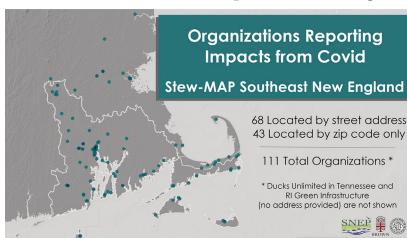
Self-reported effects of the Covid-19 pandemic on stewardship organizations and their activities in southeast New England, USA

Introduction

Numerous environmental stewardship groups shape the SNEP region through



- environmental management, protection, advocacy, education, and other activites.
- Civic environmental stewardship groups are key to modern environmental governance and socioecological outcomes^{1,2}, in part because these groups emerge and shift as communities cope with changing dynamics³.
- The Covid-19 pandemic represented a different type of crisis, hallmarked by social distancing, office closures, and similar responses.
- In this study, we analyze how the Covid-19 pandemic, and associated responses, affected environmental stewardship in the SNEP region.



graph. 1–22. **3.** Connolly, J. J., Svendsen, E. S., Fisher, D. R., and Campbell, L. K. (2013). Organizing urban ecosystem Civic Environmental Stewardship as a services through environmental stewardship governance Form of Governance in New York City. in New York City. Landsc. Urban Plann. 109, 76-84. 4. 2. Campbell, L. K., Svendsen, E., and Saldaña, J. (2015). The Coding Manual for Qualitative Researchers. Newcastle upon Tyne: Sage. Data Availabilthrough civic stewardship. Urban Geo- ity Statement | The raw data supporting the conclusions

Methods

Survey recruitment

Initial list: 390 groups

compiled from environmental coalition websites and a SNEP Network outreach list

between November 2020 to

April 2021.

orators and/or received Recruitment database: information or funding 718 total groups contacted

rounds

Civic environmental stewardship groups. These include: civic organizations like nonprofits (92), school (2), quasi-government agencies (4); other (7), No 501-c status (3), 501c4 (1), public-private (1), private business (1)

Inclusion criteria (n=111):



Analysis

Qualitative analysis⁴ of the open-ended question,

Thematic coding: categorize impacts/implications for stewardship

Causation coding: what groups attributed to be the causal mechanisms of impact

Process coding: how have groups changed stewardship in response to impacts

Quality assurance protocols applied.

of this article will be made available by the authors, without undue reservation. Ethics Statement | The studies involving human participants were reviewed and approved by University of Rhode Island IRB. Written informed consent for participation was not required for this study in accordance with the national legislation and the institutional requirements. **Author Disclaimer** | All opinions expressed in this paper are the author's and do not necessarily reflect the policies and views of US EPA, DOE, or ORAU/ORISE. Acknowledgements | We would like to thank Marisa Mazzotta, Kate Mulvaney, Ryan Furey, Martha Sheils, and Phaeng Southisombath for reviewing and commenting on earlier drafts of this manuscript.





Participants list additional organizations; List present and future collab-

Repeat for 2



mental governance:

collabo-

rators

Internal Budget External

Capacity

Results

20

15

groups

of

Number

■ Negative impacts

Neutral impacts

Positive impacts

Reported agency

to respond/adapt

- Results show negative impacts on volunteer work.
- Groups adapted workflows to leverage internal group strengths and work from home, sometimes reducing part-time and temporary opportunities.

Engagement and nature contact following disturbance:

Programs

Staff

collabo-

rators

- Shifted activities online and often re-oriented around educational efforts, reducing other kinds of stewardship activities.
- These changes raise concern over public space access, and moves the conversation toward an urgent need for nature-contact in public health crisis contexts.

Quote on causation, Social/physical distancing: "We have been able to conduct most of our planned research and projects with safe so-

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Carlson³, H. Curt Spalding³, Ben Myers³, Shreya Kaipa¹

Volunteers

Events

Engagement

Visitation



Direct stewardship and environmental outcomes:

Policy Research, Cleanups,

monitor-

ing etc.

Direct Stewardship

- Results show overall practice was impacted, as well as decreases in research such as water testing, environmental cleanups, and urban tree maintenance.
- May leave gaps in civic science-generated data.

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"How is covid-19 affecting your organization?"