New York State and federal agencies offer over $150 million in assistance to municipalities and non-profit organizations to build waterfront resilience and adapt to flooding, sea-level rise and other climate risks. This document provides an overview of these assistance programs, how to apply and local examples, with a focus on the Hudson Valley region. Eligible activities include municipal planning, resilient infrastructure and structures, emergency management, economic revitalization, public outreach, and natural solutions like sustainable shorelines, green infrastructure and floodplain protection. A summary table of all resources, organized by agency, areas of assistance, funding amounts and deadlines, can be found at the end of this document. Sign up for our Climate Resilience newsletter to receive the latest funding announcements. Programs covered in this document are:

- **NYS Department of Environmental Conservation (DEC):** Hudson River Estuary Stewardship Planning Grants, Climate Smart Communities Grants, Water Quality Improvements Program, Non-Agricultural Nonpoint Source Planning Grant and Trees for Tribs
- **Department of State (DOS):** Local Waterfront Revitalization Program and Brownfield Opportunity Area
- **Environmental Facilities Corporation (EFC):** Green Innovation Grant Program, Wastewater Infrastructure Engineering Planning, Clean Water and Drinking Water Revolving State Funds
- **Federal Emergency Management Agency (FEMA):** Hazard Mitigation Assistance, Public Assistance and Community Rating System
- **Additional assistance programs**
  - **New York State Energy Research and Development Authority (NYSERDA):** Clean Energy Communities Program
  - **NYS Office of Parks, Recreation and Historic Preservation (OPRHP):** Parks, Preservation and Heritage Grants and Recreational Trails Grants
  - **US Housing and Urban Development (HUD)** Community Block Grant Program
  - **Empire State Development (ESD) Grant Program**
  - **Hudson River Greenway Communities Grant Program**
  - **Open Space Funding Options**

**NYS Consolidated Funding Application**

New York State’s Consolidated Funding Application (CFA) allows communities to design comprehensive projects and with one application, apply to multiple state funding sources. Communities may not apply to federal programs such as FEMA through the CFA. You can download the [2019 CFA Available Resources (PDF)] online.
Overview of Financial Assistance Programs

Below is a summary of financial assistance programs identified by their funding categories related to flood resilience.

- Municipal planning
- Public outreach
- Resilient infrastructure
- Economic revitalization
- Emergency management
- Natural solutions (e.g., sustainable shorelines, green infrastructure + floodplain protection)

- CFA = grants included in the NYS Consolidated Funding Application

New York State Department of Environmental Conservation (NYS DEC)

The NYS DEC is a state agency focused on the conservation, enhancement, and enjoyment of environmental resources.

Hudson River Estuary Program Local Stewardship Planning Grant

The Estuary Program provides funding ($350,000) to help communities and local organizations advance four categories of local projects and programs through planning, feasibility studies, and/or design. Award amounts range from $10,500 to $50,000 with 15% match required. All prospective applicants must register in advance in the New York State Grants Gateway where they can also search and download the full RFA by searching for 'Hudson River Estuary.' Funding for the grants is provided by the New York State Environmental Protection Fund (EPF). Eligible planning categories:

- Adapt land uses and decision-making to factor in climate change, flooding, heat, drought, and sea-level rise projections in Hudson River shoreline communities
- Improve water infrastructure to make it more resilient to flooding and/or sea-level rise
- Create a natural resources inventory, open space inventory/index, open space plan, open space funding feasibility study, conservation overlay zone, or connectivity plan
- Develop a watershed and/or source water management plan

Contact: HREPGrants@dec.ny.gov
Deadline: 3:00 pm, July 10, 2019

LOCAL EXAMPLE: LOCAL STEWARDSHIP PLANNING GRANT

The Village of Catskill received $68,000 in Local Stewardship grants in 2016 to analyze their wastewater treatment plant and zoning codes to look for opportunities to address flooding and sea-level rise.
Climate Smart Communities (CSC) Grants

The Climate Smart Community (CSC) program offers grants ($11.7M) to support municipal projects that implement certain CSC actions and help them become certified in the program. 50% match required.

Adaptation implementation projects fund $10,000 and $2 million and include, but are not limited to the following:

- Increasing or preserving natural resilience, such as construction of living shorelines and other nature-based landscape features to decrease vulnerability to the effects of climate change and to improve or facilitate conservation, management, and/or restoration of natural floodplain areas and/or wetland systems.
- Flood-risk reduction, including, but not limited to, strategic relocation or retrofit of climate-vulnerable critical municipal facilities or infrastructure to reduce future climate-change induced risks to those facilities.
- Replacing or right-sizing flow barriers, including, but not limited to, right-sizing bridges or culverts, or improving flow barriers to facilitate emergency response or protection of population centers, critical facilities, infrastructure, and/or natural resources, based on assessment of projected future conditions.
- Extreme-heat preparation, including, but not limited to, establishment of cooling centers, construction of permanent shade structures, and implementation of other cooling features or programs.
- Emergency preparedness, including, but not limited to, establishment of emergency warning systems or implementation of emergency preparedness and/or response programs (excluding radio communications).

Certification projects fund $10,000 to $100,000 to complete the following and additional actions:

- PE2 Action: Government Operations Climate Action Plan
- PE2 Action: Community Climate Action Plan
- PE6 Action: Comprehensive Plan with Sustainability Elements
- PE6 Action: Complete Streets Policy
- PE6 Action: Planning and Infrastructure for Bicycling and Walking (planning only)
- PE6 Action: Natural Resources Inventory
- PE7 Action: Climate Vulnerability Assessment
- PE7 Action: Climate-Smart Resiliency Planning
- PE7 Action: Climate Adaptation Strategies
- PE7 Action: Heat Emergency Plan

Contact: Climatechange@dec.ny.gov, 518-402-8448

Deadline: 4:00 pm, July 26, 2019, CFA

Water Quality Improvement Project (WQIP)

The WQIP program ($70M) is a competitive, reimbursement grant program that directs funds from the New York State Environmental Protection Fund to projects that reduce polluted runoff, improve water quality and restore habitat in New York’s waterbodies. Eligible activities include:

- Wastewater Treatment Improvement, $1-10M max award depending on project type, 25% match for high priority projects, or 60% for secondary priority projects, contact Robert Wither, (518) 402-8123, Robert.Wither@dec.ny.gov

LOCAL EXAMPLE: CLIMATE SMART COMMUNITIES GRANT

The Village of Haverstraw received a $100,000 Climate Smart Communities grant in 2018 to update and incorporate climate resilience into their Comprehensive Plan.
- Wastewater Effluent Disinfection, $1M max award, 25% match
- Projects to upgrade municipal systems to meet discharge requirements for Combined Sewer Overflow (CSO) or Sanitary Sewer Overflow (SSO), $5-10M max award, 25% match
- Watershed Plan Implementation, $5-10M max award, 25% match
- Municipal Systems to Serve Multiple Properties with Inadequate On-site Septic Systems, $5-10M max award, 25% match
- Other Wastewater Treatment Improvements, $5-10M max award, 60% match

- **Non-Agricultural Nonpoint Source Abatement and Control**, $500,000-$3M max award depending on project type, 25% match, see contacts by project type:
  - Decentralized Wastewater Treatment Facilities for Failing On-Site Treatment Systems, $3M max award, 25% match, contact Ken Kosinski, (518) 402-8086, Ken.Kosinski@dec.ny.gov
  - Green Infrastructure Practice and Stormwater Retrofits, $1M max award, 25% match, contact Ryan Waldron, (518) 402-8244, Ryan.Waldron@dec.ny.gov
  - Streambank Stabilization and Riparian Buffers, $1M max award, 25% match, contact Lauren Townley, (518)402-8283, Lauren.Townley@dec.ny.gov
  - Beach Restoration, $1M max award, 25% match, contact Karen Stainbrook, (518) 402-8095
  - Culvert Repair and Replacement, $1M max award, 25% match, contact Lauren Townley, (518) 402-8283, Lauren.Townley@dec.ny.gov

- **Aquatic Connectivity Restoration**, $250,000 max award, 25% match, contact Corbin Gosier, 518-402-8872, Corbin.Gosier@dec.ny.gov

- **Land Acquisition for Source Water Protection**, $4M max award, 25% match, contact Kristin Martinez, (518) 402-8086, Kristin.Martinez@dec.ny.gov

- **Municipal Separate Storm Sewer Systems (MS4s)**, $500,000-600,000 max award depending on project type, 25% match, contact Ethan Sullivan, (518) 402-1382, Ethan.Sullivan@dec.ny.gov
  - Mapping of stormwater systems, $500,000 max award, 25% match
  - Vacuum truck purchase, $600,000 max award, 25% match

Contact: User.Water@dec.ny.gov

Deadline: 4:00 pm, July 26, 2019, CFA

**Non-Agricultural Nonpoint Source Planning Grant Program**

The DEC will fund planning ($1M) for decentralized wastewater treatment facilities, green infrastructure practice/stormwater retrofits, streambank stabilization, beach restoration and culvert repair and replacement. $30,000 award maximum, 10% match.

Contact: Lauren Townley, 518-402-8283, Lauren.Townley@dec.ny.gov

Deadline: 4:00 pm, July 26, 2019, CFA

**Trees for Tribs**

Do you own or manage land along a stream? You can apply for free native plants to help reduce erosion and improve habitat along your stream! The Hudson Estuary Trees for Tribs Program offers free native trees and shrubs for planting along the tributary streams in the Hudson River Estuary watershed. Our staff can help you with a planting plan and work with your volunteers.

Contact: Beth Roessler, NYS DEC, 845-256-2253, HudsonEstuaryTFT@dec.ny.gov

Deadline: Apply by March 1, 2019 for Spring plantings, August 1, 2019 for Fall plantings
Department of State (DOS)
The DOS is a planning agency that focuses on economic revitalization and resilient, livable communities.

Local Waterfront Revitalization Program (LWRP)
The Local Waterfront Revitalization Program (LWRP) provides technical assistance and grants ($15M) on a reimbursement basis to villages, towns, cities, and counties located along New York’s coasts or designated inland waterways, to prepare or implement strategies for community and waterfront revitalization. Funds require a 25% match (15% for environmental justice communities) and the grant categories currently are:

- Preparing or updating a Local Waterfront Revitalization Program (LWRP)
- Preparing an LWRP Component, including a Watershed Management Plan
- Updating an LWRP to Mitigate Future Physical Climate Risks
- Implementing a Local Waterfront Revitalization Program or a completed LWRP Component

Contact: NYS DOS, Office of Planning, Development & Community Infrastructure, opd@dos.ny.gov
Deadline: 4:00 pm, July 26, 2019, ☑️CFA

Brownfield Opportunity Area (BOA)
The Brownfield Opportunity Area (BOA) program takes a neighborhood-wide approach to contaminated lands and provides grants ($2M) that support communities to comprehensively assess existing economic and environmental conditions associated with brownfield blight and impacted areas, identify and prioritize community supported redevelopment opportunities, and attract public and private investment. Project awards up to $300,000 with 10% required match, and option to request up to 25% of funds upfront. Eligible activities are:

- BOA nomination: a study that includes a community vision, goals and strategies for revitalization of an area affected by a concentration of known or suspected brownfields
- Pre-development activities in a State-designated BOA:
  - Development and implementation of marketing strategies;
  - Development of plans and specifications;
  - Real estate services;
  - Building conditions studies;
  - Infrastructure analyses;
  - Zoning and regulatory updates;
  - Environmental, housing and economic studies, analyses and reports; and
  - Public outreach.

Contact: NYS DOS, Office of Planning, Development & Community Infrastructure, opd@dos.ny.gov
Deadline: 4:00 pm, July 26, 2019, ☑️CFA

LOCAL EXAMPLE: LOCAL WATERFRONT REVITALIZATION PROGRAM
The Village of Piermont received a $35,000 grant in 2015 to update its Local Waterfront Revitalization Plan, first written in 1992, to include strategies from the Task Force’s final Resilience Roadmap Report.
Environmental Facility Corporation (EFC)

The EFC is a state agency that assists public and private entities to comply with federal and state environmental quality standards through technical assistance, low cost financing, and green innovation grants.

Green Innovation Grant Program (GIGP)

The Green Innovation Grant Program (GIGP, $15M) funds projects across New York State that utilize unique stormwater infrastructure design and create cutting-edge green technologies. 10% to 60% match required. GIGP funds highly-visible projects that are directly attributable to the improvement or protection of water quality and integral to the success of the following specific green infrastructure practices:

- Bioretention
- Downspout disconnection
- Establishment or Restoration of Floodplains, Riparian buffers, Streams or Wetlands
- Green roofs and green walls
- Permeable pavements
- Stormwater Harvesting and Reuse, e.g. Rain Barrel and Cistern Projects
- Stormwater Street Trees / Urban Forestry Programs Designed to Manage Stormwater

Contact: Brian Hahn, 518-402-6924, GIGP@efc.ny.gov

Deadline: 4:00 pm, July 26, 2019, CFA

Wastewater Infrastructure Engineering Planning Grant (WIEP)

The EFC, in cooperation with NYS DEC, offers WIEPG grants ($3 million) for engineering and consulting services to produce engineering reports to construct or improve municipal wastewater systems. Funding level is based on population size and the municipality must provide a 20% match. The final engineering report can be implemented using EFC or other financing sources.

- $30,000 max award for communities with a population of 50,000 or less
- $50,000 max award for communities with a population of 50,000 or more
- $100,000 max award for inflow and infiltration projects based on an Order on Consent or SPDES Permit Compliance Schedule

Contact: Susan Van Patten, NYS DEC, 518-402-8267, CFAWater@gw.dec.state.ny.us

Deadline: 4:00 pm, July 26, 2019, CFA

Clean Water (CWSRF) and Drinking Water State Revolving Funds (DWSRF)

The EFC provides various forms of project finance for water-quality protection projects through the Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF). A variety of publicly-owned water quality improvement projects are eligible for financing, including point source projects such as wastewater treatment facilities, and nonpoint source projects such as stormwater management projects and landfill closures, as well as certain habitat restoration and protection projects in national estuary program areas. Short and long-term loans are available at no interest and low interest rates. Clean Water applicants may apply for Integrated Solutions Construction grant ($8M) to support green infrastructure by funding 50% of construction costs.
Federal Emergency Management Agency (FEMA)

FEMA is a national agency that administers programs providing flood insurance, hazard mitigation assistance, and public assistance grants.

Hazard Mitigation Assistance

FEMA currently provide three types of hazard mitigation assistance (HMA):

- **Hazard Mitigation Grant Program (HMGP)** assists in implementing long-term hazard mitigation measures. HMGP funds are triggered by a declared disaster and funneled to individual municipalities through the NYS Division of Homeland Security and Emergency Services (DHSES).

- **Pre-Disaster Mitigation (PDM)** provides funds on an annual basis for hazard mitigation planning and projects.

- **Flood Mitigation Assistance (FMA)** provides funds on an annual basis for projects to reduce or eliminate risk of flood damage to buildings that are insured under the National Flood Insurance Program (NFIP).

Public Assistance Grant Program

Through the Public Assistance (PA) Program, FEMA provides supplemental Federal disaster grant assistance for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged, publicly-owned facilities, and the facilities of certain private Non-Profit (PNP) organizations. The PA Program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process. 25% match required.

Contact: FEMA grants are administered by NYS Division of Homeland Security and Emergency Services (DHSES). Visit their website for current grant opportunities: [http://www.dhses.ny.gov/grants/](http://www.dhses.ny.gov/grants/)

Community Rating System (CRS)

FEMA also administers the National Flood Insurance Program (NFIP) and the related Community Rating System (CRS), which allows municipalities to reduce flood insurance rates for all policyholders by instating community-scale projects and policies regarding flood resilience.

Contact: 317-848-2898, [nfipcrs@iso.com](mailto:nfipcrs@iso.com)
New York State Energy Research and Development Authority (NYSERDA)

NYSERDA is a state authority dedicated to promoting energy efficiency and renewable energy sources.

**Clean Energy Communities (CEC) Program**

Municipalities that complete four of 10 priority actions will be considered Clean Energy Communities (CEC). Locally based outreach and implementation coordinators will provide free, on-demand technical assistance, including step-by-step guidance, case studies, and template contracts to help municipalities implement the Climate Smart Communities and Clean Energy Communities programs.

Contact: cec@nyserda.ny.gov or Europa McGovern, Mid-Hudson CEC Coordinator, 845-564-4075, emcgovern@hudsonvalleyrc.org

NYS Office of Parks, Recreation & Historic Preservation (OPRHP)

THE NYS OPRHP is a state agency dedicated to preserving and enhancing parks, historic assets and heritage areas.

**Grant Program for Parks, Preservation and Heritage**

The OPRHP is providing grants ($19.5M) for acquisition, planning, development, and improvement of parks, historic properties, and heritage areas. Project awards up to $600,000 with 50% required match, or 25% match for projects that are in a high-poverty district.

Contact: Erin Drost, (845) 889-3866, erin.drost@parks.ny.gov
Deadline: 4:00 pm, July 26, 2019, ☑CFA

**Recreational Trails Program**

The OPRHP is providing grants ($1.9M) for design, right-of-way and construction of recreational trails. Project awards up to $250,000 with 20% required match.

Contact: Erin Drost, (845) 889-3866, erin.drost@parks.ny.gov
Deadline: 4:00 pm, July 26, 2019, ☑CFA

US Department of Housing and Urban Development (HUD)

HUD is a federal agency aimed to support sustainable, inclusive and affordable communities.

**Community Development Block Grant Program (CDBG)**

HUD is offering competitive grants ($20M) for development projects in small communities and counties.

LOCAL EXAMPLE: PARK DEVELOPMENT

The Village of Freeport received a $250,000 Parks grant to replace over 1,000 feet of bulkhead at Waterfront Park to reduce soil erosion and improve public safety and recreational access.
- Resilient drinking water, clean water and stormwater infrastructure projects may be applied for under Category 1: Public Infrastructure, $750,000 max, $900,000 for joint applicants, no match required
- Construction and renovation projects may be applied for under Category 2: Public Facilities, $300,000 max
- Risk assessment and engineering projects may be applied for under Category 4: Community Planning, $50,000 per project, 5% match

Contact: 518-474-2057, HCR_CFA@nyshcr.org
Deadline: 4:00 PM, July 26, 2019, ☑ CFA

Empire State Development (ESD)
ESD is the New York state agency focused on economic development.

Empire State Development Grant Funds
The ESD is offering grant funds ($150M) in the 2019 consolidated funding application. Infrastructure investment that can foster new economic development is eligible under Category 1: Strategic Community Development Investment (grant funds cover up to 25% of project soft costs).

Contact: 845-567-4882, nys-midhudson@esd.ny.gov
Deadline: 4:00 pm, July 26, 2019, ☑ CFA

NYS Hudson River Valley Greenway
The Greenway is state agency focused on using regional collaboration to conserve and enhance the natural, scenic and historic resources of the unique Hudson River Valley.

Greenway Communities Grant Program
Financial assistance for planning ($5,000 to $10,000 per project, more if multiple municipalities involved) is available to designated “Greenway Communities” within the Greenway Area. Projects funded under this program include those that relate to community planning, economic development, natural resource protection, cultural resource protection, scenic resource protection, and open space protection. Greenway Compact communities are eligible for greater funds to develop, approve, and implement a regional compact strategy consistent with the Greenway criteria and the Greenway act.

Contact: 518-473-3835, grants@hudsongreenway.ny.gov
Deadline: September 6 and November 8, 2019
Open Space Funding Options

Preserving land as open space in floodplains and in coastal areas is an important aspect of flood resilience recommendations. Here are several options for municipalities looking to preserve open space in their community:

- The municipality can advocate to have their land included in the NYS Open Space Plan that is updated every 5 years. This helps the community to show that the land has value outside of traditional development and is a good way to prepare for purchase of the land for open space. The State receives annual funding to purchase lands specifically mentioned in the plan. Municipalities can also seek grant funds to write or update their own Open Space Plan and include floodplain protection as one of the important values that open space provides.

- The municipality can work with a local or regional land trust, like the Wallkill Valley Land Trust or the Open Space Institute to purchase the land using easements if it has scenic, ecological and/or agricultural value. Then, the community may be able to work with the land trust to make the property more valuable as floodplain protection.

- The municipality can purchase the land for open space by taking on debt (bonds) or instigating a tax levy. One example of a relevant tax levy is called a Real Estate Transfer Tax, which has been passable by local law since NYS passed the Hudson Valley Community Preservation Act of 2007. This tax is applied to mortgages on local real estate and is used to create a conservation fund for the community, which can be used to preserve open space.
## Summary table of all funding assistance programs

<table>
<thead>
<tr>
<th>Agency</th>
<th>Assistance Program</th>
<th>Categories</th>
<th>Grant amount, match</th>
<th>Deadline, CFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEC</td>
<td>✓ Estuary Program</td>
<td></td>
<td>$10,500-$50,000, 15%</td>
<td>7/10/19</td>
</tr>
<tr>
<td></td>
<td>✓ CSC</td>
<td></td>
<td>$10,000-$2M, 50%</td>
<td>7/26/19</td>
</tr>
<tr>
<td></td>
<td>✓ WQIP</td>
<td></td>
<td>1$-10M, 25-60%</td>
<td>7/26/19</td>
</tr>
<tr>
<td></td>
<td>✓ NANS Planning</td>
<td></td>
<td>≤$30,000, 10%</td>
<td>7/26/19</td>
</tr>
<tr>
<td></td>
<td>✓ T4T</td>
<td></td>
<td>N/A</td>
<td>3/1, 8/1/19</td>
</tr>
<tr>
<td>DOS</td>
<td>✓ LWRP</td>
<td>No max, 15-25%</td>
<td>7/26/19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ BOA</td>
<td>≤$300,000, 10%</td>
<td>7/26/19</td>
<td></td>
</tr>
<tr>
<td>EFC</td>
<td>✓ GIGP</td>
<td>No max, 10-60%</td>
<td>7/26/19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ WIEP</td>
<td>$30,000-100,000, 20%</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ CWRSF / DWRSF</td>
<td>N/A</td>
<td>7/26/19</td>
<td></td>
</tr>
<tr>
<td>FEMA</td>
<td>✓ HMA</td>
<td>N/A</td>
<td>Natural disaster trigger</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ PA</td>
<td>25%</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ CRS</td>
<td>N/A</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ NYSERDA CEC</td>
<td>N/A</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ OPRHP Parks</td>
<td>≤$600,000, 25-50%</td>
<td>7/26/19</td>
<td></td>
</tr>
<tr>
<td>ADDITIONAL</td>
<td>✓ OPRHP Rec Trails</td>
<td>$250,000, 20%</td>
<td>7/26/19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ HUD CBDG</td>
<td>$50,000 - $900,000, 0-5%</td>
<td>7/26/19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ ESD</td>
<td>75% for soft costs</td>
<td>7/26/19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Greenway</td>
<td>$5,000 - $10,000+</td>
<td>9/6, 11/8/19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Open Space</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

### CONTACT INFORMATION

**Libby Zemaitis**  
Climate Outreach Specialist, Hudson River Estuary Program  
New York State Department of Environmental Conservation  
(845) 256-3153 | Libby.zemaitis@dec.ny.gov | www.dec.ny.gov