

Request for Proposals:

HOUSATONIC RIVER NATURAL RESOURCES RESTORATION PROJECT
CONNECTICUT SUBCOUNCIL REQUEST FOR PROPOSALS (RFP)

RECEIVED
JAN 18 2007
LAND FISHERIES

Part A: RESPONDER AND PROJECT SUMMARY FORM

Please read "RFP: Overview of Selection Process" before completing this form.

Part A must be completed using Submittal Form A.

Responses may be entered electronically using the Microsoft Word version of Part A of this form available on the Housatonic River Basin Natural Resource Restoration Project in Connecticut website (www.housatonicrestoration.org), saved and printed. Alternatively, the responder may print the form and complete it with black ink.

An Adobe Acrobat version of the entire form (Part A and Part B) is also available on the Housatonic River Basin Natural Resource Restoration Project in Connecticut website

Project Name Provide a brief working name.

Salmon Kill Restoration and Enhancement

Responder – if there is more than one party involved in the project, please provide the information for the primary or lead party.

Kirt Mayland, Trout Unlimited (National Office)

Name

Eastern Water Project Director

Title

43 Reservoir Road

Address

Address

Lakeville, CT 06039

City

State

Zip

(860) 435-2073

Phone

kmayland@tu.org

Email

Type of Entity

Check the box that best describes the primary respondent.

Private individual

Non-profit organization

Municipal government

State government

County government

Federal government

Tribal government

Corporation or Business

Academic Institution

Other (explain)

Project Implementation

Does the responder plan to be the Project Sponsor and respond to the Request for Supplemental Information (RSI) pending approval of this Proposal?

Yes No

If yes, please list any other project participants. _____

If the responder does **NOT** plan to be the Project Sponsor and does **NOT** intend to respond to the Request for Supplemental Information (RSI), is the responder interested in being a project participant and assisting a different Project Sponsor on this project?

Yes No

Request for Proposals:

Restoration Priority Funding Category See Sec. 3 of "RFP: Overview of Selection Process" for category descriptions.

Primary Restoration Category. Check the restoration category that is the primary goal of the project.

Check one box.

- Aquatic Natural Resources Restoration/Enhancement
 Riparian & Floodplain Natural Resources Restoration/Enhancement
 Restoration/Enhancement of Recreational Uses of Natural Resources

Secondary Categories. Check all relevant boxes.

- Aquatic Natural Resources Restoration/Enhancement
 Riparian & Floodplain Natural Resources Restoration/Enhancement
 Restoration/Enhancement of Recreational Uses of Natural Resources

List Specific Injured Natural Resources and/or Impaired Natural Resource Services to Benefit from Project

Salmon Kill and the Housatonic River. Injured and impaired natural resources in the Housatonic River to benefit will be water quality, health and abundance of wild fish communities, recreational fishing and boating, and biodiversity.

Project Location (if known) See directions and "RFP: Overview of Selection Process" for additional materials to provide (maps, aerial photographs)

Municipality/ies:

Salisbury, CT; Lakeville, CT; Lime Rock, CT

Longitude for approximate center of project area: 41 56'33.83" N

Latitude for approximate center of project area: 73 23'28.11" W

Project Budget Estimate (if known)

Total Project Cost Estimate: \$ 784,000

Housatonic River NRD Fund Estimate: \$ 784,000

Salmon Kill Restoration and Enhancement

Item 1. Project Narrative. The Salmon Kill restoration and enhancement project (the "Project") has two primary components: (i) restoration and enhancement of streambanks, riparian zones and floodplains ("riparian improvements"), and (ii) instream work mainly comprising of a dam breach and placement of instream weirs and other structures to improve instream habitat ("instream improvements").

The riparian improvements would take place primarily on private land covering approximately 80 acres along the 6 miles of the Salmon Kill (the "creek"). All of the relevant landowners have informally agreed to let the proposed work take place on their property. The Salmon Kill valley is characterized by large private landholdings allowing it to remain mostly undeveloped and leaving scenery of hayfields, mixed evergreen and deciduous forest and the distant Taconic Range. Agriculture and industry dominated the banks of the creek historically, and agriculture, primarily haying operations, still does so today. This has left very little of the riparian forest to buffer and cool the waters of the wild trout fishery and to slow the high waters during flooding. This is true also for the ¼ mile reach of the stream that runs along the Lime Rock Race Track (the "track"). Armoring along streambanks has further altered the floodplain and increased the velocity of the water.

The instream improvements involve breaching, or removing, the approximately 8-foot high dam that runs across the creek in the center of Lime Rock and placement of instream structures and rock weirs primarily through the channelized reach of the creek running alongside the track. Heavy siltation has accumulated behind the dam for approximately 200 feet and a scour hole approximately 6 feet deep is located at the foot of the dam. Currently, there is no possibility of fish passage. During the warmer months, the water behind the dam heats up significantly, increasing temperatures not only downstream in the creek but also in the Housatonic River (the "main stem"). During spring flooding flows, silt is carried over the dam coating the gravel bottom and eliminating potential spawning habitat.

a. Goals. The Project, upon completion, would fulfill all three restoration categories. It would restore and enhance aquatic habitat, riparian and floodplain resources, and recreational uses of natural resources.

1. The primary goal of the riparian improvements is to rehabilitate, enhance, and restore the streambanks, riparian forest and floodplain along the creek. This work would involve replanting of the floodplains, replacing invasive species with natives, stabilizing streambanks, and removal of armoring. Invasive species of flora along the streambanks include *Rosa multiflora*, Multiflora rose; *Rhamnus frangula*, Alder buckthorn; and *Celastrus orbiculatus*, Oriental bittersweet.

The objectives behind this work would be to limit further impacts of eroded sediments and other pollutants, slow water velocity during periods of high flow, and decrease summertime water temperatures by providing shading. This work should also increase biodiversity and reestablish native life in the riparian forest and floodplain.

Restoration of the riparian forest will also buffer the Salmon Kill from present land uses as well as possible future development along its banks.

2. The principal goal of the instream improvements is an increase in biodiversity and enhancement of instream habitat for the native brook trout in the upper reaches of the creek, the downstream wild brown trout populations and assorted aquatic life. The breaching of the dam would be preceded by a cleanup of the siltation and potential pollutants. The breaching itself would prevent further buildup from occurring, allow for fish movement and therefore healthier fish communities and increased biodiversity, and permit cleaner and colder water to flow through the creek and into the main stem. The reach of the creek that flows by the track was channelized decades ago during construction of the track, and instream life there would benefit from the placement of rock weirs and other instream structures to improve habitat.

3. The tertiary goal is to educate the landowners and the public entities involved in both the instream and riparian improvements. Public participation and education will be utilized to help in the implementation of the riparian and instream improvements and to educate the landowners on the effects certain land uses can have on the creek.

b. Project Benefits: Most of the specific benefits have been described in the goals section above. These benefits are generally restoration and enhancement of the riparian forest and floodplain of approximately 80 acres along the Salmon Kill and improvement of instream habitat for all aquatic life. Beyond what has already been described, a substantial and primary benefit of the Project will be improvements to the main stem of the Housatonic River itself. The Salmon Kill is the most substantial tributary to the main stem below the Falls Village Dam and throughout the entire Trout Management Area ("TMA"). It is also one of the few coldwater refuges in this reach of the river that is actually deep enough for fish to move back and forth into. They use it to escape the warm waters of the mid-summer main stem and for spawning purposes. The Salmon Kill also offers the polluted main stem a critical supply of clean, cold water throughout the year. The Project would greatly enhance the value of all these services to the main stem.

As indicated below, the Salmon Kill enters the main stem immediately above the famous Housatonic TMA, one of the most popular fishing destinations in the state. The Project would not only bring substantial ecological benefits to the main stem, as described above, but, as river conditions improve, increase the popularity of fishing throughout the TMA. The Project would also greatly benefit recreation and increase fishing potential in the Salmon Kill itself.

c. General Tasks: General tasks include (i) inventory and analysis of flora and fauna in aquatic and riparian habitats using GIS and GPS systems, (ii) removal of invasive species of flora and replacement with natives, (iii) planting of trees and shrubs along creek banks and in floodplain areas, (iv) removal of armoring in appropriate spots and recycling in others to stabilize stream banks and restore natural flood plain areas, (v) breaching of the dam (with multiple preliminary tasks), and (vi) placement of instream structures near the track.

Item 2. Project Location. The source of the Salmon Kill is in Salisbury, CT and its confluence with the Housatonic River is in Lime Rock, CT, immediately above the TMA. The headwaters to the Salmon Kill are several native brook trout streams flowing off of the Taconic Range in Salisbury, CT. The streams meet to form the source of the Salmon Kill approximately ¼ mile east of the center of the village of Salisbury, CT.

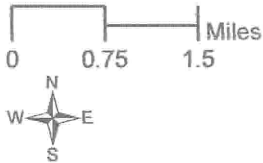
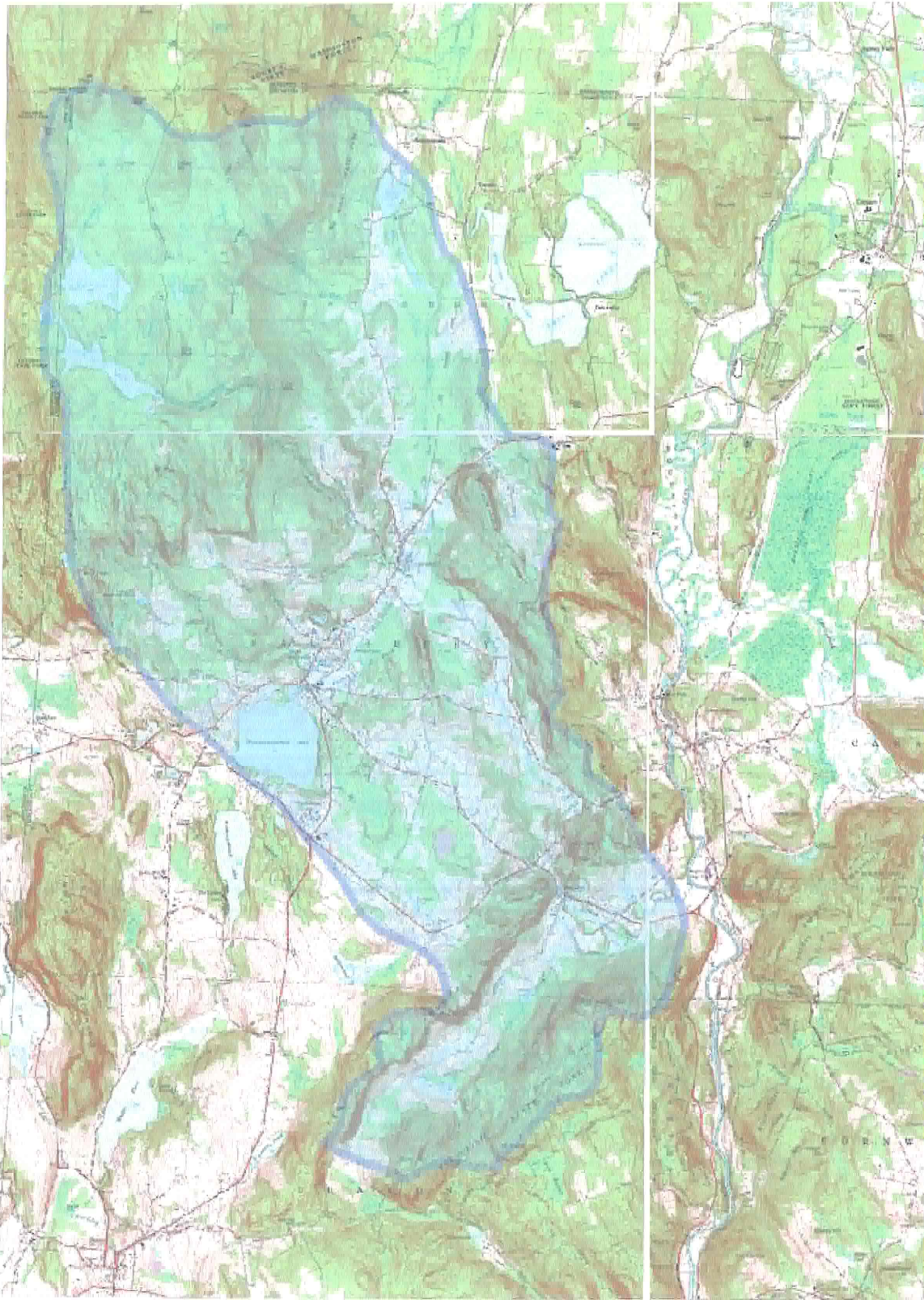
Source: Latitude: 41 58'46.86" N; Longitude: 73 24'56.63" W; elevation: 689 ft.

Confluence: Latitude: 41 56'06.10" N; Longitude: 73 21'56.43" W; Elevation: 543 ft.

The full watershed of this creek extends from Lake Wononskopomuc in Lakeville, CT, to the Mt. Riga ridgeline on the border of New York and Connecticut, to Fisher Pond approximately ½ mile south of the Massachusetts and Connecticut border. The villages of Salisbury, Lakeville, Lime Rock, CT are all included in the watershed. See attached Exhibit 1 for a map of the watershed. The locations of the riparian and instream improvements are detailed on Exhibit 2.

Item 3. Criteria Statement. The Project complies with all of the criteria as set forth in Section 6.1 of the Request for Proposals:

- This proposal contains all the information identified by the CT SubCouncil as set out in the "Instructions for Preparation and Submission of Restoration Projects".
- As indicated extensively throughout Item 1 of this proposal, the Project restores, rehabilitates and replaces both natural resources damaged by the release of PCBs and their equivalent. Natural resources both within and along the shores of the Salmon Kill, one of the principal and most critical tributaries to the main stem, and the main stem itself will benefit from the Project in a variety of areas. Improvements in water quality, fish habitat, biodiversity, and fish health and abundance, all negatively impacted by the release of PCBs, will result in the main stem as a result of work carried out for the Project.
- Neither the Project nor any portion of Project is presently required under another federal, state, or local law, including enforcement actions.
- The Project is consistent with all federal, state, or local laws and policies.
- The Project is not inconsistent with any ongoing or anticipated remedial actions in the Housatonic River watershed.



Salmon Kill Watershed

 salmon kill creek watershed

source: CT DEP GIS Database



