a key area of focus in the coming year. This has to do with increasing our organizational capacity for public communication, in order that we may engage more effectively in various spheres of influence.

## Contribute to EDGI

### ***Web Monitoring***

EDGI welcomes volunteers to assist with our web monitoring work. Please email us to volunteer: [enviroDGI@protonmail.com](mailto:enviroDGI@protonmail.com)

## ***EDGI Teaching***

We would love to support development of further EDGI courses: Interested to host an EDGI web monitoring course? Please email us: [enviroDGI@protonmail.com](mailto:enviroDGI@protonmail.com)

## ***EDGI Dev Team***

EDGI also seeks interested coders and web developers to help with Scanner and other open source software projects. Please check out our github:

<https://github.com/edgi-govdata-archiving> and email us: [enviroDGI@protonmail.com](mailto:enviroDGI@protonmail.com)

**Your support  
makes this work possible**

**DONATE NOW**