

Progress Report (1 March – 31 August 2023)

Award Number: NA22OAR4310231

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Program Office: OAR Climate Program Office (CPO)

Award Period: 09/01/2022 - 08/31/2024

Project Title: Collaborating Towards Increased Climate Resilience and Adaptation for Mobile Home Park Communities in Maine, New Hampshire, and Vermont.

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Accomplishments

24. What were the major goals and objectives of this project?

The major goals of this project are:

1) Engage with mobile home park communities to understand their vulnerability to climate change; 2) Improve regional coordination in order to anticipate and respond to risks faced by mobile home park communities across ME, NH and VT; and 3) Disseminate the findings from this project.

Key objectives associated with these goals are to:

a) assess each state's data needs for responding climate change, b) assess current documentation and risk assessment for mobile home parks, c) identify agencies who engage with mobile home park communities and who can potentially help mitigate climate change risks, d) develop or expand state databases of mobile home parks, including location maps and available demographic, business or ecological data, e) compile existing research on the vulnerabilities of mobile home parks by working with park residents and supporting agencies, f) convene stakeholder meetings, g) develop a white paper outlining results of this project and strategies for furthering the work.

25. What was accomplished under these goals?

At this project midpoint, we have made connections with stakeholders, laid the groundwork for hosting interagency stakeholder meetings in each of the three states, contacted communities and made initial plans for listening sessions to be held in each state. In Maine, we have nearly finished developing a GIS database of manufactured home park communities that will be made available for climate resiliency and emergency management mapping. A similar database of MHC in New Hampshire and community flood risk has also been compiled. Vermont has obtained updated MHC community data with updated flood risk status.

Last fall, the Vermont team shared the project with the Vermont Affordable Housing Coalition's MHC Sub-Committee and the MHC Funders' Roundtable groups. We also connected directly with partners at Vermont Housing Finance Agency, CVOEO Mobile Home Program, and the USDA Rural Development VT/NH. The Vermont P.I. also participated in the Vermont Manufactured Housing Symposium organized by the USDA Rural Development VT/NH Office, which brought together an invited list of 30 key stakeholders in July 2023.

Vermont team members organized the first interagency stakeholder meeting, entitled “*Building Resilience to Hazards in a Climate Changing World with Manufactured Housing Communities*”, which was held virtually 29 March. This meeting drew about 50 unique participants from a host of organizations, including: non-profit housing organizations, state agencies (Dept. of Health, Environmental Conservation, Emergency Management, Housing & Community Development, Agency of Transportation), federal partners (USDA Rural Development for VT/NH; Senator Sanders staff), regional planning commissions, and leader from several resident-owned communities.

Team members hosted interagency stakeholder meetings in Maine and New Hampshire. The Maine stakeholder meeting, entitled “*Building Resilience to Climate Hazards for Manufactured Housing Communities in Maine*” was held virtually 5 June with 18 participants in attendance. Participants represented the Maine Manufactured Housing Board, Efficiency Maine, Eastern Maine Development Corporation, Maine Affordable Housing Coalition, Maine Climate Council, Maine Emergency Management Agency, Sun Communities, and USDA Rural Development Maine. New Hampshire’s similarly titled stakeholder meeting was held virtually 13 June with 43 participants in attendance. Participants represented non-profit housing organizations (ROC-NH), privately-owned communities (Sun Communities, Inc.), federal partners (FEMA), state agencies (NH Dept. of Homeland Security and Emergency Management) and Regional Planning Commissions.

26. What opportunities for training and professional development has the project provided?

N/A

27. How were the results disseminated to communities of interest?

Results will be disseminated to communities of interest during the project 1-year no-cost extension.

28. What do you plan to do during the next reporting period to accomplish the goals and objectives?

New Hampshire, Maine, and Vermont are organizing listening sessions with manufactured home park communities to be held during the project 1-year no-cost extension (either November

2023 or early 2023) to identify climate vulnerabilities and concerns. Maine is working with Sun Communities, Inc. to organize a listening session with residents of their properties in the Augusta area, and is seeking an appropriate location to arrange a listening session for multiple cooperatively-owned manufactured home communities.

Vermont is working with a network of partners, namely the CVOEO Mobile Home Program and the Vermont Affordable Housing Coalition's MHC Subcommittee to identify park communities for community engagement. One session will be held with a non-profit owned community and a resident-owned community.

The entire project team is planning a virtual tri-state stakeholder meeting for either December 2023 or spring 2024 to share learning from the project as a whole and facilitate building connections across the Northern New England region.

Products

29. Publications, conference papers, and presentations

Three presentations at the Vermont stakeholder meeting (Hamshaw, Baker, Dupigny-Giroux)

Three presentations at the Maine stakeholder meeting (Hamshaw/Baker, Birkel, Johnson)

Two presentations at the New Hampshire stakeholder meeting (Stampone, Hamshaw/Baker)

30. Presentations, Technologies or techniques

N/A

31. Inventions, patent applications, and/or licenses

N/A

32. Other Products

A GIS database of manufactured home park communities in Maine is near completion for climate resiliency and emergency management planning. The database was acquired from the Maine Housing Board, and each site (~300) was geolocated and entered into GIS by an undergraduate student supported by this project.

A GIS database of manufactured home communities in New Hampshire has been completed for climate resiliency and emergency management planning. The database was acquired from publically available online ROC-NH and real estate listing. Each site (~300) was geolocated and entered into Google Earth by an undergraduate student supported by this project. In Google Earth, the MHC locations were mapped onto the FEMA floodplain layer to determine flood risk.

Participants & Other Collaborating Organizations

33. What individuals have worked on this project?

Daniel Baker (UVM), Kelly Hamshaw (UVM), Lesley-Ann Dupigny-Giroux (UVM), Mary Stampone (UNH), Sean Birkel (UM), Maxwell Valentine (UM), Eileen Johnson (Bowdoin College), Harry Cooper (Bowdoin College), Brendan Moody (UNH), Miranda Degreenia (UVM)

34. Has there been a change in the active other support of the PD/PI(s) or senior/key personnel since the last reporting period?

No

35. What other organizations have been involved as partners?

Maine Emergency Management Agency; Maine Manufactured Housing Board; Efficiency Maine; Maine Climate Council; Sun Communities, Inc., Vermont Energy Investment Corporation, USDA Rural Development VT/NH, Vermont Housing and Conservation Board, Champlain Valley Office of Economic Opportunity Mobile Home Program, Addison County Community Trust, Twin Pines Housing Trust, Champlain Housing Trust, Lamoille Housing Trust, Shires Housing Partnership, Rural Edge, Vermont State Housing Authority, Downstreet Housing and Community Development, Randolph Area Community Development Corp, Housing Trust of Rutland County, Windham and Windsor Housing Trust, Agency of Commerce and Community Development - Housing Division, Agency of Public Safety - Vermont Emergency Management Hazard Mitigation, Agency of Natural Resources - Dept. of Environmental Conservation, Cooperative Development Institute, Common Land Solutions, ROC-NH

36. Have other collaborators or contacts been involved?

Dr. Eileen Johnson, Bowdoin College; Samuel Roy, Maine Emergency Management Agency; Nathan Robbins, Maine Department of Environmental Protection; Melissa Smith, Sun Communities, Inc. Champlain Valley Office of Economic Opportunity's Mobile Home Program; Vermont Housing Finance Agency, Mikaela Hemming, Flood Ready Neighborhoods Project, UNH Cooperative Extension; Lynn Vaccaro, Great Bay National Estuarine Research Reserve; Jeannie Oliver, ROC-NH

Impact

37. What was the impact on the development of the principal discipline(s) of the project?

To be reported at project conclusion.

38. What was the impact on other disciplines?

To be reported at project conclusion.

39. What was the impact on the development of human resources?

To be reported at project conclusion.

40. What was the impact on teaching and educational experiences?

This project has supported a senior undergraduate student who has developed a GIS database of mobile home park communities in Maine that can be utilized by state and other agencies for climate resiliency and emergency management purposes (e.g., pairing the site data with flood and other climate risk maps). Vermont team member Kelly Hamshaw has shared the project with her undergraduate housing seminar (17 students) and mentored a Simon Family Public Research Fellow during Summer 2023 who participated in the virtual meetings.

41. What was the impact on physical, institutional, and information resources that form infrastructure?

To be reported at project conclusion.

42. What was the impact on technology transfer?

To be reported at project conclusion.

43. What was the impact on society beyond science and technology?

To be reported at project conclusion.

44. What percentage of the award's budget was spent in foreign country(ies)?

0%

Changes/Problems

45. Changes in approach and reasons for change

We had originally proposed to hold community meetings first, but decided to instead host interagency meetings within each state first to both share information about the project, promote collaboration and assess resources available in different agencies. This change in timeline will also enable us to take advantage of weather that is more favorable for visiting communities and likely enhance resident participation when outdoor gatherings are more feasible.

46. Actual or anticipated problems or delays and actions or plans to resolve them

Severe flooding events in June 2023 impacting Vermont MHCs necessitated postponing community activities until the fall due to response and recovery efforts.

47. Changes that had a significant impact on expenditures

None

48. Significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents

None

Project Outcomes

50. What were the outcomes of the award?

At this project midpoint, we have laid the groundwork for hosting interagency stakeholder meetings in each of the three states (Vermont hosted first meeting in March), have contacted communities and made initial plans for listening sessions to be held in each state, and have nearly finished a GIS database of manufactured home park communities in Maine. We are planning a tri-state stakeholder meeting for mid to late summer. There is great enthusiasm for shared learning and collaboration across the three Northern New England states. A no-cost extension was pursued and granted to provide an additional time for developing relationships with communities. The new project term date is 31 August 2024.