

IMPROVING INSTITUTIONAL PARTNERSHIPS FOR ENVIRONMENTAL SCIENCE AND STEWARDSHIP: A CASE STUDY BETWEEN THE SMITHSONIAN AND BLACK CHURCHES IN BALTIMORE

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Presentation Overview

- Team Introduction
- Project Origin
- Literature Review
- Interviews
- Practical Advice
- Next Steps

Positionality

- 24 year old, white woman
- Grew up middle class in New Jersey, USA
- Not religious
- Comes from a family of scientists
- Has lived in Annapolis, MD since August, 2021



Meet the ICARE Team



(Mariayna Demond)

Dr. Dawn Biehler
Academic Advisor



(Joe Pettigrew)

Dr. Alison Cawood
Partner Mentor



(Terris King II)

Terris King II
Community Stakeholder



Smithsonian Environmental Research Center (SERC) Public Engagement

August 2021



My primary task as a Chesapeake Conservation Corps member was to explore who might be good partners in community-driven participatory science.





What is

articipatory

cience?



PARTICIPATORY SCIENCE

Public contribution to
science.

There are many traditions
within participatory science,
all of which have specific
practices and power
dynamics.

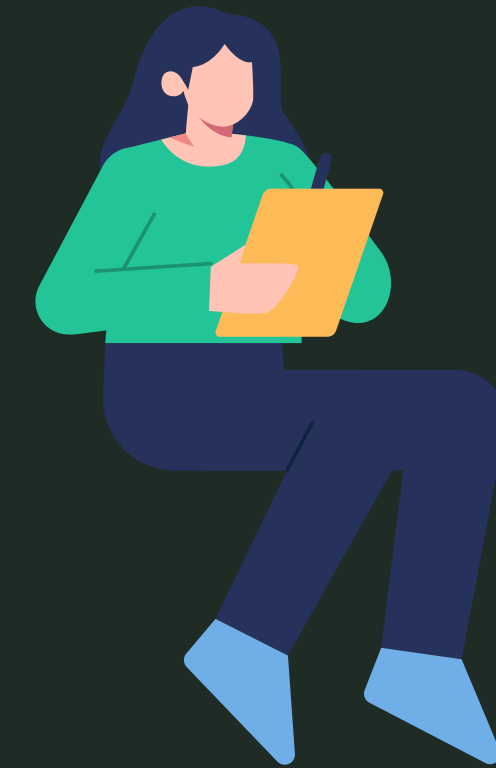
Participatory science contributes to

- Biology
- Environmental Science
- Astronomy
- Geography
- Health



The public contributes to science via

- Data Collection
- Observation
- Analysis
- Troubleshooting
- Forming Questions



Traditional participatory science is top-down. It begins with researchers, and later involves the public.



Community science is bottom-up. It starts with public priorities, and identifies scientists and institutions to help answer questions.

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Because SERC is a federal and academic institution, we cannot initiate community science.



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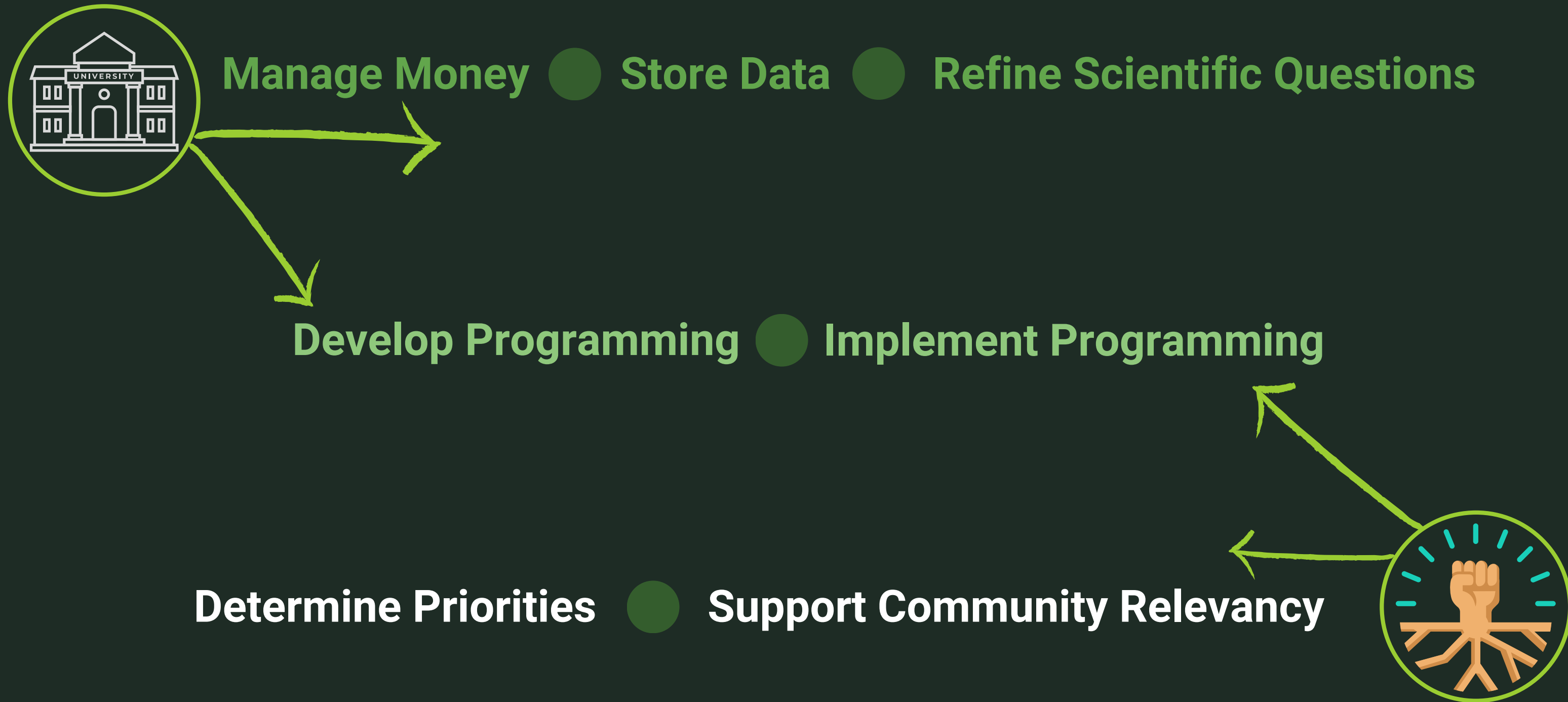


“Community-Driven” Science



Community science is bottom-up. It starts with public priorities, then scientists and institutions are identified to help answer questions.

What does **community-driven science** look like?



Why might faith-based communities be good community-driven science partners?



They own their land.



They are motivated to steward the earth.



They aim to address local community priorities.

Identifying Shared Goals

March 2022



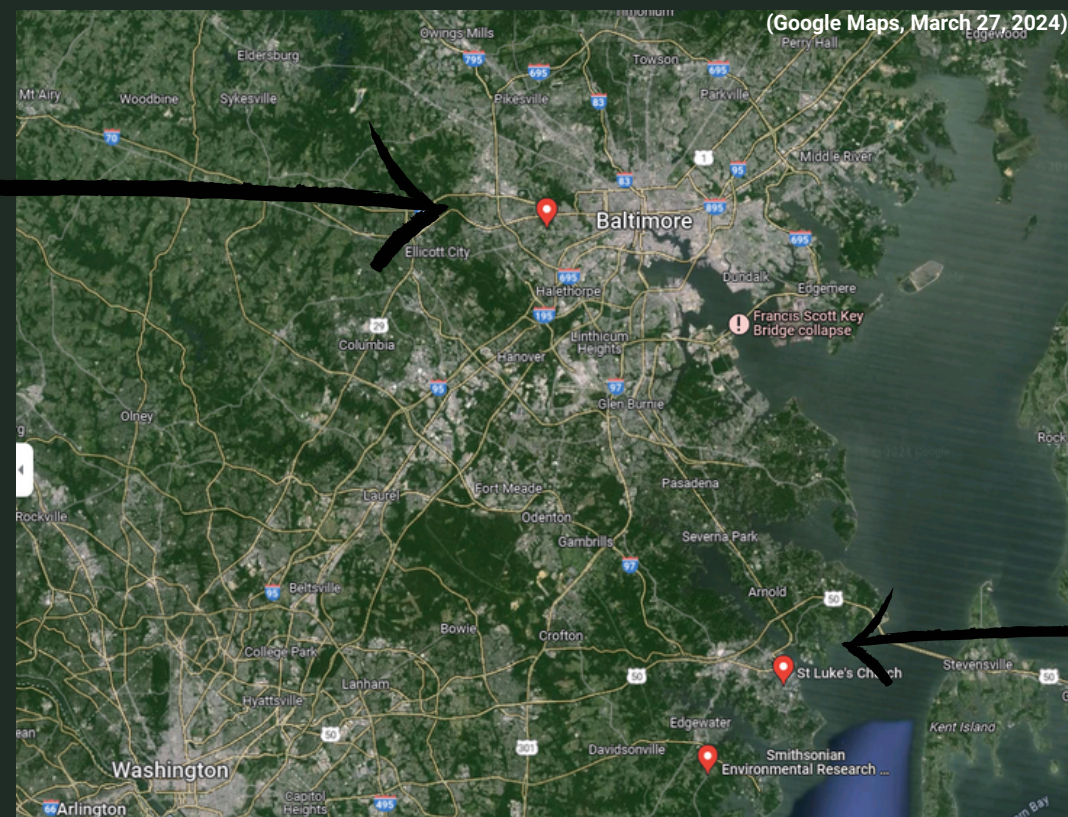
Identifying Shared Goals

- 1 Environmental education
- 2 Scientific understanding of impacts of environmental restoration



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- 1 Environmental education
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Collaborating with Temple X

August 2022



Partnership Development

More than 120 hours in meetings



More than 260 hours piloting protocols



Temple X helped me to realize that building equitable community-driven science required prioritizing the Black Church in Baltimore, MD.



WHAT IS THE BLACK CHURCH?



As defined by Lincoln and Mamiya (1990) “independent, historical and totally black controlled denominations, which were founded after the Free African society of 1787 and which constituted the core of black Christians.”



(Eli Pousson, 2016)

Union Baptist Church

Founded in 1852, the second oldest Black Baptist Church in Baltimore, and a partner in this initiative.

Communities of color are often excluded from participatory science.



This results in incomplete data that reinforces existing inequities.

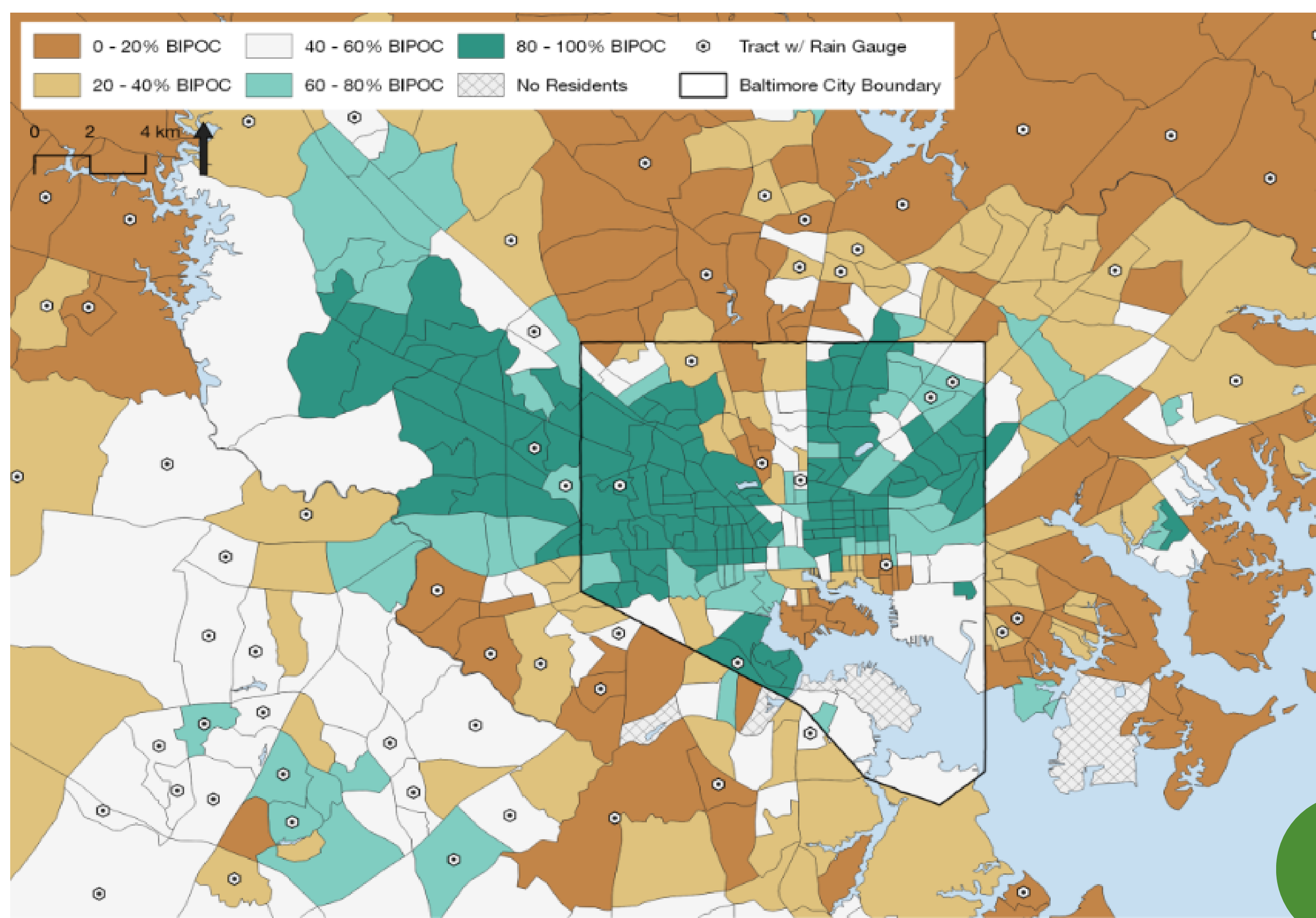


Figure 1. Baltimore city and surrounding area showing the geography of race/ethnicity and the locations of tracts that contain at least one rain gauge. Large portions of Baltimore that are majority BIPOC have little or no nearby rain gauge.

The Black Church is a leader in societal change.

Scientists should collaborate with and draw lessons from leadership within the Black Church to drive tangible, impactful change through science.



Black (Environmental) Liberation Theology



- Communal liberation
- Action for change
- Connection with nature and food



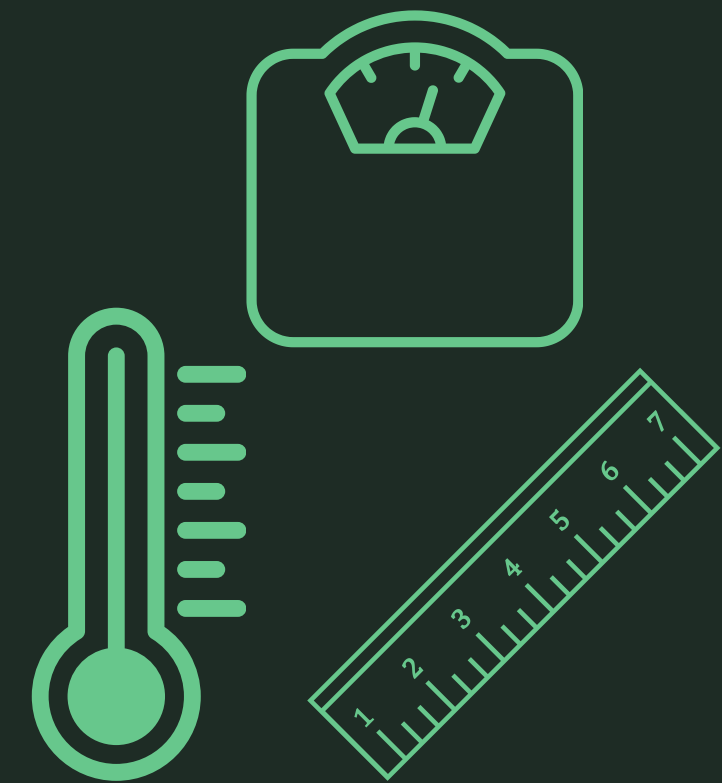
“Data”



“Data”



Smithsonian
Environmental Research Center



1. Data
2. Community
3. Ecosystem
4. Ethic(s)
5. Justice
6. Research
7. Science

Methodology

Qualitative descriptive analysis grounded in ethnographic principles.



“Tell me how you understand data.”

“Tell me how you think others, specifically scientists/faith leaders, understand data.”

Participants



Recruited via existing connections

Scientists

Faith Leaders

5 Newest SERC Principal Investigators



4 of 6 Affiliated with ActNOW



All White

5 Black, 1 Latino

3 Women, 2 Men

1 Woman, 5 Men



3 from the Black Church

Goals of Interviews



1. Describe how vocabulary is interpreted
2. Identify shared phenomena across perspectives

Themes from Interviews



1. Relationality to humans and nature
2. (Mis)Trust in science
3. Ethic(s) as action
4. Diversity of science

Relationality to People

“I'll just take from the **church congregation perspective that that's that's an ecosystem within itself among many ecosystems.** So the church itself is one place where people are, **they're developed, they are nurtured.** And then, you know, you have **schools that I'll consider that to be another ecosystem.** If people learn, and so forth, and gain understanding of things and become whoever they are, because that helps them to become whoever they want to become.

And I go back, as I was saying, about community, they have their family, so all of these things have different influences into people's lives. And **so when it comes to the ecosystem of nature, for some people that doesn't influence them in any way, shape or form.** They they see trees outside, and they just say, “Oh, that's a tree.” They they know it's a tree, and they kinda keep it moving. But they don't understand the importance of the tree, or maybe the vine that's trying to grow up the tree and what it can do to it because it's it's not important to them.

So within our ecosystem, we we know that we have certain influence over people's lives, and then and then they move on to the next ecosystem, and at that next space they get influenced.”

Pastor 1, Black, Male, Black Church

Relationality to Nature



“I typically think of it (ecosystem) in the environmental context of yeah, we'll say like a habitat or a group of habitats. So like, things like **sea grasses, or oysters, or mining groups, or trees, or grasses, or whatever, and all of the species that live there** and sort of all of the **physical forcing that happens from light to temperature to water flow, and how salty it is**, and all those kinds of things, biotic and and abiotic matter and processes going on within. You know some defined system that **can be relatively small or could be big**, but that's the not so short definition that that I tend to to think of it, as you know. But while being aware that it it sort of that, it has other broader meanings, you know, like within a financial ecosystem or you know, whatever where you're you're **sort of meeting the institutions and people and the ways they interact.**”

Scientist 2, White Male, SERC

(Mis)Trust in Science

“But when you talk scientifically, data isn't just numbers, but **data is impact**, data takes on this duality form. **Data actually, um, for scientists, has always been a a part of the profit margin** in the bottom line is that when you can get data you have greater proof to verify whatever you're claiming.”

Pastor 3, Black, Male, Black Church

Ethic(s) as Action



“For the most part, if I stick with what I really live with, which is ethics, um, I think of it as **a series of values, um, the the organization of your value system.** And, um, your **decisions about how to live and how to act and organize in a way that you can draw on them in specifics.** You can communicate them specifically.”

Pastor 4, Black, Female, Not Affiliated with Black Church

Science is Diverse



“So research for the “scientists” is often going into the unknown, peering off into what could be possible based off a previous experience. But for the believer, research should be what has previously happened creates a pathway for what can be possible...Most people say the number one industry in the world is sales. **I argue, the number one industry in the world is research. Okay. They say sales because it's money and economic. They don't say research, because they don't want people to realize that research is the voice of knowledge.** It's the, it's, it's the source of understanding, it's the mechanism that allows you to control and determine what happens next. **And the government determines what's valid research and what's not , (laughs) you gotta, you gotta have a IRB for it to be substantiated leveled research** somebody, has to give you permission is the irony. Of course somebody, has to give you permission to do the research!..”

Pastor 3, Black, Male, Black Church

Themes from Interviews



1. Relationality to humans and nature
2. (Mis)Trust in science
3. Ethic(s) as action
4. Diversity of science

Limitations

1

Racial and Gender
Diversity

2

Personal Identity

3

Restructuring of
Focus Group

Environmental Justice

1. **Utilize a local, specific environmental justice framework** when engaging with EJ communities or those previously over-studied to foster mutual understanding and trust.
2. **Look beyond obvious choices for partners;** assess organizations' real-world impacts against their stated priorities before forming alliances.
3. **Prioritize compensating community partners;** collaborate on grant writing to reflect shared priorities and values.
4. **Support community partners to set priorities** and ensure that significant decisions are made collaboratively, avoiding unilateral actions.

Building Partnerships

- 1. Understand the existing relationships and histories within communities,** including those between scientists and the community, to avoid repeating past mistakes.
- 2. Invest time in getting to know potential partners** who align with your values; attend events without a fixed agenda and prioritize active listening.
- 3. Prioritize building trust** in relationships to navigate conflicts effectively when they arise.
- 4. Acknowledge conflicts as inherent in partnerships;** identify non-negotiables for each party and seek areas of flexibility through ongoing dialogue.

Navigating Institutions

1. Understand that **research institutions may not readily support community-engaged work** due to slow processes and inadequate recognition of required labor.
2. **Recognize the significance of power dynamics;** consider their influence over decisions and their ability to access resources.
3. **Cultivate multiple relationships within institutions** to ensure resilience against changes in funding and personnel, fostering long-term sustainability.

Communication and Implementation

- Publishing with community partners in academic journals & public forums
- Continued implementation





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Thank you!

Connect with me here!
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