COMMUNITIES LEADING on CLIMATE

MAINE WON'T WAIT

Morning Session 1 / Augusta, Pine Tree, Capital

Getting Started

COMMUNITIES LEADING on CLIMATE

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Kendra Amaral
Kittery

Climate Adaptation and Capital Planning

The Challenge

- Understanding how to recognize and plan for the impacts climate change will have on our public infrastructure.
- Ensuring we are not investing in capital that is vulnerable to climate change impacts (storm surge, sea level rise, erosion/stormwater)

"No one wants to pay hundreds or millions of dollars on something that ends up underwater or compromised during its useful life. "

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Process

- FLOOD RESILIENCY CHECK LIST – Identified vulnerable public infrastructure
- ENGAGD COMMUNITY - Flood maps installed at Community Center
  - Put a pin on your property, see whether/how much sea level rise may impact you
- PLAN FOR FUTURE – Added to the CIP policy climate resiliency assessment for all capital projects/investments

2023 CAPITAL IMPROVEMENT PROGRAM - PROJECT REQUEST FORM — **CIP FUND (4002):**

Date:	December 15, 2021	**Dept. Priority (1 of 3, etc.):**	1
Department:	Kittery Public Works	**Est. Funding Request:**	**$ 600,000**
Project Title:	**Right of Way Reserve**	**Est. Useful Life (Years):**	Varies
Contact:	David Rich		
Type of Request?	☒ Ongoing Reserve ☐ One-time project		

Project Type: Check All That Apply -

Scheduled Replacement	☒	Expanded Service	☐	Deemed Critical by Dept.	☒
Present Equipment Obsolete	☐	New Operation	☐	Regulatory Requirement	☒
Reduce GHG/Improve Energy Eff	☐	Improved Efficiency/Procedures	☐	Other	☐
Health and Life Safety	☒	New Revenue	☐		

Project Description:

The Right of Way Reserve supports maintenance, repair, addition, and replacement of 65 miles of roadway, over 12 miles of sidewalk, guardrails, signalized intersections, and drainage infrastructure. The pavement management plan is developed using engineering standards and identifies which roads the Town should focus on each year to get the greatest value for dollars spent. Additional funds are allocated for the sidewalks, intersections, and underground infrastructure associated with these road miles. In FY22 the Town completed its updated pavement condition assessment and updated the Pavement Management program accordingly. Additionally, MDOT has agreed to assume responsibility for repaving Rte 236 and Rte 1 Mall Road. The escalation factor has been increased to reflect present cost trends.

Photo (click image to insert):

Climate Change/Sustainability: Are the assets vulnerable to climate change or sea level rise? Yes ☒ No ☐

Project Financing (if One-Time Project):

Total Project Cost:	$	CIP Funding Needed:	$

Other Funding Sources:

Amount and Type of Other Funding Sources:	$ 175,000	Comments:	State Compact Funds (for state roads only), Highway grants
Salvage Value of Existing Equipment?	$	Comments:	

Project Planning:

Proposed Start Date of Project:	
What Planning Has Been Done for Project?	Pavement Management Plan and condition study
Is Funding Necessary for Further Plans/Estimating?	
Can the Project be Phased? If yes, expenditure by year	

FY23	FY24	FY25	FY26	FY27	Total
$ 600,000	$ 600,000	$600,000	$600,000	$ 600,000	$3,000,000

Please Provide and/or Attach Additional Project Details

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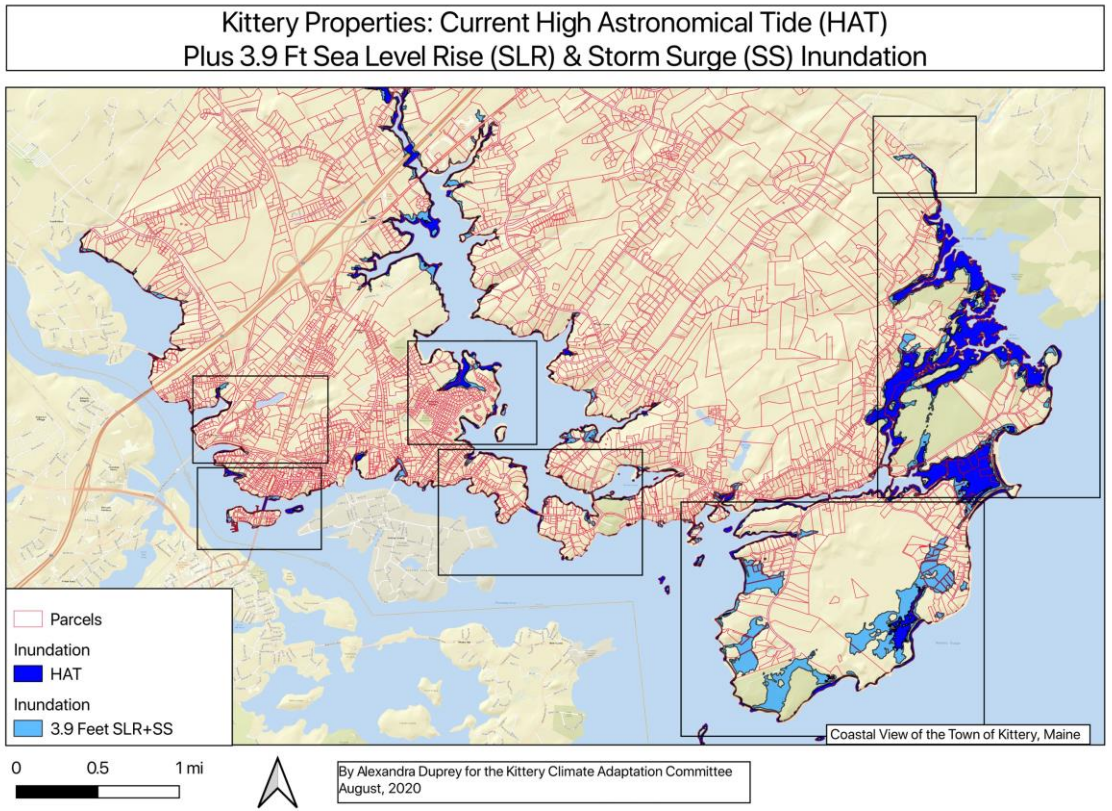

MAPPING KITTERY'S VULNERABILITY TO FLOODING

Kittery's 30 miles of coastline make it a great place to live and work, but also makes it vulnerable to coastal flooding, especially from large coastal storms. The maps depicted here provide a representation of how vulnerable Kittery is to flooding from coastal storms and sea-level rise, now and in the future. Acknowledging this vulnerability is the first step in building a community more resilient to coastal flooding.

Tide gauge measurements in Portland ME show that relative sea level has risen about 8 inches since 1912. There is extensive scientific evidence that indicates anthropogenic climate change (aka global warming) driven by carbon pollution from human activities will cause sea levels to rise for centuries. (1) The rate of sea-level rise depends on how much carbon pollution is emitted in the future from human activities.

The maps of the entire Town of Kittery and the Gate 2 entrance to the Portsmouth Naval Shipyard presented here portray two different sea-level scenarios that result from the combined impacts of sea-level rise and storm surge:

- **The 3.9 foot scenario** above high astronomical tide (HAT) provides a reasonable estimate of flooding associated with a current 100 year storm.
- **The 6.1 foot scenario** above high astronomical tide (HAT) provides a reasonable estimate of flooding associated with a 100-year storm in 2050.

HOW VULNERABLE ARE YOU TO COASTAL FLOODING TODAY OR BY 2050?

Find your residence, workplace or school on the maps, and add a push-pin to the map to identify that location and find out.

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Solutions/Results

- In Jan 2021 Kittery received a bond rating increase from Moody's from Aa2 to Aa1
  - Rating agency made clear that climate resiliency is an important evaluation criteria
  - We were able to demonstrate our awareness of and deliberate planning for climate change in our capital planning
- Added the following to our Capital Improvement Policy:
  - The town will plan for environmental factors and variations, such as sea level rise and other impacting climate changes, and invest responsibly in infrastructure and infrastructure modifications to ensure the resiliency of the community, public operations, municipal assets

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Stacia Nevin
Brooklin

Developing A Dynamic Economic Base

The Challenge

Three projects in our Planning & Community Engagement effort:

- MDOT has (or is in the process) of rebuilding the two major gateway bridges to Brooklin. In both cases, sea level change has been factored into the plans. The Hales-Hill culvert (by MDOT definition) allows a stream to flow under a roadway and into the Salt Pond. Flow is restricted and as the water level rises wildlife and fish (including habitat) will become endangered.
- Trying to secure reliable high-speed broadband to support education, more than 80 at-home businesses and larger employers in town, to build a sustainable economic base.
- Very early stages of talking about installing Electric Vehicle Charging Stations.

Process

- Each project began with educating ourselves with the many challenging aspects of the issues
- Identifying possible courses of action
- Discovering the right folks to talk with
- Being sure experts are involved
- Designating a champion among ourselves
- And diving in.

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Solutions/Results

- Maine has a great opportunity to address climate change with new funding.
- Funders want to see regional approaches.
- Your town already may be working with neighboring communities- so extend that skill set to climate resilience.
- Working together creates momentum!

Peninsula Tomorrow	Population	Social Vulnerability*
1. Blue Hill	2,663	Low
2. Brooklin	677	Low
3. Brooksville	889	Low
4. Castine	1,189	Low
5. Deer Isle	2,113	High
6. Penobscot	1,018	High
7. Sedgwick	1,380	High
8. Stonington	981	High
9. Surry	1,785	Low
	12,695	5 = Low 4 = High
*Eileen Johnson, Bowdoin College, and Jeremy Bell, The Nature Conservancy		

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Dennis Lajoie

Norway

Planning For The Future

The Challenge

- Strong microburst rainstorms, heavy snow and ice storms.
- Increasing energy cost & damage to town's infrastructure.

Process

- Haphazardly working on various items.
- No real plan
- Looking at opportunities as they present.

Solutions/Results

- Received $50,000 in funding for planning.
- Applied for $4m in funding (MDOT).

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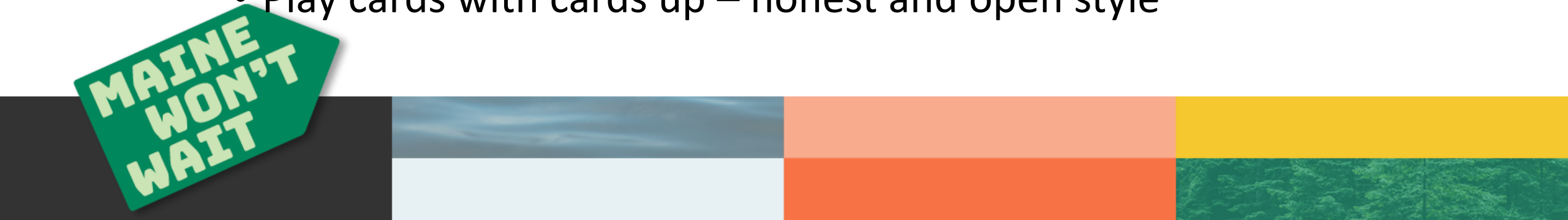
Convergence

- Over the last 10 years:
  - Energy audit of the Town Office
  - Selectboard approved Anti-idling policy
  - Researched LED Street lights and completed the conversion
  - Partnered with local non-profit on Installing a solar powered EV charger station.
  - Received grant funding for “Solar bees” for the wastewater treatment plant.
  - Received grant from Rural Development for a “reliance plan” for the wastewater department
  - Town owned closed landfill lease for a community solar farm.

Convergence and Getting to Yes

- Small town in Western Maine - Pop 5,077
- Progressive yet conservative
- My background – 32 years in nonprofit program and project development (Housing and Finance)
- Master's in Economic and Community Deployment
- Town Manager for the last 5yrs in Norway
- Willing to partner with others
- Play cards with cards up – honest and open style



Getting to Yes

- ***Used examples that folks can understand:***
  - Saving energy to reduce operating cost
  - Protecting the Town's roads and bridges
  - Installing larger culverts

  - ***Selectboard Process:***
    - Bring up to speed
    - Being practical and reasonable
    - Take time to explain – no rush for vote
    - Partner with others if you can

Solution and Results:

- **Joint Community and Selectboard meeting**
  - Lot's of project ideas – (Parking garage with solar panels)
  - Agreed to step back from *Projects and focus on Planning*
  - Applied for and was awarded $50k from the Governors Office of Policy Innovation and the Future – Community Resilience Partnership Action Grant fund

Solution and Results:

- Form a committee to inform the Selectboard and the Comprehensive planning process.
- Conduct an community vulnerability assessment for Norway's at risk populations to climate change
- Conduct an assessment of the Norway's critical community infrastructure, roads, bridges, lakes, streams, historic downtown and identify climate risks.
- Put the Town in a position to apply for future funding.

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Lesley Fernow
Dover-Foxcroft

Engaging community in climate planning and action

The Challenge

1) a deeply polarized community around issue of climate change

2) a recently completed comprehensive plan that is silent on the issues confronting the community related to future climate changes

3) Significant opportunities for funding were presented as well as state momentum from the Maine Won't Wait Plan, highlighting significant local/regional needs for education, planning and increased awareness

4) the need to identify and structure leadership on this issue.

Process

- A small group of interested residents came together to form a committee. Committed to working with businesses, industries, individuals and local government, we identified several modest goals for 2022: informing ourselves, business owners and our town leaders about evolving opportunities to develop local climate-supportive strategies, staying abreast of new technologies and grant opportunities, identifying gaps in the community, reaching out to local partner organizations, assessing local readiness.
- We had an excellent public forum with many participants from all corners of the community.
- Early on we recognized that collaboration was essential with existing natural partners such as the University of Maine Cooperative Extension, the Emergency Management department, farmers, local transportation providers, and Maine Broadband Coalition.
- We recognize that climate change affects each individual and sector of the economy differently.

Dover-Foxcroft Climate Action Advisory Committee

We need your help to create a sustainable future for our community! It's time for action!

Dover-Foxcroft residents have a history of ingenuity and resilience. Climate change is impacting our region now and risking our children's and grandchildren's futures.

We Can Make a Difference!

The Maine Climate Plan, Maine Won't Wait, is a bold *call to action* for Maine communities to come together and make a difference, and offers specific strategies in multiple sectors.

The D-F CAAC is a group of interested residents who are heeding this call to action from the state: we are committed to improving our local resilience planning, our local economy, our climate and our future.

We are committed to working with businesses, industries, individuals and local government to educate ourselves and others, to keep abreast of new funding and technology advances and to help our region take advantage of evolving economic opportunities.

We will advise and support our town government in developing local climate supportive strategies for our community. We need your voice and your involvement!

To find out how you can get involved contact us: dfcaac@gmail.com

What Can We Do?

Infrastructure

- Assess climate readiness of essential infrastructure with EMA.
- Invest in infrastructure to address ice and flooding damage to pipes, roads and buildings.
- Invest in renewable energy resources.
- Expand broadband to every resident

Transportation

- Reduce our reliance on expensive fossil fuels for transportation.
- Save money and reduce carbon emissions by supporting Electric Vehicles (EV), Plug-in Hybrids (PHEV) and biofuels.

Support Energy Efficient Housing

- Support expansion of weatherization programs.
- Support adoption of heat pumps in local homes and businesses, (also a major local industry).

Agriculture and forestry

- Support local food producers in adapting to challenges of prolonged spring rains, extended spring frost, heavy storms and summer droughts.
- Support re-generational farming practices and our growing local food product industry
- Protect against invasive insect pests and fungal pathogens that threaten our forest industry.

Fishing and water resources

- Protect river and wetland health.
- Monitor our streams and rivers for changes in water flow and temperature changes that affect cold - water species.

Build Healthy and Resilient Community

- Provide education on prevention of tick-borne diseases
- Provide protection for vulnerable workers and residents from heat waves.
- Support expanded fall tourism economy due to lengthened summers

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Solutions/Results

- We were asked to become a subcommittee of one of the town select board standing committees
- We joined the Community Resilience Partnership in March 2022 and secured grant funding for a community identified need for 1) cooling/warming center and 2) communication infrastructure for key extreme weather events.
- We are moving forward separately on a broadband expansion effort, bringing EV charging stations to our region, and acquiring at least one EV school bus for our district.
- One of our members is actively working to educate local people about regenerative farming. We continue to look for educational opportunities for the public.

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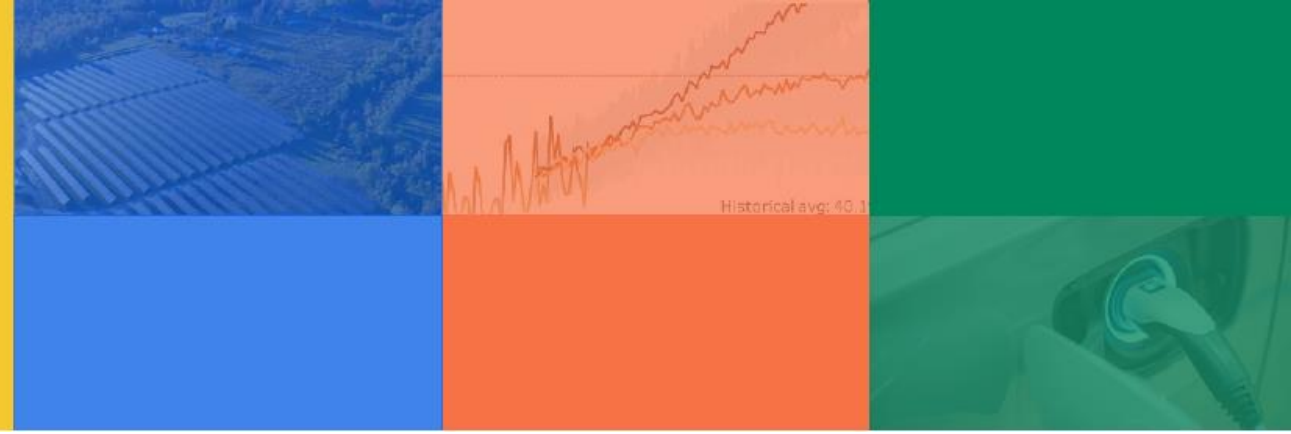
JUNE 17, 2022 8:30AM – 4:00 PM
AUGUSTA CIVIC CENTER, 76 COMMUNITY DR, AUGUSTA, ME



9:00 AM Welcome & Opening Remarks *(livestreamed)* — *Augusta/Pine Tree/Capital*

MCC co-chairs Hannah Pingree and Melanie Loyzim
Remarks from Maine's congressional delegation
Janet Mills, Governor of Maine

10:00 AM Morning Session One

Getting Started *(livestreamed)*
Understanding Social Vulnerability
Efficiency Begins at Home

11:00 AM Morning Session Two

The Future of Transportation *(livestreamed)*
Climate Ready Communities
Engaging Your Community

12:00 PM Networking Lunch — *Auditorium*

1:00 PM Keynote: Gina McCarthy, White House National Climate Advisor — *Augusta/Pine Tree/Capital*

Livestreamed

1:45 & 2:45 PM Afternoon Workshop Sessions 1 & 2

See printed agenda for full list & available livestreams

3:30 PM Adjourn