Thames Valley Chapter of Trout Unlimited
Request for Proposals
Papermill Pond Dam
Engineering Alternatives Analysis, Regulatory Coordination, and Design for Fish Passage

DATE ISSUED: November 13, 2019
ISSUED BY: Thames Valley Chapter of Trout Unlimited (TVTU)
PRE-BID SITE VISIT: November 23, 2019. This is a mandatory site visit for firms interested in submitting proposals. Firms wishing to attend must notify TVTU by COB November 20, 2019.
QUESTIONS SUBMITTED BY: November 25, 2019
ANSWERS EMAILED BY: November 29, 2019. Answers to the question submitted will be emailed to all firms that are listed on the pre-bid site visit sign in list.
RECEIPT OF PROPOSALS: Proposal must be received no later than 5PM on December 6, 2019
Proposals should be submitted electronically (only) to:
E-mail: gelconn@yahoo.com
ANTICIPATED ANNOUNCEMENT OF AWARD: December 23, 2019
CONTACT: Contact: Gary Lussier, 860-861-9344; gelconn@yahoo.com

Background and Objectives
The Thames Valley Chapter of Trout Unlimited (TVTU) is seeking a consulting firm with experience in fishway design to develop engineering plans for a fishway at the Papermill Pond Dam located on the Little River in Sprague, Connecticut. The TVTU is a private non-profit organization dedicated to the protection and enhancement of fisheries and aquatic resources of eastern Connecticut and has a vested interest in the Little River. TVTU received funding for this project through a grant award by the National Fish and Wildlife Foundation (NFWF).

The goal of this project is to restore diadromous fish passage to the Little River in the Town of Sprague. TVTU has already restored fish passage directly downstream of the Papermill Pond Dam, by rehabilitating the fish ladder at the Versailles Pond in 2013.

The Papermill Pond Dam is approximately 573 feet long and 30 feet high. A site visit was conducted with project partners in spring 2019, and it was determined at that time that the best location for a fishway on site was river-right (south bank of the river directly downstream of the dam/spillway. The property on both sides of the river adjacent to the dam have been used for industrial and commercial operations for over 100 years, however the sites have been deemed clean to industrial standards.
**Scope of Work**

TVTU is seeking a consultant to collect field data necessary to complete the full and final design of the fishway (e.g., bathymetric survey, topographic survey, wetland delineation, geotechnical borings), conduct an engineering alternatives analysis, develop engineering design plans sufficient for permitting, coordinate meetings, and provide a dedicated project manager. The primary target fish species for the fish passage project are alewife, blueback herring, and American shad. Although not the primary goal, every effort should be made to allow wild sea-run brown trout and wild native brook trout to also pass the dam. The consultant shall provide detail on their approach, all deliverables (including the specific format of all deliverables) and itemized costs associated with each of the following 6 tasks. **This scope outline is not intended to be a complete list of requirements; the consultant/engineer is expected to propose a scope of work sufficient to complete the design and permitting coordination, such that the fish passageway can be successfully permitted and eventually constructed.** TVTU welcomes innovative, cost-effective methods that maintain a focus on the successful completion of this project.

**Task 1 - Project Management and Meetings**

The consultant will assign a project manager who will provide project updates to TVTU and its project partners. The project manager will integrate the project partner team into the design decision-making process. The project manager shall include a project kick-off meeting, regular progress updates via teleconference, and one additional meeting as needed throughout the duration of the project to ensure transparent communication with the project partners. The project manager will provide monthly status update emails outlining the project’s progress by the last business day of each month. These update emails should include project progress, outstanding issues, milestone accomplishments, issues, budget status, and schedule status as necessary. This task includes coordination between TVTU, project partners, the property owner (the town), regulatory agencies, the town and stakeholders as needed to ensure the successful completion of this project.

The project manager will be responsible for invoicing and reporting requirements of National Fish and Wildlife Foundation (NFWF). As such, the consultant should be familiar with NFWF Long Island Sound Futures Fund Grant program and have experience with grant reporting and requirements. TVTU will review all documents drafted by the consultant and handle the submittals to NFWF.

TVTU will be responsible for any access coordination to the dam site.

*Examples of Anticipated Deliverable(s):* Ongoing continuous project management by a dedicated project manager and continuous communications and updates on project status, project kickoff meeting, and notes from all meetings and conference calls
Task 2 - Data Collection

As part of this project the consultant will collect all necessary field data to carry the project through to final design and construction. Although final design and construction are not part of this specific RFP, there will not be additional funds allocated in the future for field data collection efforts. Some of the anticipated data collection efforts are outlined below.

a. Topographical mapping sufficient for design
b. Wetlands delineation (including USACE data sheets and information sufficient for permitting)
c. Property boundaries
d. Relevant infrastructure features (e.g., dam limits, buildings, associated building utilities and infrastructure, and access roads)
e. Sediment Sampling

Additional collection and analysis will include the collection of available data and resource information on file with local, state, and federal agencies and other sources as needed. The proposal must identify each data parameter needed, description of why it is needed, and an approach and cost for obtaining the data. At minimum it is anticipated that these data will include the location of regulated resources (i.e., wetlands), and the potential presence of any threatened and endangered species (State and Federal).

Consultant shall complete any and all environmental, cultural, and regulatory requirements necessary for the project as required by NFWF.

All data gathered and analysis completed as part of this task shall be documented and described in the Engineering Design Memorandum prepared as part of Task 5.

Anticipated Deliverables(s): Wetlands delineation report stamped by a CT Certified Soil Scientist. and all necessary resource assessments needed for wetlands permitting and stamped survey drawings, sediment/soil sampling results.

Task 3 - Hydrology & Hydraulics

The selected consultant shall conduct a hydrologic study and HEC-RAS hydraulic analysis during the design phase of this project. Hydrological data of the watershed will be needed to properly design and set the elevation of the fishway. Hydraulic analyses will show how the fishway design will change the conditions of the stream. The consultant shall model appropriate flows to assess both fish passage and changes to regulated flooding events to complete the regulatory process for fishway construction. The results of the modeling will be documented in the Existing Conditions and Engineering Alternatives included under Task 4.
**Task 4 - Existing Conditions and Engineering Alternatives Analysis**

The consultant shall prepare a report outlining the existing conditions at the site. This report will include results of the data collection activities conducted during Tasks 2 and the existing H&H information (from Task 3). The report shall include a review of various fish passage design alternatives and an assessment of the best fishway type (e.g., denali, steep-pass, bypass channel, etc.) for the site given the target fish species and site constraints. At least three alternatives shall be assessed during this task, and the consultant will provide their professional opinion on which alternative they think works best for the site. TVTU will work with its project partners to make the final decision, taking into account the consultant’s opinion. This section shall also outline any environmental or cultural resource issues on site and propose solutions to eliminate or reduce impacts to the identified resources. This report will be reviewed and commented on by TVTU and Project Partners prior to the Consultant initiating the 35% design on the selected fishway type.

*Anticipated Deliverables(s):* Existing Conditions and Engineering Alternatives analysis report.

**Task 5 - Engineering Design**

The selected consultant shall prepare design drawings sufficient for state, federal, and local permitting. These design drawings are anticipated to be 65% at a minimum. The consultant shall submit plans at 35% and 65% for TVTU and Project Partner review and comment. All submitted plans need to be provided as two full size hard copies and one full size digital PDF copy.

It is anticipated that the preliminary engineering design, shall include the following:

- Existing site conditions showing the extent of regulated resource areas;
- The proposed fishway construction including access, staging and construction sequencing, and proposed streambank/retaining wall stabilization work (if needed);
- Drawings of the proposed fishway including a plan view, a profile view showing elevations of all components;
- Fishway details including such as the entrance and exit elevations
- Water handling and erosion controls;
- Site restoration and plantings, as appropriate.

Specific Design components that **must** be included are:

- An easy to operate mechanically assisted fishway entrance gate
- An operational monitoring window for volunteer or video monitoring of fish and documentation of fish usage.

It is anticipated that the final 65% Engineering Designs shall include all sheets described above and any additional sheets as needed for regulatory submittals, including but not limited to a table with quantified regulatory impacts, proposed planting, water control measures, streambank/retaining wall stabilization, and habitat restoration, as applicable, as well as required
erosion and sediment control measures. The purpose of this task is to advance the design plans to a level of detail and in a format suitable for local, state, and federal permitting and develop a detailed engineer’s estimate for completing final design, and potential construction cost, such that appropriate funding can be secured for future project phases.

Two paper copies along with a digital copy of the 65% plan sets will be submitted and must be stamped by a CT-certified Professional Engineer. An appropriate number of paper copies of the full 65% Engineering Design Package will also need to be made for regulatory review and coordination meeting.

An Engineering Design Memorandum documenting all additional data collection and analysis completed for the design will be included with the preliminary submittal TVTU review. This design Memorandum should also include cost estimates to complete the design and permitting for the project and construction. This will also include the proposed H&H for the selected fishway design alternative. The consultant will conduct a preliminary design review meeting with TVTU and the project partners to discuss the preliminary design and project progress.

In addition, an artist’s rendering of the final installed fish ladder shall be developed. This rendering will be used to convey the final vision of the project to project partners, sponsors, and grant agencies to build further community support for the project and apply for grant funding for future phases.

**Anticipated Deliverables(s):** 35% design plans, 65% design plans (must be sufficient for permitting), Engineering Design Memorandum submitted with 35% and updated at 65% design stage, and an artist’s rendering of the 65% design.

**Task 6 - Regulatory Coordination Meeting**

The selected consultant is not responsible for obtaining any permit as part of this phase of the project. However, the selected firm and TVTU will present design drawings to the regulatory stakeholders at an in-person pre-permitting meeting. The consultant shall identify all needed permits to satisfy local, state and federal regulatory agencies. The consultant will also coordinate, organize, and lead one meeting with regulators whom have regulatory authority over the project. This meeting will be held at a mutually convenient location which is anticipated to be within 15 minutes of the project Site. Changes to the design drawings, and comments from this meeting shall be incorporated into the permit drawings, wetland delineation report, or similar.

**Anticipated Deliverables(s):** Presentation for regulatory meeting, minutes from regulatory meeting, and changes/modification based on meeting comments, requests, or questions.

**Task 7 – Permitting (Optional Bid Item)**

Permitting – Although this phase of the project does not require permitting, the consultant may include the costs for submitting all necessary permits as part of their proposal. This additional work must be a separate cost called out on the costing sheet and not included in the total project
fee for items 1-6 above.

**Anticipated Deliverables(s):** Complete permit applications, submittal of permits applications, and regulatory approval.

**Deliverables:**

It is a mandatory requirement of this RFP that all deliverables are be submitted in original digital file formats along with any hard copies (i.e., survey point files, AutoCAD drawings, HEC-RAS files, Word documents, GIS files, etc.). Deliverables must also comply with regulatory requirements for permit application submittals, or in sufficient format to facilitate TVTU and Partner review. All deliverables are the sole property of TVTU.

**Payment Conditions:**

TVTU is a small nonprofit organization as such, TVTU cannot solely support projects of this magnitude. The terms of payment for this project is “Paid when Paid”. TVTU will request reimbursement from the grant agency, and upon receipt of payment, payment will be disbursed to the Consultant.

**Basis of Selection of Firm:**

Selection will be based on consultant qualifications, project approach, experience with fishway design, cost-effectiveness of the proposal, clarity of proposal, and experience working with non-profit organizations.

TVTU is a small volunteer run organization. As such TVTU is depending on the consultant to fulfill or lead many of the administrative requirements of the grant which this project is funded through. As such, the selected firm’s experience with Trout Unlimited (as an organization), and specific experience with the NFWF Long Island Sound Futures Fund is highly desirable.

TVTU will select the consulting firm which, in its sole discretion, appears to be most capable of successfully completing this project for the best value. TVTU reserves the right to accept or reject any and all proposals, or any part thereof, if it deems so is in the best interest of the Chapter. TVTU reserves the right to hold interviews with consultants and project managers. Project managers may not be changed without prior approval by TVTU. TVTU reserves the right to delete, add, or modify tasks. Where tasks are added or modified, opportunities will be given to revise budgets for those tasks.

**Project Timeline:**

TVTU anticipates that this scope of work as outlined can be completed by November 2020.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time Period</th>
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<tbody>
<tr>
<td>Anticipated Date of Grant Award Notification</td>
<td>October 2019</td>
</tr>
<tr>
<td>Issue RFP</td>
<td>November 2019</td>
</tr>
<tr>
<td>Review Proposals and Select Firm</td>
<td>December 2019</td>
</tr>
<tr>
<td>Activity</td>
<td>Time Period</td>
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<tr>
<td>----------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Finalize Scope and Sign Contract</td>
<td>January 2020</td>
</tr>
<tr>
<td>Consultant Conducts Scope of Work</td>
<td>February 2020 – November 2020</td>
</tr>
<tr>
<td>Final Report to NFWF</td>
<td>December – January 2020</td>
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**Submission Requirements:**

To be considered, proposals must be received by TVTU no later than 5:00 PM on Friday December 6, 2019. Proposals should be emailed to: Gary Lussier, gelconn@yahoo.com. Submittals should be in PDF format on standard letter, 12pt font, with 1” margins. Total proposal should not exceed 36 pages.

Respondents should provide the following:

- Firm Background/Firm Qualifications (no more than 2 pages)
- Firm Experience with Fish Passage projects (these can be specific projects or contracts held with state or federal agencies for similar services.) Specific 1 page project/contract summaries should be included (limited to 12 pages)
- Specific project approach outlining tasks, deliverables, and assumptions, and a statement of the overall project understanding; (no more than 10 pages)
- Specific budget, itemized by task, with total (no more than 2 page)
- Project Schedule and Timeline; (no more than 1 page)
- Organizational chart of key staff working on project (no more than 1 page)
- Key personnel specifically assigned to work on this project, their roles, and their resumes; (no more than 11 pages)
- Key references from previous work on fishway design, or contract office who can speak to your firm’s proficiency and capabilities. (no more than 1 page)

**Mandatory Site Visit**

Potential bidders shall attend a project site visit on November 23 at 10:00AM at the project site in Sprague, Connecticut. The site visit will provide an opportunity for bidders to view the site and ask questions. All firms wishing to attend this meeting must notify TVTU of their intentions no later than COB November 20, 2019. At the time of notification, specific directions will be given to the attendees. No potential bidders shall visit the property in advance of the site visit. Proposals will not be accepted from firms not attending this site visit. If necessary and at the sole discretion of TVTU the date of the site visit may be adjusted due to weather. Only firms who have notified TVTU by November 20th, will be notified of the adjustment of the site visit date.

TVTU reserves the right to: 1) amend, modify, or withdraw this RFP, 2) extend the deadline for responses to this RFP, 3) reject any or all proposals received, and 4) negotiate separately with competing candidates