

For Us / By Us: Free technology, community science and the pursuit of environmental problem solving

PublicLab.org | [@PublicLab](https://twitter.com/PublicLab) | [@sdosemagen](https://twitter.com/sdosemagen)





St. Rose, LA. Photo for YES! Magazine by Marc Pagani

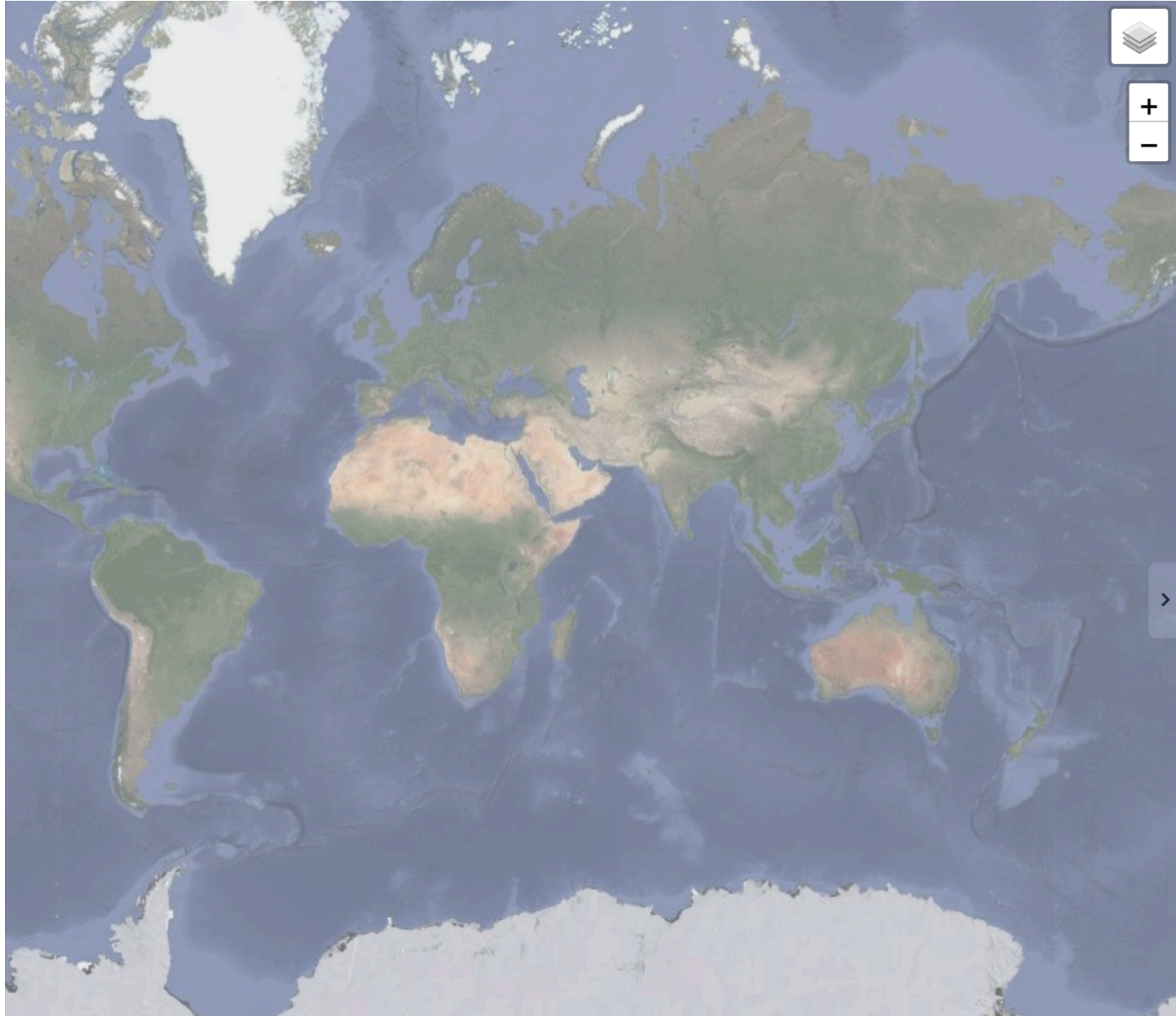
The Gulf Moment











Create a new map

Pan and zoom to locate your site, then give your map a title, location, and description.

Title

URL

Good titles are short and indicate the subject of the map, e.g.:

"Infragram map of goat brush clearing"

"Construction near BART"

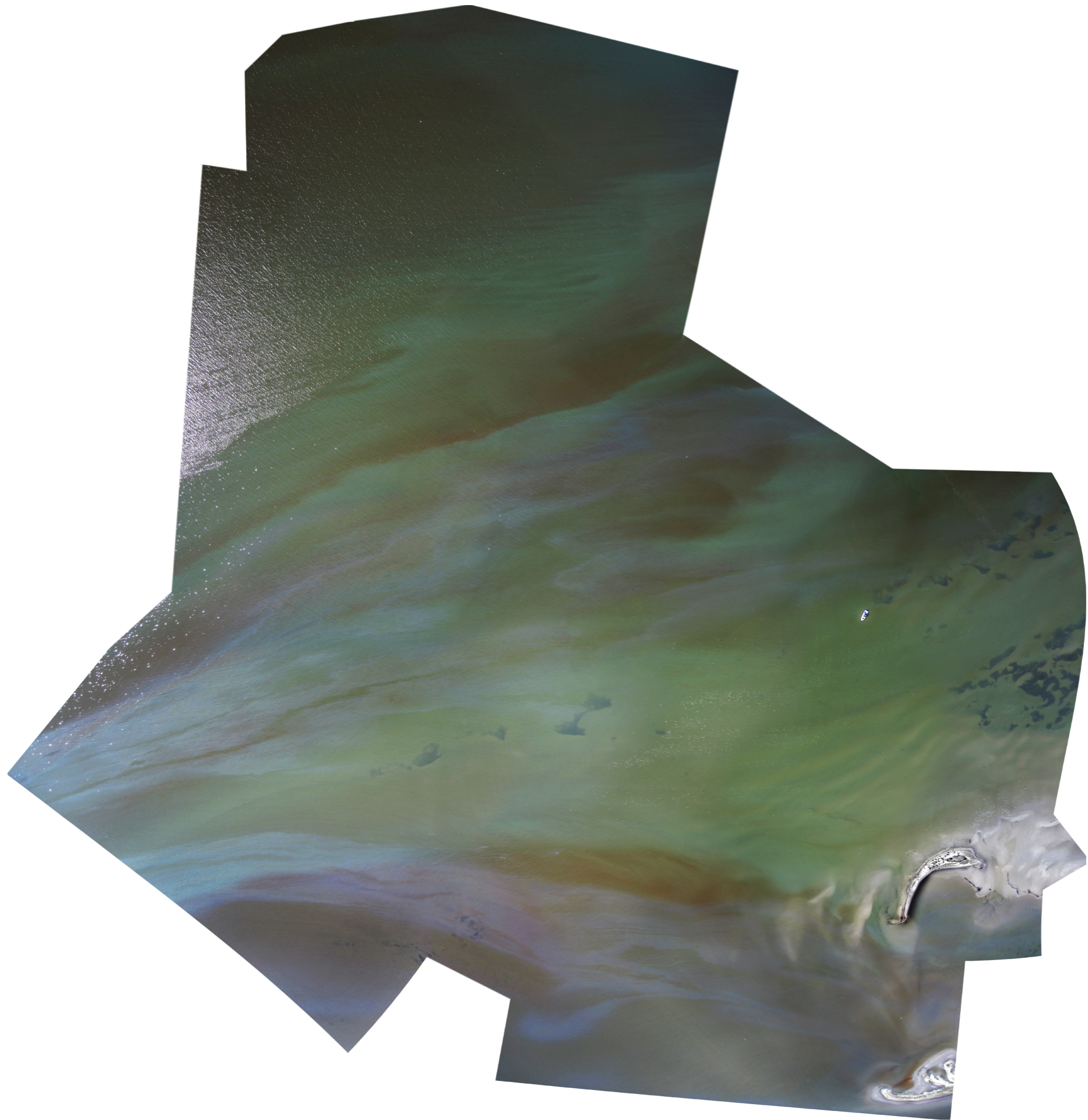
Location begin typing to search by name

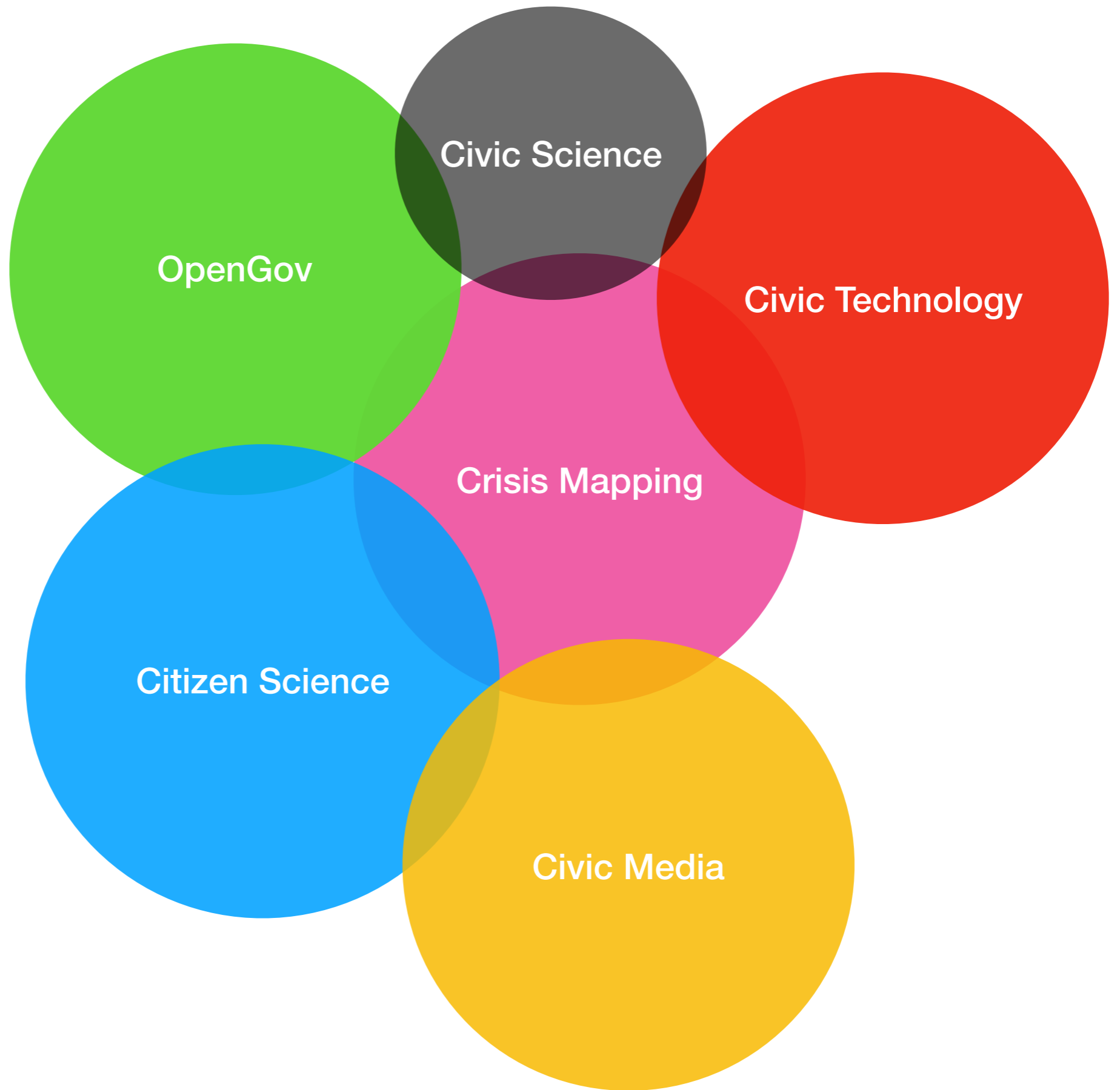
Latitude

Longitude

Description

License - [Learn more](#)







You are here

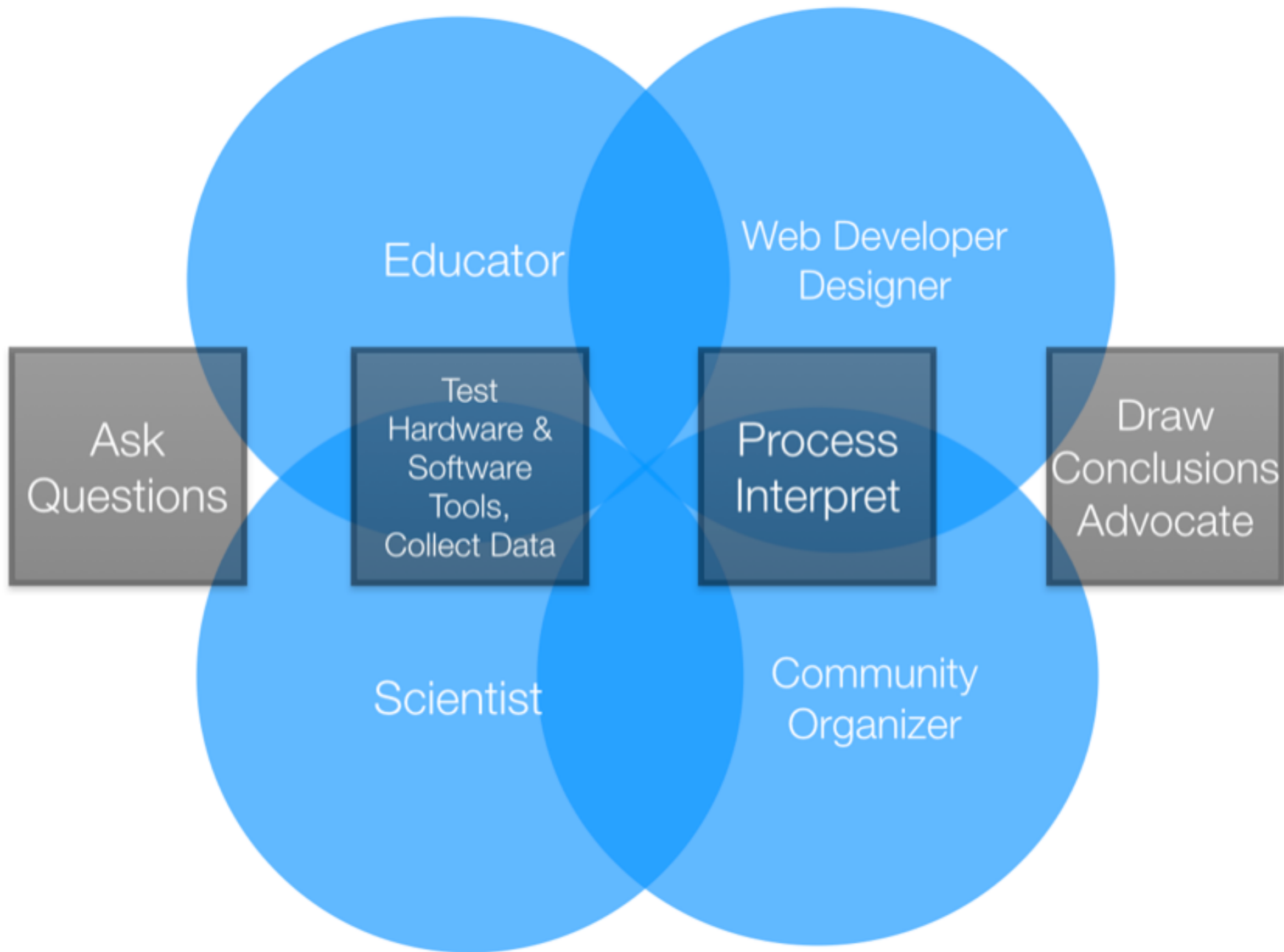
It Takes a Community



Lorie Shaul/flickr



International Bird Rescue Research Center



We're so happy to meet you! This page is to welcome new contributors.

We especially welcome contributions from people from **groups underrepresented** in free and open source software!

Our community aspires to be a respectful place. Please read and abide by our [Code of Conduct](#).

To explore issues across the entire organization, check out [Public Lab issues](#).

If you're new, and looking to get involved, you're in the right place. Check out [our README](#) to get started.

If you're new to GitHub, using branches, or opening pull requests, [read here for an introduction](#).

If you have trouble, check out [our chatroom](#) to ask for help, or you can talk directly with the other contributors on [our Gitter chatroom](#) or just [open an issue](#) and we'll write back!

Learn our process

We have a welcoming "workflow" that supports you in getting started, then helps you reach out to welcome someone else in turn!



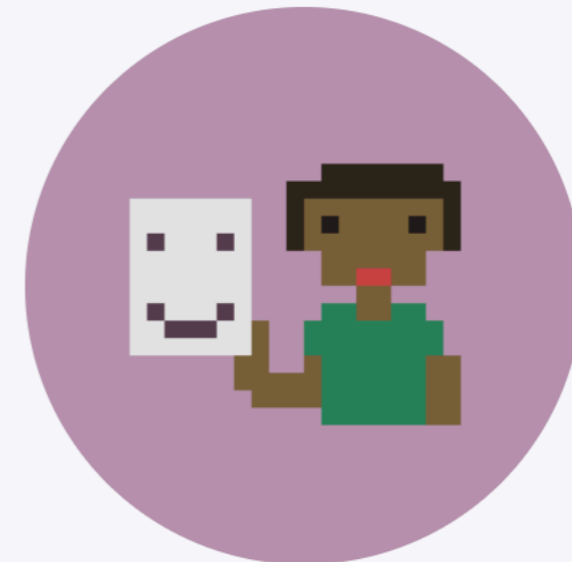
1. Try an issue

We've prepared extra-welcoming "first-timers-only" issues just for you.



2. Help someone else out

Use your new skills to [assist someone else](#) who's just starting out. Browse issues below to see who needs help!



3. Create a welcoming issue for someone else

[Read below](#) to learn how to create a "first-timers-only" issue yourself!

first-timers-only issues

Here are a [selection](#) of issues we've [made especially for first-timers](#). We're here to help, so just ask if one looks interesting, by leaving a comment!

[Change function t to translation in app/views/tag/_profileCard.html.erb](#)

plots2

#7637 opened 3 hours ago by [Tlazypanda](#) 0

first-timers-only

[Rename function t to translation in app/views/search/profiles.html.erb](#)

plots2

#7636 opened 3 hours ago by [Tlazypanda](#) 2

first-timers-only

[Change t to translation in reset.html.erb](#)

plots2

#7627 opened a day ago by [sssash18](#) 5

first-timers-only

[Change function t to translation in app/views/wiki/_header.html.erb](#)

plots2

#7597 opened 5 days ago by [govindgoel](#) 1

first-timers-only

has-pull-request

[Change t to translation in _events.html.erb](#)

plots2

#7558 opened 7 days ago by [sssash18](#) 6

first-timers-only

[Change t to translation in _related.html.erb](#)

plots2

#7538 opened 5 hours ago by [sssash18](#) 6

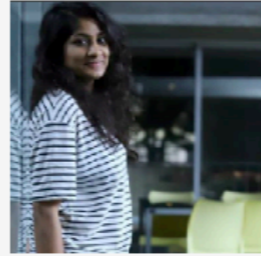
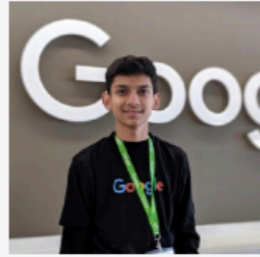
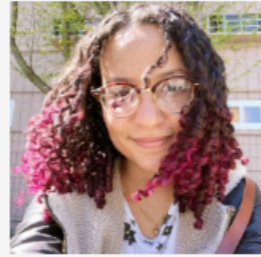
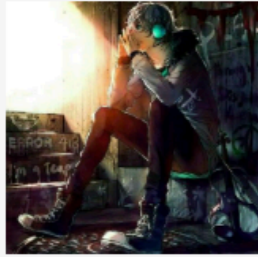
first-timers-only

[Showing number of results found in email search](#)

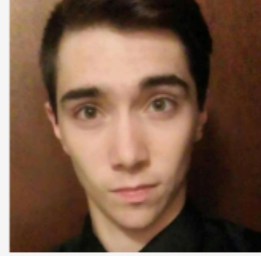
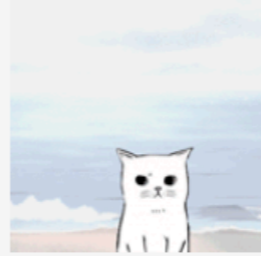
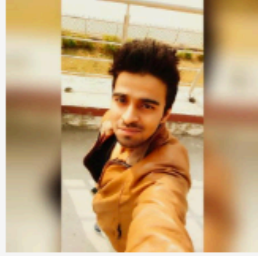
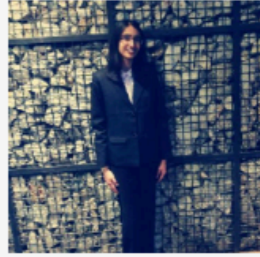
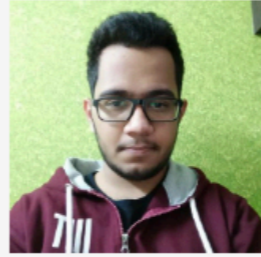
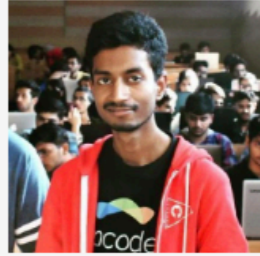
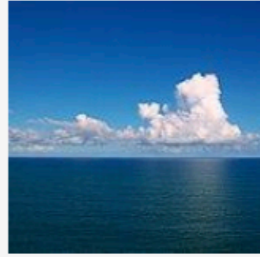
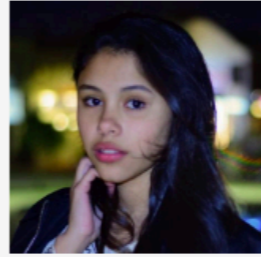
plots2

#7506 opened 3 hours ago by [sssash18](#) 6

first-timers-only



1.2(y)A7	Cresol Red	4.2(p)-6.2(y)	Valeryl Rad
2.2(y)A7	Cresolphthalein (mota)	4.6(p)-5.2(y)	Bromocresol Green
3.2(y)A7	Cresol Purple	6.2(y)-6.0(p)	Bromocresol Purple
4.2(y)	Thymol Blue	6.2(y)-6.8(y)	Chlorophenol Red
4.0(p)	Methyl Orange - Xylene Cyanol	6.0(p)-7.0(b)	Bromothymol Blue
4.6(b)	Bromophenol Blue	6.8(y)-8.2(y)	Phenol Red
6.0(y)	Congo Red	7.3(p)-8.7(b)	Naphtholphenathalein
1.3(y)	Methyl Orange	6.0(p)-10.0(p)	Phenolphthalein
1.6(y)	Alizarin Red S	6.2(p)-8.8(y)	Cresolphthalein
5.6(b)	Bromocresol Green	6.8(p)-10.5(b)	Thymolphthalein
6.8(p)	Dichlorofluorescein	11.0(b)-14.0(y)	Indigo Carmine





Survey your site

🌿 14 activities 📄 2 questions

...



Stormwater Monitoring

🌿 11 activities 📄 14 questions

...



Write an Issue Brief

🌿 2 activities 📄 0 questions

...



Odor Logging

🌿 4 activities 📄 8 questions

...



Sampling

🌿 3 activities 📄 9 questions

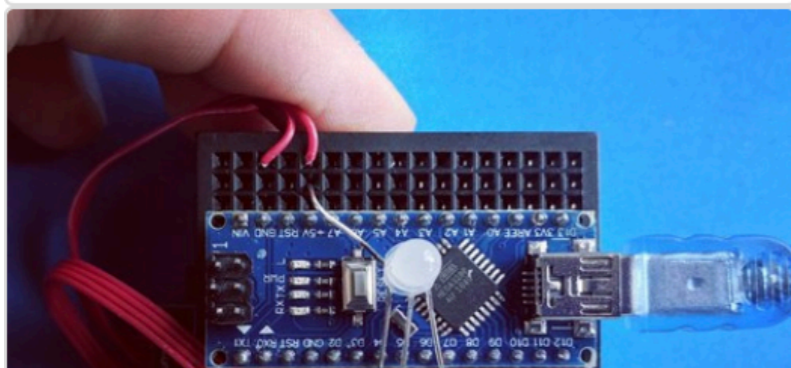
...



Pipeline Monitoring

🌿 0 activities 📄 0 questions

...



Simple Air Sensor

🌿 5 activities 📄 11 questions

...



Public Comment

🌿 0 activities 📄 0 questions

...



BabyLegs

🌿 6 activities 📄 8 questions

...

How many squid should I dissect to determine the average amount of micro plastics in squid guts?

by [plasticsquid](#) new contributor with [amallozzi](#) new contributor 22 days ago

[question:general](#) [general](#) [squid](#)

[question:microplastics](#)

3 | 197 | 1

Is gravel mining containing silica dangerous to the surrounding community?

by [annemolony413](#) new contributor 26 days ago

[industrial-monitoring](#) [air-quality](#) [mining](#) [silica](#)

4 | 84 | 1

Can fans be used to power a vehicle and if so how many will you need?

by [REVOLG](#) new contributor with [amallozzi](#) new contributor 28 days ago

[arduino](#) [raspberry-pi](#) [wind](#) [question:general](#)

2 | 89 | 0

What factors affect coastal land loss on the Gulf Coast?

by [CoastalConstructionCrew504](#) with [amallozzi](#) new contributor 22 days ago

[gulf-coast](#) [coastline](#) [erosion](#) [question:general](#)

3 | 91 | 1

Microscope webcam lens fused on

by [Meculus](#) 24 days ago

[question:general](#) [general](#)

3 | 86 | 0

What are ways to measure the environmental impact of food?

by [LUVAndLIVHealthyAlliance](#) new contributor with [amallozzi](#) new contributor 28 days ago

[agriculture](#) [food](#) [carbon](#) [question:general](#)

6 | 154 | 1

Does anyone have any tips for emptying hydra tank without damaging culture?

by [TheFreshHydraOfNola](#) new contributor with [amallozzi](#) new contributor 28 days ago

[water](#) [question:general](#) [general](#) [first-time-poster](#)

5 | 83 | 0

Do you have invasive cats claw (Macfadyena unguis-cati) in your yard?

by [ExtinctAnimals](#) with [amallozzi](#) new contributor 28 days ago

[plant-health](#) [invasive](#) [invasive-species](#)

[plant-matter](#)

2 | 71 | 0

What is global warming effect on natural disaster?

by [cspiller017_stu](#) new contributor with [amallozzi](#) new contributor 28 days ago

[gulf-coast](#) [hurricane](#) [climate-change](#)

[global-climate-change](#)

4 | 86 | 0

GOSH Manifesto

[English](#) | [Español](#) | [Français](#) | [Português](#) | [中文](#) | [বাংলা](#) | [日本語](#)

The Global Open Science Hardware (GOSH) movement seeks to reduce barriers between users of scientific tools to support the pursuit and growth of knowledge. These are c

- ▼ **GOSH is accessible**
- ▼ **GOSH makes science better**
- ▼ **GOSH is ethical**
- ▼ **GOSH changes the culture of science**
- ▼ **GOSH democratizes science**
- ▼ **GOSH has no high priests**
- ▼ **GOSH empowers people**
- ▼ **GOSH has no black boxes**
- ▼ **GOSH is impactful tools**
- ▼ **GOSH allows multiple futures for science**

<http://openhardware.science/gosh-manifesto/>

Public Lab Code of Conduct

Public Lab, PO Box 426113, Cambridge, MA 02142

We are coming together with an intent to care for ourselves and one another. We want to nurture a compassionate democratic culture where responsibility is shared. We -- visitors, community members, community moderators, staff, organizers, sponsors, and all others -- hold ourselves accountable to the same values regardless of position or experience. For this to work for everybody, individual decisions will not be allowed to run counter to the welfare of other people. This community aspires to be a respectful place both during online and in-person interactions so that all people are able to fully participate with their dignity intact. This document is a piece of the culture we're creating.

This code of conduct applies to all spaces managed by the Public Lab community and non-profit, both online and in person. It was written by the Conduct Committee (formed in 2015 during Public Lab's annual conference "The Barnraising") and facilitated by staff to provide a clear set of practical guidelines for multi-day events such as Barnraisings, events led by organizers and community members, and online venues such as the website, comment threads on software platforms, chatrooms, our mailing lists, the issue tracker, and any other forums created by Public Lab which the community uses for communication.

We come from all kinds of backgrounds

Our community is best when we fully invite and include participants from a wide range of backgrounds. We specifically design spaces to be welcoming and accessible to newcomers and folks from underrepresented groups. Public Lab is dedicated to providing a harassment-free, safe, and inclusive experience for everyone, regardless of personal and professional background, gender, gender identity and expression, style of clothing, sexual orientation, dis-/ability, physical appearance, body size, race, class, age, or religion. Public Lab resists and rejects: racism, sexism, ableism, ageism, homophobia, transphobia, body shaming, religion shaming, "geekier-than-thou" shaming, education bias, the shaming of people nursing children, and the dismissal or bullying of children or adults.

We do not tolerate harassment or shaming

While we operate under the assumption that all people involved with Public Lab subscribe to the basic understanding laid out above, we take these issues very seriously and think they should, in general, be taken seriously. Therefore, individuals who violate this Code both in and outside of Public Lab spaces may affect their ability to participate in Public Lab ranging from temporarily being placed into online moderation to, as a last resort, expulsion from the community. If you have any questions about our commitment to this framework and/or if you are unsure about aspects of it, email conduct@publiclab.org and we will do our best to provide clarification.

How It Works

Sometimes things go wrong. When a situation is uncomfortable, hurtful, exclusionary, or upsetting, there is a problem that should be addressed. This code of conduct is an effort to maintain a safe space for everyone, and to talk about what might happen if that space is compromised. Please see additional guidelines below for community behavior on how we expect people to interact with one another.

<https://publiclab.org/conduct>



Research questions are focused on addressing local questions

and are driven by on-the-ground community work.

Community engagement: awareness, partnership, development, stakeholder engagement, public outreach

Case Studies:

Citizen Science in Great Smoky Mountains National Park

Environmental Health Organizing in El Paso, Texas

Condition indicator: media campaign, cross-sector stakeholder involvement, request for further study or involvement by government agency and/or research institutions

Case Studies:

Argentine/Turner Rail Yard Community Air Pollution Monitoring

Southeast Alaska Tribal Toxins Partnership

Management decisions: remediation, restoration, community solution enactment

Case Studies:

Canton Creek Snorkel Survey

Composting Food Waste with Fermentation

Regulatory standard setting: new mandatory and voluntary standards, development of best practices, revision of prior standards, changes in methodologies for measuring compliance status

Case Study:

The Dewey-Humboldt Arizona Garden Project

Community Engagement

Education

Condition Indicator

Research

Management

Regulatory Decisions

Regulatory Standard Setting

Enforcement

Education: Environmental and STEAM literacy, civic participation, stewardship

Case Studies:

Ironbound Community Corporation Partnership

Center in the Park's Senior Environment Corps

Research: creating baseline datasets, identifying trends and hotspots in health and ecological change over time, filling gaps in datasets

Case Studies:

Watershed Monitoring in the Mill (Otter) Creek Watershed

Friends of the Shenandoah River

Regulatory decisions: permits, licenses, leases, environmental permits, zoning and rezoning, site plan approvals, mitigation requirements

Case Study:

Aerial Imagery of the United Bulk Terminals in Plaquemines, Louisiana

Enforcement: launching of inspections; investigations; prosecution of administrative, civil or criminal violations; imposition of new permit conditions; liability

Case Study:

Tonawanda Coke Air Monitoring



UNITED BULK TERMINAL

Conveyor

Plume

Additional Source?

More residual coal under the water in batture









Resources

HAVE	NEED
Cameras for ground photos → I see change	• 3 rain gauges ↳ Julia !!
• 5 SD cards	• 3 ^{gauge} depth board
E coli testing kit	• Google form/sheet
Lasers	• Sample jars
	• 2 time lapse photos
	• Mini signs
	• Base photo + same each time
	• Velcro straps
	• Marking equip.

- Google Sat images
- Ppl to take photos of depth gauge
- Rain Gauge
- Photos Camera
- Weather.gov/.com
- Post Storm Survey
- Time lapse camera
- Google Street
- Rain Barrel
- Plopper
- Depth Gauge



Stormwater Workshop Series
• March 7 11pm Introduction to Stormwater
• April 8 11pm Community Planning
• May 13 11pm Designing a Stormwater Study
• June 3 3pm Implementing a Stormwater Study
• July 8 3pm Monitoring and Lesson Learned
- Ashley Carter, April 2017

Today's Schedule
1pm Introduction Activity
1:15 Welcome to the Series
1:30 Stormwater - the New Orleans Sewerage & Water Board
2:40 I See Change
2:50 Break + How outside!! - for site visits
3:00 Identifying our research questions
3:30 Wrap Up

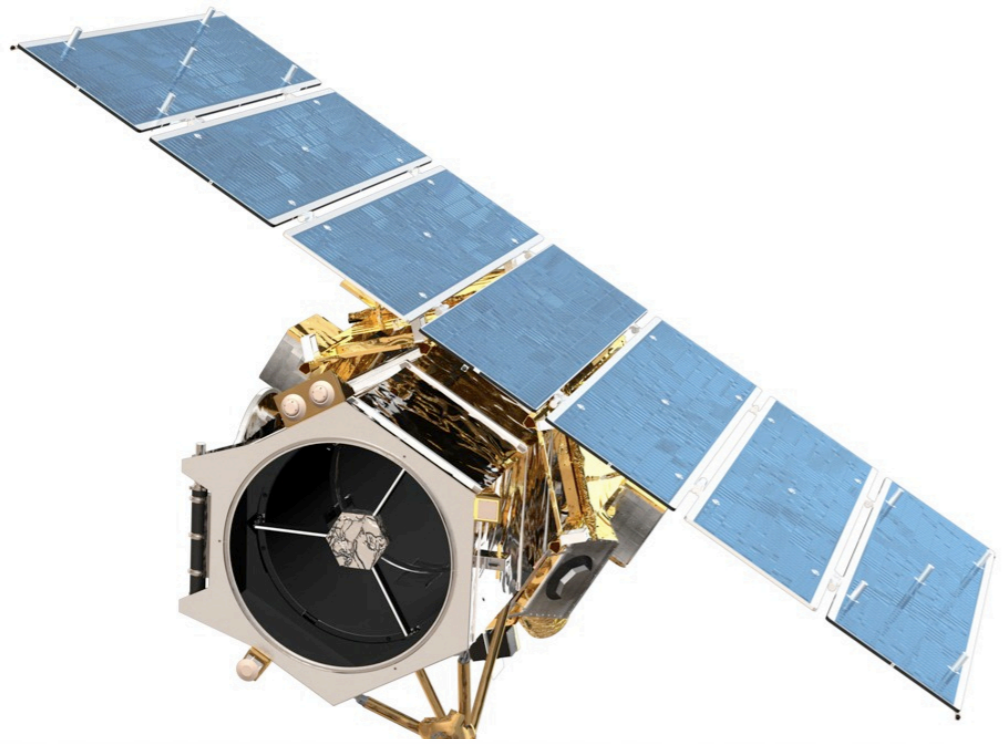
What we've learned...

A group of people, including children and adults, are gathered in a grassy field. A large orange balloon is suspended in the air, attached to a string that runs across the ground. A man in a blue shirt is crouching down, interacting with a child in a green shirt. Another child in a green shirt is standing nearby. A woman in a white shirt and sunglasses is standing in the background. A man in a brown jacket and a hat is in the foreground, looking towards the group. The scene is outdoors with trees in the background.

Engage researchers **not** subjects

Pull complexity off the shelf: modify minimally





diydrones.com cyberquad

102

concealed operator



revealed operator

Build in accountability

Create collaborative workflows



MapKnitter

A Community Atlas hosted by [PublicLab](#)

Use a kite, balloon, or pole to take an aerial photo and tell your own visual story of a place. [Learn more](#)

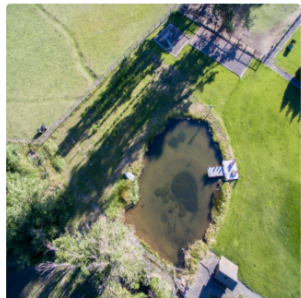
Get a mapping kit >>

Make a map +



Maintain public data archives

[Bangalore](#) [Korea](#) [Louisiana](#) [Milan](#) [Nairobi](#) [Mexico City](#) [Jakarta](#) [Lima](#) [Puerto Rico](#)

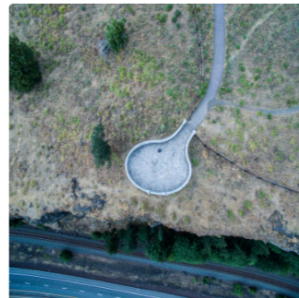


LITTLE MOUNTAIN RD, TROUT...
Little Mountain Road

by [porter](#)

1 image

0 comments



HISTORIC COLUMBIA RIVER HWY...
Historic Columbia River Highway State Trail Overlook

by [porter](#)

1 image

0 comments

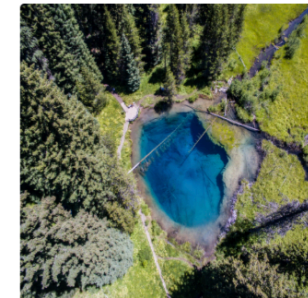


PUNCHBOWL FALLS, DEAD POINT...
Hood River Punch Bowl Falls

by [porter](#)

1 image

0 comments



LITTLE CRATER LAKE, OREGON, USA
Little Crater Lake

by [porter](#)

2 images

0 comments



2012-05-13-louisiana-bellechase-wetlands-conservancy-alligator-road

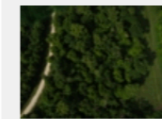
by [gonzoeath](#)

[Upload](#) [Post](#) [Download](#)

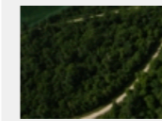
[About](#) [Images](#) [Annotate](#) [Export](#) [Chat](#)

Images

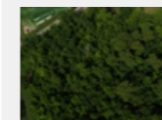
Sort Images



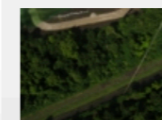
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2.3 MB



[IMG_2458.JPG](#)
2.2 MB



[IMG_2351.JPG](#)
2.82 MB



[IMG_2088.JPG](#)
2.37 MB

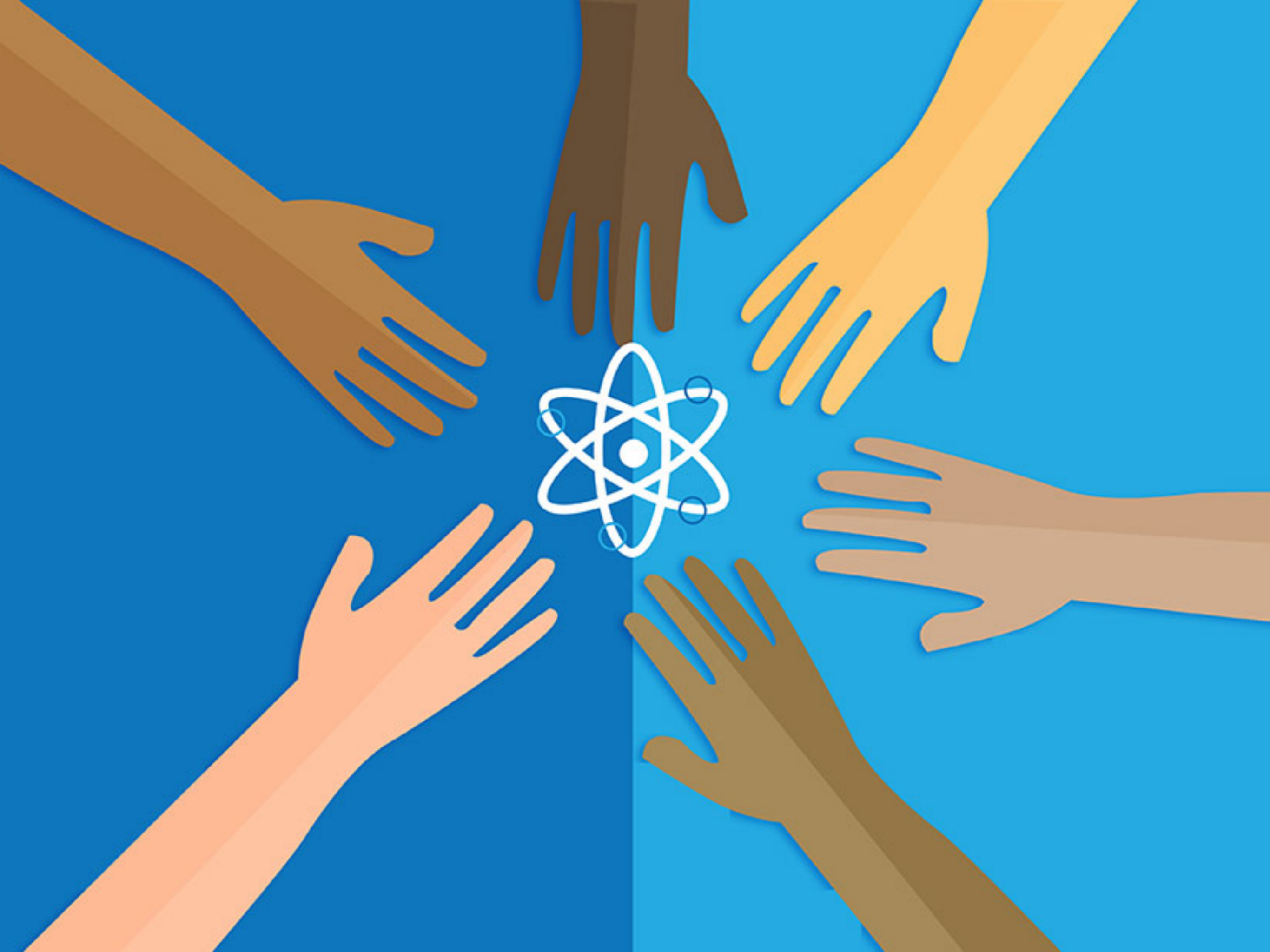


Let images communicate complexity



Create locally

People Centered Science & Technology



Considerations for our work:

- Build relationships based on equity* from the beginning (resource distribution, ownership of processes and data)
- Honor different types of expertise, local knowledge and experience
- Consider the many places where collaboration can happen
- Leverage scientific knowledge to help distribute power
- Think critically about the use of terms such as “inclusion” and “empowerment”. Co-opting people and their work can create friction.
- Move beyond feedback loops and step into solution finding
- Address tech-solutionism before it becomes a problem

**Why equity? Equality is treating everyone exactly the same, while equity starts from the idea that people/groups start from different social, political and economic positions and strives to address this unevenness.*

And some challenges:

- Addressing policy, standard setting and the ability of community data to be used in regulation and enforcement.
- Creating a policy culture that matches our drive for technology innovation.
- Developing interoperation of systems for both data and hardware.
- Conceptualizing a governance model that is conducive to multiple projects, data streams and places of input.

Learn more at

PublicLab.org

@PublicLab | @sdosemagen