

Preparing for a Future in a Changing Climate

Information Needs and Preferred Outreach Tools for Seacoast Communities of New Hampshire

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Introduction

Earth's climate constantly changes over long periods of time. However, **human activity** such as the **burning of fossil fuels** has **accelerated** the rate at which the **climate changes**. This process is causing major **environmental, social, and economical** impacts to communities globally. With **1/3 of New Hampshire's population living along the Seacoast** the need to prepare for a future in a changing climate is becoming increasingly important.

How is Seacoast New Hampshire affected by climate change?

- Increase in average temperature
- Increase in winter temperature
- Increase in precipitation
- Increase in extreme precipitation events (more than 1 inch of rain in 24 hours and more than 4 inches of rain in 48 hours)
- Earlier ice out dates on inland lakes
- Increase in surface temperature for the Gulf of Maine

How do these impacts affect Seacoast residents?

- Threats to wildlife, agriculture, recreational industry, and commercial fishing
- Flooding
- Health risks from high temperatures
- Contamination of drinking water
- Damage to infrastructure

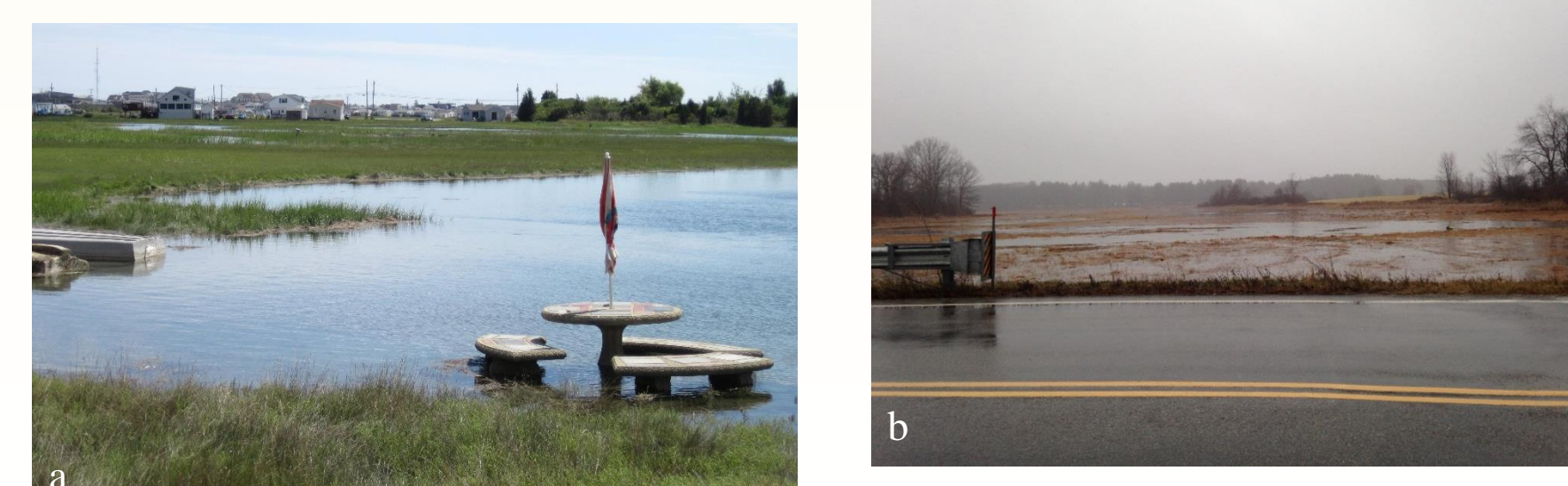
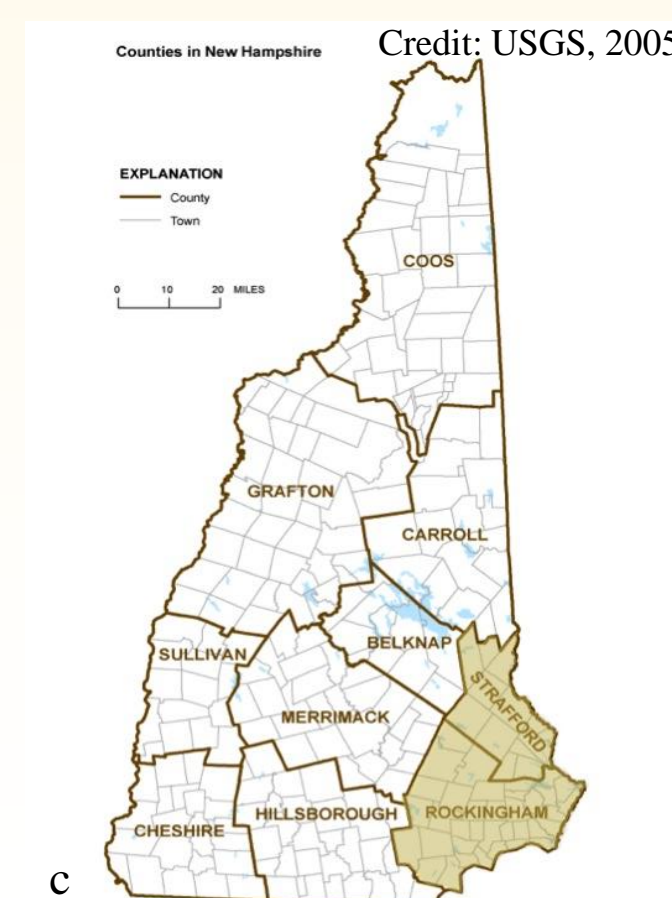
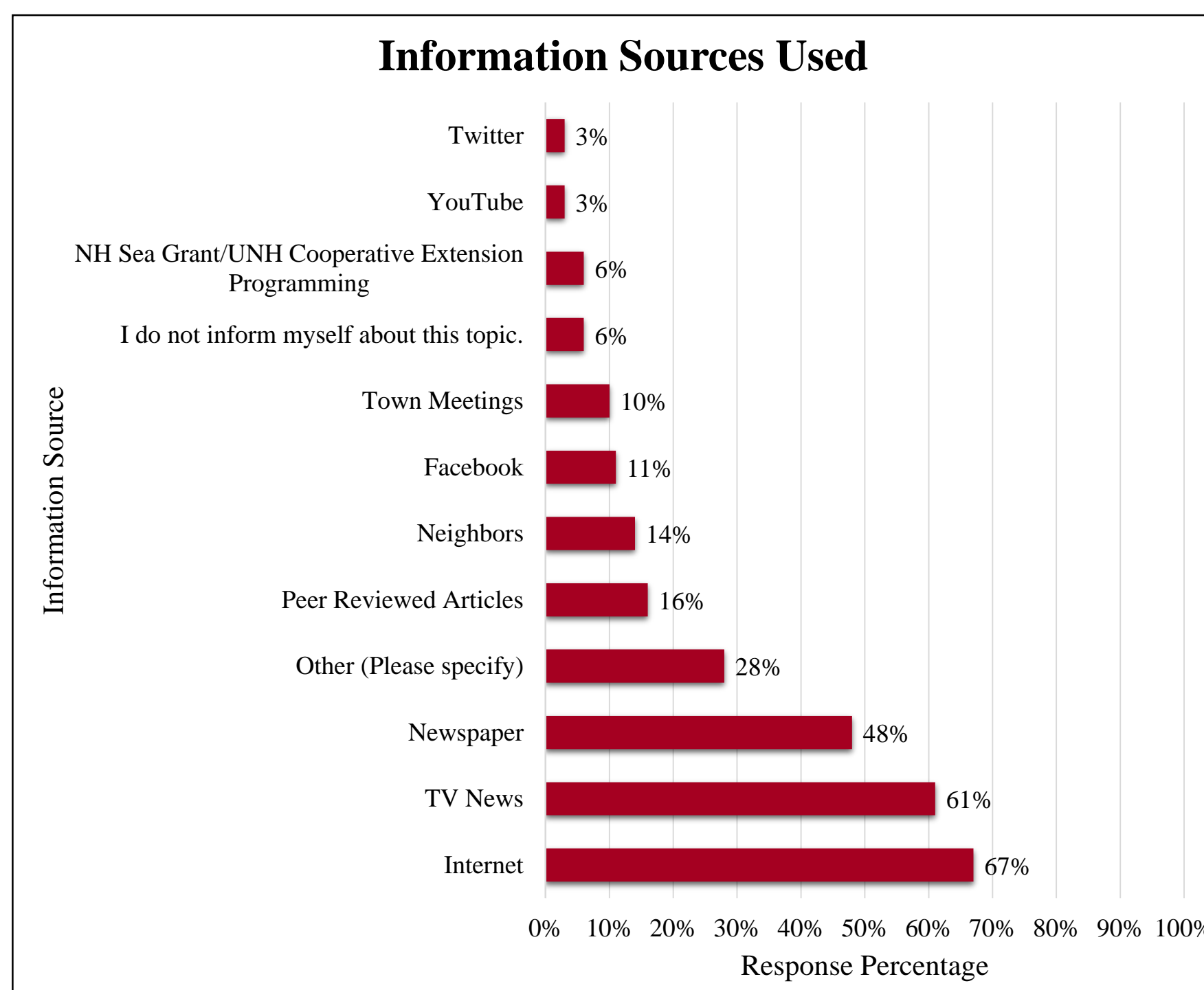


Figure 1. (a) sea level rise in Hampton, NH, (b) extreme rain event in conjunction with high tide, Stratham, NH, (c) map of Seacoast New Hampshire Counties, Rockingham and Strafford (shown in light tan).

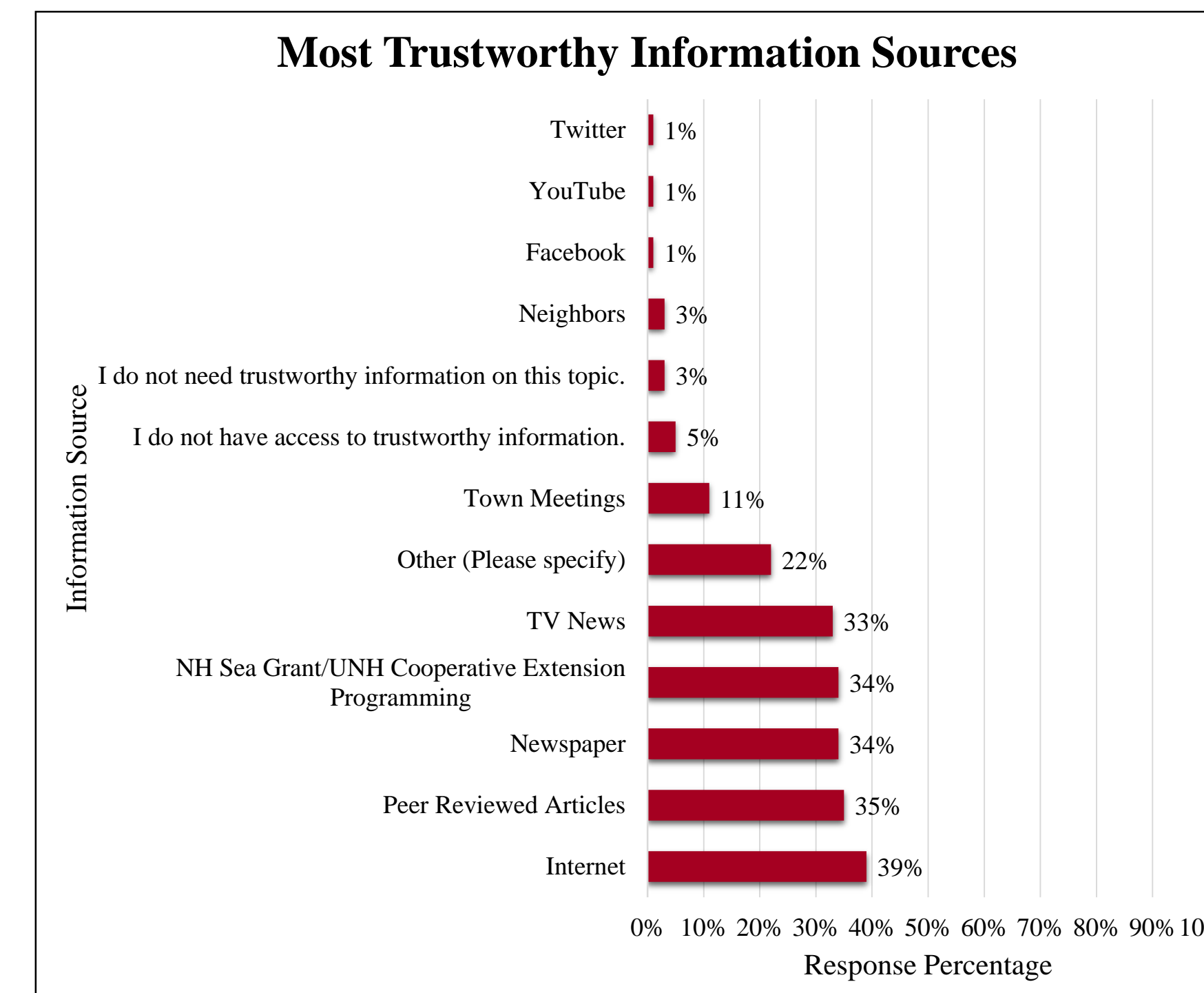
Methods

- Institutional Review Board Approval
- Literature review
- Developed survey in Qualtrics
 - Multi-choice and open-ended questions
 - Topics addressed
 - Most **trusted information** sources
 - Preferred **methods for receiving information**
 - **Information needs**
- Called list of possible respondents (1,005 people) to get email addresses
- Used Qualtrics to make graphs for multi-choice questions
- Used **descriptive coding** to categorize open-ended responses
- Survey received **176** of a possible **287** responses (**61% response rate**) from Seacoast residents (2 mail surveys, 28 phone surveys, 146 online surveys)

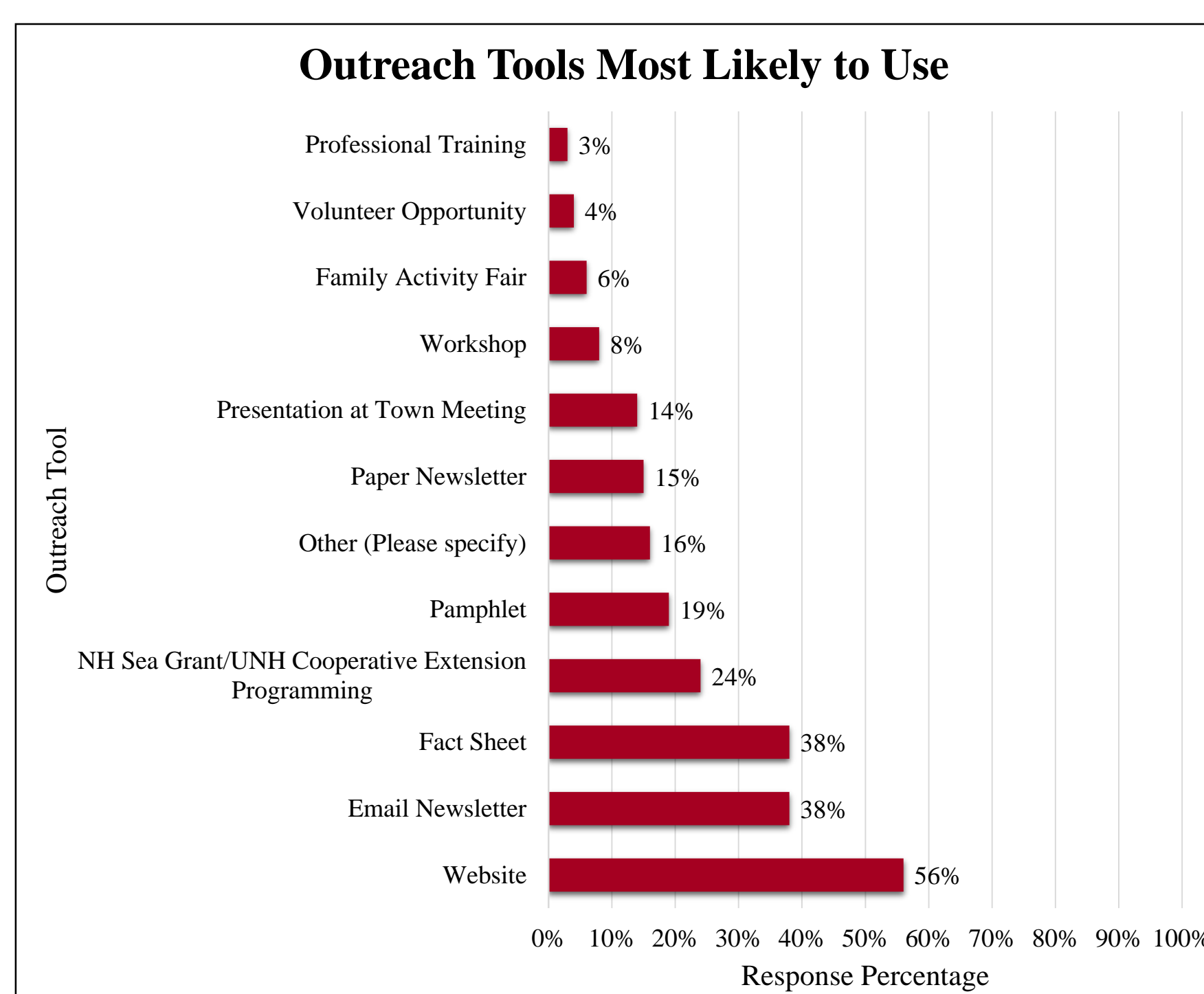
Key Findings



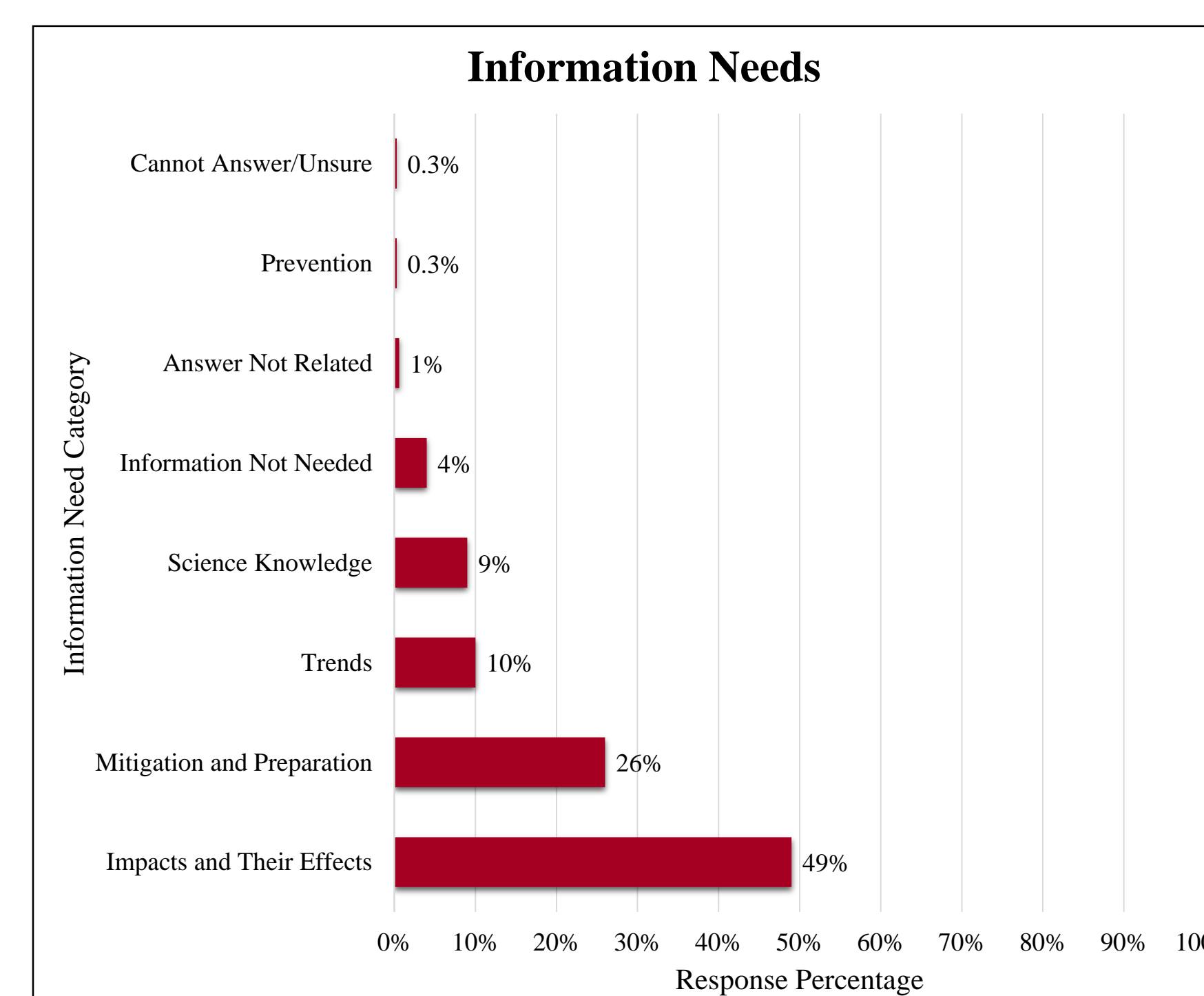
The Internet is the most used source for gathering information on the impacts of climate change, but it is closely followed by TV news.



The Internet is the most trusted source for gathering information, but is closely followed by peer reviewed articles, the newspaper, NH Sea Grant/UNH Cooperative Extension Programming, and TV news.



A website is the outreach tool most likely to be used. An email newsletter and fact sheet are also outreach tools likely to be used.



The impacts of climate change and impact effects are the most needed information by residents. Information is also needed on mitigation and preparation strategies.

*Results should not be generalized to New Hampshire Seacoast population.



Recommendations

Information on...

- Impacts of climate change
- Effects of climate change impacts
- How to prepare for impacts
- How to mitigate effects
- Differences between weather and climate change

Outreach Tools

- Make education available in online format
- Incorporate information into current email newsletters
- Develop a website that can be updated often
- Develop a series of fact sheets

Ongoing Work

- Needs assessment report developed
- Create adult education and outreach programming based on needs assessment report
- Use adult program as pilot and eventually create a school based program about climate change impacts

Acknowledgements

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