Session III: Resilient Communities and Climate-Ready Infrastructure

Facilitator: Jeremy Bell  
Climate Adaptation Program Director, The Nature Conservancy in Maine

Gabe McPhail  
Vinalhaven Downtown Project Consultant, Resilient Communities L3C

Sara Mills-Knapp  
Greater Portland Council of Governments

Victoria Hill  
Town of Bridgton

Nell Donaldson  
Director of Special Projects, City of Portland

Allen Kratz  
Resilience Works LLC

Martha Sheils  
Director, New England Environmental Finance Center
Session 3/Resilient Communities and Climate Ready Infrastructure

Gabe McPhail, Vinalhaven
Downtown Project Consultant, Resilient Communities L3C
Vinalhaven Downtown Project

Vinalhaven Island, Knox County Community Action Grant Recipient
Spring 2022
## Project Development

- Develop Project Team
- Fund Project
- Design and Engineer Project
- Permit and Construct Project

<table>
<thead>
<tr>
<th>Project</th>
<th>Construction</th>
<th>Admin</th>
<th>A&amp;E</th>
<th>Town Match</th>
<th>State Match</th>
<th>WD Match</th>
<th>Grant</th>
<th>Total Match</th>
<th>Total Project</th>
</tr>
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<tbody>
<tr>
<td>EDA</td>
<td>$3,734,000</td>
<td>$33,316</td>
<td>$424,160</td>
<td>$767,000</td>
<td>$625,000</td>
<td>$500,000</td>
<td>$1,875,316</td>
<td>$1,892,000</td>
<td>$3,767,316</td>
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<tr>
<td>(Town pays)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$4,191,476</td>
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<tr>
<td>NBRC</td>
<td>$1,327,000</td>
<td>$50,000</td>
<td>$623,000</td>
<td>$677,760</td>
<td>$50,000</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
<td>$2,000,000</td>
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</tr>
<tr>
<td>CPF / EPA</td>
<td>$1,200,000</td>
<td>$210,000</td>
<td></td>
<td>$272,240</td>
<td>$250,000</td>
<td>$1,410,000</td>
<td>$352,500</td>
<td>$1,410,000</td>
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<tr>
<td><strong>Totals</strong></td>
<td>$6,261,000</td>
<td>$83,316</td>
<td>$1,257,160</td>
<td>$1,717,000</td>
<td>$925,000</td>
<td>$500,000</td>
<td>$4,285,316</td>
<td>$3,244,500</td>
<td>$7,177,316</td>
</tr>
</tbody>
</table>

*Community Action Grant*
What Does Success Look Like?
Session 3/Resilient Communities and Climate Ready Infrastructure

Sara Mills-Knapp, GPCOG
Victoria Hill, Town of Bridgton
The Challenge

CAPITAL INVESTMENT PROCESS LACKS STRUCTURE AND CLARITY

DECISIONS ON INVESTMENT MADE SOLELY BASED ON COST

LACK OF CONSIDERATION OF SUSTAINABILITY BENEFITS
Process

- Resilience pilot workshops identified key challenges and impacts of climate hazards
- Bridgton priorities include
  - Loss of open space
  - Climate impacts on natural resources
  - Impacts to vulnerable populations
Results: Screening Tool

• Equity and Community Wellbeing
• Environmental Stewardship
• Infrastructure and Technology
• Economic Development
• Planning Documents (when applicable)
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Sub-criteria</th>
<th>Sub-criteria Grade: Yes (1-3), N/A (0), or No (-1)</th>
<th>Sub-criteria Weight (optional)</th>
<th>Sub-criteria Score (optional)</th>
<th>Potential Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maintains or improves water quality</strong></td>
<td>Avoids current and/or future pesticide use</td>
<td></td>
<td>1</td>
<td>0</td>
<td>Utilize mulch or native/well-adapted plants</td>
</tr>
<tr>
<td></td>
<td>Manages nutrient in water resources</td>
<td></td>
<td>1</td>
<td>0</td>
<td>Creates policy or campaign to encourage residential or small business reduction in pesticide use</td>
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<tr>
<td></td>
<td>Prevents runoff</td>
<td></td>
<td>1</td>
<td>0</td>
<td>Limits excess nutrients in the water (i.e. soil testing before fertilizer use, aquaculture, or wastewater treatment upgrades)</td>
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<td></td>
<td>Incorporates vegetation</td>
<td></td>
<td>1</td>
<td>0</td>
<td>Provides educational programming on nutrient management strategies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Includes steps to limit improper nutrient management</td>
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<td></td>
<td></td>
<td>Increase stormwater management capacity by an identified percentage</td>
</tr>
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<td></td>
<td>Provides educational programming on methods to reduce runoff</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Incorporates methods for reducing runoff (i.e. minimizing impervious surfaces, roof gardens, and tree plantings)</td>
</tr>
<tr>
<td><strong>Land Use</strong></td>
<td>Protects and conserves forests</td>
<td></td>
<td>1</td>
<td>0</td>
<td>Project includes plantings of trees, wildflowers, or other vegetation</td>
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<tr>
<td></td>
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<td>Project encourages residents to plant vegetation</td>
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<td></td>
<td>Project protects or conserves an established number of acres</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Project avoids the development of or disturbance of forested land</td>
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<tr>
<td><strong>Maintains or protects habitats and biodiversity</strong></td>
<td>Identifies and protects vulnerable species in the project area</td>
<td></td>
<td>1</td>
<td>0</td>
<td>Project consults an ecologist or equivalent expert</td>
</tr>
<tr>
<td></td>
<td>Minimally disturbs or maintains habitat</td>
<td></td>
<td>1</td>
<td>0</td>
<td>Implements precautions to protect identified species (i.e. bird safe glass)</td>
</tr>
<tr>
<td></td>
<td>Creates new or restores habitat</td>
<td></td>
<td>1</td>
<td>0</td>
<td>Plan identifies habitat in the project area and an outlined approach to protect said habitat (i.e. avoid development in specific areas or create green roofs with native plants)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Project consults an ecologist or equivalent expert</td>
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<td></td>
<td>A pre-identified area of habitat is to be created (i.e. utilizes wildflowers, native trees or shrubs, nest boxes, ponds, reduces lawn areas, etc.)</td>
</tr>
</tbody>
</table>
Session 3/Resilient Communities and Climate Ready Infrastructure

Nell Donaldson, Director of Special Projects, City of Portland
High heat
+
More precipitation
+
Sea level rise

Vulnerable properties and vulnerable people
Process

1. Wide acknowledgement of issue
2. Successful planning
3. Concurrence on technical approach
4. Drafting

Continuous public engagement

MAINE WON'T WAIT
Solutions

WHOLE CITY
- Landscape
- Cool roofs/hardscape
- Stormwater
- Wetland fill

RESILIENCE OVERLAY
- First story use
- First story wet/dry floodproofing
- Critical systems elevation
- Ground floor elevation
- Preservation and creation of pervious natural/open spaces

MAINE WON'T WAIT
Session 3/Resilient Communities and Climate Ready Infrastructure

Allen Kratz, Resilience Works LLC
The Challenge
Fund climate readiness
Blue Hill
Wastewater Treatment Facility
Process

• Identify funds
• Generate regional support
• Use each grant to leverage the next
Insights

• Funders provide advice
• Think strategically
• Community members like helping
Session 3/Resilient Communities and Climate Ready Infrastructure

Martha Sheils, Director, New England Environmental Finance Center

Resource Wrap-Up
Navigating an Unprecedented Federal Funding Landscape

How the NEEFC Can Help

- **MISSION:** Provide *innovative financing solutions* that help states, tribes, local governments, nonprofits, community-based organizations, and the private sector pay for climate resilience projects

- **BARRIERS to overcome:** low capacity to find and apply for funding/financing, and to manage grants/loans for the life of the project

NEEFC provides **FREE technical assistance** to bring communities to the funding and financing table – **PROVIDING** capacity and **BUILDING** local community capacity.
Infrastructure Investment and Jobs Act – or “BIL”

The single largest investment in water that the federal government has ever made

- U.S. EPA to distribute more than $50 billion to improve our nation’s drinking water, wastewater, and stormwater infrastructure.

- A significant portion of water infrastructure dollars flow through the Clean Water and Drinking Water State Revolving Funds (SRFs).
  - Below market interest rate on loans
  - Forgivable loans and grants to disadvantaged communities (100% for emerging contaminants like PFAS)

- Must ensure that disadvantaged communities benefit equitably from this historic investment in water infrastructure
Opportunity for the next 5 years

New England Water Infrastructure Network
Bridging the Gap Between Community Water Challenges & Investment in Water Infrastructure for Future Generations

**FREE** training and technical assistance to **municipalities**, **organizations**, and **tribes** - prioritizing **underrepresented** communities and those with pressing water quality challenges.

**MAINE WON'T WAIT**
Services of NEEFC & Partners

NEEFC and our specialized partners bring certain FREE technical assistance at each phase of the project

Some communities may need one distinct service while others may need the full spectrum which may take longer
Contact Information

Martha Sheils, Director
martha.sheils@maine.edu  207.841.2246

Chloe Shields, Deputy Director
chloe.f.shields@maine.edu  207.228.8031

neefc.org
Small Group Discussion Instructions (until 3:15pm)
See instructions and prompts on the pink sheet of paper at your table.

Discussion Prompts

1. **Introductions:** Introduce yourself to your tablemates.

2. **Quick round robin:** Share what your town is working on related to the panel topic. Where are you in the process? What’s going well? Where are you stuck? If this topic is new to you, what opportunities come to mind?

3. **Funding resources:** Reflect on the funding resources presented. If you have used this resource, please share your experience. What other resources, technical assistance, grant programs, or tools are you using or exploring?

4. **Learning partners:** I wish I could have a thought-partner to work through __________ in our project.

5. **Community engagement:** How are you engaging your community with your project? What input do you need from the community to make this project a success? What do you want the community to know?