Resilient Rhody

Financing Solutions to Address the Impacts of Climate Change

Presented to the Connecticut Governor's Council on Climate Change

RHODE ISLAND INFRASTRUCTURE BANK

April 21, 2020
1. RI Infrastructure Bank Overview
2. Formalizing RIIB's Approach to Climate Resilience
3. Strategic Implementation and Resilient Rhody Initiatives
RI Infrastructure Bank Overview
About the Infrastructure Bank

Rhode Island’s centralized hub of local infrastructure investment
Diversified Product Offerings

- Wastewater, Sewer and Stormwater
- Drinking Water
- Residential septic and sewer tie-in
- Road and Bridge
- Commercial Clean Energy (C-PACE)
- Clean Energy for Public Sector Entities
Our Impact Since 2015

- $579 MM in new lending, 63% leveraging private capital sources
- Supported almost 14,000 direct and indirect jobs

- Our lending generated $136 MM in financial and energy savings for local communities
- Greenhouse gas emissions reduction equivalent to 142 MM miles driven by the average passenger car

- Financed more than $74 million of road and bridge projects across Rhode Island cities and towns
- Fully deployed new financial & loan management software
Evolution of Climate Resilience at the Bank

1989
RICWFA is Founded

1993
NBC CSO Phase 1

1995
Providence Water Water Quality Protection and Pump Station Hardening

2001
Pascoag Utility Backup Power

2009
Green Infrastructure at Bristol Town Beach

2015
Warwick WWTF Flood Berm & Phosphorous Removal upgrade

2015
Newport Solar and CSO Wet Weather Flows

2016
Warren WWTF Resilience Upgrades

2017
Embrace Home Loans Solar and Backup Generator

2018
Resilient Rhody and Stormwater Project Accelerator

2019
Central Falls Green Street

2019
Municipal Resilience Program is Launched
How We Deliver Value

**Choice**
- Full set of infrastructure investment products
- Flexible engagement model
- Ability to innovate and meet future customer needs
- Technical assistance to disaggregate project components

**Ease of Doing Business**
- Flexibility in meeting customers needs off-cycle
- Proactive business development team organized by customers
- Responsive to emergency capital needs
- Improving business conditions & reducing regulatory hurdles

**Low Cost Lending**
- Below-market rates
- Savings on interest and fixed transactions costs
- Reduces administrative functions of public debt issuances
How we work

Partner agency subject matter experts review and grade project application

Project is then listed by grade on the Project Priority List (PPL)

- **Project & Credit Analysis**: Bank’s advisor conducts a thorough credit review & evaluation of the borrower and project
- **Board Review**: Bank’s Board considers and votes on the borrower loan request
- **Protection**: Bank actively monitors project status and borrower financials
Formalizing RIIB’s Approach to Climate Resiliency
Establish a Framework for Success

• Initiate focused approach
  o Convene experts from across the state
  o Green Infrastructure Strategic Advisory Council
  o Engage stakeholders

• Develop capacity
  o Establish new position with defined responsibilities
  o Build institutional support

• Establish leadership
  o Identify funding and financing gaps
  o Accelerate project implementation
  o Develop and fund new programs
Implementing the Strategic Imperative

• Technical assistance
  o Internal and with stakeholders
  o Supplement local expertise and knowledge
  o Rapid response to overcome barriers to implementation

• Project origination
  o Solution-oriented approach
  o Build project pipeline
  o Link projects to funding and financing

• Influence and modify resilience thought process
  o Integrating climate risk into our credit approval process
  o Project financing disaggregation
  o Wholistic approach to project review, integration and execution
Strategic Implementation and Resilient Rhody Initiatives
RESILIENT RHODY
AN ACTIONABLE VISION FOR ADDRESSING THE IMPACTS OF CLIMATE CHANGE IN RHODE ISLAND
Resilient Rhody Framework

Making the Case for Climate Resilience

RESILIENCE THEME: Emergency Preparedness

RESILIENCE THEME: Natural Systems

RESILIENCE THEME: Critical Infrastructure and Utilities

RESILIENCE THEME: Community Health and Resilience

Financing Climate Resilience Projects
Resilient Rhody by the Numbers

• 61 actions and aligning achievable 1,3,5-year goals
• Establish and accelerate funding and financing for resilience
  o Resilient Rhody has been a catalyst for $13mm in new climate resilience funding
  o $7mm for Municipal Resilience Program proposed in 2021 budget
• Established a process for building a pipeline of climate resilience projects
Communities across Rhode Island face an urgent need to build climate resilient infrastructure that will survive extreme weather events.

There are several existing loan, bond, and grant programs for addressing climate resilience, and many new financing mechanisms currently under development by state and local agencies.
## Existing Financing Tools for Climate Resilience

### Critical Infrastructure and Utilities

<table>
<thead>
<tr>
<th>Finance Tool</th>
<th>Water</th>
<th>Power</th>
<th>Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean Water State Revolving Fund</td>
<td>X</td>
<td>X</td>
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</tr>
<tr>
<td>Drinking Water State Revolving Fund</td>
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<td>X</td>
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<tr>
<td>USDA Rural Development Loan Program</td>
<td>X</td>
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<tr>
<td>Bonds</td>
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<tr>
<td>RIB Stormwater Accelerator</td>
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<tr>
<td>Efficient Buildings Fund</td>
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<tr>
<td>Water Infrastructure Finance and Innovation Fund</td>
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<tr>
<td>Electric/Gas Ratepayer Funds</td>
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<tr>
<td>Energy Savings Performance Contracts</td>
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<tr>
<td>Power Purchase Agreements</td>
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<tr>
<td>Property Assessed Clean Energy</td>
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<tr>
<td>Municipal Road and Bridge Revolving Fund</td>
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<tr>
<td>Tax Increment Financing</td>
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### Natural Systems

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<th>Inland</th>
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<tr>
<td>Mitigation Banking</td>
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<tr>
<td>Land Trust</td>
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<td>X</td>
</tr>
<tr>
<td>Clean Water State Revolving Fund</td>
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### Emergency Preparedness

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<tr>
<td>Property Assessed Clean Energy</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Bonds</td>
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### Community Resilience

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<tr>
<td>Bonds</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Tax Credits</td>
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</tr>
<tr>
<td>FHA Mortgages</td>
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Stormwater Project Accelerator

- Accelerate implementation of stormwater projects through low-cost upfront capital
- Backed by a funding source that will eventually reimburse the project
- First projects completed in fall 2019
- Pipeline of ~$3M in projects over next 9 months
Resilient Rhody: Municipal Resilience Program

- Partnership between Rhode Island Infrastructure Bank and The Nature Conservancy
- The MRP is open to all 39 municipalities in Rhode Island
- Provides technical assistance to complete the “Community Resilience Building” process to identify projects
- Action grant funding is available to implement priority projects
Resilient Rhody: Municipal Resilience Program

- 5 municipalities participated in 2019
  - 48 Projects totaling ~$14mm identified
- 9 municipalities selected to participate in 2020

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Project Type</th>
<th>Action Grant Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrington</td>
<td>Coastal restoration and green stormwater infrastructure</td>
<td>$201,000</td>
</tr>
<tr>
<td>Portsmouth</td>
<td>Dam rehabilitation and green stormwater infrastructure for flood mitigation and water quality benefit</td>
<td>$339,000</td>
</tr>
<tr>
<td>Warren</td>
<td>Green stormwater infrastructure at public access points</td>
<td>$156,000</td>
</tr>
<tr>
<td>Westerly</td>
<td>Flood protection at wastewater treatment facility pump station</td>
<td>$304,000</td>
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</tbody>
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$1,000,000
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<thead>
<tr>
<th>Do</th>
<th>Support</th>
<th>Inspire</th>
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<tr>
<td>Implement High Impact Resilience Projects</td>
<td>Build a centralized resource for funding and financing opportunities</td>
<td>Update on Resilient Rhody progress and project case studies</td>
</tr>
<tr>
<td>• Schoolhouse Road elevation and Kickemuit River Dam removals</td>
<td>• Resource to be updated regularly and includes timelines, project applicability, and key contacts</td>
<td>• Publish an update to Resilient Rhody with progress made to identified actions and new climate science available.</td>
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Climate Action Snapshot

State of Rhode Island Climate Change

RI in the Fight Against Climate Change: A Snapshot

Rhode Island is working to combat climate change on many fronts, and this dashboard is designed to highlight a handful of key metrics.

**79%**

- Toward the goal of increasing RI's clean energy by 2050.

**16,021**

- Green jobs - the clean energy economy has grown by 34% since 2014.

**427**

- Electric vehicles in Rhode Island have increased 427% from 2016 to 2016. There are now 3,242 electric vehicles in Rhode Island.

**8,077**

- Trees have been protected by state programs over the last 5 years.

**11.7%**

- Fy 2018 greenhouse gas (GHG) emissions are estimated at 11.7 x 10^6 tCO2e vs. 13.3 x 10^6 tCO2e in prior years. RI greenhouse gas emissions have decreased 13% since 2015.

**Why It Matters**

- Fighting climate change is good for the economy. Energy efficiency jobs make up the largest sector of the clean energy economy, with efficient heating and cooling representing the largest rate of growth.

- Electric vehicles are powered by electricity, which is an energy source that is cleaner than gas. They produce less pollution than a conventional gasoline-powered vehicle. Reduced harmful tailpipe pollutants is good news for our health, better or quality will yield to fewer health problems and costs saved by an amount of energy.

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**Why It Matters**

- When we turn off the lights for energy, we add more and more carbon dioxide into the atmosphere. The building sector is like a giant buffer that helps slow the effects, such as air quality, ozone pollution, and climate change.

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