My Climate Change Resilience Story

The Landmark Trust USA
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Purpose and Objectives



Who needs to know your climate change resilience plan? Why?

Possible Audiences:

Staff
Leadership Team
Key Vendors or Partners
Volunteers

Board of Directors
Advisors

Banks/Lenders
Investors
Insurance
Government Agencies

Critical Business Assets

tangible

Physical (it can be touched)

1. Historic properties
2. Land
3. Furnishings
4. Appliances
5. Office equipment
6. Grounds equipment
7. Historic artifacts
8. Paper files

intangible

A special quality or advantage with value (reputation, employee expertise, community engagement)

1. Guests
2. Staff
3. Donors

supportive

Infrastructure (you cannot typically directly control these)

1. Reservation system
2. Utilities
3. Supplies
4. Website

Potential Climate Hazards

BY 2050:

- **Higher Average Temperature**
  - ⬆Annually 9-12%, Summer(July) 4% & Winter (Jan) 9%
- **Less Ice, More Extreme Heat by 2050**
  - Icing Days < 32 degrees: ⬇ -37 to -40%
  - Days over 90 degrees: ⬆12 to 20
- **Precipitation**
  - Rain ⬆ by 9 to 11%
  - Decline in snowfall and shorter season
  - More intense rain events

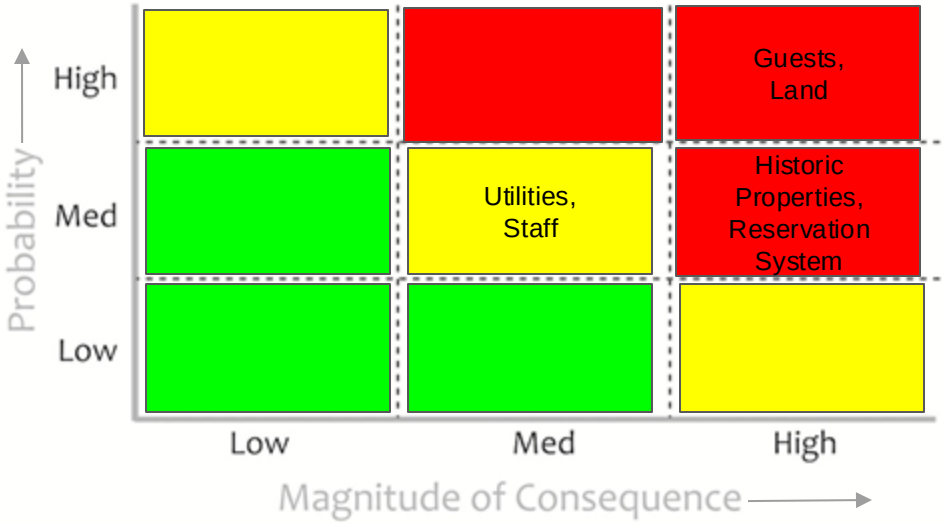
Windham County, VT:
Climate Explorer https://crt-climate-explorer.nemac.org/

Asset-Hazard Pairs

Your Priority Assets	Hazards
Historic Properties	Flooding and Extreme Storms
Land	Flooding and Inundation, extreme storms
Guests	Heat, Flooding, Extreme Storms, Climate Hazards in other parts of Vermont and world
Staff	Heat, Flooding, Extreme Storms,
Reservation system	Extreme Storms (power outages), climate hazard in ohio
Utilities	Extreme Storms (power outages)

Risk Matrix

Most Vulnerable Assets	Probability of a Loss	Magnitude of Loss
Historic Properties	Medium	High
Land	High	High
Guests	High	High
Reservation system	Medium	High
Utilities	Medium	Medium
Staff	Medium	Medium



Resilience Strategic Plan



When should I implement an action or make an investment? Are there dependencies to consider?

Is an action actually a series of steps? Is there an optimal sequence that maximizes my resiliency?

What resources are available to help me plan and pay?



"Best Bet" opportunities for my resilience investments

Resilience Strategic Plan



Priority: High Asset: **Guests**

Action/Investment

Communications Plan

Resources for Support

- LTUSA Communications Specialist
- VT Chamber of Commerce

Timing: End of FY 25

Estimated Cost: $

Resilience Strategic Plan

Priority: High

Asset: **Guests**

Action/Investment

Cooling Solutions that fit in with our historic properties

Resources for Support

- Efficiency VT
- Green Mountain Power
- Statewide Historic Preservation Organizations in southern states
- National Park Service

Timing: Within 5 Years

Estimated Cost: $

Resilience Strategic Plan

Priority: High

Asset: **Guests**

Action/Investment

Improve reliability of electricity:

Tesla Wall, battery storage, microgrids or generators

Resources for Support

- Green Mountain Power
- Solar for All

Timing: Within 5 Years

Estimated Cost: $

Resilience Strategic Plan

Priority: High

Asset: **Land - Naulakha**

Action/Investment

Drainage Improvements for Naulakha



Resources for Support

- NPS Save America's Treasures
- 1772/Preservation Trust of Vermont
- National Trust for Historic Preservation
- VT SHPO
- Fundraising Campaign

Timing: End of FY 25

Estimated Cost: $ 376,000.00

Resilience Strategic Plan

Priority: High

Asset: **Land**

Action/Investment

Review Drainage at remaining properties and develop plans

Resources for Support

- Vermont ANR

Timing: Within 5 Years

Estimated Cost: $

Resilience Strategic Plan



Priority: High Asset: **Land**

Action/Investment

Develop plan for invasives

Resources for Support

- Windham County NRCD
- USDA
- Longview Forestry
- Windham County Forester

Timing: End of FY 25

Estimated Cost: $

Resilience Strategic Plan



Priority: High

Asset: **Historic Properties**

Action/Investment

Monitor Roofs

Resources for Support

- Landmark Trust USA's Maintenance Staff via drone

Timing: Annually

Estimated Cost: $

Resilience Strategic Plan

Priority: High

Asset: **Historic Properties - Naulakha**

Action/Investment

Replacement (in kind) of 4 cedar roofs at Naulakha



Resources for Support

- NPS Save America's Treasures
- 1772/Preservation Trust of Vermont
- National Trust for Historic Preservation
- VT SHPO
- Fundraising Campaign

Timing: End of FY 25

Estimated Cost: $ 378,105.00

Resilience Strategic Plan



Priority: High

Asset: **Historic Properties**

Action/Investment

Energy Efficiency Plan

Resources for Support

- Efficiency Vermont
- Alex Wilson
- Green Mountain Power
- National Park Service Preservation Briefs

Timing: Within 5 years

Estimated Cost:

Resilience Strategic Plan



Priority: High

Asset: **Historic Properties**

Action/Investment

Diversification of portfolio of historic properties

Resources for Support

- The Landmark Trust USA Board
- Statewide & Regional Historic Preservation Organizations
- Preservation Partnership
- VT Law School

Timing: Within 5 years

Estimated Cost:

Resilience Strategic Plan



Priority: High

Asset: **Reservation System**

Action/Investment

Make sure reservation system continues to operate when climate hazards occur

Resources for Support

- Think Reservation

Timing: End of Next FY

Estimated Cost: N/A

Projected Timeline

Year 1

- Monitor Roofs (annually)
- Enpasse (passwords) implementation for all staff
- Hazard Outreach Responsibility Chart

Year 2

- Communications Plan
- Drainage Improvements Naulakha = $376,000
- Develop plan for invasives
- Naulakha cedar roofs = $378,105
- Battery Backups for Computer Servers
- Out of office plan for climate hazards
- Cross training of Staff

Year 3-5+

- Cooling solutions for properties
- Battery storage for properties
- Property drainage review
- Energy efficiency plans
- Property diversification

Key Community Resources & Supports

- The Landmark Trust USA Board
- VTBSR
- VT Chamber of Commerce
- Efficiency VT
- Green Mountain Power
- Statewide Historic Preserv. Organizations
- National Park Service
- VT Law School
- VT ANR
- USDA
- Windham County NCRD
- Preservation Partnerships
- The Landmark Trust USA staff

Insurance Considerations

Historic Property Insurance continues to increase or owners dropped throughout the nation.