**ESIP: Community Data Cluster** 

Email the slack: community-data-aaaacppwmda3h2i24nl6qc2sy4@esip-all.slack.com

#### **Connection info:**

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# Join the mailing list:

• https://lists.esipfed.org/mailman/listinfo/esip-communitydata

# Join our Slack Channel (new!):

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### **18 November 2021**

<u>Participants:</u> Andrea Thomer, Steve Diggs, Megan Carter, Christine Gregg, Marion McKenzie, Brooke Hawkins, Emilio Mayorga

# Agenda:

- Blog post updates (<u>Marion</u>: feel free to make edits in suggesting mode, Christine, Steve and Andrea)
- <u>Data privacy update</u> (Marion and Diana). Looking for assistance on recommendation, edits on summary and risk sections. Summary could be included in AT and SD blog post to send to Flint collaborators.
- Metadata Maturity Analysis Update (Andrea)
- Finalizing materials, what is left to do to wrap up the Community Data cluster?

# **Meeting Notes:**

• Marion finished with <u>blog post</u>, Andrea made <u>outline for hers</u>: starts with history of the cluster, moving through progress over the last two years, link to jamboards, lessons learned and next steps-- funding opportunities, making them more visible for utilization in the future), defining success-- how can we define this so we feel we are making incremental progress in our work?

- SD: We are in a moment of transition: transferring power and developing new goals and direction
- AT: data is not enough for community advocacy, but framing data in a narrative way is much more effective (infographic)
  - Marion to make infographic after Brooke finalizes report-- pull out key findings
- SD: open letter to the Geoscience community-- how do we define "community" and what actually will make a difference?
  - At some point take the blog posts and report and figure out what will actually
    make a difference-- not just data. How to have incremental expectations to drive
    the work forward.
- Continue talking about these things through the merged community resilience meetings
- Lightning talk with slides in community resilience about the community data cluster to inform the whole group about our work would be useful
  - Short statement on WikiPage about the merge, link to blog posts (don't need new info there)
  - Timeline with community resilience showing the merging: Marion and Steve infographic
- This is our last separate meeting.

- Looking for feedback on Marion's blog post
- Andrea and Steve working on their blog post
- Looking for feedback on privacy assessment, Brooke to include this assessment in the DSMM
- Development of lightning talk/slides to present the history and work of community data to the community resilience cluster
  - Short statement for WlkiPage about the discontinuation of these meetings
- Infographic of CD and CR timelines merging (MM and SD)

# 14 October 2021

<u>Participants:</u> Andrea Thomer, Emilio Mayorga, Steve Diggs, Christine Gregg, Marion McKenzie, Megan Carter, Lindsay Barbieri, Diana LaScala-Gruenewald

### Agenda:

- Andrea Thomer blog post update
- Christine Gregg blog post on community resilience/community data merger
- Deliverables and finalizing summer session information for community contacts
- Updates on community data/community resilience merger

# **Meeting Notes:**

 CG and MM need to write blog posts for fellowship, AT and SD writing blog post about where we've been and where we're going

- Chatting at community resilience cluster-- merging, but details on what that looks like are forthcoming
- New ESIP communications manager-- no formal way to communicate, but they can help us shine and develop our thoughts
- SD- these groups shouldn't last forever, we're looking for more hands to make light work hence staying in this space and "merging" with community resilience. Is there something in the lifecycle of the cluster in which the mission changes and you converge with some other group and begin working together.
- MC-- need to think about how to make sure your legacy is preserved that you did exist, what you did, what you learned (of course with the possibility to re-emerge again).
- AT-- don't want to lose sight of the curation work we started this summer. We should make a timeline to finish up curation and get deliverables back to folks in Flint by the end of the year.
- MC-- potential first collaboration between community resilience and data to create a day
  of service for MLK Jr. Day (during the virtual winter session)
  - AT-- keynote speaker discussing what ESIP owes Black Americans-- what work we can be doing to support
  - SD-- who should give the keynote? Multiple people?-- could be pre-recorded where different people talk about different aspects and how it relates to ESIP.
     reflective of the tone that something needs to be done all the time-- not just immediately after a traumatic event affecting marginalized communities
    - MC-- BTW, the January meeting theme is **Data for All People**: From generation to use to understanding. People asking "is it okay that I'm working on these issues"? This could be a front and center way of saying this matters. Could weave this into what we're already talking about so it's not another thing.
- First step-- need to get the data curation done by the end of the year. Keep separate community data meetings while we're finishing, just go to community resilience at the beginning of next year. Arika is chair again next year, co-chairing with Rupu.
- AT-- will help push the conversation forward regarding the talk for the beginning of the winter meeting. Future community resilience is to get more hands-on experience following publication of their problem statement which is why it makes sense to merge.
- Steve and Andrea will write up the results of their workshops over the years. Emilio will be happy to help-- expanding to make it the entire cluster's blog post
- SD-- bringing a chapter to a close, not a failure. Still worthwhile but needed to take strategic breaks to assess what we were doing.
  - MM-- one difference I'm highlighting in the blog post is no new collection of data and us using our skills to assess what's already been done and how that in itself was a useful exercise for the community
- MC-- seems like we're still learning what we want to write too, and that will help us figure out what we mean and what direction we're going and what was useful.

- AT- finish privacy risk analysis of data that's already public and metadata maturity index (from other cluster-- very concrete). Both have a good start but they're not done and need to be written up
  - DLG- offering to help with concrete database tasks, working with MM on the privacy risk assessment write up
  - o AT working with a student to finish the metadata maturity
- Need a succinct write-up of what we found and what surprised us as people with expertise assessing what data exists. November would be writing up our finalized findings.
- Plan to check-in December 9th (even if asynchronously)-- does not intersect with AGU

- MM writing blog post focusing on theory vs. reality in terms of community engagement
- AT and SD writing up results from previous workshops and Emilio working with them to talk about where we were and where we're going-- a whole "community data" blog post
- CG writing blog post on the future merging of the clusters and what that looks like/means in terms of theory and practice
- Finish privacy risk analysis-- MM and DLG (get it finalized and start writing it up by November meeting)
- Finish Metadata Maturity analysis (AT and additional student-- finalized ready to write-up by November meeting, CG will help if additional student doesn't work out)
- Check-in on Slack in two weeks

# 7 September 2021

Participants: Andrea Thomer, Marion McKenzie, Diana LaScala-Gruenewald, Emilio Mayorga

#### Agenda:

- Wrapping up from the <u>Summer Session</u>:
  - What were the main findings?
  - What does this mean for our community contacts?
  - What does this mean for Community Data's continued involvement?
- Merger with Community Resilience: when, how, and what will the goals and vision be?
- Blog post: <u>draft/outline</u> (MM)

- MM not reapplying for community fellowship
- "How can we leverage Earth science data to assist communities affected by anthropogenic climate change"
- AT setting up a meeting with Arika to discuss merging with the Community Resilience Cluster-- get Megan's feedback on this

- EM: worth taking a longer look at how we got here-- it took a long time to figure out what the goals were, what data we were working with, how to go about this project in every way
- AT: our struggle included concepts of being people in the Ivory tower being helpful vs. imposing our desire of being helpful
- Would be helpful to reflect on broader cluster issues: making community ties are difficult
  - Many of us are not local
  - Flint does not have a good track record with universities-- university conduct is problematic in many circumstances
  - o ICPSR did not respond to efforts for collaboration
  - Steve went to Flint to make community contacts
  - Question of whether or not we can/should just 'dive in'
  - In community resilience they talked about 'what is your community' including different identity factors-- Steve sees Flint as part of his community-- need to be explicit about this, can't gloss over it
- Potential blog post series-- one as MM's 'fellowship capstone'
- This is important for the ESIP community and their understanding/interest in doing this type of work
- Acknowledging all of the work and how difficult it is to talk about-- diversity of reasons to work on things
- EM: Community of peers, this cluster is hard because regardless of diversity in identities we are reaching out to non-peers-- the gulf is bigger than we're used to: this is the problem of the next generation
- Community Data newsletter? Set or articles from different perspectives?
- Start with a pair of blog posts (or one with multiple perspectives) that could be refined into an article
- Also need to create a structured document to share with our community contacts-- still have work that needs to be done
- Summer session
  - Filled out questionnaire to determine utility of data in Flint
    - Very simple things that could be done to make data better:
      - Bad spreadsheet practices, a lot of data available in pdfs and not csv files
      - Not consistent flags and naming, units of measurement missing, preservation issues
    - Privacy concerns with data: addresses published in terms of pipes replaced and houses with dangerous water-- weaponization of open data
      - Highlighting houses that might have had high levels of lead put them at risk for gentrification or predatory actions of groups
      - ESIP brings to the table: making data more useful. By applying good practices we address these issues of inequality and privacydifficult data accessibility makes privacy issues not super visible,

but making it more accessible makes these issues more prevalent-- currently protected through obscurity

- Needs for data munging-- what patterns, gaps, or problems can we find by putting these data together?
  - Quick decline in testing frequency
  - Christine would be up to doing more analysis on this
- One of the initial motivations/goals for this cluster -- to create a toolkit for people wanting to do this work. What have we learned? Would be good to reflect on. How do we build community with people who are not geographically close, who are not already our peers, etc?

### To do:

- MM: continue working on blog post, send to AT a week before october meeting for her additions
- AT: put together list of what needs to be done to finish summer work, email cluster
- AT: put together document of what was done and the products for community contacts
- AT: set up meeting with Arika and go to Community Resilience meeting next week

# 14 July 2021

Participants: Steve Diggs, Marion McKenzie, Andrea Thomer, Yousef Kazerooni, Tami Lee

### Agenda:

- Updates on conference fee for new contacts and their feedback for future direction (SD)
- Updates from Community Resilience meeting and sharing of Community Data Timeline (AT)
- Structuring for Curate-a-Thon: what needs to be prepared, what can we do on the fly?

- SD putting out a message following up with people he met with in Flint
  - Inviting them to the session, have them listen and passively interview us to see what we can accomplish during this session: may have corrections and suggestions (which we want to encourage)
  - Will have a much clearer picture on this by Friday
- SD attended Fisher & Charley's office hours last Thursday: have a meeting with Fisher tomorrow and are planning for post-ESIP meeting interfacing with the community.
- Should we invite people- revisit after structuring Curate-a-Thon
- Community Resilience Meeting- ideas for working together moving forward, opening things up after this meeting while maintaining ties with Flint
  - Potentially merging together starting in September: gaining members, expertise, and aligned mission statements
  - Current timeline was very useful in sharing our cluster information with Community Resilience

- SD writing up meeting notes with Fisher and sending to Slack channel of Fridayrefining plan then
- Hydrologic experts to help with data analysis: one person in mind, but unsure if we'll be able to bring them in for the summer meeting session-- talk to Megan about this, could also be asynchronous
- Privacy risk analysis of existing data: looking through SD's data and website data to
  assess privacy of the data (backup in case the hydrologists aren't available), much more
  interactive, can be done synchronously
- What is the quality of this data, what metadata is needed: manageable for 90 minutes
- **Three big things** to address/accomplish during the session: hydro data analysis (more than just the numbers), privacy risk analysis, general curation
  - Writing up a blog post: can be given back to the Flint folks-- document at the end
    of it solidifies the work we're doing and brings them into the loop more
  - MM taking on the blog post after the summer session-- make a conglomerate of the voices during the Curate-a-Thon-- 1-3 pages in length
  - Coordinate on a specific plan over Slack: block out time on Monday to prep for this meeting-- earlier is better
- Feature Yousef's work in a future meeting-- maintain contact to see how we can work together: will be further along and will have more to share in the near future

### 9 June 2021

<u>Participants:</u> Steve Diggs, Marion McKenzie, Karen Moe, Megan Carter, Andrea Thomer, Christine Gregg

### Agenda:

- Updated from SD on his trip, new connections, and next steps
  - https://kumu.io/scdiggs/flint-water-crisis-landscape-pre-alpha
- Discuss how this meets or deviates from Summer session goals: what shifts need to happen?
- Review <u>session outline draft</u> (made by MM during session design workshop)
- Discuss how we can organize/categorize/classify data during the session

- Won't need to change what we do for the Summer Session-- just integrating new information
- Few people we want to invite to be speakers at our session
- Contacted HFRCC (E. Yvonne Lewis), contact forwarded to Mona Munroe-Younis. Met with Benjamin Pauli (political science professor at Kettering University in Flint)
- Also met with Monica Villareal (pastor, Flint Community Initiative Program Coordinator and Fixed-Term Faculty), Aujanee Young

- "Need to know what we don't know" what pipes have been replaced? With higher pH, interior of pipes have been eaten away
- Outcomes: data needs assessments (what do people need to know), who is working on the problem? (landscape analysis)
  - The community leaders are tired, a lot of recent community meetings have been about COVID
  - Community goals now are to restore faith in community infrastructure, getting the activists to know where the data can be consolidated and utilized
    - We need to do other steps first (i.e. data needs assessment via kumu and connections map and landscape analysis)
- Next step: have the leaders come in and talk to us about what they need
- In person aspect is so critical: for trust, conveying information quickly
- - AT: is what is in our current landscape analysis relevant and what does it mean for summer?
  - SD: parallel track-- continue with where we were headed, because our expertise lies in the data. Weak suggestions: get one new contact willing to speak: give them ~10 minutes and see what their thoughts are, start a larger discussion. Will provide guidance and help us set priorities, open invitation to join our meetings
  - KM: thinking about similarities and differences with her situation in air quality.
     Metropolitan areas want to move bus station due to gentrification. What kind of help do people think they can get from this initiative (both ours and the one KM is working on)
- Information disparity problem vs. issue with restoring trust. Data will not necessarily
  change minds. At its most essential, is the issue with data or relationships? A lot of
  current issues are with relationships and trust. Combination of both: if data is in the right
  hands, with leaders the community trust has the right information it can be powerful,
  make policy that can guide the community.
  - Thinking about timelines for restored trust in **decades**
  - Data is not giving immediate gratification because of the broken trust relationships
- Refine what we do, temper expectations, determine what would be most useful via community contacts
- KM: not having a baseline is often used as an argument to steamroll those fighting back against pollution
- MC: community resilience is in a vague space, talking theoretically about constructs (no one cluster will be able to work on these issues alone), potentially work with/hear from perspectives of air quality cluster
- KM: hearing from Flint leaders about where they're at, why they feel beaten down, what gives them help, etc.

- AT: like the idea of community leaders talking, landscape analysis already exists- had an
  ideation session at the winter meeting. Show the homework that we have done to the
  leaders so that they can tell us how the direction we're going looks.
- SD: engage Flint contacts with landscape analysis to see how far off we were, can give us direction. "Working document" more than an analysis. Critical thing to get right in the next few weeks. Needs analysis is huge (looking for energy and leadership), things they wanted but gave up on because there didn't seem to be any information
- Example of need: green light/red light on tap water: we know those data don't exist, but don't know if it's feasible (may be now more than it was a few years ago).
- Complementary speaker form is due June 21st- two is all we could handle
- Public-partnership cluster collaboration-- could be useful when talking about relationships
- In relationships, stuck to the theoretical until we could put things on the ground (in KM's case, putting air quality sensors on the ground, etc.)
- Charley and Fisher open office hours-- utilize that and communicate over Slack before the July meeting-- resources found here
- Connection with community resilience. AT opinion spend time thinking on building and sustaining relationships with SD's new contacts (something that community resilience cluster would have good advice on, could take pressure off of SD).

- Potential ESIP conference fee covered for new contacts? (1-2 speakers, yes)
- SD: place data in one place to compare with Flint city website data to make sure they're not the same thing
- SD: share landscape analysis with new contacts, get their feedback and future directions in the next few weeks-- generate buzz about it, could be done during summer session if they're able to attend
- MM: Creating timeline of Flint work, community data cluster: start a collaborative document

# 12 May 2021

Participants: Marion McKenzie, Christine Gregg, Karen Moe, Steve Diggs

## **Updates:**

- Abstract accepted for the Summer 2021 ESIP Meeting! Currently scheduled for 2:30-5:00PM on Wednesday, July 21st.
- To do list for summer session from April meeting: things we want to accomplish for curate-a-thon to make the summer session run smoothly
  - Check data for overlaps
    - If data is same as what's on the "Taking Action" website making up documentation could an important contribution
    - Use Marion's infographic skills to make an explainer

- Get data into one shared folder
- Review data for curation needs (e.g. privacy steps, data cleaning, quality checks, metadata creation, provenance metadata creation)
  - Data cleaning should include spatial analysis to look for geographic outliers
- o Talk with Denise Hills and Ruth Duerr re. Past data rescue efforts
- Slides for summer meeting
- Materials to share ahead of summer meeting
- Write up problems with data/making suggestions document to send to the state-could work as a learning exercise for the larger ESIP community

# Agenda:

## **Meeting Notes:**

- Steve is going to Flint, MI next week: goal is to listen and **remain flexible**
- Healthy Flint coordinating committee has moved into COVID planning
- Karen: air quality data, kick off meeting and discussion was focused on getting together
  people who knew the legislative process at the state and county level: not ready for the
  science, learning about the issues from the community aspect and their point of view
- Steve: what we can uniquely do is act as quality control and lower the barriers to accessing data turned into knowledge for the community
- Future work could be related to "<u>Climate Corp</u>" and finding resources from this administration's plans to fund community based climate projects
- MI Environmental Justice Conference (from Christine): https://www.michigan.gov/egle/0,9429,7-135-3308\_3333-551173--,00.html

### To do:

• (reminder) Register for Summer 2021 session

## 13 April 2021

<u>Participants:</u> Marion McKenzie, Zachary Robbins, Andrea Thomer, Christine Gregg, Karen Moe. Robert Rovetto

### **Updates:**

 Andrea preparing to meet with Healthy Flint Research Coordinating Center (they haven't been very responsive)

### Agenda:

- Review Summer 2021 call for abstracts: discuss ideas
  - Curate-a-thon during summer session
  - Submitting google form: "Community Data Cluster Curate-a-thon", purpose is to work together to curate obscure but public data about Flint water quality for

preparation for deposit in a *suitable* repository. This data is public but obscure, and currently stored in a series of spreadsheets.

- Our curation efforts will involve creating metadata, cleaning the datasets, and making them easier to understand. Our hope is to deposit this data in Open Data Flint for easier access by journalists and the general public, but other repositories are an option.
- Session purpose: the latest in the series of ongoing ESIP meeting sessions in which we're working to bring ESIP brainpower to bear on earth-science related crises. Work to develop standards in which people can take part in community data efforts that increase equitable access to data resources and data experts. For the last two years we have been focusing on Flint, MI but hope that the lessons learned here can be applied to other communities going forward.
- Outcomes/Goals: We want to curate data. And we want people who come to this session to help curate data. The goal is to get at least one spreadsheet more fit-for-use and to draw people's attention to the need for this work.
- Length of time/duration: Honestly 150 would be better but we'll take 90 if you all think its best.
- Target audience: people with experience and interest in cleaning spreadsheets, creating metadata, and working with communities. We would very much appreciate participation from people interested in/experienced in this topic (e.g. sampling procedures for water quality data, the Flint water crisis specifically).
- Recommended ways for session attendees to prepare: We will have material prepared ahead of time to share, and ask that participants read those. \*not included, but have a signup list and people sign up to read different sections of material to prepare for different aspects of the data curation process (i.e. different breakout rooms during the session)\*

- For May meeting: put together a checklist for things we want to accomplish for curate-a-thon to make the summer session run smoothly
  - Check data for overlaps
    - If data is same as what's on the "Taking Action" website making up documentation could an important contribution
    - Use Marion's infographic skills to make an explainer
  - Get data into one shared folder
  - Review data for curation needs (e.g. privacy steps, data cleaning, quality checks, metadata creation, provenance metadata creation)
    - Data cleaning should include spatial analysis to look for geographic outliers
  - o Talk with Denise Hills and Ruth Duerr re. Past data rescue efforts
  - Slides for summer meeting

- Materials to share ahead of summer meeting
- Write up problems with data/making suggestions document to send to the statecould work as a learning exercise for the larger ESIP community

- Check what data overlaps with public data before next meeting (if it does not overlap, it would be really useful to add to Open Data Flint)
- Christine has existing data on public website and can ID duplicates if Steve gets her the data.

# 10 Mar 2021

<u>Participants:</u> Marion McKenzie, Steve Diggs, Andrea Thomer, Christine Gregg, Emilio Mayorga, Karen Moe, Megan Carter

### **Updates:**

• Summer 2021 <u>call for abstracts</u>-- due April 16th

# Agenda:

- Recap of February's meeting
- Water Quality Data
  - Moving/hosting FOAI-acquired data to ICPSR?
  - Curate-a-thon
- Preparing for Summer ESIP abstracts due April 16 - <a href="https://docs.google.com/document/d/12KnG92ATbNLrVCerLaJNZmHDe6Mmq3UAm0M">https://docs.google.com/document/d/12KnG92ATbNLrVCerLaJNZmHDe6Mmq3UAm0M</a> ELVGyvRg/edit

- ICPSR: Social science data repository
  - Interested in becoming more involved with interdisciplinary data
  - Would not limit what we put in (DDI metadata needed)
  - Willingness to evolve, closeness to place, granularity of metadata is up to contributor
  - Just a storage place: working with data would be another system
  - Good with sensitive data!
- Use one or two datasets as the "path finders" to stay course when working with diverse types of data
- Complete some sort of "phase 1" before Summer meeting so we can structure the meeting session to be productive for the allotted time
  - Use this to determine audience as well.
- In curation work, we need to consider stripping addresses and obscuring them for security-- danger in making public data more aggregated

- Two expert analyses need to be conducted: security (Andrea) and water quality to determine if the data is useful (data associated with a certain block-- stretch of pipe, don't need specific addresses)
- Apply for a lab grant or special project funding for clusters (\$5-7k) to support collaborative work (generally), renewed each year
  - Potentially discuss with Annie to decide best course of action if we decide we need funding for next steps

- **Steve**: provide information on data that is public (for Andrea to use in her meeting as well)
- Andrea: meeting with Tricia Pachowski: Healthy Flint Research Coordinating Center next week
- Get a clear sense of what dataset we're working on: take inventory
  - What is available, adding detail over time (such as number of variables)
- Steve: ask source of data if they're comfortable with us putting the data into ICPSR
- Marion: work on updating wiki!
- All: take a look at the <u>submission form</u> for Summer session and come with ideas
- Steve: contact Ruth and Denise on Slack for involvement in curate-a-thon

#### 10 Feb 2021

<u>Participants:</u> Steve Diggs, Marion McKenzie, Andrea Thomer, Alexis Garretson, Arika Virapongse, Christine Gregg, Megan Carter, Sara Lafia, Zachary Robbins, Karen Moe

# **Updates:**

## Agenda:

- Review <u>summary of winter session</u>, discuss potential starting points
  - Three main takeaways from the session for **ESIP** documentation
  - Acknowledging gaps, defining our goals moving forward
- Review winter highlights webinar slide
- Set action items, set schedule for Spring 2021, invite speakers
  - Focusing on community entry success stories and failures
- Where are we?!? Reflect on big picture

#### Ideas:

- Identifying third party experts: curating data for journalists or partnering with already existing data providers
- Ask Libby Hemphill to join us/come speak at a meeting talk about ICPSR ability to serve as backend; Sara L. can also help move this forward
  - I \*\*think\*\* that Open Data Flint lost its community contact too S.L.
  - Would we like to deposit public-but-hard-to-find-and-use data with ICPSR?

- o Framing as a "data usability pilot" in partnership with <u>Taking Action on Flint Water</u>
- Ask Emilio to present on West Coast Ocean Data Portal
- Acting as data consultants -
- Curate-a-thon: 1) putting data somewhere, 2) doing more to describe/enrich data...

# **Meeting Notes**

- Three main takeaways:
  - Refocusing on who our audience is and what our goals are: thinking about curating data for journalists and public policy makers and utilizing third party data sources
  - Ideated around 4 main topics: FOIA and public data curation, map integration, community buy-in, and utilizing ESIP resources
  - More discussion is needed about scope: attending Flint community meetings
- Finding third party experts the community has little trust in this data
  - Looking at sampling techniques, data trends
  - If we don't have that expertise then we need to think again about our focus and scope; or reach out to other clusters who do have expertise
  - Could be tricky if there's a government trust gap but if ESIP folks are affiliated with the government?
- <u>Trust principles</u>: assessing how trustworthy data is within a repository ("Repositories
  must earn the trust of the communities they intend to serve and demonstrate that they
  are reliable and capable of appropriately managing the data they hold.") could be
  relevant for Open Data Flint
- First focusing on the learning, going to Flint community meetings: developing a process to understand community needs-- have data cluster members attend meetings to learn, report back to the Community Data cluster
  - Maybe there's an indirect way too (like ML on text of city council minutes)?
- Connecting with Thriving Earth-- many projects focused on connecting communities with earth science data and researchers

### To do's

• Attend community meetings in your local communities and report back with notes

### 13 Jan 2021

<u>Participants:</u> Andrea Thomer, Alexis Garretson, Jonathan Blythe, Justin Schell, Marion McKenzie, Karen Moe, Steve Diggs, Zachary Robbins, Megan Carter, Michael Lenard, Emilio Mayorga, Christine Gregg

#### Updates

- Update on Open Data Flint Connection
  - Libby Hemphill = archive director

- Has a small amount of curation budget, and thinks the sorts of things we're likely to do are a good fit for ODF
- Putting me in touch with others in Flint
- Says we should still fill out community research form
- Statement from Community Resilience Cluster on community organization in Flint (posted in Slack thread by Arika)
  - Updated statement-- if community resilience wants further feedback, we can work on it in Slack
- Happy hour on the first day of Winter ESIP meeting, we will discuss how to do more cross-cluster organization and collaboration
  - Thursday plenary as well
  - Gap analysis between where different clusters overlap (or not) and learning more about what the other clusters are working on and where we can gain more support

# **Agenda**

- Planning for ESIP Winter Session (ideation-a-thon/idea-thon)
  - o Pre-reads to send out
    - Landscape analysis
    - Potential topics to work on
  - Email list to sent to
  - Mission statement/wiki updating/website updating
- Meet in Feb?

## **Ideas**

- Topics (assign break out room ideas/discussion leaders)
  - a. (Steve) How to curate the data that Steve got through a FOIA and other public data
  - b. (emilio) What to do with the Flint Open Data Portal to connect it to the community
    - i. How could we better understand the levels of data practices in Flint?

      And how can we support those different engagement levels? (e.g. the multiple modes of sharing and serving data, from an infographic to an API)
    - ii. How do we structurally and financially support more research and data needs of people in Flint
    - iii. Starting point: collaboration with Usability Cluster
  - c. (Zachary) Integrating maps and making existing maps accessible and findable.
    - i. Finding pipes in other cities
    - ii. Some cool starting points
      - 1. <a href="https://www.vox.com/a/lead-exposure-risk-map">https://www.vox.com/a/lead-exposure-risk-map</a>
      - 2. https://mytapscore.com/pages/the-lead-map
      - 3. <a href="https://gis-michigan.opendata.arcgis.com/">https://gis-michigan.opendata.arcgis.com/</a>

- 4. https://www.mapflint.org/
- iii. Integrating maps with the Flint Open Data Portal
- d. (Marion) How can ESIP, its expertise, and its data be leveraged to build the best, most resource-efficient ways of assisting those impacted by this crisis? How can we help impart skills to use and work with earth science information? How can ESIP work with community organizations (potentially remotely)?
- e. if we need it From the LS who can we contact in Flint to collaborate with
- f. Plans for adoption and obtaining community buy in (if we have education people)
- g. Crowdsource a topic based on pre-reads
- Future areas for work
  - a. Work across clusters to
- Ask Libby Hemphill to join us/come speak at a meeting talk about ICPSR ability to serve as backend
- Ask Emilio to present on West Coast Ocean Data Portal

### To do's:

- Timeline of where we've been/where we're going for website
- Look at Marion's graphic and provide feedback
- Further feedback on Community Resilience
- Make templates for session + slides

### 9 Dec 2020

<u>Participants:</u> Zachary Robbins, Steve Diggs, Christine Gregg, Andrea Thomer, Marion McKenzie

### **Updates**

### <u>Agenda</u>

- Planning for ESIP Winter Session
  - 1.5 hour session
    - Spend 10-15 minutes to introduce to the cluster and what we've done
      - Ground rules:
        - Nominate a note taker for each break out group
        - Nominate someone to report out
    - 45 minutes Split into break out groups to think about aspects of the project based on the landscape analysis to tackle different parts of the project
    - 15 minutes report out

### Ideas

- Send out What is crisis when it happen. Make sure LS analysis is legible to someone coming in fresh.
  - Send out topics with LS beforehand to try to get a sense of what folk
- Potential Topics
  - 1 How to curate the data that Steve got through a FOIA
  - 2 What to do with the Flint Open Data Portal to connect it to the community
    - How could we better understand the levels of data practices in Flint?
      And how can we support those different engagement levels? (e.g. the multiple modes of sharing and serving data, from an infographic to an API)
    - How do we structurally and financially support more research and data needs of people in Flint
    - Starting point: collaboration with Usability Cluster
  - 5 if we need it From the LS who can we contact in Flint to collaborate with
  - 4 How can ESIP and it's data be leveraged to build the best, most resource-efficient ways of assisting those with lead exposure-caused health & learning issues in the long term (potentially out of scope)
  - 3 Integrating maps and making existing maps accessible and findable.
    - Finding pipes in other cities
    - Some cool starting points
      - <u>https://www.vox.com/a/lead-exposure-risk-map</u>
      - https://mytapscore.com/pages/the-lead-map
    - Integrating maps with the Flint Open Data Portal
  - What proxies for lead contamination are there (e.g. pH)? And how these be turned into self-testing kits?
    - Physical lead service line inspection how-to for residents: https://apps.npr.org/find-lead-pipes-in-your-home/en/#intro
    - pH as a proxy for lead in drinking water: https://www.sciencedirect.com/science/article/pii/S004313541100090X
    - Thriving earth exchange~ through AGU. ask Alexis.
      - This is the project not updated with the partners yet but stay tuned

        https://thrivingearthexchange.org/project/ottawa-county-oklahoma/
    - https://safewaterengineering.com/ Elin Betanzo
      - From the site: "In August of 2015, Elin played a critical role in uncovering the Flint Water Crisis by encouraging Dr. Mona Hanna-Attisha, a Flint pediatrician, to conduct a study that discovered elevated lead levels in children living in Flint, Michigan. Elin continues to work on lead and drinking water policy at federal, state, and local levels. Current projects include working with the Detroit Water and Sewerage Department to establish their lead

service line replacement program, improving public education about lead in drinking water, and helping water utilities comply with the federal and state lead and copper rules. Elin holds a Master of Science in Environmental Engineering and a Water Quality Management Certificate from Virginia Tech. She also has a Bachelor of Science in Environmental Science and a Bachelor of Fine Arts in Piano Performance from Carnegie Mellon University. Elin is a Professional Engineer registered in Michigan, Maryland and Virginia, and a certified water system operator in Maryland. She served on the Federal Advisory Committee on Water Information from 2014-2017."

Other stuff from LS that might be helpful eventually:

- Research into implementable, effective infrastructural safeguards against catastrophic public health crises like the Flint Water Crisis how do we stop this from happening again, even in the event of institutional/bureaucratic negligence?
- More detailed demographic analysis of who was most affected is still possible and likely to be enlightening, if it can be done without being overly intrusive or privacy-violating (i.e. exposing identifying info about vulnerable populations) (out of scope)
- Longitudinal studies of health and education outcomes for those exposed to high amounts of lead (what are the long-term health & educational outcomes?)
- Community data and resilience happy hour/social (during or post winter-session), monthly, bi-monthly occurrence
- general ESIP get together social

## - Issues to consider

- How do we deal with the upcoming burn-out of zoom life and post election burn-out
  - Provide productivity platform
  - Have seed topics

#### - To do's

- Zachary Review landscape analysis
- Steve gets to make an inspirational video
- Marion and Andrea Add vision statement to wiki, then link to slack
  - "A place to stretch your legs to try good ideas. If you'd like to try a good idea and leave then we'd still love to have you"
  - infographic/digestible information for people that don't want to go to slack
- Steve We need a timeline showing where we've been and where we're going

- Andrea and Steve one of us needs to go to facilitator training
- Andrea respond to lesedi's email
- Andrea get in touch with Flint Open Data
- Andrea and Steve figure out who will get free registration
- Working meeting either next week or first week of jan

#### 11 Nov 2020

<u>Participants:</u> Steve Diggs, Andrea Thomer, Michael Lenard, Mark Parsons, Zachary Robbins, Christine Gregg, Karen Moe

## **Updates**

- FOIA requested for Flint water quality data, but it's complicated. Given the current political upheaval, I don't expect a response until CY21.
- Meeting with TheEngineRoom and Data4BL scheduled for next Tuesday, Nov 18.

# <u>Agenda</u>

- <u>Discussion: Data Feminism (Klein and D'Ignazio)</u>
  - How can the concepts and best practices outlined here inform our work as data people.
  - An open access copy of the book is available here.
  - Comments

https://mitpress.mit.edu/books/data-feminism

From C Gregg to Everyone:

They also have book club recordings that have been great to listen to: https://www.youtube.com/watch?v=PFKSs0qH\_wU

## 14 Oct 2020

<u>Participants:</u> Steve Diggs, Denise Hills, Christine Gregg, Michael Lenard, Mark Parsons, Zachary Robbins, Megan Carter

### **Agenda**

- Updates on landscape analysis on Flint Water Crisis and Data4BL
  - No contacts in Flint from Data4BL
  - Potential avenue for action: ID missing data; what data is missing that would be needed for ML or Al approaches
- Other interesting projects to share
  - https://youtu.be/pNwE7Jn36s4 begin at 16:50 (@annerolfes)
    - Could be an interesting person to contact at some point
  - https://dataplusfeminism.mit.edu/

- Planning for Winter ESIP (session deadline 11/5)
  - Ideation session based on landscape analysis

### Ideas:

pointing to the data that isn't there specifically to address preventing this sort of thing happening in the future

To facilitate Al approaches?

Christine points out that some of this information (indoor air, groudnwater, vapor intrusion) is FOIAable - not necessarily online, and often messy, but could be FOIAed

- Something to do with data gaps try to find it via FOIA
- Toolkit to figure things out to FOIA something

Consolidate information about topics we want to take action on (Flint as an exemplar) to make it easier to build a repo

# 16 Sep 2020

<u>Participants:</u> Steve Diggs, Denise Hills, Christine Gregg, Emilio Mayorga, Michael Lenard, Megan Carter

# <u>Agenda</u>

Where are we? (status check)

- Allies and Potential Partners
  - Data4BlackLives
  - TheEngineRoom
  - Erin Brockovich <a href="https://youtu.be/T29Y30t8zRQ">https://youtu.be/T29Y30t8zRQ</a>
  - Others
    - https://www.detroitcommunitytech.org/?g=datajustice
    - https://alliedmedia.org/resources

## From Christine Gregg -

- https://www.michigan.gov/flintwater/0,6092,7-345-76292 76294 76297---,00.htm
- <a href="https://news.umich.edu/missing-lead-in-flint-water-pipes-confirms-cause-of-crisis/">https://news.umich.edu/missing-lead-in-flint-water-pipes-confirms-cause-of-crisis/</a>
- https://pubs.acs.org/doi/abs/10.1021/acs.estlett.7b00226
- Action in Flint
  - \$600 Million to Flint:

https://www.washingtonpost.com/national/600-million-settlement-to-be-announce d-for-flint-mich-water-crisis/2020/08/19/7d8add22-e288-11ea-8181-606e603bb1c 4\_story.html

Continue to refine input from Summer 2020 Cluster Meeting:

 https://docs.google.com/presentation/d/1l4LzzvG0y9Gtc\_JYgGF\_6zoeuezkIRM80hjONy pwpdE/edit#slide=id.p https://sched.co/ccAo

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Today's Breakouts (team formation)

October/November Summit (or Workshop)

- Ideas?
  - Do we need a website? / dashboard (ESRI story maps? Denise)
- Invitees?

ESIP Winter session call will be out in the next week or two. Submitters will be limited to a single 90 minute session.

# 12 Aug 2020

<u>Participants: Steve Diggs, Andrea Thomer, Megan Carter, Ruth Duerr, Jonathan Blythe, Karen Moe</u>

# Agenda:

- Review and organize:
   <a href="https://docs.google.com/presentation/d/114LzzvG0y9Gtc\_JYgGF\_6zoeuezkIRM80hjONypwpdE/edit#slide=id.p">https://docs.google.com/presentation/d/114LzzvG0y9Gtc\_JYgGF\_6zoeuezkIRM80hjONypwpdE/edit#slide=id.p</a>
- https://sched.co/ccAo
- **Q 1:** Who is being most affected by the problem and how?
  - ID'ed lingering issues with kids long term impacts
  - Found some good demographic data
  - Still a number of houses that need pipes replaced
  - Root causes IDed in this group too; also found a lot of data resources
  - Gap: Missing data mapping pipes x demographics

How are people being affected?

- Lack of water access
- Learning outcomes for students
- Compounding effects with other crises -- e.g. COVID
- Outbreak of Legionnaire's disease tied to low chlorine levels in the water
- Pipes that still need replacing even though the water source is better
- Decreased trust in government and gov't services

Q 2: What research and data is already available that tracks the problem and harms?

a. What research is needed to further understand the problem and harms?

### Resources here:

https://docs.google.com/document/d/1G34d0snsHKsiChHhvVAJ3sJCGooDin85jnvE8CuU6 Y/edit

<u>Data</u> on Blood Testing and Testing at various types of locations (homes, schools, healthcare), some in excel

Next steps here: maybe writing up a synthesis

Q 3: What are the root causes of the crisis?

## General comments:

Group focus broadly could be on environmental problems that exacerbate social inequality

Scientists see things before they become stories

What sorts of partnerships could we forge with journalists, programs in journalism? What toolkits for journalists, and data journalists?

Leo network in alaska and canadian arctic - in which local news becomes science - privileges indigineous perspectives --

http://leonetwork.org/en/#lat=41.96666&Ing=-92.57686&zoom=

Next steps for this: explore how we could work with journalists

## 13 May 2020

Participants: Steve Diggs, Andrea Thomer, Lauren Childs, Lin Chambers, Sean Barberie, Jay Gopalakrishnan, Bob Downs, Ruth Deurr, Dave Jones

# Agenda:

## Megan updates:

- EGU virtual data help desk
  - Q's about Data citation, schema.org, data management plans
- Summer meeting
  - July 14-24
  - Entirely virtual
  - Live stuff T-R each week, 11:30-5:30ET
  - Using chat with zoom
  - Registration will be lower than usual

Updates from D4BL

Presentation from Jay and Sean on Covid 19 Data Hub on Knowi: <a href="https://www.knowi.com/coronavirus-dashboards/">https://www.knowi.com/coronavirus-dashboards/</a>

Q: from Steve - how does Knowi handle transparency?

- For COVID, include a list of all the sources; focusing on "reputable" datasets.

Q from Bob: how do you balance the potential conflict between providing more capabilities vs. keeping the interface simple?

# Potential applications:

- Dashboard for someplace like Flint, on water quality?
- What are the data sources?
  - How do we make them fit for science?
  - To what degree are they fit for science?
  - How do we build community capacity for continuing/taking over this work?
    - Talk with ICPSR/ISR
  - ESIP summer: data-track-down-athon
    - Find, evaluatte, curate data
    - <a href="https://2020esipsummermeeting.sched.com">https://2020esipsummermeeting.sched.com</a>

# 15 April 2020

Someone to potentially reach out to Notes from DB4L webinar Agbeli Ameko 05:21 PM

The National Center for Atmospheric Research is now part of Covid-19 supercomputing consortium. This allows researchers to have access to these resources to study the impact of

climate change, weather socio-economics, and to crunch big data. Contact me if you have interest in potential computing collaborations.

https://news.ucar.edu/132724/ncar-operated-supercomputer-join-national-covid-19-computing-consortium

#### 11 March 2020

<u>Participants</u>: Steve Diggs, Andrea Thomer, Jonathan Blythe, Justin Schell, Mark Parsons, Megan Carter

## <u>Agenda</u>

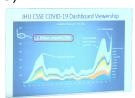
- Introductions around the 'table'
- Overview of the Cluster
  - Justin: working with community science groups, city parks groups to make data more accessible and indexable. Just received AsTech funding - how libraries and museums can support data justice. Some access to equipment, some access to repos.
  - Jonathan: from Community Resilience cluster also interested in supported communities in questioning/reviewing information
    - Comm Resilience cluster would like to develop recommendations, and would like to align representations with our group.
  - Recap of Sky Bristol's <u>presentation</u> at ESIP Winter State of ESIP
    - Mark: we need to do some outreach to bring more folks into the group; possibly through USGS
    - Reaching out to Community Resilience for further cross-pollination
      - Arika Virapongse (Chair): av@middlepatheco.com
      - Ruth Duerr (very active also)
      - Zachary Robbins (Community Fellow)
      - Mailing List: esip-communityresilience@lists.esipfed.org
      - Slack Channel w/in ESIP: #communityresilience
    - What can we do to increase awareness of our group?
      - Megan we've been putting things in the Monday update
      - Blog post
      - ESIP theme: putting data to work, want to highlight collab areas doing work in this space
        - Could plan something like that, perhaps and invited speaker
      - Justin: in outreach materials, giving examples could be helpful of inspiration and of things we're working on.
      - <u>ACTION</u>: Clusters banding together to solve a larger societal problem.
        - Can table this for now, Andrea and Steve can talk through and consider adding to a blog post

- Output Description 

  Output Description
  - Share w/Megan, put in monday update; share with ESIP-all; collab highlights/webinars
  - Engaging with other nascent groups can help too
- Thinking about the "service" component of data science work
- In the News: **COVID-19**, from a Community Data perspective
  - Examples of Community Data Dashboards
    - A listing of sites: <a href="http://www.cidrap.umn.edu/covid-19/maps-visuals">http://www.cidrap.umn.edu/covid-19/maps-visuals</a>
    - Most popular: Operations Dashboard for ArcGIS (ESRI / JHU)
      - http://bit.ly/coronavirus COVID19
      - Behind the scenes: the data collection story (Youtube video)
    - Others
      - <a href="https://hqis.uw.edu/virus/">https://hqis.uw.edu/virus/</a>, <a href="https://hqis.uw.edu/virus/">https://www.outbreakstats.com/</a>
  - Not all the same, updates are uneven between sites



But, viewership is high (JHU)



- And (best of all) **the data** are on <u>Github</u> (also JHU)
- Education is key, enable <u>anyone</u> to <u>do the math!</u>
- What could we stand up and build a page for w/our friends at ESRI?
  - What are the gaps that ESIP is well positioned to address?
  - SST? Air temp? Hour by hour salinity?
  - Jonathan would encourage that we find a contact at the CDC to ensure that we're adding value
  - Steve: don't necessarily need to correlate with a health crisis, but could look at visualization in general
  - Justin: should also explicate what the visualization allows for
  - Andrea: should invite Sci Comm, Data journalism, Info viz folks for this sort of thing
    - https://earth.nullschool.net/
    - http://hint.fm/wind/
  - Andrea: what would it take to map water quality issues?
    - Data hard to find or doesn't exist
      - o EPA
      - Could involve hook up with schema.org to link up this data

- Andrea wants to make this a class project for my data curation students
- Mark: we're bouncing around in terms of scale. Wind maps are cool, but not necessarily helpful. Should definitely think about achievable projects
  - Andrea is going to continue thinking about a class project in this space - working with Justin.
  - Andrea should write this down -- let's take this up next meeting
- We need two sentences for the next Monday update
- Next meeting: should also talk about summer session

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- Summer ESIP: alternate plans if we cannot meet in-person
- <u>Data for Black Lives III</u>, December 2020 MIT, Cambridge, MA
- Discussion about direction of cluster in general

Next call: 3/11 at 4 pm ET

#### 12 Feb 2020

<u>Participants</u>: Steve Diggs, Andrea Thomer, Megan Carter, <u>Daniel Howard</u> (NRL @ Stennis, MS), Joshua Young, Ken Keiser, Mark Parsons, Rachel (??), Ruth Duerr

# Agenda

- Introductions, overview
  - Motivations for group: we're the "in the know" data nerds with all the
    connections -- but we're only talking to each other. And there are real implications
    from this in the broader world, where people need earth science data to make
    decisions, improve their communities.
  - Andrea's shameless plug: <a href="http://esc.umich.edu/">http://esc.umich.edu/</a>
  - Data justice
- Review of Sky Bristol's <u>presentation</u> at ESIP Winter State of ESIP
  - Call for white hat hacktivism!
  - Bridging divide between data haves and have-nots
  - Where's the next Flint, MI and how might ESIP's talent be leveraged to help prevent it?
  - Many possible paths for outreach and action -- project development, academic avenues and publishing
- Discussion about direction of cluster in general
  - Josh: both optimist and pessimist perspective, likes idea of lighting the path, but installing guardrails on path. E.g. suggestions or policies or recs on how this data might be used. Basically, guidelines to keep data from being misused
  - Mark: struggling with issue of scale. Most ESIPers work at broad geographic scales, but we're talking about smaller communities. So could target a community, or think about scaling down.
  - If you're a city planner or community member who do you call?
  - Steve: started out wanting to be the Avengers but even they have a hard time IDing the problem, and figuring out solutions.
    - Possible synergy that this grounds work of other clusters
    - Part of community resilience cluster's goal to help enable people to build pipelines, "teach a person to fish"
  - Mark: we need use cases!
  - Ruth: Perhaps Westeminster, CO \*is\* a use case (air quality / air quality sensors); others in CO re water quality. Hard to find place to start
  - Steve: One option could start small and build. E.g. build water testing kits for small groups that we know need help, and use project-based approaches to build our 'library' of approaches
  - Josh: are we aiming to support local gov't decision makers? Civil society folks? These are very different groups. E.g. gov't is making decisions on land use or big

- policy decisions; civil society is often working with nonprofit, more informal. These require different forms of engagement and credentials
- Steve: need to choose a path, and mindfully choose what we're not doing. Don't want to get diluted by trying to cover everything
- Josh: could instead focus on preparing ESIP members to better serve communities however they choose
  - +1 from Mark, but encourages real-world examples so it's not just abstract
- Andrea: "do-gooders" parachuting in and trying to "save" a community, but doing more harm than good. Slowly build a relationship, and don't deploy fragile solutions.
- Ruth: (being a bit of an activist), enable communities to help themselves.
- Steve: It sounds like we're on the same page for the most part. Encourages us to do the work anyway, even when we're going to be imperfect. Be ready for people to come at you -- particularly if you're effective.
  - We've definitely ID'ed a constraint here, e.g. time and energy. Issue in oceanographic community too - not enough folks to curate data. Wound up recruiting retired folks. Might be an option here too.
- Andrea: +1 for what Steve said. Argues for building a code of conduct, maybe as part of a summer activity
- Steve: yes, there are some we could build on or just use.
- Planning for future telecons, ESIP summer.
  - Steve: just committed not 10 minutes ago to fly to Flint and make connections!
  - Ruth: encourages to start where you are, more local.
  - Steve: agrees, but argues that he's got a relationship-accelerator in the form of Data for Black Lives
  - Mark: for summer, can start with building code of practice, and sharing ESIP members' experience

## - Homework:

- Bring one thing from your backyard or background to the next meeting. Or an idea
  - EPA is hamstrung. A lot of testing is curtailed. There are needs out there for sure, so we should be able to traverse our networks to ID needs that can be turned into action.
- Andrea; email Flint Open Data people at ICPSR
- Future meetings:
  - Can record meetings in future
  - In two weeks, want to close the loop with Sky, and make sure we get him the notes
  - Soon: seed other groups with question of how we could support non-researchers in using data
  - Example Community Participation Guidelines: https://www.mozilla.org/en-US/about/governance/policies/participation/

### 7 Jan 2020

Talk: Turning citizen science into community science

- 1) Intro and premise
  - We're from the new community data cluster
  - Our goal: to connect communities with research data, and vice verse
  - [a few more sentences about why this is an issue, and where the gaps are here]
  - Today: talking about potential uses of CitSci data for and by communities and some ways we could use this data for social justice, community organizing, and policy reform
- 2) First, what do we mean by citizen science data
  - Often used to refer to data out of zooniverse projects
    - These often entail crowdsourced transcription work
    - E.g. galaxy zoo, where "citizens" classify galaxies according to shape
    - Old Weather: transcription of historical ship logs for weather data
  - Others that don't entail transcription instead collect simple observational data
    - E.g. iNaturalist and eBird: collect photos, identifications and locality data for organisms
  - Examples out of CLEAR/Liboiron Lab
  - Surya Project in India
- 3) Data challenges
  - Data quality issues
  - But also data outreach issues -- getting data (and information → *knowledge*) into the hands of people who need it, and helping them use it
- 4) Potential solutions to challenges?
  - Or how can information quality approaches
    Should we have an online meeting in Feb? → Feb 12, 2020 @ 16:00 EST (include link)

#### 22 November 2019

ESIP winter - Citizen Science Data and Information Quality

https://2020esipwintermeeting.sched.com/event/XrhT/citizen-science-data-and-information-quality

Data for black lives, meeting in NYC this summer

Organize something to invite folks from this

Potential intersections with U Mich, UMSI

- Continue water testing around city in Flint?
- <a href="https://www.icpsr.umich.edu/icpsrweb/odf/">https://www.icpsr.umich.edu/icpsrweb/odf/</a>
- Send intro email saying hey this is us, any interest in collaborating?

On Tuesday - put together a framework of what we could present Steve will email the list to see if there's interest in having a telecon in Dec Need to get in touch with Arika - see what she would want

ESIP winter - We'll have a meet up on Tuesday evening

ESIP has been a hub for many things - but not for reaching out to communities, Would be great to start doing this work, and great to get

# 6 Sept 2019

Notes from 4S - Should invite these folks to come speak at ESIP

- Issues with NPRI data -- out of date, hard to use, released on thing at a time -
  - What format? How could data curation and cleaning help with this?
- Spending a lot of time working on putting info in accessible language
- Part of project is how to make facility responsible to indigenous land and treaties
- Health harms data set using 17 categories
  - Intergenerational effects
  - Land and body persistence
  - Harms form low-level exposures
  - Hormone disruption
  - Felt effects
- Limits of app
  - Tension between sharing info and holding polluters responsible
  - 10 chemicals out of 76

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## 29 August 2019

Participants: Steve, Andrea

## Cluster history:

Steve's work with Data for Black Lives -

- Don't have a ton of good data contacts
- One of the founders is getting a PhD in math but still not close ties to people with data

- Pathway for getting academic/research/scientific data from research centers to activitists/community groups is unclear.
- Issues Steve has faced: what's the "real" data file to be sharing? What's the right model for data dissemination
  - Potential model to follow: the NWS/NOAA model.
- Use cases for other kinds of data and data flows are needed
- What can we get NOAA people to do?
- How can we foster and support community-driven data repositories? Data sharing efforts?

Cluster kicked off in January