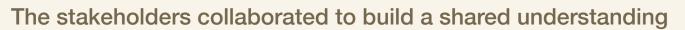
# SOUTHEAST MICHIGAN REPORT CARDS: FIRST VIRTUAL STAKEHOLDER WORKSHOP SUMMARY

The University of Maryland Center for Environmental Science Integration and Application Network has partnered with Council Fire, LLC, the Clinton River Watershed Council, Friends of the Detroit River, Huron River Watershed Council, River Raisin Watershed Council, and Friends of the Rouge to create socio-environmental report cards for five rivers in southeast Michigan. An overall report card that integrates the results into an assessment of the southeast Michigan region will also be produced. This

project is funded by the Erb Family Foundation. The kick-off workshop for this project occurred virtually, over three sessions, in November 2021. During the workshop, stakeholders discussed key features of each watershed and identified values and threats that all of these watersheds have in common. Stakeholders gained an understanding of what a report card is and how they are useful, what it means to understand a watershed's social, environmental, and economic health, and

built a shared understanding of their watersheds.

November 4, 10, and 16, 2021



During three sessions, stakeholders developed a conceptual understanding of their watersheds. When considering how the report card will be important for their goals, stakeholders identified that the report card will help:

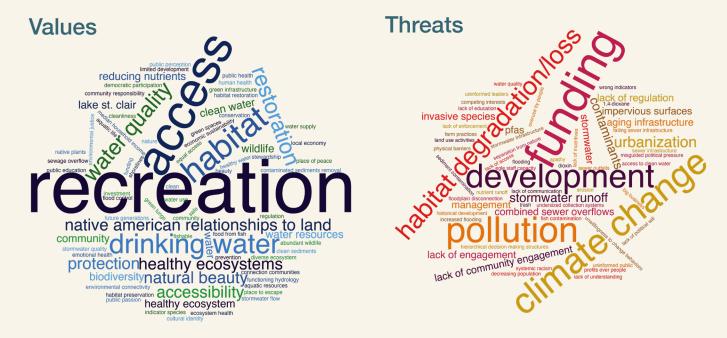
- 1. Prioritize efforts
- 2. Connect with stakeholders
- Understand causes of watershed degradation
- 4. Generate educational programming
- 5. Promote work that has been done and improvements in the watersheds
- 6. Evaluate trends in watershed health



- Evaluate area of concern (AOC) designations and improvements
- 8. Communicate each watershed's values
- 9. Communicate with decision makers, partners, funders, and the public

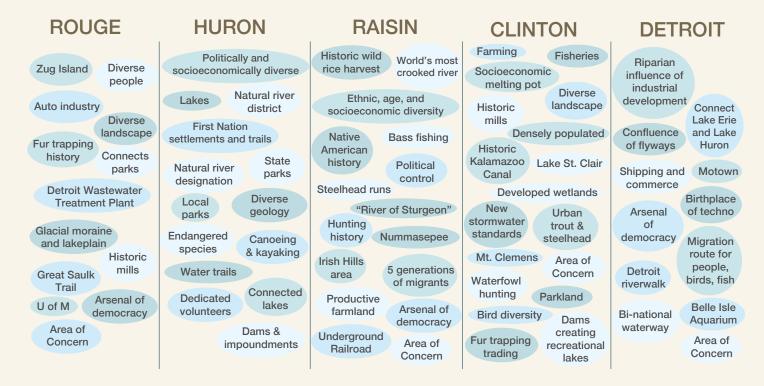
## Stakeholders identified important values and threats

Stakeholders identified key things that they valued about their watersheds (Values) and things that threaten those values (Threats). This was done by individual watershed and then as a whole for the southeast Michigan region. Values or threats that were suggested more times by different stakeholders are larger, helping to visualize how consensus is built around good indicators of watershed health.



# What makes up each river's cultural and geographic landscape?

Stakeholders considered important cultural and geographic features of their watersheds and communities. Identifying culturally relevant anecdotes is an important part of the report card process. These stories paint a picture of each watershed and it's community. The figure below shows what stakeholders came up with for each watershed, however this is in no way an exhaustive list.



# Potential categories and indicators were identified

To relate the identified values and threats to watershed condition, stakeholders brainstormed potential indicators and discussed how to categorize the indicators. With continued stakeholder input, the suitability and data availability of these proposed indicators will be investigated in the next stage of this project.



#### Community well-being

- Green economy
- Heat vulnerability index
- Social vulnerability index
- Community connectivity
- Income inequality
- Affordable housing



## Sense of place

- Park use
- · Acreage of parkland
- Boating and fishing registrations
- Sustainable recreation opportunities



#### Access and recreation

- Canoe and kayak use
- River accessibility
- Number of launch sites
- Recreational activity access



## Stewardship

- Volunteer engagement
- Diverse participation
- · Citizen science efforts
- Stewardship index
- Students engaged



## Tourism and economy

- Blue economy
- River-reliant businesses
- · Riverfront housing value





## Fisheries

- Fish population
- Fish diversity
- Invasive species
- Fishing access
- Fish consumption advisories



#### Healthy waterway

- Macroinvertebrates
- Harmful algal blooms
- Indicator species
- Temperature extremes
- · Coastal wetlands



### Water quality

- Nutrient loads
- Drinking water advisories
- CSO discharges and overflows
- Contaminants



#### Infrastructure/land use

- Rainfall intensity
- Development and sprawl
- Green infrastructure
- Stormwater projects
- Cost of flooding



## Air quality

- Air quality violations
- · Human health



Photos from the Rouge, Raisin, and Detroit River watersheds showing public access and recreation areas, both identified as important watershed values (photos by UMCES IAN/Dylan Taillie).

#### What's next?

The development and production of five watershed report cards and one overall southeast Michigan regional report card is estimated to take two years, with the release planned for June 2023. Following the initial stakeholder workshop, the next nine months entail data acquisition and indicator analysis. This includes small stakeholder working groups that provide guidance and expertise on the indicator thresholds and scoring. A draft report card with preliminary scores will be distributed to stakeholders for review and comment prior to a second workshop in mid-2022.



Thank you to our project partners and all stakeholders who participated in this series of workshops.

