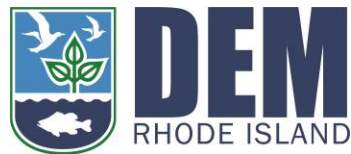




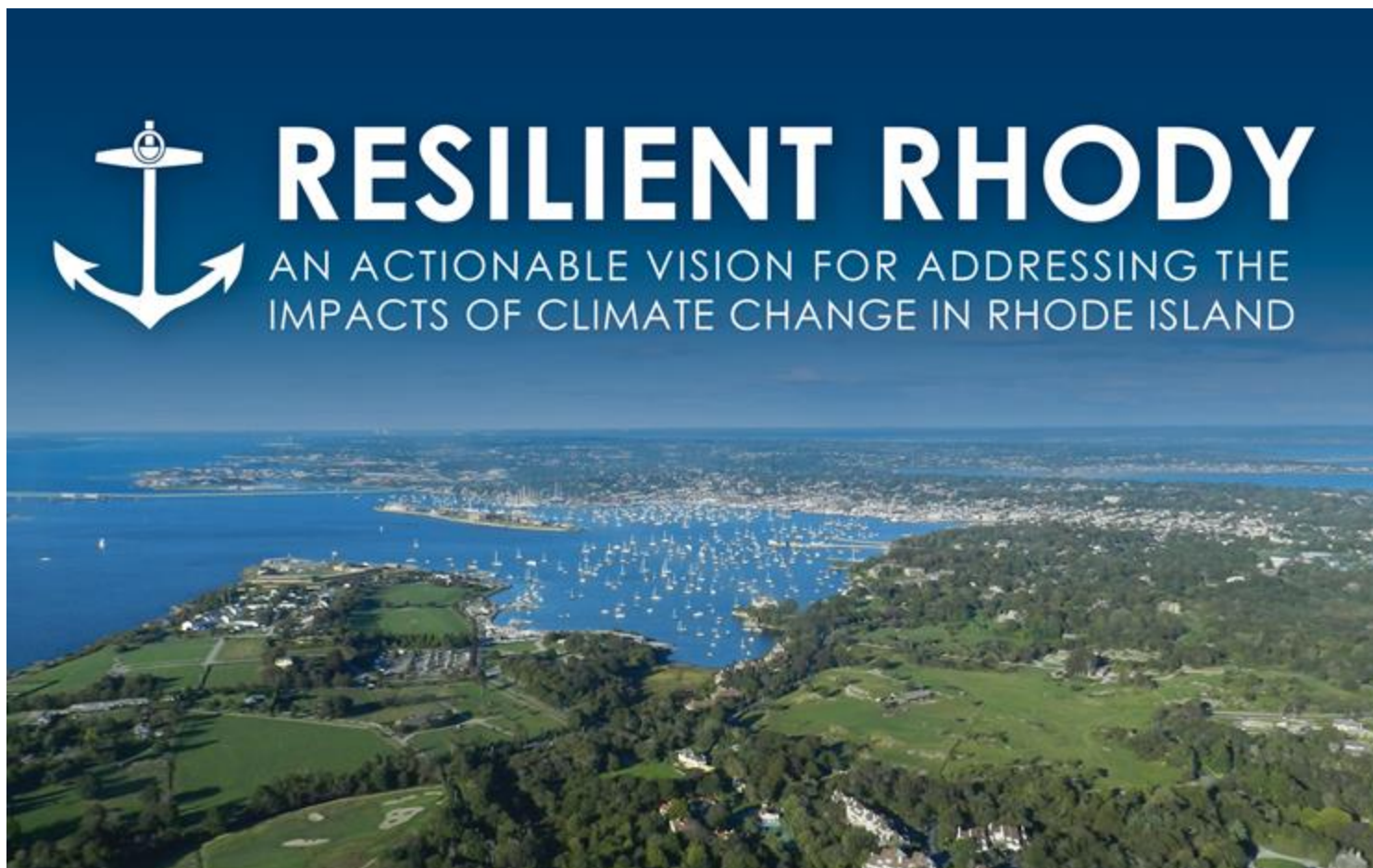
Rhode Island Climate Resilience

November 19, 2024



Resilient Rhody, 2018

Rhode Island's Climate Resilience Action Strategy



Making the Case for
Climate Resilience



RESILIENCE THEME:
Natural Systems



RESILIENCE THEME:
Community Health
and Resilience



RESILIENCE THEME:
Emergency Preparedness



RESILIENCE THEME:
Critical Infrastructure
and Utilities



Financing Climate
Resilience Projects

Municipal Resilience Program

State + Local Collaboration

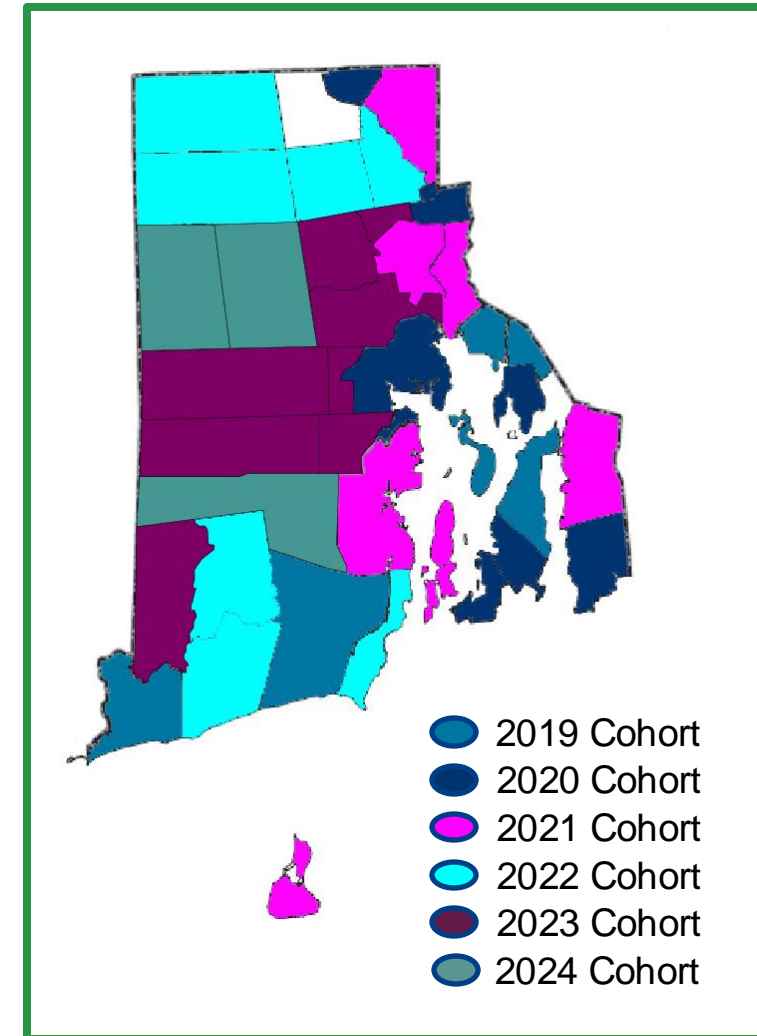
- **Launched in 2019**
- **Community Resilience Building Workshops:**
 - **Identify** community hazards, strengths, vulnerabilities, and priority actions
 - **Develop** localized resilience strategies
 - **1600+ Resilience Actions** Identified
- **MRP Action Grants:**
 - **Fund** design and construction of capital projects with resilience benefits
 - **\$24.4 in funding awarded** 2019-2024
- **Project Pipeline:**
 - **Support** municipalities to identify further funding/financing sources
- **38/39 RI municipalities participating**



Municipal Resilience Program

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Chief Resilience Officer

Transition from RIIB to RIDEM

- **Chief Resilience Officer - RI Infrastructure Bank June 2017 – July 2021**
- **May of 2023 - Governor McKee re-establishes Chief Resilience Officer at RI Department of Environmental Management**
- **Chief Resilience Officer - RIDEM Jan 1, 2024 – present**
- **Transition discussions held October 2023 – December 2023**
 - **Statewide & Local Planning, Technical Assistance, and Coordination responsibilities** to shift to RIDEM (*Resilient Rhody*, MRP Workshops, Designing for Resilience, Resilience EC4 Subgroup)
 - **MRP Action Grant responsibilities** to remain with RIIB, with RIDEM to support on RFP development and application review

Chief Resilience Officer – Executive Order 23-07

The Department of Environmental Management shall recruit and hire an individual to serve as the Rhode Island Chief Resilience Officer.

- **Coordinate resilience efforts across state agencies, municipalities, businesses, and other organizations** and to **advise the RI Executive Climate Change Coordinating Council (RIEC4)**, established pursuant to R.I. General Laws § 42-6.2-1, on the status and effectiveness of those efforts;
- **Draft state policies on resilience and implement** such policies under the direction of the RIEC4;
- Serve as the primary **voice and advocate** for state actions on resilience;
- Build upon the **planning assistance** provided to municipalities by MRP workshops, in coordination with partner agencies;
- Work closely with RIIB on the **MRP Action Grants** and the planning and financing of other resilience projects;
- Work with RIIB and CRMC on the implementation of the **OSCAR grant program**;
- **Plan and implement projects to protect and restore the habitat** and recreational resources owned or under the stewardship of DEM;
- Aggressively track and **apply for federal grants** to fund resilience efforts across Rhode Island;
- **Coordinate resilience efforts with decarbonization programs**, activities, and policies taken in accordance with the RI Act on Climate; and
- **Provide biennial reports** to the RIEC4, the Governor, the Speaker of the House of Representatives, and the President of the Senate on the State of Resilience in Rhode Island, with the **first report to be submitted by December 31, 2024**.

Chief Resilience Officer – Act on Coasts

Establishes the Chief Resilience Officer in statute, including all mandates listed in EO 23-07, with the addition of the below:

- **Conduct a comprehensive assessment of the climate risks related to sea level rise for coastal and riverine communities.** *The CRO will conduct an assessment of risk to Providence, Kent, Washington, Bristol and Newport counties for the purposes of the development of a statewide coastal resilience strategy*
- **Develop a coastal resilience plan...** *to support community and economic recovery efforts and to address risk and vulnerability reduction from sea rise, riverine flooding and urban heat. **The CRO shall provide the statewide coastal resilience plan** to the governor, the RIEC4 and the general assembly to be included in the state climate plan*
- **Provide technical assistance to municipalities and the state for the implementation of resilience planning,** *including resilience frameworks, vulnerability profiles, risk-reduction plans, and economic development strategies.*

Chief Resilience Officer

Three Core Goals: **Elevation, Collaboration, and Transparency**



Collaboration on resilience solutions at Fogland Point in Tiverton with Save the Bay

1. **Elevate local resilience needs**
2. **Foster collaboration & coordination**
3. **Increase transparency and accessibility**

Rhode Island Climate Resilience

Statewide Collaboration Framework

1. Planning

- Statewide Planning: *Resilient Rhody 2.0* – 2024 State of Resilience Report, 2025 Statewide Coastal Resilience Plan
- Local Planning: MRP Community Resilience Building Workshops, Municipal Annual Resilience Updates

2. Implementation

- Resilience Technical Assistance (Project Scoping, Policy Development, Design & Engineering)
- State + Federal Resilience Grants

3. Capacity Building & Partnerships

- Resilience EC4 Subgroup
- RI Resilience Partner Group
- State Resilience Office (Regional Resilience Coordinators) – Three (3) Regional Coordinators

4. Transparency & Information Sharing

- Resilience Web Resources
- Annual *Rhode Island Resilience Summit*

Rhode Island Climate Resilience

Statewide Collaboration Framework - Timelines

1. Planning

- Statewide Planning: *Resilient Rhody 2.0* – 2024 State of Resilience Report **(December 2024)**, 2025 Statewide Coastal Resilience Plan **(December 2025)**
- Local Planning: MRP 2.0 Community Resilience Building Workshops **(February 2025)**, Municipal Annual Resilience Updates **(Spring 2025)**

2. Implementation

- Resilience Technical Assistance (Project Scoping, Policy Development, Design & Engineering) **(Designing for Resilience – March 2025)**
- State + Federal Resilience Grants **(MRP Action Grants & Climate Resilience Fund – Summer/Fall 2025)**

3. Capacity Building & Partnerships

- Resilience EC4 Subgroup **(Re-Established July 2024)**
- RI Resilience Partner Group **(Launched Sept. 2024)**
- State Resilience Office (Regional Resilience Coordinators) – Three (3) Regional Coordinators **(January/February 2025)**

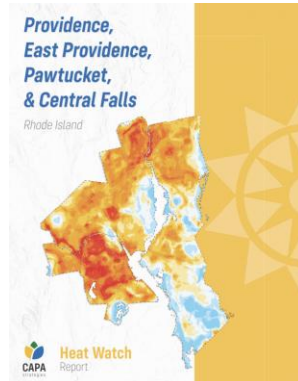
4. Transparency & Information Sharing

- Resilience Web Resources **(January 2025)**
- Annual *Rhode Island Resilience* Summit **(In alignment w/ MRP 2.0 Workshop Launch)**

Rhode Island Climate Resilience

Across Agencies & Partners

Statewide Plans



Local Planning

- MRP Community Resilience Building
- Local Comprehensive Plans
- Local Hazard Mitigation Plans
- Health Equity Zones

Data & Mapping



Rhode Island STORMTOOLS

Rhode Island
Coastal Hazards,
Analysis, Modeling &
Prediction
RI-CHAMP

Narragansett Bay Estuary
Program
GIS Data Hub

SLAMM (Sea Level Affecting Marshes Model)
Maps



URI Environmental Data Center and RIGIS
Environmental Data Center

 **MyCoast**

Project Scoping & Technical Assistance

- Coastal Hazards Application
- Designing for Resilience
- Microgrid Municipal Technical Assistance
- Municipal Ordinance Assistance

State of Resilience Report 2024

EO 23-07

Providing a snapshot of our current climate resilience efforts statewide.

Structure:

- RI Climate **Resilience Data Snapshot** (STAB Approved)
- RI Resilience **Standards & Permitting Requirements Snapshot**
- RI Resilience **Successes (Current Metrics) Snapshot**
- **Statewide Resilience Initiatives** (Government & Non-Governmental Planning, Outreach & Engagement, Technical Assistance, and Grant Programs)
- **Resilient Rhody 1.0 Goal Progress** Summary
- **Municipal Resilience Actions Summary** (Key Needs & Accomplishments)
- **Next Steps:** Overview of State Climate Resilience Plan 2025 Process & Deliverable

Statewide Coastal Resilience Plan 2025

R.I. Gen. Laws § 46-23.4-1 - Act on Coasts

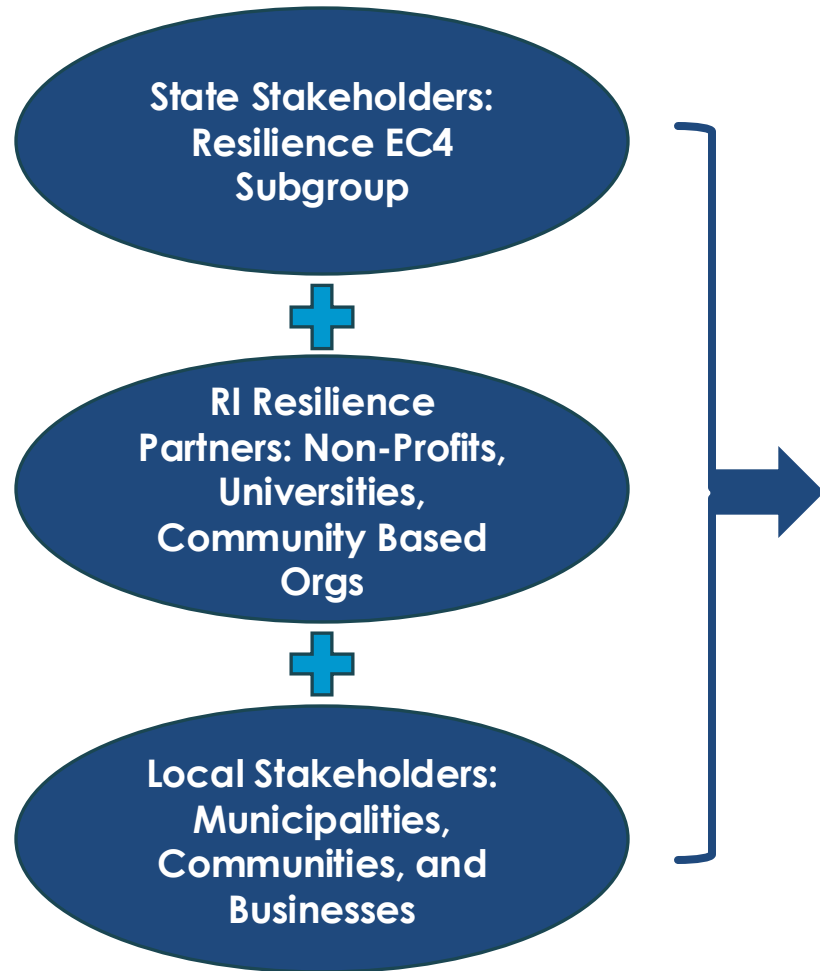
Setting new goals, surveying our vulnerabilities, and determining our best practices for future investment.

Proposed Components:

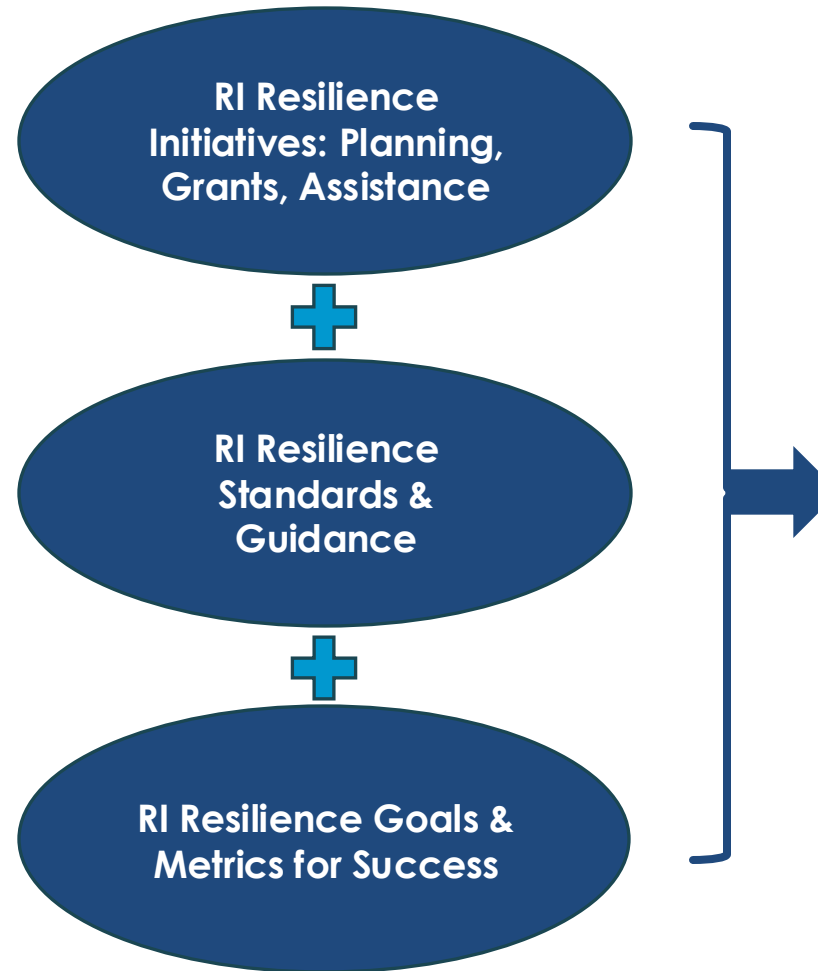
- **Gap Analysis & 2025 State Resilience Goals** (Revised from *Resilient Rhody* 2018)
- **Assessment of Statewide Climate Change Vulnerabilities**
 - Assessment of vulnerability of infrastructural, economic, environmental, and societal asset types considered in *Resilient Rhody* 2018 (expands upon those named in Act on Coasts)
 - Consideration of climate impacts determined in *Resilient Rhody* (sea level rise, storm surge, intense precipitation, warming air & water temps, & changing biodiversity)
 - Analysis will consider short, medium, and long term scenarios (2035, 2050, and 2100)
- **RI Climate Resilience Best Practices**
- **Review of Funding/Financing Options & National Resources**
- **Municipal Resilience Priority Actions**

Statewide Resilience Collaboration

Who?



What?



Outcomes this will inform?

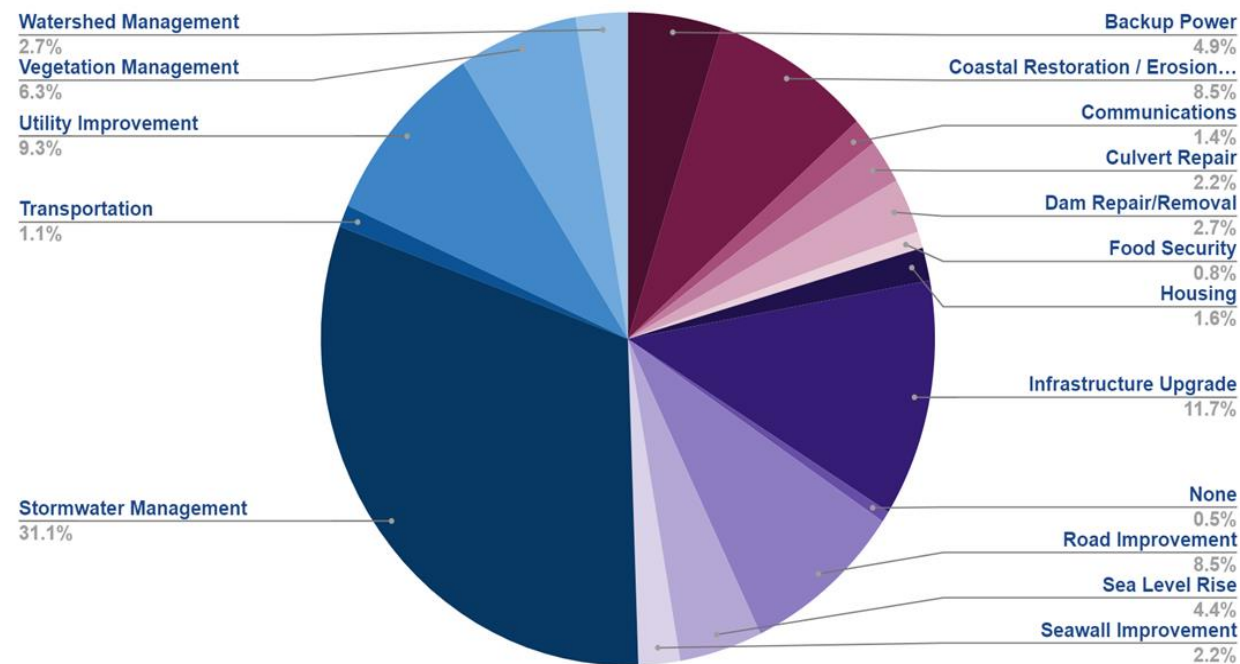


Rhode Island's Climate Vulnerabilities

Top 5 Resilience Project Needs Identified through Municipal Resilience Program:

1. Stormwater Management
2. Infrastructure Resilience
3. Utility Resilience
4. Coastal Restoration / Erosion Control
5. State + Local Road Resilience

MRP Identified Projects by Type, 2021 Analysis

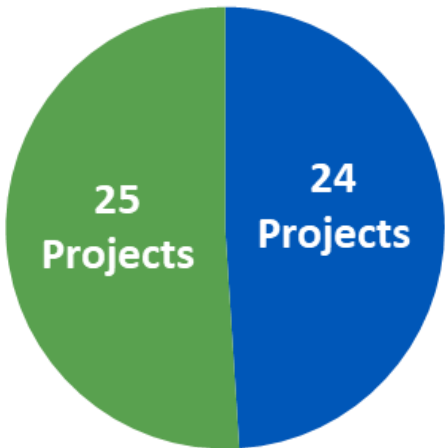


Rhode Island's Climate Vulnerabilities

MRP Funded Projects in State Identified Disadvantaged Areas, 2023 Analysis

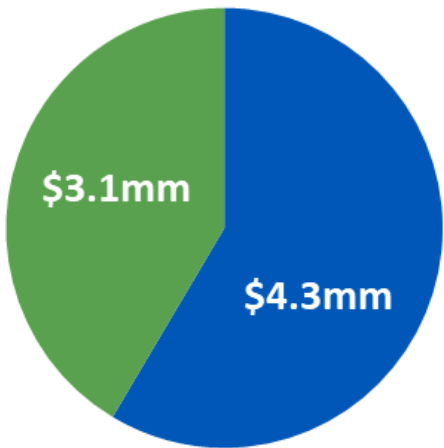
2019-2023: 49 MRP Action Grants, \$7.4 million total in funding awarded

24 MRP Action Grants awarded to RIIB
Identified Disadvantaged Areas



- Projects in RIIB Identified Disadvantaged Areas
- Projects Outside RIIB Identified Disadvantaged Areas

\$4.3mm in MRP Action Grant dollars awarded to
RIIB Identified Disadvantaged Areas



- Awarded to RIIB Identified Disadvantaged Areas
- Awarded Outside RIIB Identified Disadvantaged Areas

Rhode Island's Climate Vulnerabilities



Johnston

"RI's 2023 MRP Action Grant round, offering \$12mm in funding, received over \$52mm in proposals – all of which were eligible, ready to proceed, and desperately needed."

- RIDEM NFWF National Coastal Resilience Fund Proposal

Rhode Island's Climate Vulnerabilities



Prudence Island,
Portsmouth

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Rhode Island's Climate Vulnerabilities

Massachusetts

- **In August 2024, \$52.4mm in MVP Action Grants** awarded to cities and towns
- **Disaster Relief Fund** - State disaster assistance for non-federally declared events

Vermont

- **Emergency Relief and Assistance Fund (ERAF)** - State funding assistance to match Federal Public Assistance after federally declared disasters
- **Flood Resilient Communities Fund (FRCF)** - Voluntary Buyouts of flood-vulnerable properties

Connecticut

- **Climate Resiliency Revolving Loan Fund**



South Kingstown

Rhode Island's Climate Vulnerabilities

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- **Climate Resiliency Revolving Loan Fund**

"RI's 2023 MRP Action Grant round, offering \$12mm in funding, received over \$52mm in proposals – all of which were eligible, ready to proceed, and desperately needed."

Homeowner Risk & Voluntary Buyouts

Since September 2023,
**Rhode Islanders required over
\$22.4 million in Individual
& Homeowner Assistance
Dollars from FEMA**



Park Plaza Resident Evacuation – Johnston
(Wheeler Cowperthwaite, Providence Journal)

Climate Adaptation – Relocation & Retreat

Georgetown Climate Center:

"Managed retreat, or the **voluntary movement and transition of people and ecosystems** away from vulnerable coastal areas"

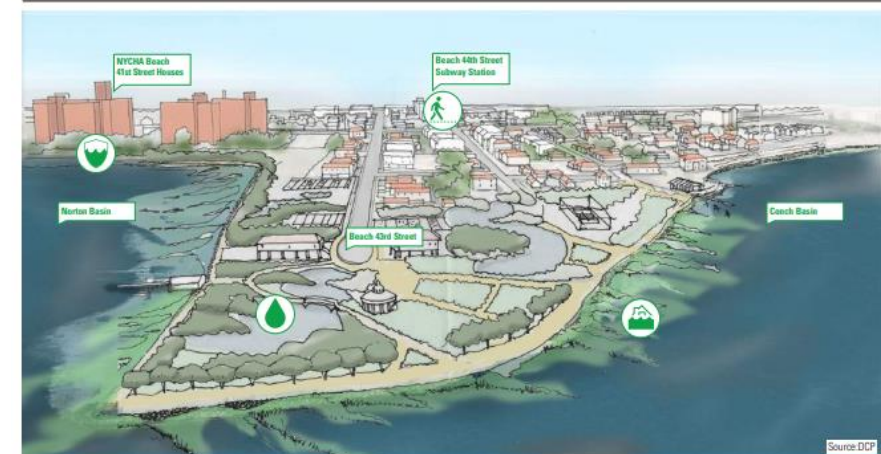
Beach SAMP:

"This suite of adaptation measures can be applied to both **existing or new construction** and at the **site or structural scale**"

Short-term Vision

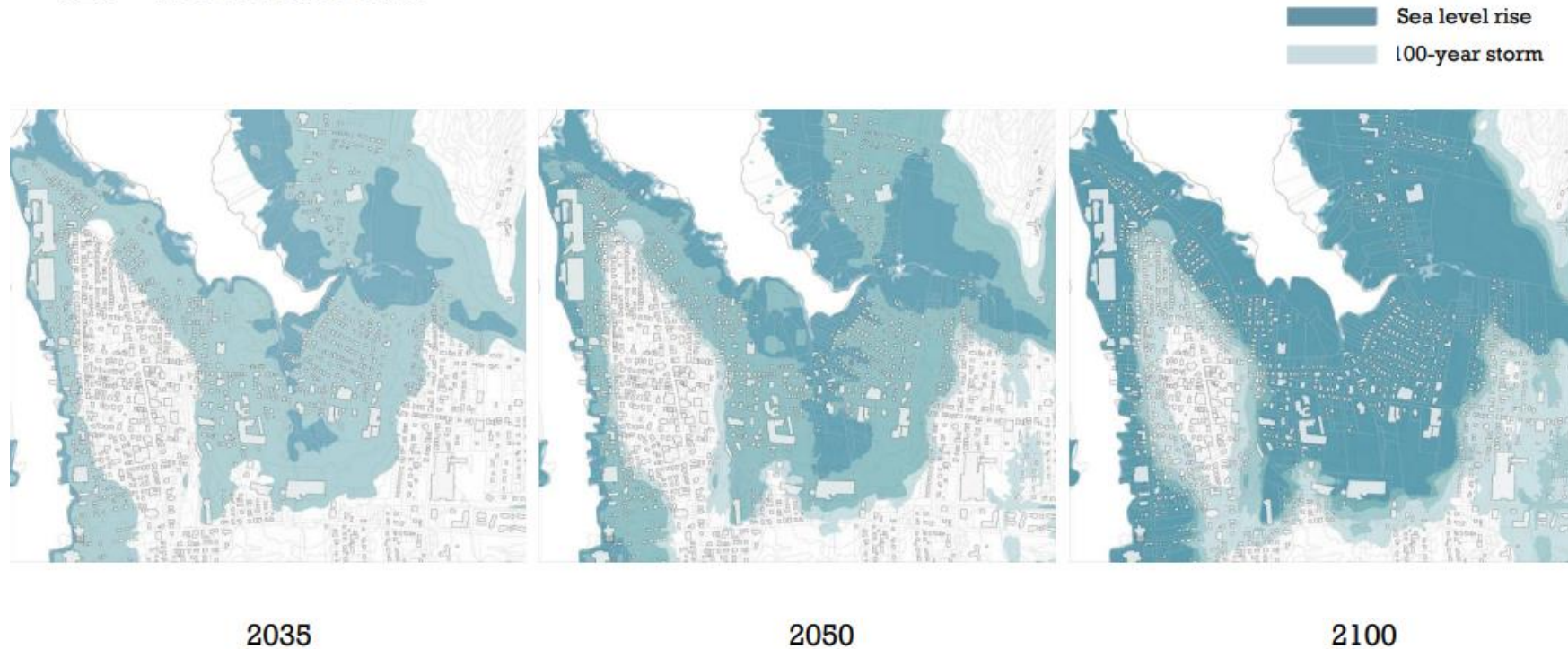


Long-term Vision



Climate Adaptation – Relocation & Retreat

SLR + 100-YEAR STORM



Source: Stormtools

Warren's Market to Metacom Resilience Project
Market Street – Projected Flood Conditions

Climate Change Impacts Commission

Focus Areas for Consideration

1. Intersection of Climate Resilience & Housing

- Analysis of **state policy intersection** on these topics
- Development of **policy strategies for achieving both affordable housing and climate resilience** – to protect Rhode Island homeowners, renters, and businesses from climate change impacts & flood areas
- **Analysis of policy that could contribute to new development in floodplain areas**
- Analysis of **insurance considerations & building codes**

2. Development of "Cost of Inaction" estimate

- Development of a **series of proposed new state climate funds** to support resilience planning, projects, and capacity

Contact

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Rhode Island Department of Environmental Management

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