

Climate Resilience Workshop

Town of New Gloucester

April 17, 2025

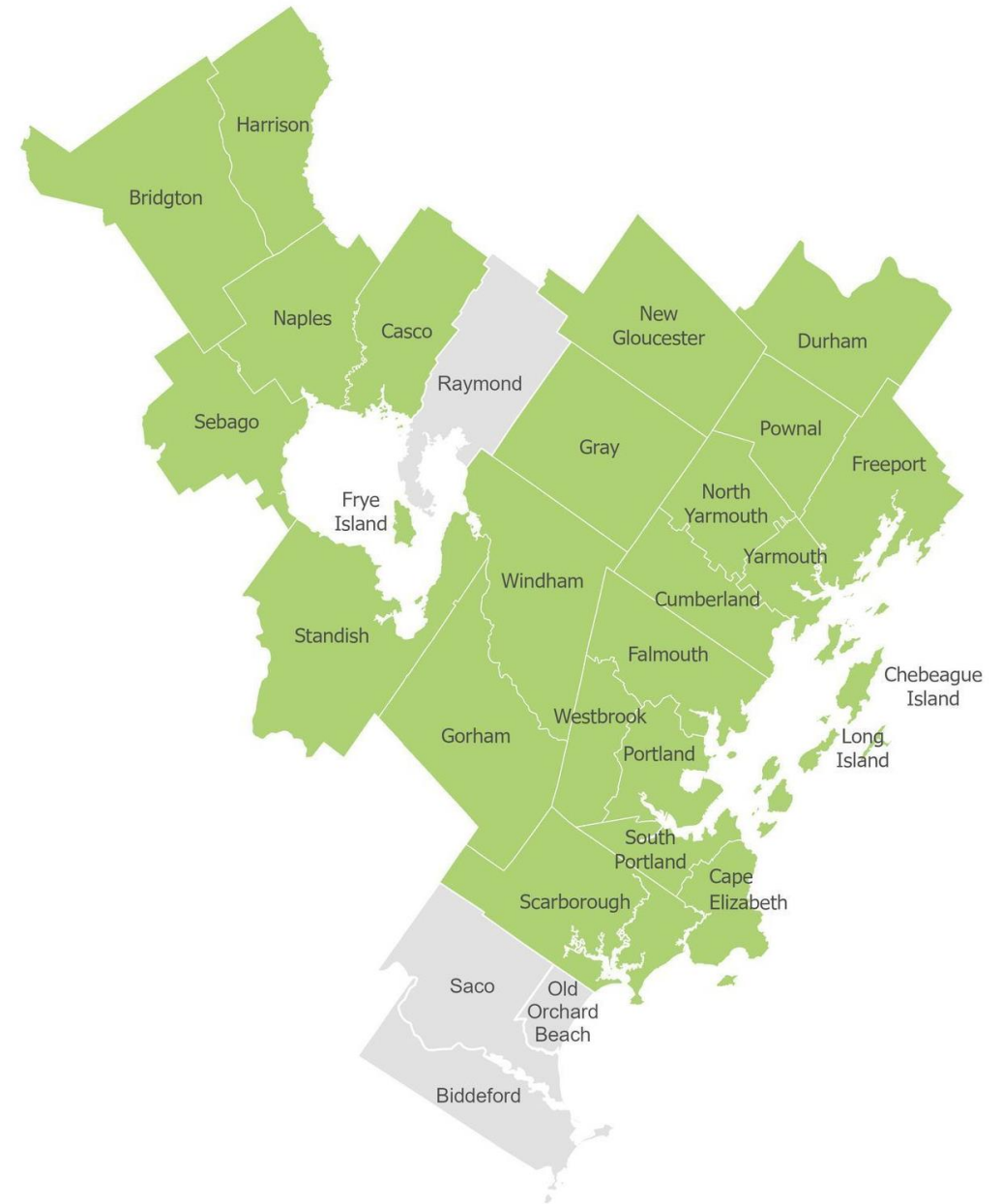
Agenda

- Climate Change in Maine
- About the Project
- New Gloucester Impacts
- Next Steps
- Open Q&A
- Breakout Station Activities

GPCOG

The Greater Portland Council of Governments (GPCOG):

- Is a regional agency sustained by 25 dues-paying cities and towns.
- Helps cities and towns do together what they can't do alone.
- Works to make our member communities prosperous and economically sustainable.
- Supports work on transportation, planning, economic development, sustainability, broadband, municipal operations, and more!



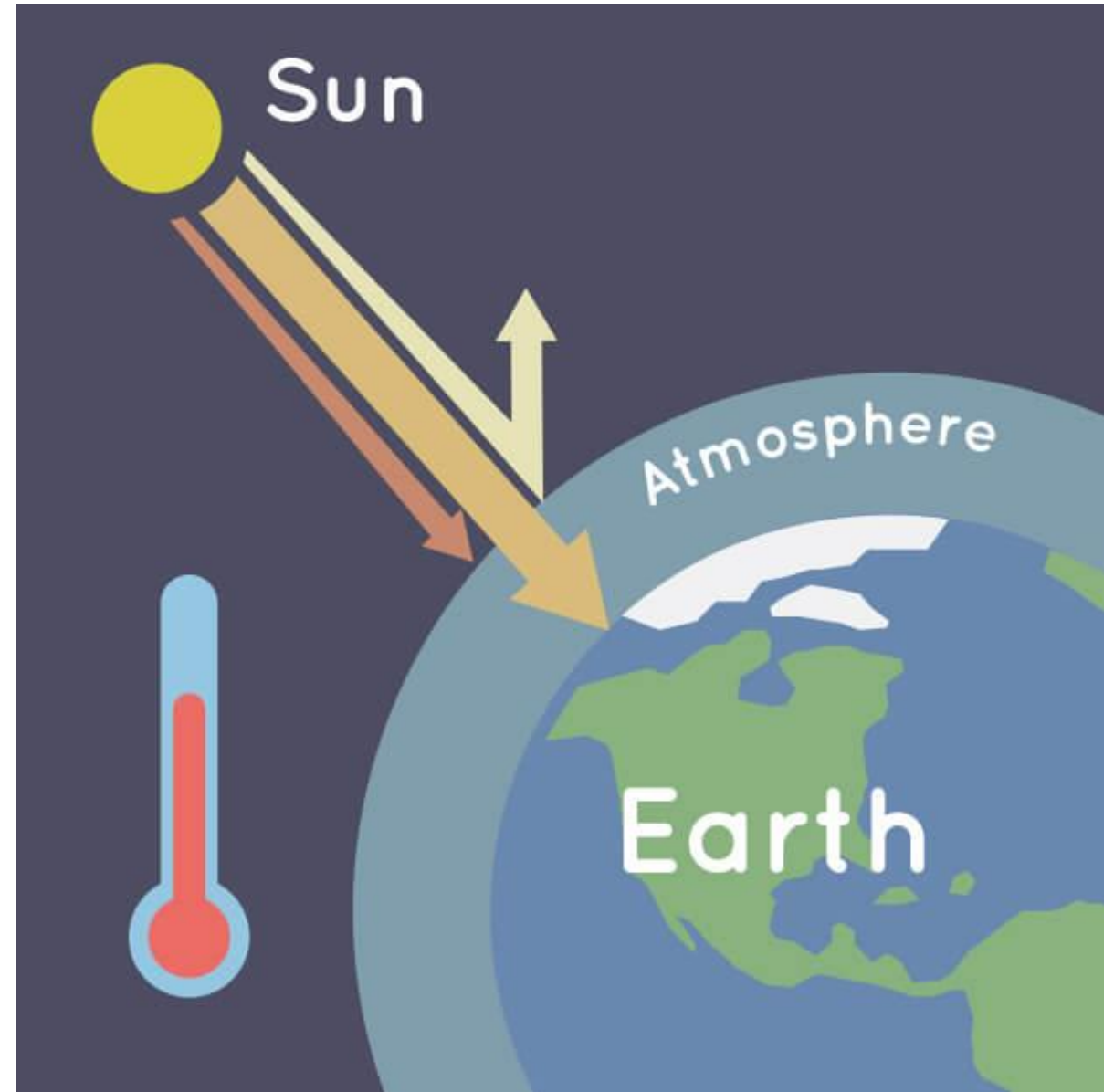
**What are we
experiencing in
Maine?**



Why is our Climate Changing?

- The 'Greenhouse Effect' makes Earth livable!
- Burning fossil fuels adds heat-trapping gases like a blanket
- Altering our temperature and precipitation patterns

Big takeaway: Human activity is causing our climate to change.





Warmer Temperatures

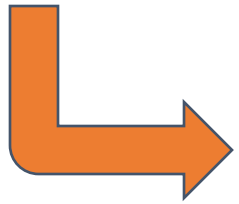
What we've seen:

Over 3°F increase

annual temperature

2-week increase

in the growing season



Road ahead:

2°-4°F increase

annual temperature

Up to 2 week shorter

Winter season





More Rain, Less Snow

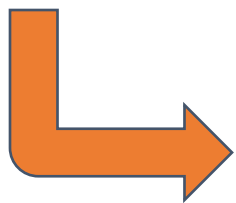
What we've seen:

6-inch increase

annual precipitation

20% decrease

snowfall



Road ahead:

5% increase

total precipitation

50% decrease

in snowpack



**Experiencing more intense
precipitation events**



Drought

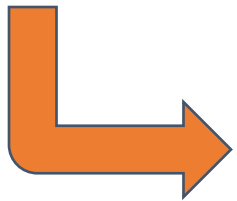
What we've seen:

3 extreme droughts

since 2000

30% increase

wildfires



Road ahead:

**Increased risk of
droughts and
wildfires**





Marine Conditions

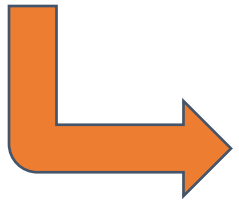
What we've seen:

7.5-inch increase

sea level

2.5°F increase

Casco Bay water temperatures



Road ahead:

**>1 foot of sea level
rise** by 2050

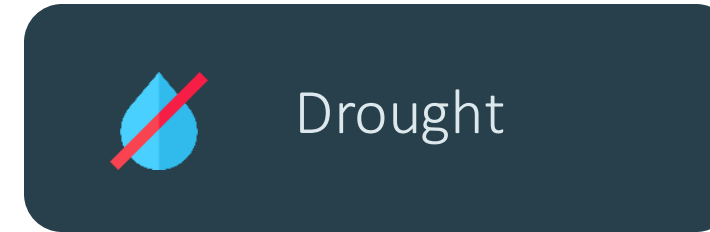
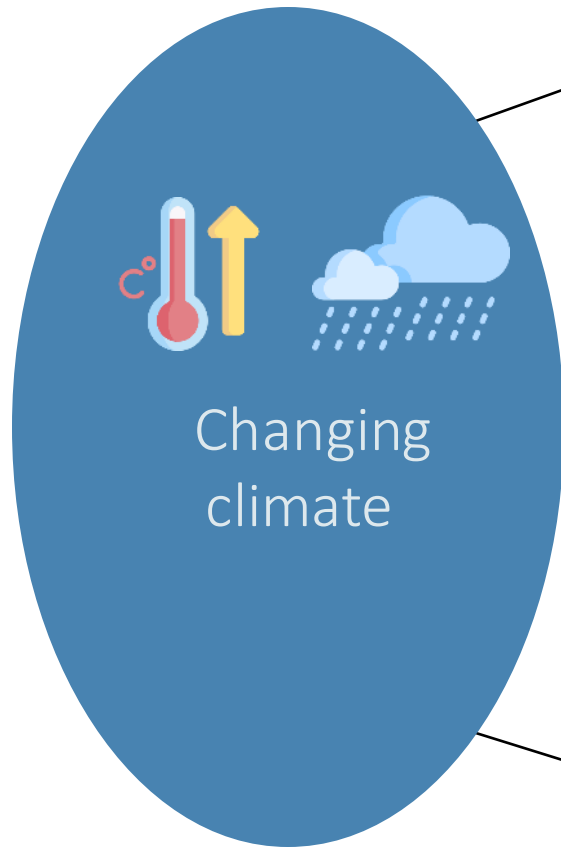
**Warmer and more acidic
waters**



CHANGING CLIMATE
CONDITIONS

LEAD TO HAZARDS

WHICH CREATE THE
FOLLOWING IMPACTS:



- Decreased water quality
- Stress on wildlife
- Ecosystem disruption
- Agriculture damage



- Damage to homes, businesses, critical facilities, and infrastructure
- Loss of access
- Power outages
- Property damage
- Increased energy demand



- Heat-related illnesses
- Vector-borne diseases
- Worsening air quality
- Strain on community resources
- Increased social inequity



- Changing tourism seasons
- Changes to tax base
- Increasing costs
- Supply chain Disruptions
- Natural resource job shifts

About the Project



Overview

2023 – enrolled in the **Community Resilience Partnership**

2024 – Received grant to work with GPCOG to complete the **New Gloucester Community Risk Assessment and Resilience Engagement Project**



Climate Vulnerability Assessment



- WHAT**
- Identify climate hazards,
 - Analyze risks to community resources
 - Recommend priority adaptation strategies
- WHY**
- Supports community goals,
 - Protects economic development,
 - Reduces vulnerabilities
 - Creates a healthier, sustainable community
- WHO**
- Environmental Resources Committee
 - Town Staff
 - Community Partners
 - Community input
 - GPCOG

Community Engagement

- Project website
- Community Survey
- Two workshops
- Staff and stakeholder interviews
- Educational events
- Outreach materials
- Community Engagement Plan



Project Timeline

Winter 2024	 Data Collection
Spring 2025	 1 st Workshop & Survey
Spring-Summer 2025	 Mapping & Analysis
Summer-Fall 2025	 Report Writing & Priority Setting
Fall 2025	 2 nd Workshop
Winter 2025	 Community Engagement

What are we analyzing?



Social
Vulnerability



Community
Assets



Natural
Resources



Critical
Infrastructure

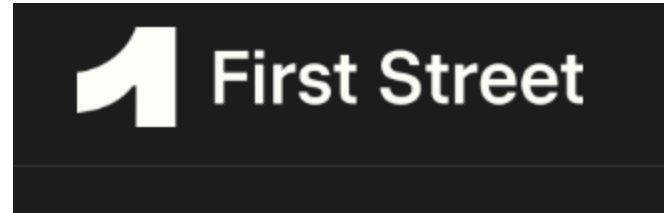
Where do we get our data?

Regional, state, national

- First Street Foundation
- Maine Geological Survey
- Maine DEP
- Beginning with Habitat
- Maine Climate Change Institute
- EPA

Municipal and local

- Available GIS layers from municipality
- Local stakeholders and conservation groups
- Municipal Staff surveys
- Engagement with community members



What are we seeing in New Gloucester?



Social Vulnerability

In New Gloucester



15% Population 65+



31% Households with person living with a disability



25% Houses built before 1970



16% Households who are cost-burdened

Why this matters:

- Certain people and groups are more vulnerable to the impacts of climate change than others
- Reducing social vulnerabilities creates healthier, more resilient communities

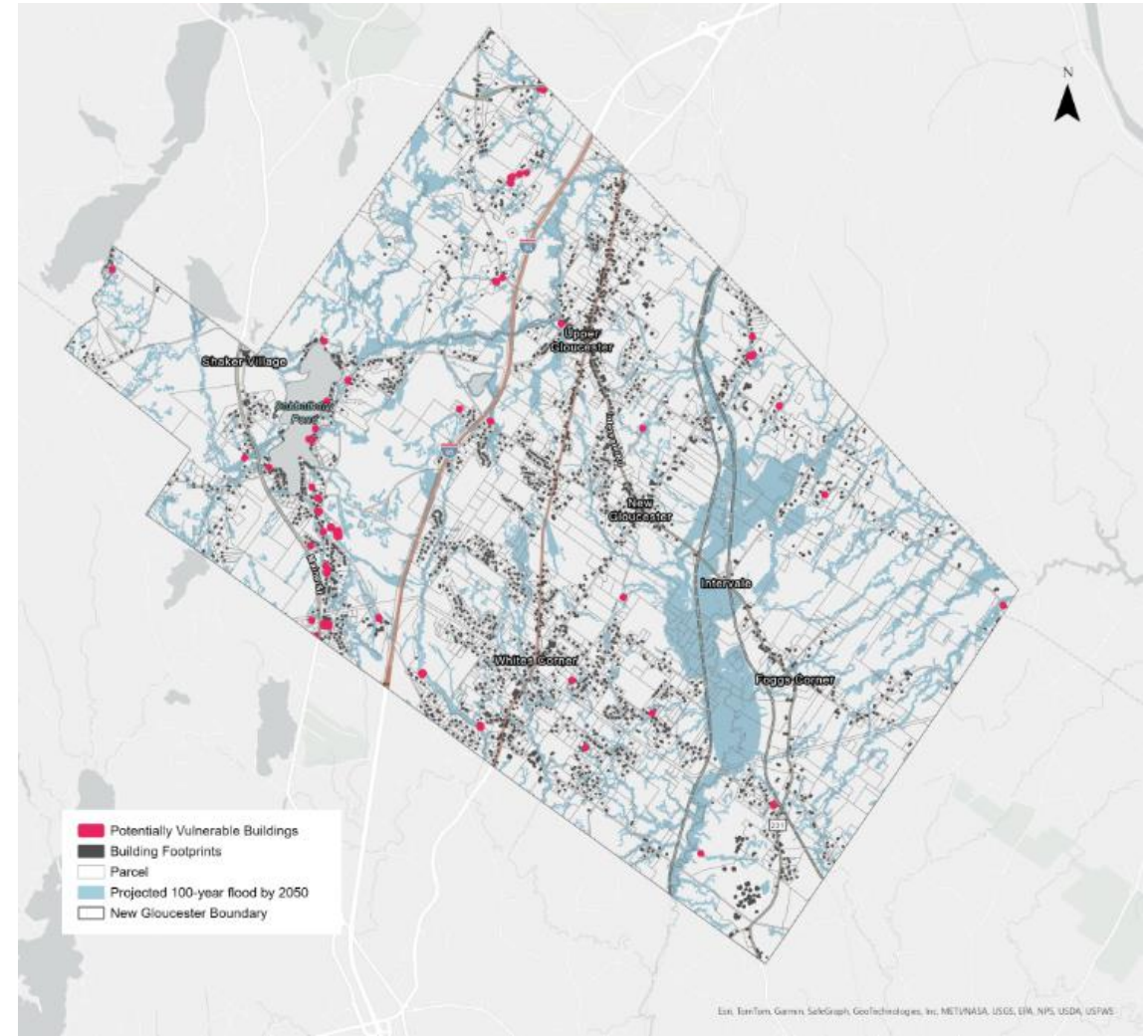
Community Assets

At risk:

- Social Services (food pantry, medical services, etc.)
- >1,000 acres of agricultural lands
- 65% of trails in flooded areas

Why this matters:

- Access to essential services
- Air and water quality
- Property value changes
- Food supply and agriculture



Natural Resources

At risk

- >5,500 acres of conserved lands (18% of town)
- Critical Species
 - Great Blue Heron
 - Wood Turtle
 - Inland Waterfowl

Why this matters:

- Strained ecosystem
- Invasive species
- Water quality
- Public Health



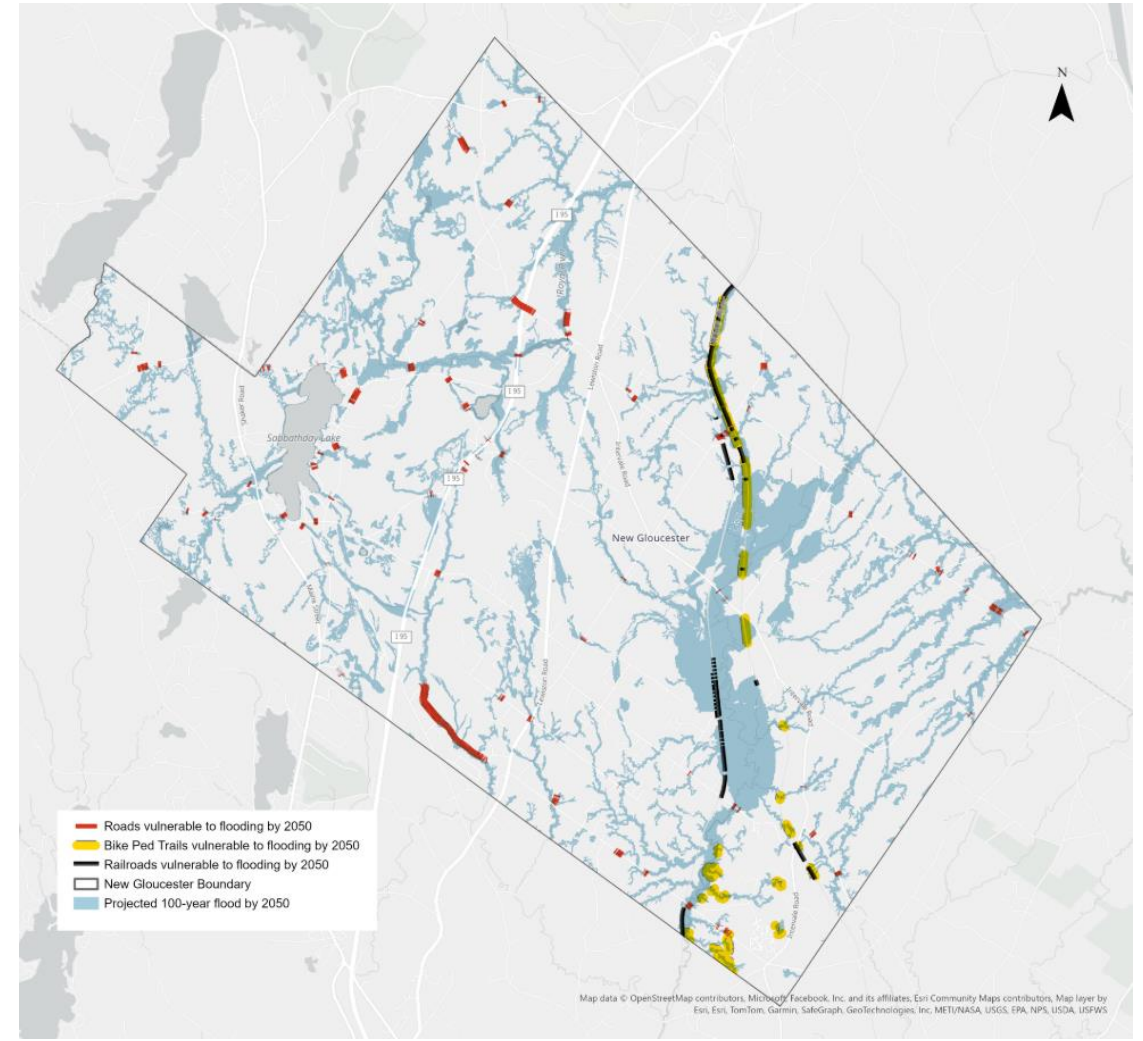
Critical Infrastructure

Potential at risk resources

- Over 7 miles of roads
- 57 buildings
- 19 bridges
- Culverts at risk of overtopping

Why this matters:

- Damage to properties
- Restricted access
- Financial strain (for town and property owners)
- Power outages



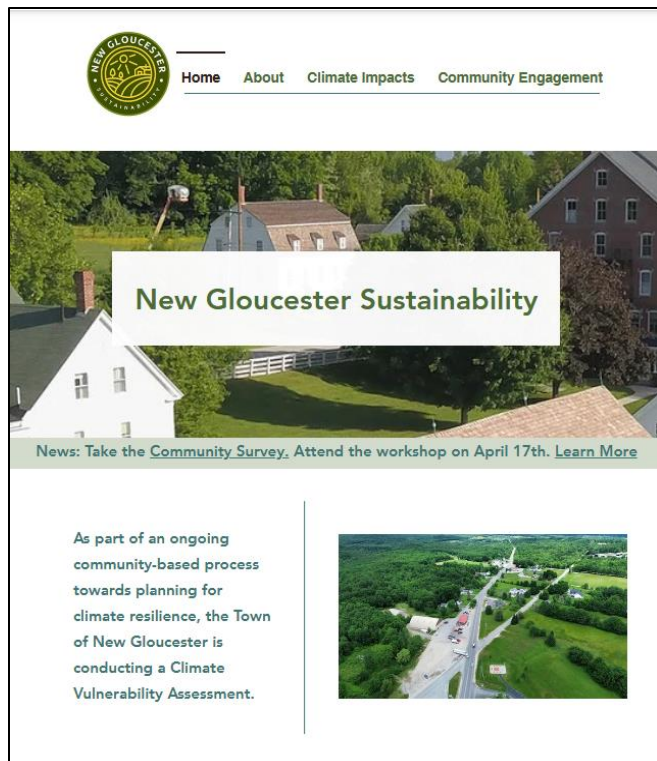
What comes next?

- 1 Bring initial data and input from community to staff and stakeholders
- 2 Refine analysis
- 3 Draft vulnerability assessment report
- 4 Continue community engagement
- 5 Establish priority next steps



Get Involved

Visit the project website



www.NewGloucesterSustainability.com

Take the survey



[New Gloucester - Climate Awareness & Concerns Survey](#)

Tell your friends and neighbors



Questions?



Breakout Stations

Give us your thoughts, ideas, concerns, and feedback!

Leave comments on sticky notes and attach to the posters

Write on the map or posters

Talk to us

