

## **PE7 Action: Riparian Buffers**



### A. Why is this action important?

Riparian buffers are areas along rivers, streams, and other bodies of surface water that are designated by humans to help protect the water body. Expanding riparian buffer areas and restoring vegetation, especially native trees and shrubs, helps to store water during droughts and helps protect people and property from the impacts of flooding. Healthy vegetated riparian buffers intercept rainfall, filter runoff, capture sediment, absorb excess floodwaters, provide shade (which reduces water temperatures), and reduce erosion. Restoring vegetated buffers is important in flood-prone areas, but also in upstream areas to reduce the speed and potentially the volume of floodwaters. Healthy riparian buffers also offer habitat benefits and contribute to ecosystem resiliency.

In general, the wider the buffer, the more effective it can be in providing all of the benefits described above. To address flooding, the most effective buffers should include the entire width of the floodplain. FEMA Flood Insurance Rate Maps (FIRMs) may be used as a tool to delineate the floodplain. However, note that flooding can occur outside of the mapped Special Flood Hazard Area (SFHA). A minimum riparian buffer of at least 100 feet is recommended by the US EPA to provide a wide range of stream protection functions.

This Climate Smart Communities (CSC) action is related to several others in the certification program:

*PET Action: Conserve Natural Areas -* This action offers guidance and points for protecting floodplains and riparian buffers through land acquisition and conservation easements.

PE7 Action: Watershed-based Flood Mitigation Plan - This action offers guidance and points for assessing a watershed and developing flood-mitigation strategies.

6.19 Preserve Natural Areas Through Zoning or Other Regulations - This action offers guidance and points for incorporating the protection of riparian buffers into local land regulations.

*PE6 Action: Local Forestry Program* - This action offers guidance and points for community-scale tree projects (e.g., tree planting and tree preservation ordinances), regardless of whether the trees are along a riparian area.

## B. How to implement this action

This action focuses on assessing and revegetating riparian areas. To implement this action, consider the following:

**Riparian assessment.** Use land cover and other map data (e.g., FEMA FIRMS), watershed assessments, natural resources inventories, aerial photos, and local knowledge to complete the <a href="New York State">New York State</a> (NYS) Statewide Riparian Opportunity
<a href="Assessment">Assessment</a>. Use assessment results and landowner/stakeholder engagement to identify priority riparian buffer areas to conserve and revegetate.

Revegetate a riparian buffer area. Protect and revegetate riparian buffers with native trees, shrubs, and grasses. Revegetation project designs must include consideration of the underlying soil and chemical, hydrological, and biological processes that support riparian function. Designs should indicate how and when the project will meet the stated goals of the project. All projects should include a maintenance plan. Plantings can incorporate native fruit and edible species that overlap with sustainable food production or community garden models with appropriate maintenance plans (see edible stream buffer example below). Coordinate with state and federal agencies, to the extent required, to ensure adherence

with state and national policies in restoring floodplain connectivity to the waterway.

### C. Timeframe, project costs, and resource needs

This action contains both short-term and long-term strategies with varying degrees of implementation costs. In general, a community can expect to make progress on this measure in between six-to-twelve months.

# D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this action?

This action is applicable to all types of local governments. The departments with the responsibility for leading parks and recreation development could be responsible for this action. If these do not exist, the department or office that leads climate and sustainability efforts may be responsible for this action. Municipal committees, such as CSC task forces, conservation advisory councils, environmental conservation committees, and watershed groups may also be involved and can help with outreach to local landowners. County Soil and Water Conservation Districts may be able to provide technical assistance with riparian buffer revegetation, especially in agricultural areas.

In some cases, local governments may wish to work together to implement this action, or by participating in a county-led process. Local governments will need to demonstrate substantial involvement in any intermunicipal or regional process to be eligible for CSC points.

### E. How to obtain points for this action

Points for this action are tiered based on completion of the components described below. All must have occurred within ten years prior to the application date.

	POSSIBLE POINTS
Complete a riparian assessment that identifies and prioritizes sites for conservation and revegetation of buffers.	2
Revegetate a riparian buffer area for at least 50 feet width with a minimum area of 10,000 square feet. Revegetation projects must have a maintenance plan.	2
Revegetate a riparian buffer area for at least the mapped floodplain width or 100 feet and a length sufficient to reconnect existing vegetated buffer areas or a minimum area of 20,000 sq ft.  Revegetation projects must have a maintenance plan.	4

## F. What to submit

**Riparian assessment**: Submit a new or revised riparian assessment document that summarizes the maps/data used and identifies priority locations for conservation and revegetation based on data and stakeholder input.

**Riparian revegetation**: Submit evidence of a revegetation project and corresponding maintenance plan, including designs, plans and photos, clearly demonstrating the project meets minimum size requirements stated above.

The project(s) must have been completed within ten years prior to the application date.

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

### **G.Links to additional resources or examples**

- DEC, NYS Trees for Tribs program
- New York Water Resources Institute Riparian Buffers

- U.S. EPA, National Pollution Discharge Elimination System, Forest Roads
- NYS Statewide Riparian Opportunity Assessment: facilitates the identification and prioritization of riparian sites for restoration or protection
- NYS DEC riparian buffer web page (including funding options)
  - NYS Association of Soil and Water Conservation Districts
- Model Local Laws to Increase Resilience: Chapter 2: Wetland and Watercourse Protection Measures
- PA Department of Environmental Protection Riparian Forest Buffer Policy Part 2
- Town of New Paltz, NY Wetlands and Watercourse Protection Law
- Kingston Land Trust's edible stream buffer
- USGS StreamStats
- Federal Emergency Management Agency (FEMA) Map Service Center (MSC)
- USDA Soil Data and Maps

# **H. Recertification Requirements**

The recertification requirements are the same as the initial certification requirements.