Coastal Pollutant Remediation Grant (CPR)

Massachusetts Office of Coastal Zone Management
Cristina Kennedy
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FY2020 Pre-RFR Meeting

https://www.mass.gov/service-details/coastal-pollutant-remediation-cpr-grant-program
Nonpoint Pollution

Contamination which includes but is not limited to *sediments, nutrients, pathogens, and pollutants* that collect in waterbodies from *stormwater runoff* and *boat waste discharges*.

*301 CMR 26*
CPR Goals: Coastal Habitat & Water Quality

- Address stormwater runoff and boat-waste pollution affecting coastal resources
CPR Goals: Coastal Habitat & Water Quality

- Remove waters with a connection to the coast from MassDEP’s integrated list of (impaired) waters

2016 Draft Integrated List of Waters & 2014 Interactive Map
https://www.mass.gov/lists/integrated-lists-of-waters-related-reports
CPR Eligible Projects

- Watershed Assessment
  - Identification and prioritization of sources of stormwater pollution
  - Feasibility and siting of appropriate BMPs*
- Design and Construction
  - BMPs to address stormwater pollution
  - Boat-waste pumpout stations serving mainly commercial vessels
  - Must be on public land

*stormwater infrastructure Best Management Practice

Types of Projects Funded

- Construction (44%)
- Design & Permitting (26%)
- Assessment & Feasibility (23%)
- Pumpout (7%)
CPR Eligible Communities

- Municipalities in the coastal watershed (>200)
  - Partnerships encouraged
- Demonstrate both:
  - Impairment to local waters or impact to coastal resource
  - Direct connection to coastal waters
- Municipal Vulnerability Preparedness (MVP) designation not required
CPR Since 1996

- > $11 million
- 184 awards
- 56 communities
- 140+ BMPs constructed
CPR Goals

- Preserve or expand opportunities for shellfish harvesting
- Reduce instances of beach closures due to elevated bacteria

<table>
<thead>
<tr>
<th>Community</th>
<th>Project Name</th>
<th>Year</th>
<th>Water Quality Impact</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provincetown</td>
<td>Commercial Street Porous Asphalt – Phase 5</td>
<td>FY19</td>
<td>Shellfish, Beach Closures</td>
<td>Design</td>
</tr>
<tr>
<td>Kingston</td>
<td>Jones River BMP Design and Implementation, Phase 1, 2, 3, 4</td>
<td>FY13, 14, 15, 16, 18</td>
<td>Shellfish</td>
<td>Design Construction</td>
</tr>
</tbody>
</table>
## CPR Goals

- Increase or protect habitat for diadromous fish, including freshwater portions, and areas which historically supported fish runs

<table>
<thead>
<tr>
<th>Community</th>
<th>Project Name</th>
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</thead>
<tbody>
<tr>
<td>Milton</td>
<td>Uniquity Brook BMP Assessment and Planning</td>
</tr>
<tr>
<td></td>
<td>FY 16, 17, 19</td>
</tr>
<tr>
<td></td>
<td>Rainbow Smelt</td>
</tr>
<tr>
<td></td>
<td>Assessment Design Construction</td>
</tr>
<tr>
<td>Everett</td>
<td>Improve Anadromous Fish Habitat in Malden and Mystic Rivers</td>
</tr>
<tr>
<td></td>
<td>FY 18</td>
</tr>
<tr>
<td></td>
<td>River Herring</td>
</tr>
<tr>
<td></td>
<td>Assessment</td>
</tr>
<tr>
<td>Plymouth</td>
<td>Great Herring Pond Stormwater Improvements</td>
</tr>
<tr>
<td></td>
<td>FY 17, 18</td>
</tr>
<tr>
<td></td>
<td>River Herring</td>
</tr>
<tr>
<td></td>
<td>Assessment Design</td>
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</table>
CPR Goals

- Protect or improve condition of coastal habitats such as salt marshes and eelgrass beds
- Improve water quality in waterbodies subject to eutrophication

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<th>Water Quality Impact</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yarmouth</td>
<td>BMP Assessment and Implementation Project</td>
<td>FY 17, 18, 19</td>
<td>Reduce bacteria and nutrients</td>
<td>Design Permitting Construction</td>
</tr>
<tr>
<td>Sandwich</td>
<td>Sandwich Harbor Stormwater Mitigation</td>
<td>FY19</td>
<td>Shellfish, Coastal Habitat</td>
<td>Design Construction</td>
</tr>
</tbody>
</table>
CPR Goals

- Expand the use of appropriate green infrastructure and low impact development techniques

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<th>Year</th>
<th>Water Quality Impact</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnstable</td>
<td>Three Bays Stormwater</td>
<td>FY18,19</td>
<td>Coastal habitat, beach, shellfish</td>
<td>Assessment Design Construction</td>
</tr>
<tr>
<td>Melrose</td>
<td>Orient Avenue Rain Gardens</td>
<td>FY17,18</td>
<td>Impaired watershed</td>
<td>Design Construction</td>
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<tr>
<td>Salem</td>
<td>Commercial Street North River LID</td>
<td>FY13,16</td>
<td>Diadromous fish</td>
<td>Construction</td>
</tr>
</tbody>
</table>
**CPR Goals**

- Design and construct commercial boat-waste pumpout facilities to support compliance with the statewide No Discharge Zone (NDZ)

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<th>Type</th>
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</thead>
<tbody>
<tr>
<td>New Bedford</td>
<td>Waterfront Commercial Boat Pumpout Facility</td>
<td>FY11, 13</td>
<td>NDA</td>
<td>Design Permitting Construction</td>
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<tr>
<td>Barnstable</td>
<td>Hyannis Harbor Pumpout Station Construction</td>
<td>FY13, 14</td>
<td>NDA</td>
<td>Design Permitting Construction</td>
</tr>
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</table>

[https://www.mass.gov/service-details/no-discharge-zones-ndzs](https://www.mass.gov/service-details/no-discharge-zones-ndzs)
CPR Goals: Climate Resiliency

- Site and design stormwater BMPs to increase treatment effectiveness and long-term resilience to climate change impacts.
  - Increased Precipitation & Drought
  - Increased Storms
  - Sea Level Rise
  - Groundwater Table Rise

CPR Goals: Climate Resiliency

Yarmouth Resiliency Retrofit (FY17,19)

- Evaluate existing BMPs vulnerable to climate change impacts and create conceptual retrofit designs
  - Desktop analysis
  - Field inspections (priority sites)
  - Conceptual designs
CPR Goals: Climate Resiliency

Yarmouth Resiliency Retrofit

- Infiltration Basin (~1500 ft²)
  - Residential area and public beach
  - Sand fill from neighboring beach
  - VE flood zone
  - Category 1 Hurricane and 2 ft SLR
CPR FY20 Logistics

- Estimated Timeline
  - RFR out in late April
    - Contact us now!
  - Proposals due late May
  - Contracting Aug/Sep
  - June 30, 2020: All tasks must be completed

- Funding Levels FY19
  - Up to $500k
  - $175k max (construction)

- Applicants must provide at least 25% of the total project cost as match

www.commbuys.com/bso/
CPR: General Application Advice

- Clearly connect the “solution” to the “problem”
- Show rationale for location and BMP selection
- Show that this is one piece of a larger solution
- Work within the timeline
  - Set up for multiple grants
- Assume the reviewer is not familiar with the project
- Pay attention to evaluation criteria (RFR Section 3A)
- Connect back to Coastal Habitat & Water Quality
- And.....
CPR Priorities: Operations & Maintenance

- 2006 BMP report
  - > 50% inadequate maintenance
  - Recommendations for Improving Stormwater BMPs
- Demonstrate the capacity for long-term O&M
  - Include DPW staff in all phases
  - Knowledge of BMPs
  - Equipment
  - Maintenance records
  - O&M Plan and Training

MA Tools & Resources

- Stormwater funding opportunities

- CZM Grant Viewer (CPR 2015-present)
  - [https://www.mass.gov/service-details/czm-grant-viewer](https://www.mass.gov/service-details/czm-grant-viewer)

- EPA and MassBays Green Infrastructure Handbook

- BSWC Stormwater Best Management Practices Guidance Documents (urban focus)

- StormSmart Coasts – Coastal Landscaping

- MA Climate Change Clearinghouse
  - [http://resilientma.org/](http://resilientma.org/)

- CZM Sea Level Rise Viewer:
Contact Us

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www.mass.gov/service-details/coastal-pollutant-remediation-cpr-grant-program
## CPR vs. 604b vs. 319

<table>
<thead>
<tr>
<th></th>
<th>CPR</th>
<th>604b</th>
<th>319</th>
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</thead>
<tbody>
<tr>
<td><strong>Eligibility</strong></td>
<td>Municipality</td>
<td>Municipalities, RPAs &amp;</td>
<td>Public/private MA organization</td>
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<tr>
<td></td>
<td></td>
<td>Conservation Districts</td>
<td></td>
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<tr>
<td><strong>Geographic Extent</strong></td>
<td>MA coastal watershed</td>
<td>MA</td>
<td>MA</td>
</tr>
<tr>
<td><strong>Project Timeline</strong></td>
<td>&lt; 1 year</td>
<td>2 years</td>
<td>2 years</td>
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<tr>
<td><strong>Match</strong></td>
<td>25%</td>
<td>Not required</td>
<td>40% non-federal</td>
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<tr>
<td><strong>SW Education &amp; Outreach</strong></td>
<td>As match only</td>
<td>Depends*</td>
<td>✅</td>
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<td><strong>WQ Assessment</strong></td>
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<td>✗</td>
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<tr>
<td><strong>Projects in MS4</strong></td>
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<td>Depends*</td>
<td>Depends*</td>
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<tr>
<td><strong>BMP Design</strong></td>
<td>✅</td>
<td>✅</td>
<td>Depends*</td>
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<tr>
<td><strong>BMP Construction</strong></td>
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<td>✅</td>
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<tr>
<td><strong>Development of SW Collaborative</strong></td>
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<td>✅</td>
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<td><strong>Development of SW Utilities</strong></td>
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<td>✅</td>
<td>✅</td>
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<tr>
<td><strong>Development of Watershed Based Plans</strong></td>
<td>✗</td>
<td>✅</td>
<td>✅</td>
</tr>
</tbody>
</table>

*Talk to MassDEP grant program staff or review RFR for clarification

https://www.mass.gov/info-details/grants-financial-assistance-watersheds-water-quality
CZM 2006 O&M Report: Recommendations for improving stormwater BMPs

- **Recommendations for Improved Maintenance**
  - 1. Avoid installing underground stormwater systems within the travel lanes of a roadway.
  - 2. Select surface stormwater BMPs over subsurface treatment systems.
  - 3. Equip all recharge chamber fields and other BMPs with adequate access for cleaning and maintenance.
  - 4. Install manhole risers and covers to grade.
  - 5. Provide adequate access to the inlet and outlet control structures of all BMPs.
  - 6. Design BMPs so that maintenance efforts can be focused on a smaller number of structures at a greater frequency.

- **Recommendations for Improved Siting and Design**
  - 7. Equip all catch basins and water quality chambers with hoods at all outlet pipes.
  - 8. Ensure that drainage collection structures are constructed in the stormwater flow line (i.e., stormwater runoff will be captured by the practice).
  - 9. Incorporate flow diversion structures in system designs to bypass large storms around stormwater treatment systems.
  - 10. Employ practices that provide stormwater collection and surface treatment prior to discharge in areas with shallow groundwater and/or tight soils (i.e. forebay, bioretention systems, swales, channels, constructed wetlands, etc.).
  - 11. Employ surface stormwater practices in situations where the roadway grades are topographically too low to collect and convey stormwater to an underground infiltration system.
  - 12. Install velocity dissipation devices (i.e. rip rap, and stilling basins) at all outfalls to reduce downstream erosion.

- **Recommendations for Improved Construction Practices**
  - 13. Remove all temporary erosion control devices following site stabilization.
  - 14. Provide adequate time for vegetation to establish following construction of vegetated treatment devices.