Massachusetts Coastal Resilience Grants
Supporting Local Adaptation Efforts

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Coastal Resilience Grant Program

Provides technical and financial assistance to coastal communities to reduce risks associated with coastal storms, flooding, erosion, and sea level rise through innovative and transferable local initiatives.
## Support for local adaptation

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>State Capital Funding</th>
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<tbody>
<tr>
<td></td>
<td>Requested ($M)</td>
</tr>
<tr>
<td>FY 2014</td>
<td>$4.8</td>
</tr>
<tr>
<td>FY 2015</td>
<td>$5.2</td>
</tr>
<tr>
<td>FY 2016</td>
<td>$3.0</td>
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<tr>
<td>FY 2017</td>
<td>$5.1</td>
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<tr>
<td>FY 2018</td>
<td>$5.6</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$23.7+</strong></td>
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Level of interest

Proposed Projects: 151
Awarded Projects: 86

(43 communities)
Investing local staff time and resources

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<tr>
<th>Fiscal Year</th>
<th>Match</th>
<th>Award</th>
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<tbody>
<tr>
<td>FY14</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>FY15</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>FY16</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>FY17</td>
<td>26%</td>
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<tr>
<td>FY18</td>
<td>29%</td>
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Eligibility

Applicants:

- 78 coastal cities and towns (#1-5)
- Nonprofits with vulnerable coastal property that is open and accessible to the public (#5)

Project Types:

1. Vulnerability and Risk Assessment
2. Public Education and Communication
3. Local Bylaws, Adaptation Plans, Other Management Measures
4. Redesigns and Retrofits
5. Natural (green infrastructure) Storm-damage Protection
Water/Wastewater Infrastructure projects

- Gloucester – Floodproofing Redesign and Retrofits at Five Pump Stations ($97,500), Little River Floodplain and Habitat Restoration ($400,000)

- Manchester – Sawmill Brook Culvert and Green Infrastructure Analysis: Vulnerability and Required Capacity under Climate Change ($154,950)

- Marshfield – Assessing Alternatives for Reducing Flooding within Green Harbor River Estuarine System through the Optimization of the Tide Gates Located on Dyke Road ($71,250)

- Mattapoisett – Protecting Mattapoisett’s Potable Water and Sewer Infrastructure in the Face of Climate Change: Assessing Risk and Identifying Solutions ($47,791); Addressing Mattapoisett’s Potable Water Infrastructure Vulnerabilities...Pease’s Point Water Main Crossing ($47,625); final design and permitting ($67,800)

- New Bedford – Sewer Pump Station Flood Proofing ($255,000)

- Oak Bluffs – Elevate emergency generator ($200,000)

- Wareham – Wastewater Infrastructure Vulnerability Assessment and Emergency Response Plan ($93,750); Permit-level designs for retrofit measures at three critical pump stations ($150,000); final design and permitting ($101,100)

- Weymouth – Puritan Road Flood Mitigation and Ecological Resilience: watershed modeling and alternatives analysis ($75,000), design and permitting ($51,504), construction ($397,500)

Part of town-wide vulnerability assessment – Winthrop, Quincy, Boston, Chelsea, Beverly, Lynn, Hull, Hingham, Swampscott, Gloucester
Identify coastal erosion and flooding vulnerabilities and plan for future conditions

Cat. 2 + 1-foot Sea Level Rise

Source: Town of Mattapoisett, July 2015
Protect public health and safety

Water main exposed during June 2013 storm

Source: Town of Mattapoisett, June 2017
Strengthen hazard mitigation approaches to prevent catastrophic flooding impacts

Source: Town of Wareham
Keep critical facilities online during high water events

Photo: Marc Drainville
Re-establish floodplains

Before

After
Deteriorating culvert at the end of Puritan Road restricts tidal exchange between Weymouth’s Back River and 4+ acre salt marsh
Culverts that will overtop during specific flood events in the year 2025 with a fossil intensive precipitation event and sea level rise.
Coming Soon:

Downscaled climate change projections for temperature, precipitation and sea level rise:

- Temperature and Precipitation for annual and seasonal temporal scales provided at statewide, county, and major basin scales
- Sea Level Rise projections provided for the coastline at established tide gauge locations (Boston Harbor, Buzzards Bay, Nantucket, Newport, RI, Sandwich, Seavey Island, NH, and Woods Hole)