



# COMMUNITY SCIENCE: MISSED OPPORTUNITIES OR COMMUNITY CONNECTIONS?

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# COMMUNITY SCIENCE

Research conducted by  
community members in a  
nonprofessional researcher role



## JCWC Programs

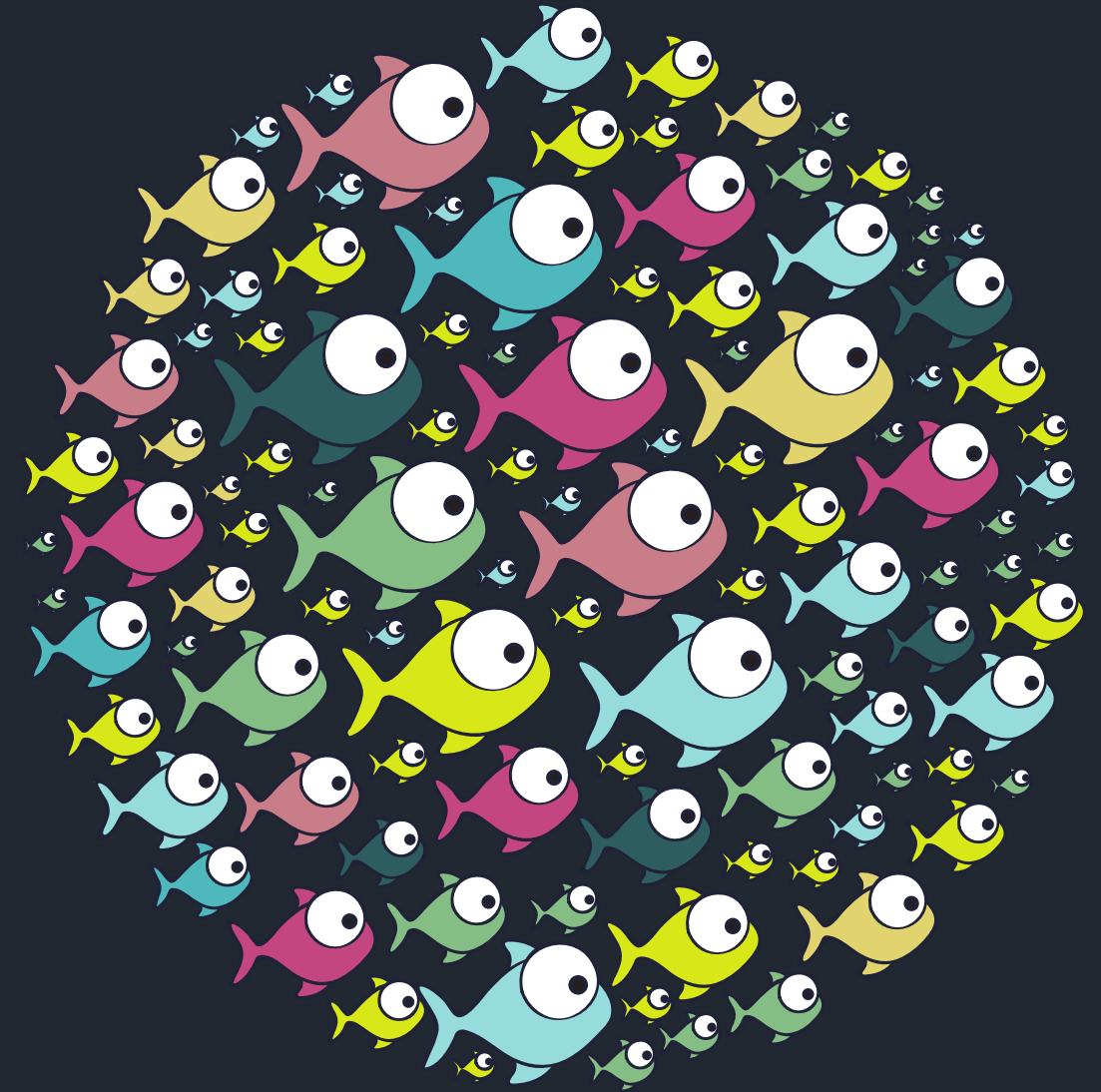
- Amphibian Egg Mass
- Prairie Nesting Birds at Powell Butte
- Dragonfly
- Beaver
- Salmon





GOAL:

Increase diversity in  
community science surveys







# BENEFITS

## Community

- Meaningful experience
- Greater understanding of natural and urban communities
- Broadened access to scientific research

## Science

- Useful data
- Expands data reach
- Shared data





# DRAWBACKS



## Community

- Insufficient community representation
- Inability to participate
- Unclear benefits to community



## Science

- Inconsistent data
- Incomplete data



Experiences



Growth





# PATHWAYS TO IMPACT

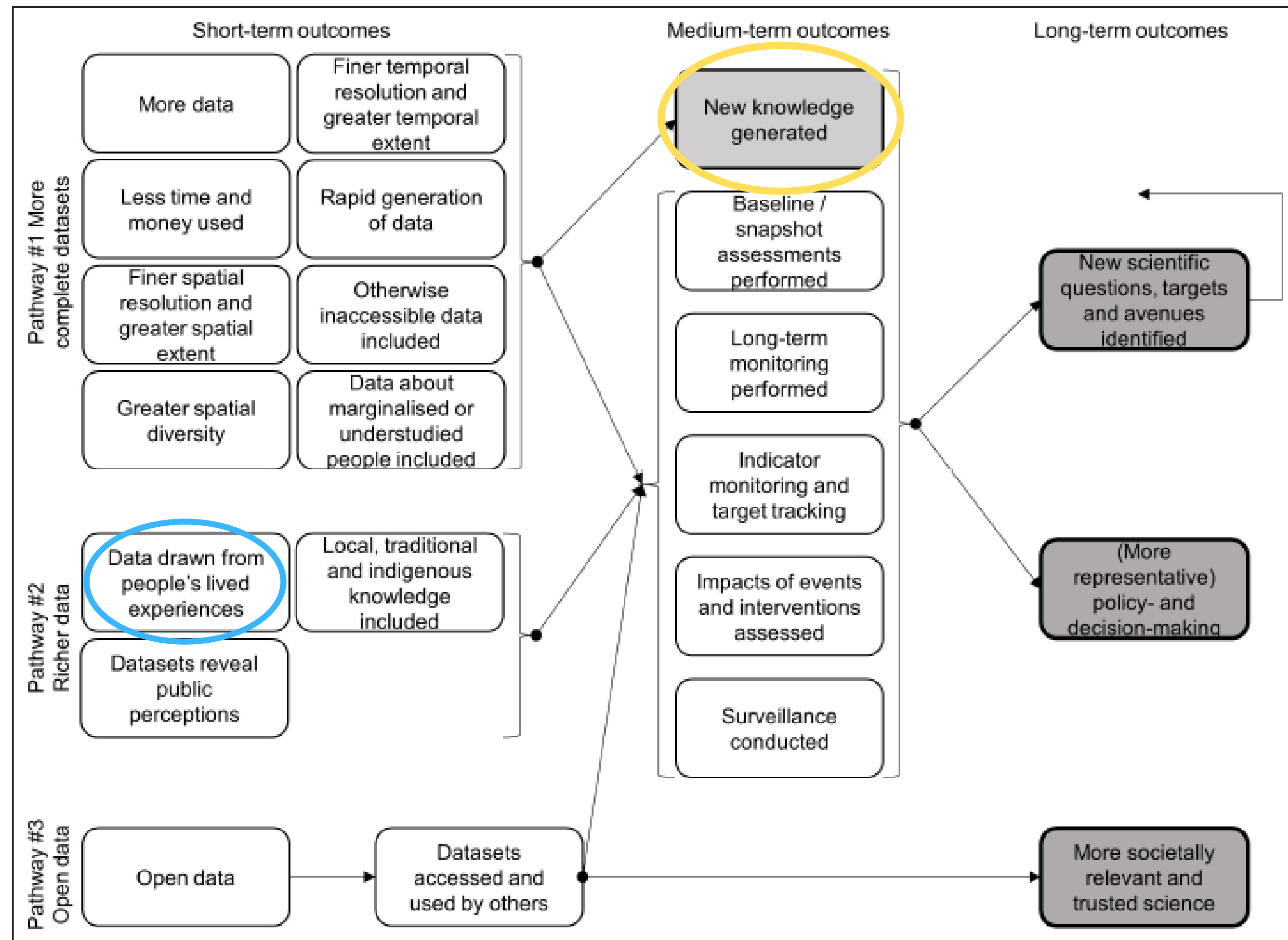
SHORT TERM

MEDIUM TERM

LONG TERM

Citizen Science: Pathways to Impact and why Participant Diversity Matters  
Pateman and West

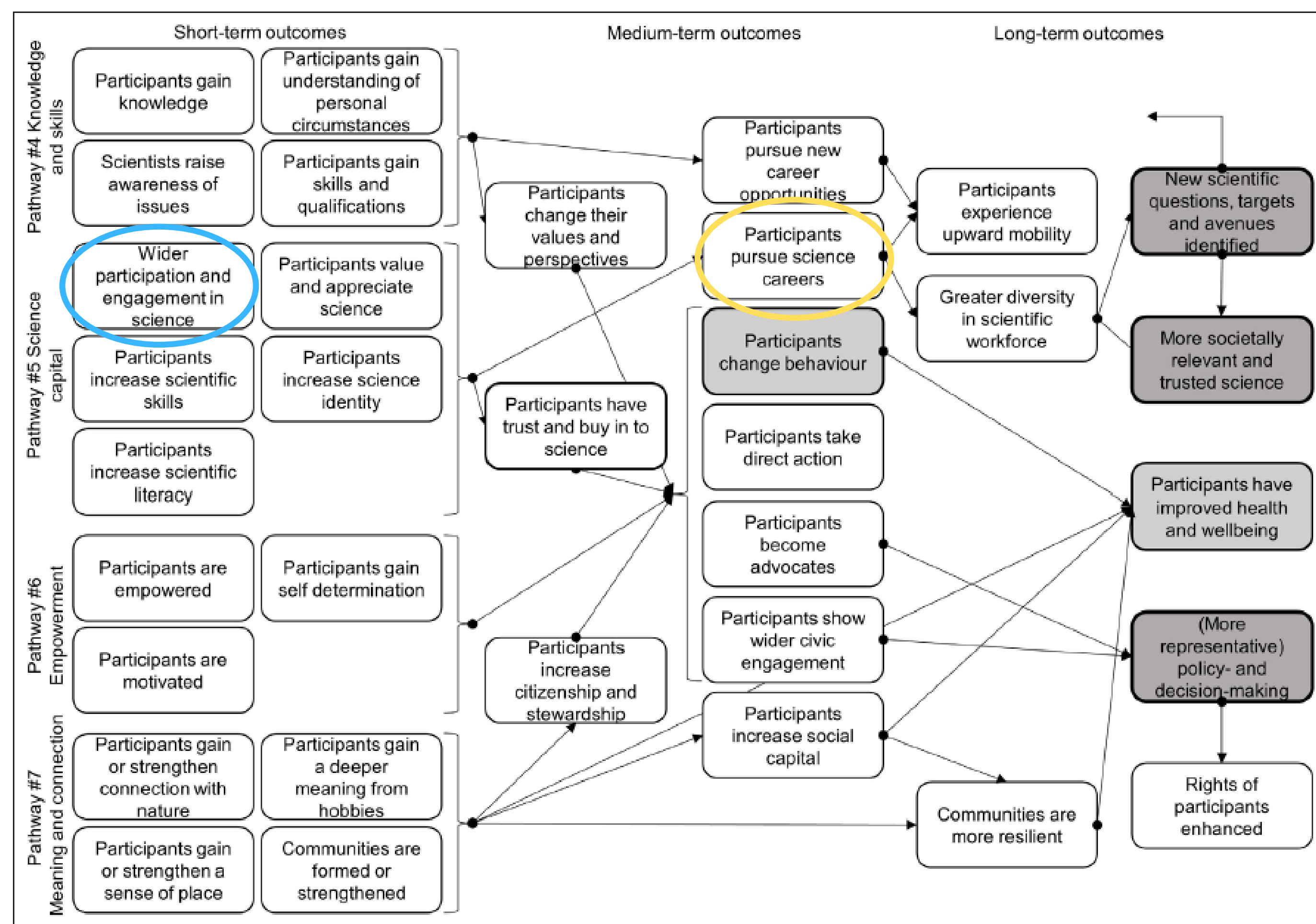
# Pathways: Data



**Figure 2** Data pathways. Category appears in two pathway themes (bold outline and light shading). Category appears in three pathway themes (heavy bold outline and heavy shading).



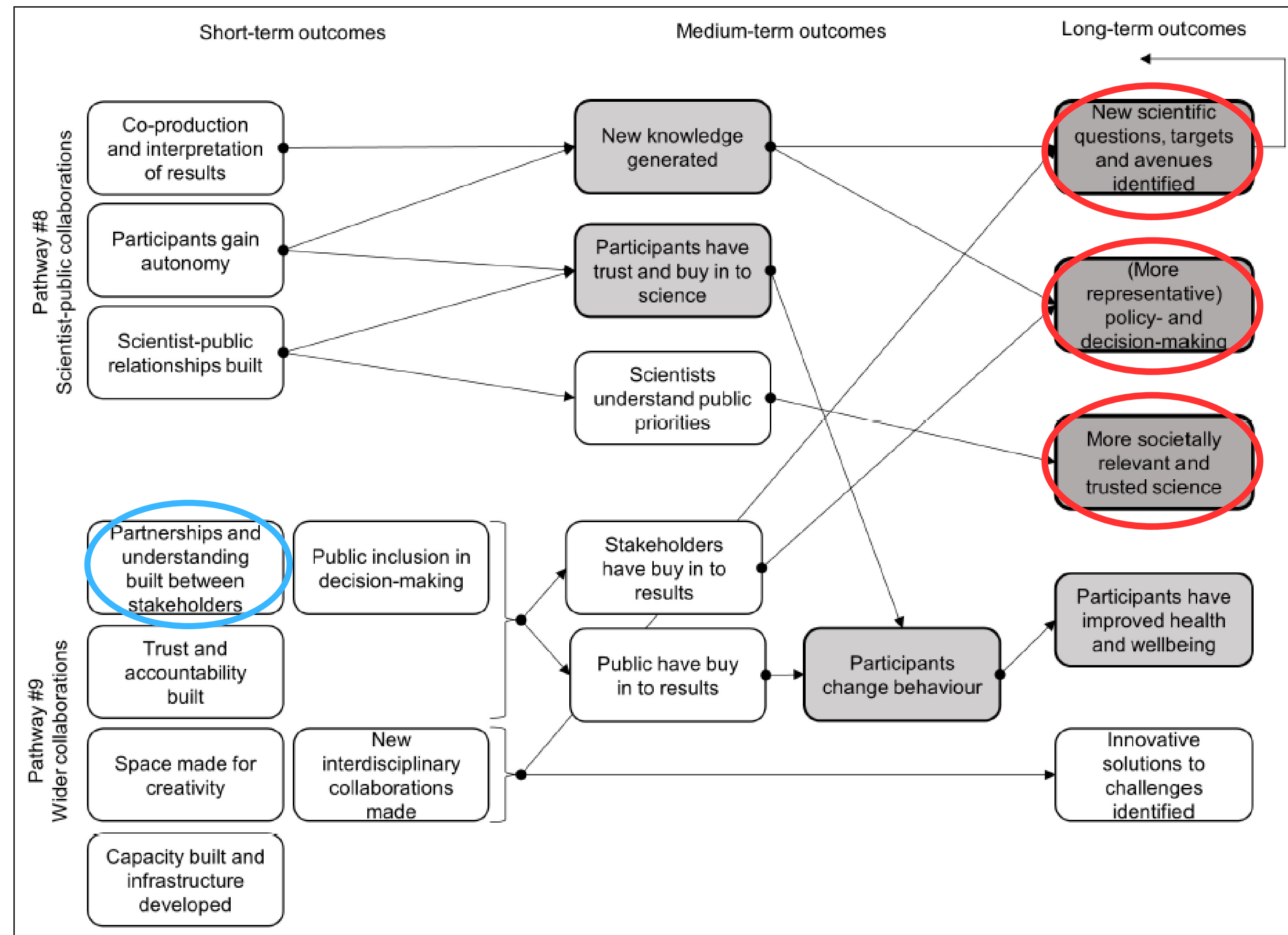
# Pathways: Participant Engagement



**Figure 3** Participant engagement pathways. Category appears in two pathway themes (bold outline and light shading). Category appears in three pathway themes (heavy bold outline and heavy shading).



# Pathways: Collaboration



**Figure 4** Collaboration pathways. Category appears in two pathway themes (*bold outline and light shading*). Category appears in three pathway themes (*heavy bold outline and heavy shading*).



# JCWC COMMUNITY SCIENCE

- **Representation**
- **Data**
- **Collaboration**
- **Health**





# WHAT'S NEXT

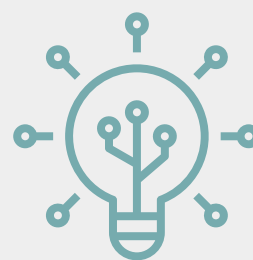


## GOAL:

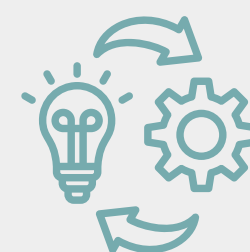
Increase diversity in community science surveys



**Survey**



**Collaborate**



**Implement**



# JOHNSON CREEK WATERSHED





# REFERENCES

- Pateman, RM and West, SE. 2023. Citizen Science: Pathways to Impact and why Participant Diversity Matters. *Citizen Science: Theory and Practice*, 8(1): 50, pp. 415. DOI: [https:// doi.org/10.5334/cstp.569](https://doi.org/10.5334/cstp.569)
- Najev, B., Diversity issues with inquiry-based citizen science. NCSE, August 1, 2020. <https://ncse.ngo/diversity-issues-within-inquiry-based-citizen-science>
- Hall, D.M., Avellandeda-Lopez, P.M., et al., Citizen silence: Missed opportunities in citizen science. *BioScience*, 2024, 74, pp 319 -321.
- Attributes & Outcomes of Community Science. Association of Science and Technology Centers: Community Science Initiative. <https://communityscience.astc.org/framework/attributes-outcomes/>