

Short Environmental Assessment Form

Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information			
Name of Action or Project: Beaverdam Creek/Rochester Creek Critical Environmental Area			
Project Location (describe, and attach a location map): An 1700-ft-wide corridor in the Town of Olive along Rochester Creek, Beaverdam Creek and two tributaries.			
Brief Description of Proposed Action: The Town of Olive Conservation Advisory Council wishes to establish a Critical Environmental Area encompassing these stream corridors to draw attention to the high-quality streams, the unconsolidated aquifer, the rare species habitats, the high-quality forests, and the movement corridors for wildlife so that the conservation of these features can be considered in future land use decisions.			
Name of Applicant or Sponsor: Dan White, Co-chair of the Town of Olive CAC		Telephone: 917-902-7466	
		E-Mail: dwdiscover@aol.com	
Address:			
City/PO:		State: NY	Zip Code:
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			NO <input type="checkbox"/>
			YES <input checked="" type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval:			NO <input type="checkbox"/>
			YES <input type="checkbox"/>
3. a. Total acreage of the site of the proposed action? _____ acres			
b. Total acreage to be physically disturbed? _____ acres			
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ acres			
4. Check all land uses that occur on, are adjoining or near the proposed action:			
<input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential (suburban)			
<input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other(Specify):			
<input type="checkbox"/> Parkland			

5. Is the proposed action,	NO	YES	N/A
a. A permitted use under the zoning regulations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Consistent with the adopted comprehensive plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
b. Are public transportation services available at or near the site of the proposed action?	<input type="checkbox"/>	<input type="checkbox"/>	
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	<input type="checkbox"/>	<input type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____ _____	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ _____	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____ _____	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	NO <input type="checkbox"/> <input type="checkbox"/>	YES <input type="checkbox"/> <input type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency? b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____	NO <input type="checkbox"/> <input type="checkbox"/>	YES <input type="checkbox"/> <input type="checkbox"/>	

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input type="checkbox"/> Urban <input type="checkbox"/> Suburban		
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES
	<input type="checkbox"/>	<input type="checkbox"/>
16. Is the project site located in the 100-year flood plan?	NO	YES
	<input type="checkbox"/>	<input type="checkbox"/>
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: _____ _____	NO	YES
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment: _____ _____	NO	YES
	<input type="checkbox"/>	<input type="checkbox"/>
49. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____	NO	YES
	<input type="checkbox"/>	<input type="checkbox"/>
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ _____	NO	YES
	<input type="checkbox"/>	<input type="checkbox"/>
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Applicant/sponsor/name: <u>Dan White</u> Date: _____ Signature: _____ Title: <u>Co-chair, Olive Conservation Advisory Council</u>		

Project:

Date:

Short Environmental Assessment Form

Part 2 - Impact Assessment

Part 2 is to be completed by the Lead Agency.

Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept “Have my responses been reasonable considering the scale and context of the proposed action?”

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Will the proposed action result in a change in the use or intensity of use of land?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Will the proposed action impair the character or quality of the existing community?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Will the proposed action impact existing:		
a. public / private water supplies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. public / private wastewater treatment utilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Will the proposed action create a hazard to environmental resources or human health?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Project:

Date:

Short Environmental Assessment Form Part 3 Determination of Significance

For every question in Part 2 that was answered “moderate to large impact may occur”, or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

2. Will the proposed action result in a change in the use or intensity of use of land.

This is answered "no" because there would be no direct effect of the CEA on future land uses or land use intensity. The purpose of the CEA designation is simply to inform people about the resources of conservation concern. The information could affect how a landowner decides to use their land within the CEA, or how a landowner or developer designs a subdivision or a new development project, or the recommendations or decisions of the Olive Planning Board, Zoning Board of Appeals, or Town Board about future proposed projects within or next to the CEA. The existence of the CEA, however, would not dictate any aspects of those decisions; it would merely inform everyone about the sensitive natural resources in the vicinity.

- Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.
- Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Town Board, Town of Olive, NY	
Name of Lead Agency	Date
Jim Sofranko	Town Supervisor
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

Beaverdam Creek/Rochester Creek Critical Environmental Area

Town of Olive, Ulster County, New York

Description

A Town of Olive working group, including members of the Olive Conservation Advisory Council, staff of an environmental consulting firm, and a local cultural NGO, proposed the establishment of the Beaverdam Creek/Rochester Creek Critical Environmental Area (CEA) to promote the protection of surface water, groundwater, and wildlife habitats in the stream corridors. The CEA encompasses a 1700-foot-wide zone along the two streams and their tributaries (see map on last page of this document).

Beaverdam Creek rises below the Wagon Wheel Notch between High Point and Little Point, gathering water below the gorge at the Samsonville Road crossing, and running generally south for four miles before joining Rochester Creek near the southern corner of the town. Rochester Creek begins in western Marbletown, runs ca. 2.2 miles through the Town of Olive and, after the junction with Beaverdam Creek, continues south through the Town of Rochester another 6.5 miles before emptying into the Rondout Creek.

Both streams and the main tributary to Beaverdam Creek are all classified as A(I) by the NYS Department of Environmental Conservation (NYSDEC). The “A” classification signifies that the best uses are for drinking water supply, and the “(I)” classification means that, because of the cool, clear conditions, the streams may support trout. There are extensive wetland complexes bordering all three streams and smaller wetlands set apart from the streams.

The stream corridors are underlain by an unconsolidated aquifer, an area where groundwater is stored in sand and gravel deposits. The water in such aquifers is abundant and easily accessible for domestic wells, but may also be especially susceptible to contamination from activities on the surface because the coarse sands and gravels are less effective at filtering than are the finer mineral deposits in other parts of the landscape. The coarse deposits also make these aquifer areas especially important for replenishing groundwater from rainwater and snowmelt. Measures to promote groundwater recharge and protect groundwater from contamination are important everywhere, but particularly in areas overlying unconsolidated aquifers.

A large portion of these stream corridors lie within forest patches that score in the 90th percentile and higher in the Forest Condition Index, based on measures of size, fragmentation, connectivity, stressors, habitat value, and carbon sequestration compared to other forests of the Hudson Valley (NYNHP, NYSDEC, and Cornell University 2019). Forests are not only important for wildlife habitats and

carbon sequestration, but are also key to protecting the quantity and quality of water in streams, ponds, and groundwater.

Streams and stream corridors are essential components of regional ecosystems, and are part of the scenic landscapes so loved by the people of Olive. The stream floodplains and associated wetlands act to absorb floodwaters and attenuate downstream flooding. Clean-water streams like Beaverdam and Rochester creeks have diverse and abundant invertebrates—stoneflies, mayflies, dragonflies, mollusks, crayfish—that support the fishes, salamanders, turtles, and the rest of the aquatic community, as well as the terrestrial animals that use streams intermittently. Streams are essential habitat areas for American beaver, river otter and American mink. Many bat species forage over stream corridors, ponds, and wetlands, where flying insects are often abundant. A rare dragonfly has been found in ponds of these corridors, a terrestrial animal of conservation concern has been found in the Rochester Creek corridor, and the high elevation of the Beaverdam Creek has been designated an “Area of Known Importance” for another rare terrestrial animal species. The forests bordering streams provide important habitat for many other plants and animals, including some species of conservation concern that are known to occur in Olive, such as Louisiana waterthrush and red-shouldered hawk. Intact habitat areas along these streams also offer safe movement corridors from low-to-high elevations and south-to-north movement corridors that may benefit wildlife seeking cooler habitats in the warming climate.

The 1700-ft-wide CEA corridor encompasses a broad buffer zone to protect the streams, ponds, wetlands, and groundwater, and the habitats that are used by stream-associated wildlife.

The purpose of the CEA designation is to help ensure the persistence of the unusual clean, coolwater stream conditions, the quality and quantity of water held in the underlying aquifer, the high-quality forests, and the riparian habitats.

Threats

- **Tree removal:** Maintaining intact forests is usually the best way to promote groundwater recharge, supply clean water to streams, and maintain high-quality habitats for wildlife, along with the many ecosystem services that forests provide to the human community. Clearing of forests along streambanks and at the perimeters of wetlands and pond reduces shade and often leads to increased water temperatures and streambank erosion. Clearing in floodplains may also reduce the capability of the floodplain to absorb and slow floodwaters.
- **Cutting of trees and shrubs** during the nesting season (e.g., spring through mid-summer) disrupts the activities of nesting songbirds, raptors, and other tree-dependent wildlife, and cutting during the period April through October can disrupt roosting bats.
- **Compaction and other disturbance of the forest floor** (as by large equipment) damages the soil structure, and reduces the capability of the soils to absorb rainwater and snowmelt. It can also harm amphibians, small mammals, and the diverse soil invertebrates and microbes that support a healthy and resilient forest community.

- **Forest fragmentation** by roads, driveways, yards, utility corridors, and buildings divides the forests into smaller blocks that may be unsuitable for area-sensitive wildlife species—such as nesting songbirds that require large habitat areas and are sensitive to human contact or disturbances. Forest fragmentation makes the (formerly) deep interior forest areas newly accessible to songbird nest predators (such as raccoons and domestic cats) and to brood parasites (such as the brown-headed cowbird) whose activities are ordinarily confined to open areas and forest edges. Smaller patches of forest have more forest “edge” habitat with higher light and noise levels and infestations of non-native plant species. Roads and other developed areas dividing forests can also act as significant barriers and hazards to wildlife movement, and many animals avoid breeding near human activities.
- **Infestations of the hemlock woolly adelgid** in the coming years may kill most of the hemlocks that border these streams and may dramatically affect the habitat conditions of the corridors and the streams, and possibly the water management capabilities of the forest.
- **Impervious surfaces:** Roads, driveways, parking lots, roofs, and other impervious surfaces (including compacted soils) prevent infiltration of rainwater and snowmelt to the soils; can lead to rapid runoff of surface water, soil erosion, siltation of streams, elevated stream water temperatures, and reduced groundwater recharge; and are often sources of contamination of surface water or groundwater—e.g., from de-icing salts, petroleum hydrocarbons, and heavy metals.
- **Other forms of pollution** can arrive in streams as direct discharge or in sheet or channelized runoff from agricultural fields or lawns carrying fertilizers and pesticides that degrade the quality of water and habitats, and harm non-target plants, animals, fungi, and soil microbes that support ecosystem functions.
- **Water withdrawals:** Direct water withdrawals from the stream, or over-extraction of groundwater can deplete the stream water volumes and adversely affect the stream biota which depend on normal seasonal volumes and flow patterns.
- **Recreational use** or other kinds of repeated and frequent uses can lead to trampling, littering, soil erosion, and noise disturbance to nesting or roosting birds and other wildlife.

Recommendations

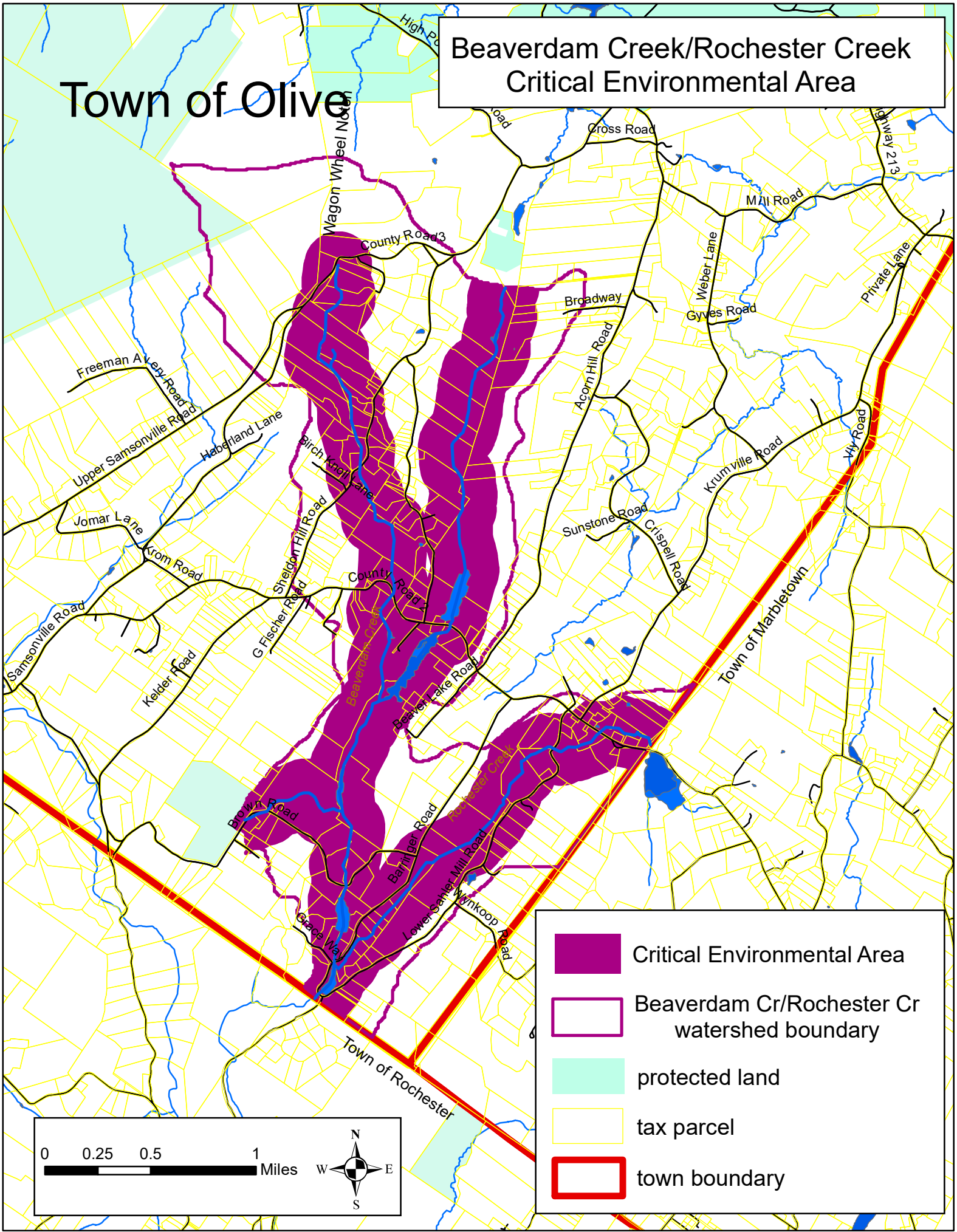
Below are recommendations for actions that will help to protect the streams, groundwater, and riparian habitats, and the benefits they provide to the human community and to wildlife. Many of these recommendations can be applied when landowners or town agencies are in the early stages of planning or reviewing new land uses or land development within the CEA, or when the town is considering new land use legislation.



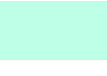


- **Avoid direct disturbance of streams, streambanks, or pond shores.**
- **Conserve broad, well-vegetated stream buffers,** wherever possible.

- **Prevent siltation, warming, and other forms of stream or pond pollution.**
- **Avoid or minimize applications of de-icing salts, fertilizers, and pesticides.**
- **Prevent over-extraction of streamwater or groundwater.**
- **Maintain intact forests** wherever possible. Minimize disturbance of soils and vegetation in the stream corridors, and especially within 200 feet of a stream or pond edge to help maintain cool water temperatures and volumes, prevent erosion, and protect wildlife habitat.
- **Avoid fragmenting large forests** in and near the stream corridors with new roads, driveways, yards, utility corridors, and other developed features. Locate new development distant from streams and near forest edges to leave the forest interiors intact as much as possible.
- **If recreational access points and trails are provided, locate and design them carefully** to protect streams, streams pools, wetlands, and the sensitive soils, vegetation, and wildlife of the stream corridors.

Town of Olive

Beaverdam Creek/Rochester Creek Critical Environmental Area



-  Critical Environmental Area
-  Beaverdam Cr/Rochester Cr watershed boundary
-  protected land
-  tax parcel
-  town boundary