

Tulpehocken and Quittapahilla Watershed Enhancement Program Grant Application (2022)



APPLICATION DEADLINE

- Applications must be **received no later than 4:00 PM (Eastern), Friday, October 21, 2022.**

Contact

Diana M. Day (Conservation Coordinator)
Phone: 717-346-8137
Email: diday@pa.gov

GRANT APPLICATION SUBMITTAL INSTRUCTIONS

- Grant applications must be submitted in their entirety.
- All grant applications must be **signed and dated.**
 - Applications may be submitted by hard copy or e-mail.
 - **Important:** The PFBC is not responsible for undelivered applications. It is the applicants responsibility to ensure the materials are received by the PFBC prior to the application deadline.
- **E-mail Submissions:** If applications are submitted by e-mail, send to: diday@pa.gov.
- **Hard-copy Submissions:** Applicants may submit the grant application, budget file, and additional attachments, in hard-copy (one copy) and digitally on an electronic data stick (i.e., jump drive) in Microsoft® WORD .docx (Grant Application) or Microsoft® Excel .xlsx (Budget). Supporting documents may be in MS-Word, MS-Excel or Adobe® pdf. Send to:

Mailing Address	Physical Address
PA Fish and Boat Commission c/o Diana M. Day Bureau of Fisheries P.O. Box 67000 Harrisburg, PA 17106-7000 (717) 346-8137	PA Fish and Boat Commission c/o Diana M. Day Bureau of Fisheries 1601 Elmerton Avenue Harrisburg, PA 17110 (717) 346-8137

IMPORTANT: All deliveries are processed through a Commonwealth central receiving facility and delivery to PFBC may be delayed an estimated 3-5 days. Example: Overnight delivery scheduled for a Thursday, may not arrive until the following Monday or Tuesday. It is the applicant's responsibility to ensure materials arrive by the due date/time.

INSTRUCTIONS

- **Save this file to your computer.**
- **Text boxes will expand as text is entered.**
- **Complete all fields, as appropriate.**

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**Indicates required information. Text boxes will expand as text is entered.*

1. *PROJECT TITLE		Quittapahilla Creek Restoration -- Spruce Street	
2. *LOCATION			
*Watershed	Quittapahilla Creek		
*County(ies)	Lebanon		
*Township(s)	Annville		
*Latitude (required)	40.328523	*Longitude (required)	-76.500373
Check if map is attached		<input checked="" type="checkbox"/>	
3. APPLICANT INFORMATION			
*Name of Organization	Trout Unlimited 108-Doc Fritchey		
*Address	1167 S Forge Rd		
*City	Palmyra		
*State	PA	*Zip Code	17078
*Contact Person	Russell Collins		
*Phone (including area code)	717-580-3958	FAX	
*E-Mail	russ@dftu.org		
4. TYPE OF ORGANIZATION (check organization type)			
<input type="checkbox"/> Angling/hunting	<input type="checkbox"/> Watershed	<input type="checkbox"/> Conservation District	
<input type="checkbox"/> Government	<input checked="" type="checkbox"/> Other	Specify	Trout Unlimited Chapter
*Federal Identification Number (FIN)		23-7355295	
5. PROJECT TYPE (check all the apply)			
<input checked="" type="checkbox"/> Habitat (e.g., riparian protection/restoration, instream habitat, wetland restoration)			
<input type="checkbox"/> Water Quality/Habitat Studies directly relevant to management			
<input type="checkbox"/> Recreational Access (e.g., fishing, boating)			
<input type="checkbox"/> Fisheries (e.g., fish stocking, non-game species)			
<input type="checkbox"/> Outreach and Education			

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<input type="checkbox"/> Other	Specify:	
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6. PROJECT TIMELINE	
*Project Duration (months)	12
*Anticipated Start Date	04/01/2023 (mm/dd/yyyy)

7. RELEVANT CONSERVATION PLANS

7a. Does your project implement recommendations of an existing watershed, habitat improvement, or river conservation plan?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
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<p>7b. If “yes”, identify the plan(s), responsible organization(s), contact person(s), and project relevance to the plan(s).</p>	<p>Clear Creeks Consulting. 2021. Quittapahilla Creek Watershed Implementation Plan (WIP). Available at: http://www.quittiecreek.org/documents/210127-WIP-2021-Final.pdf</p> <p>Organization: Quittapahilla Watershed Association</p> <p>Contact: Dr. Michael Schroeder</p> <p>Relevance: The WIP identifies the Quittapahilla Creek from Spruce Street to the upstream end of Quittie Park as a priority section for remediation due to "bank erosion throughout" and "failing habitat structures."</p>
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8. PERMITS

8a. Will permits be required to complete the work?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
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*8b. If “yes”, specify the types of permit(s) and if they have been issued.	General Permit 1 & 3 issued by DEP - initiated, but not issued.
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9. PROJECT PARTNERS

9a. Are other entities (i.e., organizations, agencies) assisting with this project?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
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<p>9b. List the names of partners supporting this project (i.e., providing funds, staff, volunteers, services).</p>	<p>Quittapahilla Watershed Association Lebanon County Conservation District Lebanon County Countywide Action Plan (CAP) Annville Township Trout Unlimited 108 - Doc Fritchey Chapter (DFTU) Aquatic Resource Restoration Company</p>
<p>9c. Describe the applicant’s experience and qualifications, as well as that of partners, for conducting this project.</p>	<p>DFTU has been sponsoring and installing stream restoration projects for at least two decades. We have successful projects completed on Snitz Creek, Beck Creek, Hammer Creek, Clark Creek, Rausch Creek, Manada Creek, and Wiconisco Creek. Our cadre of volunteers is enthusiastic, energetic, and reliable.</p> <p>Aquatic Resource Restoration Company (ARRC) is an environmental restoration company specializing in stream, wetland & floodplain restoration. The ARRC team includes experienced staff and specialized equipment to create & restore projects to a natural-looking & highly functional state. Their unique design/build approach to stream, wetland, and floodplain restoration gives clients an economical package while also providing top-notch results. The ARRC has been providing these services for 20 years.</p>

10. PROJECT DESCRIPTION *Text boxes will expand as text is entered.*

A. *PROJECT DESCRIPTION (Brief): A 2-3 sentence summary of the project. Briefly describe the project and its anticipated benefits.

<p>A.</p>	<p>Quittapahilla Creek Restoration -- Spruce Street project (Spruce Street Project) proposed in this 2022 grant application is one of the stream stabilization projects identified in the Quittapahilla Creek Watershed Implementation Plan (Clear Creeks Consulting, 2021). If approved, the Doc Fritchey Chapter of Trout Unlimited will use the funding under this grant to restore 834 linear feet of the Quittapahilla Creek immediately downstream from the Spruce Street bridge in Annville Township, Lebanon County. Project activities would occur on the Mayes property (south bank) and</p>
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	<p>property belonging to Annville Township (north bank). This reach of stream comprises the upper section of one of the Pennsylvania Fish and Boat Commission's Keystone Select Stocked Trout Streams. It is within a delayed harvest area and is very popular with fishermen and women.</p>
<p>B. *NEED: Why is the project needed? Describe why the project should be funded? Explain problems that the project will address. Note fish, mussels or other aquatic life that might benefit from this project. Describe the habitats that will benefit.</p>	
<p>B.</p>	<p>The Quittapahilla Creek watershed has been designated as “impaired” by the Pennsylvania Department of Environmental Protection (PADEP, 2022). Causes for the Quittapahilla Creek impairment are listed as pathogens and nutrients. In 2000, a Total Maximum Daily Load evaluation listed the Quittapahilla Creek as impaired from sediment (PADEP, 2000). Sediment deposition frequently dominates the stream bottom. The proposed project is expected to reduce bank erosion and increase water velocity, therefore, sweeping sediment out of the reach. It will also add structure to improve habitat for fish and invertebrates.</p> <p>References: PADEP. 2022. 2022 Pennsylvania Integrated Water Quality Report. Online at: https://storymaps.arcgis.com/stories/b9746eec807f48d99dec3a583eede12</p> <p>PADEP. 2000, Total Maximum Daily Loads (TMDLs) Quittapahilla Creek Watershed, Lebanon County: Southcentral Regional Office, Water Management Program, 36 pp. + appendix</p>
<p>C. *OBJECTIVES: What is expected to be accomplished? When relevant, explain how the project is commensurate with other projects, plans or studies anticipated, underway, or already completed.</p>	
<p>C.</p>	<p>The project will result in a stream rehabilitation for the targeted section of the Quittapahilla Creek. Specifically, modified mudsils, log vanes, digger logs, and bank grading will serve to narrow the stream, increase water velocities, create deeper pools, and increase fish habitat.</p> <p>This project is one step in a multi-organizational effort to improve the Quittapahilla Creek. The Lebanon County Conservation District is working to reduce erosion from lands in the watershed. The Lebanon County Countywide Action Plan (CAP) is committing funds to this proposed project and other similar projects within the county. The U.S. NRCS is working directly with farmers to reduce sediment and nutrients going into the Quittapahilla Creek. The Lebanon County Clean Water Alliance is a consortium of government agencies that focuses on the enhancement of the water resources of Lebanon County. Importantly, this organization has the authority to allocate funds from stormwater management fees. The Quittapahilla Watershed Association has completed a Watershed Implementation Plan that guides the in-stream and streamside</p>

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	<p>projects needed to enhance the waters of the Quittapahilla Creek Watershed. Finally, Doc Fritchey Trout Unlimited has led similar stream restoration projects within the watershed.</p> <p>Objectives of the proposed project are listed below. Some of these objectives will be met immediately upon completion of the construction phase of the project. Others should be attained approximately one year after project construction is completed.</p> <ol style="list-style-type: none"> 1. Increase the percentage of stable streambanks. 2. Reduce the bank full width/mean depth ratio. 3. Reduce the wetted width/mean depth ratio. 4. Increase sediment transport capacity by increasing the velocity. 5. Decrease the percentage of the substrate consisting of sand or finer materials. 6. Increase the median substrate particle size category. 7. Increase pool and riffle habitat. 8. Increase the mean residual pool depth. 9. Increase the amount of large fish cover.
<p>D. *APPROACH: How will the work be accomplished? Provide a detailed list of implementation activities, costs per activity, responsible parties, and expected completion dates (in the Budget Table, Worksheet 1-Project Schedule). List project partners.</p>	
<p>D.</p>	<p>See Worksheet 1- Project Shedule</p> <p>Project partners:</p> <ul style="list-style-type: none"> - Quittapahilla Watershed Association - Lebanon County Conservation District - Lebanon County Countywide Action Plan (CAP) - Annville Township - Trout Unlimited 108 - Doc Fritchey Chapter (DFTU) - Aquatic Resource Restoration Company
<p>E. *ANTICIPATED BENEFITS AND OUTCOMES: What measurable environmental benefits are expected to be achieved upon completion of this project?</p>	
<p>E.</p>	<p>We expect the project to provide additional habitat for trout, provide streambank and riparian zone vegetaiton for shading, increase water velocities in the stream, narrow the stream width, and increase the stream depth. We anticiapte several habitat improvements after project implementation including:</p> <ul style="list-style-type: none"> - Depth -- we anticipate that mean depth will increase - Velocity -- we anticipate that velocity will increase - Embeddedness -- we anticipate that embeddedness will decrease - Pebble counts -- we anticipate that pebble size will increase

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	<ul style="list-style-type: none"> - Channel width -- We anticipate that channel width will decrease - Habitat cover -- We anticipate that habitat cover will increase
F.	*PROJECT SIZE/LOCATION: When appropriate, indicate the size of the project (e.g., acres, length of stream, riparian corridor), and provide a detailed map of the project area.
F.	The project will improve 834 feet of stream length, both sides of the stream. Map is attached (Attachment 1, Map of the project area).

If relevant, include digital images, reference to other plans or projects, etc.

See Attachment 2, Images showing existing conditions in the project reach.

11. *BUDGET		
A. Sub-contracting: Do you intend to sub-contract any of the proposed work?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
If "yes", describe	All construction activities will be completed by Aquatic Resources Restoration Company (ARRC).	
B. Match: Will the project use match of any kind (e.g., cash, in-kind materials or services, volunteers)?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
If "yes", in the accompanying budget tables describe source(s), types of match, and amount of match from each source.		
C. Budget Justification: Explain why the costs are reasonable and necessary.		
Justification	Almost all of the costs for the proposed project will go toward the construction activities. Stream restoration requires heavy machinery to transport and position large boulders, rocks, and logs in the stream. An experienced contractor is required for this work. The contractor we have selected has the knowledge, experience, and equipment to complete the job successfully. Contractors with these qualifications deserve premium compensation. We have been pleased with past work performed by ARRC and we are confident they will do a great job for us on this project.	

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D. BUDGET TABLES	Access the BUDGET file and <SAVE> to your computer.
	<p>Complete the following budget tables in the Microsoft® EXCEL file.</p> <p>Note the tabs (lower left of the file) for the three worksheets.</p> <p>0-INSTRUCTIONS: Overview of key schedule and budget items.</p> <p>1-PROJECT SCHEDULE: List major activities, deliverable(s) and anticipated due date.</p> <p>2-SUMMARY BUDGET: Provide total budget information by state fiscal year and line-items. Include total estimated value of matching funds, in-kind services, donated materials & supplies.</p> <p>3-DETAILED BUDGET: Provide detailed information on Personnel, Materials & Supplies, Contractual Services, Travel, Vehicle Use and Indirect Costs. Check if all or part of a specified expense will be provided as match.</p>

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Provide a brief description of any attachments

List of Attachments	Brief Description (e.g., map of project area)
Attachment 1:	Map of the project area showing proposed stream improvements.
Attachment 2:	Images showing existing conditions in the project reach.
Attachment 3:	Letters of support from project partners.
Attachment 4:	Landowner permissions
Attachment 5:	

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12. CERTIFICATION AND SIGNATURE

I certify that the information in this application is true and correct to the best of my knowledge.

[Insert digital signature image, **or** print page, sign, and scan to a .pdf and include with application.]

Submitted By:

10/18/2022

**Tulpehocken and Quittapahilla Watershed Enhancement
Program
Grant Application (2022)**



Signature

Date (mm/dd/yyyy)

Digital Signature

Printed Name: Russell W. Collins _____

Title: Immediate Past President, Board of Directors Member _

APPLICATION CHECK LIST

<input checked="" type="checkbox"/>	Sections 1-9 have been completed (i.e., project title, contact information, location, project type, organization, timeline, relevance to conservation plans, permits, partners).
<input checked="" type="checkbox"/>	Sections 10 a-f: Project description has been completed.
<input checked="" type="checkbox"/>	Section 11: Budget narrative has been completed.
<input checked="" type="checkbox"/>	Project Schedule and Budget tables have been completed: 1-Project Schedule; 2-Summary Budget Table; 3-Detailed Budget Table
<input checked="" type="checkbox"/>	Section 12: The application has been signed and dated. IMPORTANT: All applications must be <u>signed and dated</u> .
<input checked="" type="checkbox"/>	Attachments (e.g., map of project area) are listed and included, if applicable.
<input type="checkbox"/>	For <u>hard-copy</u> submissions, also included is an <u>electronic copy</u> (Microsoft© WORD-application; Microsoft© EXCEL-budget) on an electronic data stick (i.e., jump drive).

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