Willard Bay Settlement Request for Proposals

The Division of Water Quality is soliciting project proposals that will enhance and protect waterways and environmental areas that may have been affected or related to the March 2013 release of diesel in the Willard Bay State Park. Examples of acceptable mitigation projects include but are not limited to: environmental projects, infrastructure improvements, and studies or educational activities/events which serve the purpose of protecting or improving water quality and/or the ecology of natural systems. Proposals must include a detailed description of the mitigation project, a cost breakdown showing how the funds will be used, and a plan for implementation of the project. The implementation plan shall include a timeline for implementation, completion of the project, and submission of final document(s) verifying completion of the project.

A two phase process will be used to evaluate proposals and select projects for funding. The first phase will evaluate proposals submitted on the form included below and select projects for funding. Initial proposals should be limited to a six (6) page maximum. Supplemental documents such as letters of support, information to demonstrate previous project implementation and other relative supportive documents may be submitted in addition to the six (6) page application form. Successful applicants will then be notified to submit detailed project plans in the second phase. Upon approval of the detailed project implementation plans, funding will be authorized by the Director of the Utah Division of Water Quality.

The deadlines for proposal submission, detailed project plans and funding authorization are provided here:

- May 5, 2014, 5:00 p.m.: Submission Deadline for project proposals
- May 28, 2014: Projects selected, funds allocated, & Proposers notified (Accepted proposals will be posted on DWQ website.)
- January 1, 2018: Completion of project and final reports due

The following criteria must be met by each funded project:

1. Proposed project must enhance the natural environment by improving conditions for one or more of the following: wildlife, habitat, native vegetation, water quality or emergency response or provide scientific and/or educational enhancements to the citizens of Utah in the context of the above named environmental areas.
2. Proposed project must benefit Utah citizens by providing one or more of the following: enhancements of infrastructure, educational opportunity, environmental benefit or recreational opportunity.
3. Proposer must have either an interest in any land directly involved in the project (e.g., fee title, easement, or other legal agreement that gives all needed rights to enhance the land involved in the project) or written permission/contract to conduct project activity on property.
4. Proposed project must be capable of being completed within 4 years.
5. Proposer must be capable of implementing the proposed project.

Proposals will be scored based upon the following criteria:

Strength of the Project

1. Project benefits the area within Willard Bay State Park or the ecosystems in close proximity.
2. Project benefits the natural environment.
3. Project increases the ecosystem services being provided by the enhanced waterway.
4. Project has social benefits.
5. Project size – how large is the total area that will be directly enhanced by the proposed project?
6. Project connectivity – how does the proposed enhanced project area connect to other natural areas or projects.
7. Project proposer can leverage additional funds.
8. Project cost-effectiveness.
9. Administrative expenses.

Strength of the project team

10. The proposer has the ability to carry out the project as shown by successful past experience in carrying out similar projects.
11. The proposer can ensure, through contract or other written agreement, long term maintenance (if applicable) will sustain the project into the future.
12. The project has multi-agency support and collaboration.

A completed proposal form, no more than six (6) pages, plus supplemental documents, must be submitted in hard copy or emailed electronically (preferred) by May 5, 2014 to the Division of Water Quality to the attention of:

Emily Bartusek
Division of Water Quality
PO Box 144870
Salt Lake City, UT 84114
ebartusek@utah.gov

UTAH DIVISION OF WATER QUALITY
195 North 1950 West
PO Box 144870
Salt Lake City, Utah 84114-4870

Willard Bay Project Proposal Form

NOTE: Proposal must be no longer than 6 pages. Supplemental documents such as letters of support, information to demonstrate previous project implementation and other relative supportive documents may be submitted in addition to this form.

Applicant Name: Paul Burnett

Co-Applicant Name(s) (if applicable): _____ Project Title: Weber River Urban Restoration and Community Outreach

Agency or Business Name (if applicable): Trout Unlimited, Inc.

Mailing Address: 5279 South 150 East City: Ogden State: UT Zip: 84405

Phone: (801)781-7180 E-mail: pburnett@tu.org

☐ Individual ☒ Non-Profit ☐ Govt. Agency ☐ Academic ☐ Commercial ☐ Other

1. Estimated Project Costs:

Project Coordination	(1/3 FTE for 2 years)	$ 47,520
Materials (Plants and Planting Materials)		$ 17,500
Contractual (Morgan Restoration Plan)		$ 10,000
Travel		$ 2,500
TOTAL	$	$ 77,520

Sources of project funding:

	Partner (organization/individual)	**Qualifications** (project-related skills/expertise)	**Contribution(s)** (goods or service being provided)	**Value of Contribution (s)** (dollar equivalent)*
1	Utah Division of Wildlife Resources	Project Funding	Funding for Geomorphic Assessment near Morgan	$10,000
2	Trout Unlimited	Project Coordination and Management	Project Coordination, resource expertise	$20,000
3	Weber Basin Anglers	Manual Labor	River Cleanup, Riparian Planting Workdays and River Cleanup	$10,000*
4	Weber Pathways	Manual Labor	River Cleanup and Riparian Planting Workdays	$5000*
5	Utah Whitewater Club	Manual Labor	River Cleanup	$5000*
6	Willard Bay Fund	Funding	Funding	$47,520

Total project cost including other sources of funding: $ 77,520
(please include bids for labor, equipment, rentals, etc.)

2. Describe the purpose and need of the project:

The Critical need in the Middle-Lower Weber River fulfilled with this proposal is to advance community stewardship in protecting and restoring the green infrastructure supported by our rivers. The primary purpose of the project is to:

- Provide capacity for river cleanups
- Provide resources for riparian revegetation efforts
- Engage schools in water quality monitoring
- Establish TU's Trout in the Classroom program within two schools

TU proposes to work within the communities of Ogden and Morgan to restore riparian habitat along the Weber River to improve water quality, benefit native fish populations and recruit community conservation stewards. The Weber River provides drinking and irrigation water for 21% of Utah's population, and supports unique native fish (e.g. Bonneville cutthroat trout and bluehead suckers) and popular recreational fishing opportunities, but both water quality and fish habitat have been degraded by human development in the river corridor. We propose a combination of strategic on-the-ground restoration actions to re-establish native riparian vegetation and stabilize streambanks, and an outreach and education campaign to build a community of river stewards to sustain the conservation benefits and advocate for enhancement and protection of the Weber River corridor in the future. Specifically we will host riparian planting and invasive weed removal workdays, a river clean-up, and a bioengineering workshop. We also will engage over 300 students through a combination of TU's Trout in the Classroom curricula and water quality monitoring activities. These restoration actions will reduce erosion and sediment inputs into the Weber River and improve habitat and water quality, which ultimately will result in more robust fish populations. Outreach and education activities will raise awareness among local communities about the Weber River as a valuable economic, ecological and recreational resource, and establish a core of community volunteers to sustain these conservation benefits into the future.

The Weber River plays a critical role in the economy and ecology of northern Utah. It is one of three primary tributaries to the Great Salt Lake and, as such, provides fresh water to sustain the unique GSL ecosystem and the critical habitat it provides for millions of migratory shorebirds and waterfowl. The river corridor is a popular recreation destination, and annually hosts thousands of boaters, anglers, birdwatchers, joggers and others who connect with the outdoors via the extensive network of river trails and bike paths that parallel the river. The river has become the second-most popular stream angling destination in the state, and supports popular sportfish as well as unique populations of native Bonneville cutthroat trout and bluehead suckers.

Despite all of these obvious values, the Weber River has, until recently, been largely neglected and in many ways overlooked as a community resource. Urbanization and transportation infrastructure (i.e. railroads and highways) straightened and armored the river in many places. That, coupled with poor land management, created severe erosion problems and streambank instability, and irrigation diversions seasonally dewatered long reaches and created fish passage barriers and dangerous obstacle for boaters. Even today urban run-off continues to impact the river, and agricultural practices in rural areas contribute large quantities of nutrients, sediment, and pesticides. Cumulatively, these impacts have left water quality and stream and riparian habitats degraded, and have rendered much of the river corridor more of an eyesore and a liability than a community asset.

Beginning in 2011, TU and other stakeholders in the Weber River Basin (including Utah Division of Water Quality) initiated a collaborative effort to restore the Weber River corridor for both the wildlife and people that depend on it. In March 2014, the group produced the Weber River Watershed Plan that outlines future restoration actions and calls for the recruitment and training of local watershed stewards to catalyze public involvement and sustain restoration actions and conservation practices in the future. The plan calls for a combination of on-the-ground restoration projects as well as local outreach and education to raise awareness of the Weber River as an important community resource. That document, coupled with species assessments and conservation strategies (e.g. Bonneville Cutthroat Status

Assessment and Conservation Strategy, Three Species Conservation Agreement and Strategy) and agency water quality data (e.g. 303(d) list of impaired streams) guide this effort to restore the watershed. With a grant from the Utah Division of Water Quality, Willard Bay Fund, TU proposes to implement a suite of community-based restoration activities to restore the Weber River and its recreational and wildlife resources.

3. Estimated timeframe of the project with significant milestones (Note: Project must be completed with final reports filed by January 1, 2018):

Table of annual workplan for specific project activities.

TASK	MONTH											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Riparian planting workdays			X	X						X		
Bioengineering workshop and workday									X			
Weber River corridor restoration planning in Morgan, UT	X	X	X	X	X	X	X	X	X	X	X	X
Invasive weed removal workdays				X	X							
East Canyon Cr. streambank stabilization									X			
River clean-up days					X					X		
Water Quality Monitoring (training and implementation)					X			X	X			
Classroom visits – Trout in the Classroom				X							X	

The proposed project will take place over two calendar years beginning in 2015. Planning, monitoring and education and outreach activities will occur throughout the project period. Restoration implementation will be completed during the spring and fall periods. Below is a list of milestones to gauge the success of each project component:

- Riparian volunteer workdays – plant 2400 trees
- Bioengineering workshop and workdays – 1000 linear feet of streambank treated
- Weber River restoration planning – 1 watershed-scale restoration plan near Morgan completed
- Invasive weed removal – 50 acres treated
- East Canyon Creek streambank stabilization – 500 linear feet
- River clean-up days – 1000 pounds of trash removed
- Water quality monitoring – 4 permanent WQ monitoring stations established; 210 high school students engaged
- Classroom visits ($3 – 5^{th}$ grade) – 120 students engaged
- Trout in the classroom curricula taught – 60 students engaged
- Total volunteers engaged in project activities above – 900 people

4. Describe the location of the project with attached location map, including details on the total area that will be directly enhanced by the project:

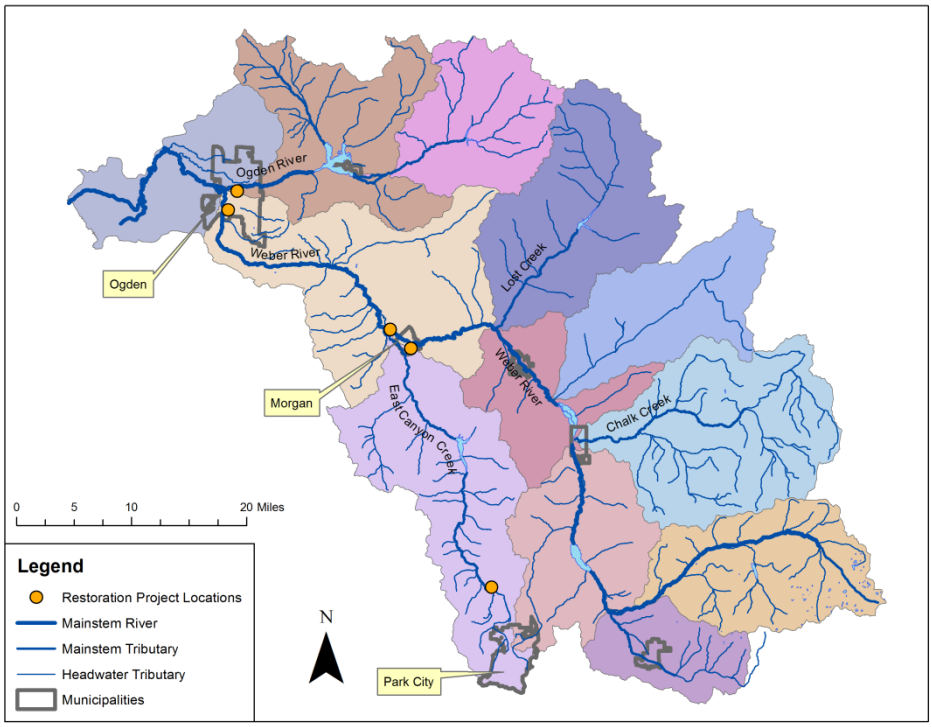

Figure 1: A map showing restoration project areas with Orange Markers. These include riparian revegetation, invasive weed management, bioengineering, and river cleanups.

5. Describe how the project will specifically enhance and protect waterways affected by the Willard Bay diesel release and improve the conditions of one or more of the following: wildlife, habitat, natural vegetation, water quality or emergency response:

Willard Bay is the primary receiving water for the Weber River, and, as such, is directly impacted by water quality and the upstream conditions that limit it. Cumulative stressors (i.e. multiple impairments or challenges) in ecosystems are thought to be one of the greatest threats to plants, wildlife and fish in the face of a changing future climate. The ability of a population or species to adapt to new challenges (e.g., fires, warmer water temperatures…and diesel spills) will depend in large part on how stressed that population or species already is by other factors. The proposed project seeks to reduce the suite of stressors in the Weber River drainage by improving habitat and water quality, thereby making it easier for the system and its animals to survive future disturbances and adapt to any changes in climate conditions.

The legacy of urban development along the Weber River corridor has introduced invasive species and manually straightened the river in many places. The combination of these factors destabilizes streambanks and accelerates erosion, elevates water temperatures, and increases sediment in the stream. As a result, fish habitat and water quality are impaired and the risk of flooding and property damage in downstream communities is increased. By actively removing invasive plants and replacing them with native vegetation, we will increase streambank stability and improve the filtration of sediment during storm and run-off events. Similarly, by installing bioengineering streambank revetments on especially erosion-prone streambanks we will reduce sediment inputs from localized “problem areas.” Most importantly, we will engage volunteers from the local community in these activities and empower them to develop and implement similar projects elsewhere along the stream corridor. By establishing long-term water quality monitoring sites we will be able to quantify the cumulative benefits that these projects realize over time. As habitat and water quality improve native fish populations are expected to rebound in the lower reaches of the Weber River.

6. Describe project's connectivity to other natural areas or projects that further enhance wildlife, habitat, natural vegetation, water quality or emergency response:

During the past two years TU and project partners have implemented the following restoration projects to benefit the Weber River watershed and the aquatic and terrestrial animals that depend on it:

- South Fork Chalk Creek Irrigation Upgrades – Removed a fish passage barrier and upgraded the irrigation system of a landowner in Chalk Creek to reconnect critical habitat for Bonneville cutthroat trout and reduce overland flow of water back into the stream
- Fish Creek Reconnection – Removed a 6-foot tall perched culvert near the mouth of Fish Creek (tributary to the South Fork of Chalk Creek). Reconstructed and stabilized the stream and hillslopes with a combination of active restoration and bioengineering methods.
- Thurston Restoration – The Morgan Area restoration actions are in close proximity to the Thurston Ranch Restoration area. This is a restoration project currently underway to resolve land management and river erosion challenges just downstream of Morgan.
- Native Fish Stronhold Restoration Actions – TU and project partners have been engaged in large scale reconnection and restoration of critical fish habitats throughout the Middle-Lower Weber River. This project is complimentary to those actions by improving community awareness and extending the reach of the original project scope.

7. Describe any additional social benefits of implementing this project:

The cities of Ogden, Morgan and Park City are major municipalities in the Weber River Basin. Ogden, in particular has a very large underserved population, with an overall poverty rate of approximately 23% (Data from www.city-data.com). Poverty in Ogden is primarily focused around the confluence with the Weber and Ogden Rivers, and as a result, projects that focus in these areas have the potential to improve the green infrastructure surrounding them and stimulate community support. Although the proposed project does not directly affect poverty rates, the green infrastructure associated with the rivers is typically the extent of the outdoor experiences that children from these areas have. By focusing on community-based restoration in these areas, we have the potential to greatly enhance the environmental well-being of the individuals who live in and rely upon these areas.

8. Project plans and details, including rights to work on specified piece of land:

The project details will depend heavily upon funding apportionment. We have obtained access to work on all properties highlighted in the Map. Most of the properties are protected by a conservation easement, or an access agreement has been developed through various programs. We are still working to obtain access to the entire Morgan Area restoration planning site

9. Describe your experience in implementing projects of similar scope and magnitude:

In 1994 TU established an innovative model—the Home Rivers Initiative (HRI)—for conservation of streams and fish. HRI project managers are hired from within local communities to work with and coordinate efforts among resource agencies, scientists, landowners and local partner organizations to restore coldwater fish habitat and populations at the watershed scale. Each project is a collaborative multi-year effort that combines applied scientific and economic research, community outreach, on-the-ground restoration, and the development of long-term conservation and management strategies and tools. Project managers implement restoration and conservation projects in high priority watersheds, and work to build community support and stewardship to carry them forward and sustain the conservation gains into the future. To date we have implemented 25 HRI projects in over a dozen states. Those projects have reconnected and/or restored hundreds of miles habitat and benefitted fish populations, anglers, and local communities.

In addition to our professional staff of project managers, TU also relies heavily on our members and grassroots volunteers. Each year those volunteers contribute thousands of hours and hundreds of thousands of dollars in time, labor and materials to restore river and stream habitats across the country.

The direct conservation benefits for trout and salmon are huge, but without stewardship and maintenance of the projects, those benefits don't always last. To address that challenge, TU implements youth education and community outreach programs in communities where we work to recruit and train the next generation of conservationists. For example, we work with grade school teachers through our "Trout in the Classroom" (TIC) program to teach children about trout biology and the importance of clean, healthy streams.

Recognizing that the Weber River is an important wildlife and community resource at risk, TU launched the Weber River HRI project in 2012 to focus on three primary objectives in the watershed: 1) conserve native fish in key areas of the watershed through habitat restoration, 2) build capacity to improve and protect the valuable coldwater fishing and recreation opportunities in the Weber River Basin, and 3) engage the public to sustain restoration actions throughout the basin to ensure their long-term success. To that end TU has worked for the past two years to develop diverse partnerships in the Weber River Basin among municipalities, agency managers, and members of local communities. We have mobilized our substantial network of volunteer members and engaged them in restoration projects as leaders and mentors to instruct new volunteers. TU members are passionate about rivers and fishing, and impart that passion to others during the course of a volunteer workday on a local stream. A grant from the Utah Division of Water Quality Willard Bay Mitigation Fund will enable us to increase our outreach efforts and implement additional restoration projects and volunteer opportunities. By raising the profile of the Weber River we will increase conservation stewardship interest and capacity in local communities.

10. Describe how ongoing maintenance of the project will be funded and carried out:

The proposed project does not require ongoing maintenance of any infrastructure, but does entail ongoing coordination and monitoring of both project elements (e.g. riparian vegetation establishment) and water quality. TU is well positioned to monitor project achievements in the Weber River beyond the project period due to the dual presence of TU National Staff (HRI Project Manager) and a robust TU chapter in Ogden. Volunteers from the Weber Basin Anglers Chapter already are very active in the watershed and involved with stream restoration. Together with TU staff they will work with the communities to oversee water quality monitoring at the newly established permanent monitoring transects indefinitely. Our intention is to eventually hand off some of these duties to newly recruited community and watershed leaders. In addition, Utah Department of Wildlife Resources will continue an already established systematic periodic fish population monitoring effort on the Weber River that will document trends in numbers and distribution of Bonneville cutthroat trout and bluehead suckers in project areas.

11. List consultants or agency partners that have participated in project development (below):

Name/Company	Address	Phone
Utah Division of Wildlife Resources Ben Nadolski	515 E 5300 S, Ogden, UT	801-643-4953
RiverRestoration – Jason Carey	PO Box 248, Carbondale, CO	970-947-9568

Signature _____ Date 5/5/2014
Applicant

Signature _____ Date _____
Co-Applicant (if applicable)