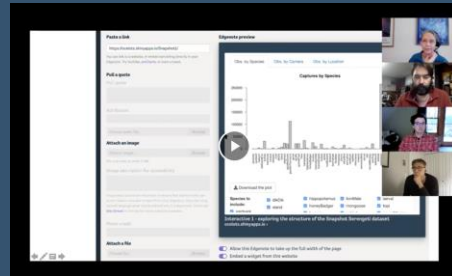
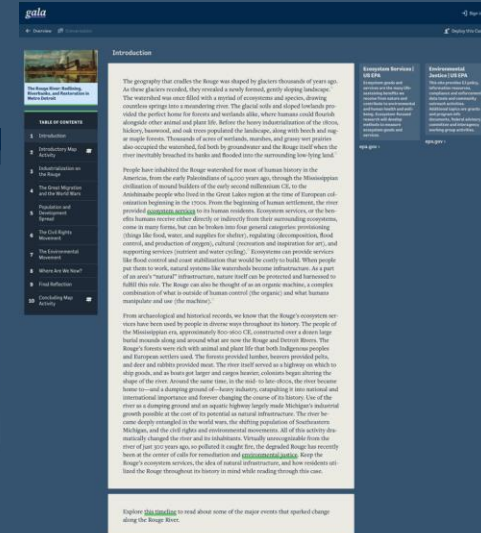
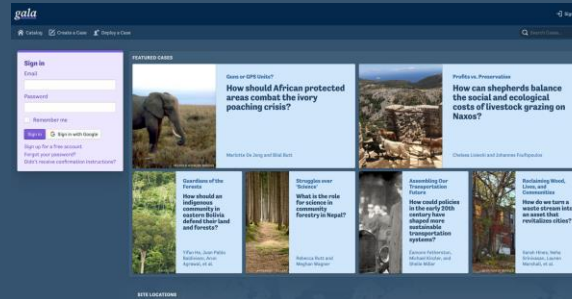


*gala*

*Open Tools for Sustainability Learning*

# About Gala

- Initiative concerned with case-based approaches to environment and sustainability learning.
- Online tool for authoring and teaching with media-rich case studies [learngala.com](http://learngala.com).
- Emphasis on openness, experimentation and collaboration.



# MBDH Learning Innovation Fellows

- *How can data be used to enrich case studies?*
- *How can data skills for environment and sustainability be taught in an applied, interdisciplinary context?*

# MBDH Learning Innovation Fellows

- Fellows matched with a case study/need and a faculty advisor.
- Facilitated peer-learning and feedback.
- Capture and share insights and resources.
- Opportunity build skills that compliment core technical skills .
  - version management and collaboration
  - sourcing data
  - project management and iterative development

# Fall 2021 Cohort

- Started second cohort this fall
- 5 students from across the midwest
- Undergrad-PhD students

From:



Studying:

- Civil Engineering
- Computer Science
- Biology and Data Science
- Atmospheric Science
- Environment and Sustainability

# Fall 2021 Cohort

## Case studies:

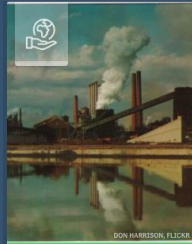


Untapped value of utility flushing programs  
**Improving distribution system flushing programs through accessible data science**



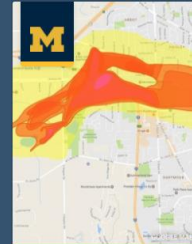
Assembling Our Transportation Future  
**How could policies in the early 20th century have shaped more sustainable transportation systems?**

[Éamonn Fetherston](#), [Michael Kinzler](#), and [Shelie Miller](#)



The Rouge River: Redlining, Riverbanks, and Restoration in Metro Detroit  
**What actions would be necessary to ensure a just distribution of the Rouge River's ecosystem services?**

[Theresa Benton](#) and [Esther Ladkau](#)



Dioxane Plume Pollution  
**Who should deal with the groundwater contamination in a university town?**

[Anna Prushinskaya](#), [Allen Burton](#), and [Rita Loch-Carusu](#)



Shared Cases  
Healing the scars: Tropical rainforest carbon cycling  
**Does it matter which tree species you plant?**

[Ann Russell](#)

## Projects using:

- Geospatial data
- Python
- System Modeling

## Faculty in:

- Environmental Justice
- Sustainable Systems
- Environmental Health
- Natural Resource Ecology
- Civil and Environmental Engineering

# Building on Experience

- NSF DChem Emerging Frontiers in Research and Innovation
- Public Interest Technology (PIT-UN Challenge)

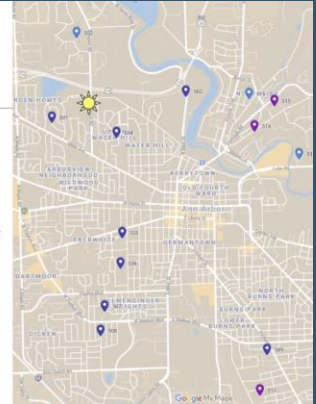


Untapped value of utility flushing programs

**Improving distribution system flushing programs through accessible data science**

## Sites & study details

- Weekly for 10 sites + bi-weekly for 6 sites
- 5-8 hours in-field each sampling day
- Flushing durations & intensities based on prior practices & new data



# Contact

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