Title Page:

Project Title:

Expansion of an Existing Watershed Group:
Improving Ecological Resilience, Conserving Water and Reducing Conflicts through formation of the Teton River Advisory Council

Applicant Information:

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I. Technical Proposal and Evaluation Criteria

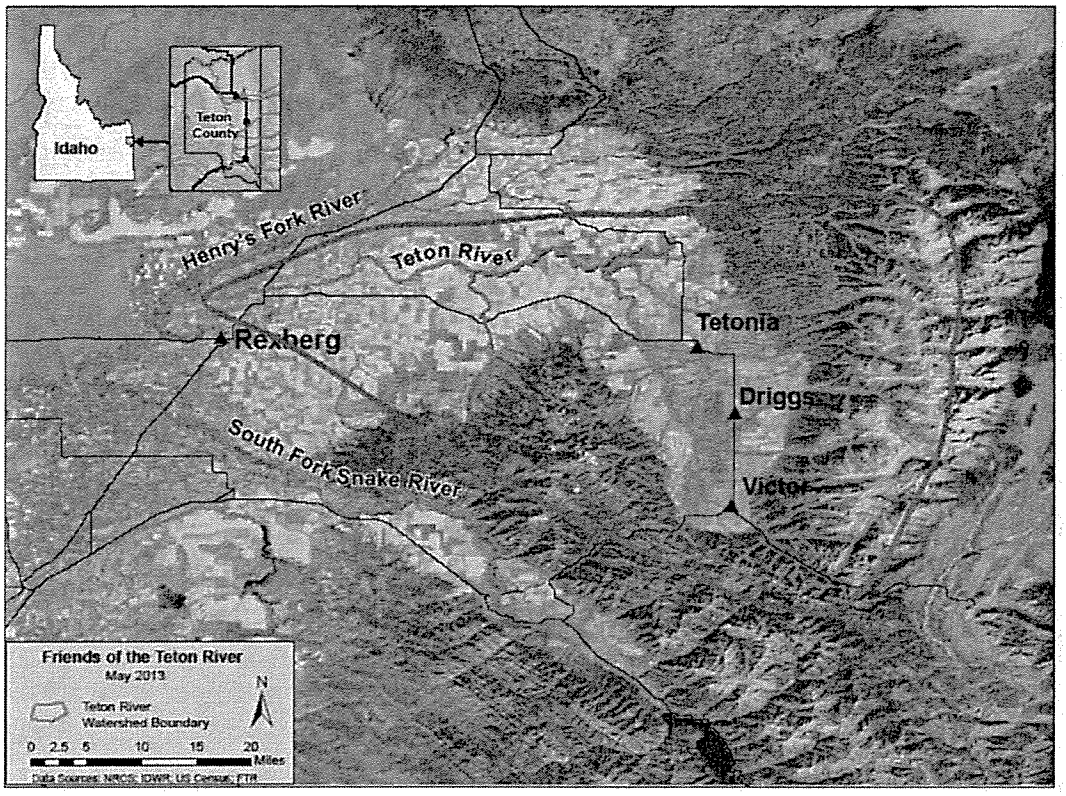
a. Executive Summary:

Date: June 10, 2013
Applicant: Friends of the Teton River
City and State: Driggs, Idaho
County: Teton County

Friends of the Teton River (FTR) is a grassroots, membership-based, non-profit organization legally incorporated as a 501(c)(3) that works in Teton County, Idaho to promote clean water, healthy streams, and resilient fisheries in the Teton River watershed. Through this grant FTR proposes expanding its existing activities to form a diverse working group collaborative, called the Teton River Advisory Council (TRAC), which will identify, review, vet, and prioritize watershed restoration activities in the Teton River watershed. Funds will support a watershed group coordinator, who will recruit a broad based membership; help the group develop a mission statement; perform administrative activities; hold and facilitate regular meetings; develop criteria by which to assess restoration projects; and develop an action plan for implementation. It is envisioned that the group will collaboratively develop a restoration plan that identifies, prioritizes, and endorses a specific series of watershed restoration and water conservation activities that improve water quality and the ecological resiliency of the Teton River and its tributaries by improving water management, restoring valuable habitat, and increasing stream flows. By bringing together representatives from all interest groups within the watershed it is anticipated that unique solutions will be developed which satisfy the needs and demands of multiple stakeholders, thereby decreasing the potential for water conflicts and ensuring that the goals of each entity are advanced more readily.

Grant activities will be completed within two years of grant award, with work being conducted from September 2013 to August 2015.

b. Background Data



The Teton River drains an area of 806 square miles in Idaho and 327 square miles in Wyoming. The river originates from headwater streams in the Teton, Big Hole, and Snake River mountain ranges and flows more than 64 miles to the point at which it discharges to the Henry's Fork of the Snake River. Twenty river miles southwest of this point, the Henry's Fork joins the South Fork to form the main stem of the Snake River. FTR works in the Teton watershed, outlined on the map above, which extends from the headwaters down to the confluence with the Henrys Fork River, with a primary focus on the upper Teton River. FTR's decision to focus efforts in the upper Teton River was influenced by the presence of greater development threats and a gap in governance and coordination of water resource issues.

The Teton watershed encompasses approximately 664 square miles of the Greater Yellowstone Ecosystem (GYE), with Grand Teton National Park to the east, and Yellowstone National Park to the north. Approximately 25% of the Teton River Watershed is federally or state-owned, and the majority of this land is managed by the Caribou-Targhee National Forest. Land use on the forest in the eastern portion of the subbasin, most of which is located in Wyoming, is determined primarily by its status as wilderness and grizzly bear habitat. The Jedediah Smith Wilderness Area, which borders Teton National Park, has experienced limited timber harvest but receives heavy recreational use with more than 60,000 visitors each year. Grand Targhee Ski and Summer Resort is adjacent to the wilderness area and is a major tourist destination. Management of forest lands in the Big Hole Mountains is directed toward opportunities for motorized and non-motorized recreation, improvement of big game habitat, and improvement

of ecosystem health. The Big Hole Mountains have been logged extensively and livestock grazing is a common land use.

Water has long played a central role in the cultural and economic prosperity of the Teton River watershed. From its earliest days, Native Americans frequented the Teton River and its tributaries, which provided resources – including wild game, berries, and native Yellowstone cutthroat trout – that were relied upon to sustain the tribes. The first permanent settlers of Teton Valley, members of the Church of Jesus Christ of Latter Day Saints, arrived in the early 1880's from Utah and other parts of Idaho and established dairy, potato, and grain farms. Since that time, agriculture has remained one of the central drivers of the regional economy. More recently, the region has attracted new residents, both full and part-time, that place a high value on recreational access and intact ecosystems which support high quality fish and wildlife habitat. This led the population of Teton County, Idaho to grow by 39% between 2000 and 2007, making it the fourth fastest growing county in the nation during that time.

Currently a variety of water related issues are playing out in the Teton River watershed. Cumulative impacts on water quality from fertilizer application and livestock have resulted in elevated nitrogen levels in both ground and surface water. Over the past twenty years, accelerated development pressures have resulted in channelization and rip-rapping of tributary streams, destruction of riparian vegetation, and loss of connectivity between stream channels and their floodplains. Further, relevant climate science indicates that as a result of climate change, the Greater Yellowstone Ecosystem can expect hotter, drier summers with warmer, wetter winters, leading to a higher potential for winter flooding, reduced snowpack, earlier runoff, summer drought, and increased wildfires.[1] It is expected that in general, higher elevation habitat, including that in the Upper Snake River region, will provide important refugia from climate change impacts. Yet in the Teton Watershed, the majority of core high-elevation habitats are disconnected from the main stem Teton River at least part of the year due to dewatering of tributary streams for agricultural use. In addition, the ongoing Henrys Fork Basin Study is evaluating the Teton River and its tributaries to determine if a new dam or storage facility may be constructed to shore up and securing water for out of basin water needs. All of these issues, especially when working in concert, are serving to influence both the landscape and hydroscape of Teton Valley.

In addition to the physical changes in the Teton watershed, discussed above, the introduction of non-native fish species has had a negative effect on Yellowstone cutthroat populations in the Teton Watershed. Eastern brook trout (*Salvelinus fontinalis)* and rainbow trout (*O. mykiss)* were introduced beginning in the early twentieth century. Once a classic snowmelt-driven hydrograph (with a peak to low flow ratio of 22), due primarily to agricultural water diversion the Teton River watershed is now more akin to a spring creek hydrograph with lower run-off peak and higher winter flows (peak to low flow ratio of 11). Altered hydrology and degraded habitat conditions have favored these non-native species. Competition for resources and direct predation has resulted in fish assemblages in the main stem Teton River and most tributary streams that are now dominated by non-native species.

[1]Corey Hatch. "Climate Change Will Endanger Trout" Jackson Hole Daily [Jackson, WY] 12/6/2007

The cumulative impact of these changes on native Yellowstone cutthroat trout is reaching a critical level. Yellowstone cutthroat trout (YCT) are considered a species of special concern in the State of Idaho and the condition of YCT populations are often an indication of the overall health of the watershed. Between 1999 and 2003, Idaho Fish and Game observed a 95% decline in Yellowstone cutthroat trout populations, while both brook trout and rainbow trout populations increased by 300%. Historically, YCT occupied much of the Greater Yellowstone Ecosystem (GYE), which encompasses parts of Idaho, Montana, Wyoming, and small regions of Nevada and Utah. Currently, YCT exist in just 27% of their historic range. The Teton River Watershed is one of three remaining stronghold systems for YCT in the entire GYE. Given the range-wide decline in YCT abundance and distribution, it is likely that the species will be petitioned for listing under the ESA in the future unless significant progress is made towards stabilizing and increasing populations throughout the region.

Together, these factors and emerging forces are shaping a future water management paradigm that by necessity will look different from the past. Given the various interests that rely on water in the region, and the dynamic social, environmental, and political drivers affecting water use, it is necessary to promote collaborative approaches to address water resource issues. This proposal seeks to implement a process and bring together individuals that can, collectively, identify solutions that satisfy the needs of all constituents within the community – farmers who depend on water for crop production, municipalities that require clean and adequate water for residents, industry that requires sufficient quantities of water for the production of power and goods, and fish and wildlife who rely on flowing streams to provide critical habitat and migration corridors to ensure their persistence in the watershed. The Teton River Advisory Council (TRAC) will do just that. It will bring together a diverse group of stakeholders, unified under a single mission, to work through a collaborative process to identify, prioritize and endorse a restoration plan that works for the benefit of the community as a whole. This approach is the new paradigm, and this group will work to define how to manage the valuable resource that is the Teton River, into the future.

c. Project Description

i. Description of Applicant

Friends of the Teton River is a grassroots, membership-based, non-profit organization working for clean water, healthy streams, resilient fisheries, and watershed education in the Teton River watershed. FTR was started in 2000 by a group of farmers, fishing guides, scientists, conservationists, and government agency representatives who shared concerns about the health of the watershed. The mission of FTR is to use sound science to protect and restore the water resources of the Teton River Watershed by educating the public and implementing effective watershed restoration projects. FTR spent its first four years primarily focused on research and establishing baseline data for water quality, ground and surface water hydrology, and fisheries in the Teton River and its tributaries. Building on the results of this intensive research, FTR developed an action-based strategic plan to guide work in the watershed, focusing on fish passage improvements, and habitat and stream flow restoration on the Teton River tributaries. To implement this plan, FTR has organized its work in three primary program areas: outreach and education, stream habitat restoration, and streamflow restoration. FTR is committed to a collaborative approach, and regularly works with other nonprofit groups (local,

regional, and national), government agencies (local, state, and federal), and all local stakeholders to find creative solutions to water resource problems in the upper Teton watershed. An active watershed education program for youth and adults has been an important cornerstone of FTR's work. FTR believes that "science is a universal mediator" and that educating the public (of all ages) about watershed science fosters a sense of stewardship and promotes collaboration among stakeholders.

The success of FTR over the past twelve years is attributable, in part, to the dynamic partners and stakeholders with which it works. FTR has formed partnerships with a range of individuals and organizations including NGO's, government agencies, elected officials, local businesses, public and private schools, and landowners to conduct research, restoration, and education programs.

- NGO's play a pivotal role in natural resource protection in the Greater Yellowstone Ecosystem and particularly in the Henry's Fork and Teton watersheds. FTR works closely with the Henry's Fork Watershed Council (HFWC) to review proposed projects, participate in the Water Quality and Native Trout subcommittees, and conduct field trips. FTR has adopted the HFWC consensus-based approach for stakeholder groups and builds on relationships established at the HFWC to design and implement restoration strategies in the Teton basin. The Henry's Fork Foundation research program served as a model for FTR's four year research effort and both organizations continue to collaborate on issues like the Teton Dam proposed reconstruction and cross-basin water management. In the Teton watershed, FTR, TRLT and Valley Advocates for Responsible Development (VARD) have until quite recently worked parallel tracks in watershed, land easement and land use protection. Over the past two years the organizations have had joint planning sessions to address gaps in governance for land development planning. Additionally, TRLT, FTR and TU's Idaho Western Water Project Director have been working on joint conservation strategies, which will incorporate land easement work with water management strategies for Teton Valley. At a larger scale, FTR participates regularly in the Columbia Basin Water Transaction Program meetings to learn from efforts throughout the Columbia Basin to restore streamflow.
- FTR also has active partnerships with state and federal agencies. We partner with, and are contracted by, IDEQ and Wyoming TCD to conduct water quality monitoring in the Teton Valley. The U.S. Forest Service (USFS), IDFG, and Wyoming Game and Fish Department (WGFD) partner with us to monitor trout populations in the Teton River and its tributaries and are currently helping us to develop a restoration monitoring plan for Trail Creek and Teton Creek. The U.S. Fish and Wildlife Service (USFWS) Partners for Fish and Wildlife and Fisheries Restoration and Irrigation Mitigation (FRIMA) programs fund FTR's restoration work on Teton Creek and Trail Creek; NRCS frequently partners with FTR to work with individual landowners on stream restoration projects through the WHIP and EQUIP programs. Our ongoing partnership with Idaho Department of Water Resources - Water District 1, under which we are contracted to collect diversion flow data for the Teton basin, enables us to monitor tributary flows throughout the watershed and provides baseline data for streamflow restoration efforts.
- FTR has partnered with Idaho State University and Utah State University on fishery, hydrology and watershed planning studies. We recently concluded a three-year, $640,000

U.S. Department of Agriculture grant, in partnership with Humboldt State University (Dr. Rob Van Kirk, Principal Investigator) to develop a conjunctive ground and surface water management plan for the Henry's Fork and Teton watersheds.

- FTR has close working relationships with the Driggs, Victor, and Tetonia city councils and planning and zoning commissions, and since its inception has worked with the Teton County Commissioners on water-related technical issues in the county. As we move forward with watershed restoration efforts, we will work with elected officials to write ordinances that will protect local water resources.
- We have partnered with the Teton County School District to develop watershed and place-based curriculum throughout the school system and are currently providing training for teachers in this curriculum.

In 2010, FTR was awarded the prestigious "Model Watershed" designation and 10-year support from the Bonneville Environmental Foundation (2010-2020). As a component of that, FTR worked with leading Yellowstone cutthroat trout experts and climatologists to develop a document, termed the Upper Teton River Model Watershed Document, which details conservation outcomes for the watershed. The document includes baseline and target restoration metrics, a long-term monitoring plan, and outlines an adaptive management approach framework. In short, the document catalogs science-based targets for improved ecological resilience, and preservation and protection of water resources in the Teton River Watershed.

It is envisioned that the funds from this grant will be used to form the Teton River Advisory Council, which will build upon the Upper Teton River Model Watershed Document by helping to define how FTR, with the support of the community as a whole, will work to strategically and methodically achieve the target conservation matrices identified in the document. This will be accomplished through the development of a restoration plan that identifies vets, prioritizes, and endorses a series of watershed restoration activities and projects that not only achieve conservation goals but which also satisfy the needs of farmers, municipalities, and industrial interests.

ii. Eligibility of Applicant

Friends of the Teton River FTR is a 501(c)3 non-profit, grassroots, non-regulatory legal entity which was founded in 2000 by a diverse group of stakeholders, including farmers, anglers, scientists, agency personnel and environmentalists concerned by declines in the health and quality of the Teton River fishery, and the quality and quantity of the watershed's valuable water resources. Since that time, FTR has completed an ambitious research agenda that addresses water quality, hydrology and fisheries. Our program work is focused on Stream Habitat Restoration, Stream Flow Restoration, Fish Passage, and Community Education. Our work has earned a prestigious "Model Watershed" designation and 10-year support from the Bonneville Environmental Foundation (2010-2020).

FTR is a nationally-recognized leader in community-based watershed protection and restoration; basing all of our projects in sound science and collaboration. We live and work in a community that is a melding of the old and new West, where a strong agricultural heritage exists side-by-side

a tourism and recreation-based economy. We collaborate with a diverse group of stakeholders to accomplish our work; from farmers and ranchers, to subdivision and golf course developers, municipalities and small business owners, to NGO's, and state and federal agencies. We realize that our success rests largely upon stakeholder involvement, support and buy-in. Thus, a large component of our work centers on building bridges and cultivating effective communication between these various interests. Over the past decade, we have successfully completed habitat and fisheries restoration projects, water conservation and efficiency improvements, water quality and trout monitoring programs, and flow restoration projects with a diverse group of constituents. Due to our unique positioning, FTR is uniquely situated to address water quantity and quality issues within the watershed in a manner which promotes water conservation, ecological resiliency and reduces water conflicts.

iii. Goals

Through this grant FTR seeks funding to *expand* its existing watershed group by forming a diverse working group, called the Teton River Advisory Council (TRAC), which will identify, review, vet, prioritize, and endorse watershed restoration activities in the Teton River watershed. The goal of the TRAC is to: (1) engage diverse stakeholders in a process (2) to develop a comprehensive watershed restoration plan (3) which can be implemented to improve stream conditions, water quality, and flows in the Teton River Watershed (4) while also meeting the needs of agricultural, residential, and municipal interests, thereby reducing conflicts over water.

iv. Approach

The Teton River Watershed is considered a conservation priority watershed within the Greater Yellowstone Ecosystem. FTR conducts its work on the Upper Teton River and its tributaries, which provides vital riparian habitat for many sensitive wildlife and fish species, including the native Yellowstone cutthroat trout (*Oncorhynchus clarkii bouvieri)*, elk, moose, grizzly bears, trumpeter swans, and sandhill cranes, to name a few. These fish and wildlife species heavily rely on the riparian corridors and waterways that connect the Teton Mountain Range (to the east) with the Teton River, and the Big Hole Mountains (to the west). As part of the prestigious "Model Watershed" designation and 10-year support from the Bonneville Environmental Foundation (2010-2020), FTR worked with leading YCT experts and climatologists to develop a document, termed the Upper Teton River Model Watershed Document, which details conservation outcomes for the watershed. The document includes baseline and target restoration metrics, a long-term monitoring plan, and outlines an adaptive management approach framework. In short, the document catalogs what must be accomplished to improve ecological resilience, and preserve and protect water resources in the Upper Teton River Watershed.

While the Model Watershed Document identifies *what* the desired conservation outcomes for the watershed are, it fails to detail *how* FTR will strategically and methodically advance those target metrics in the coming years. At this point, lack of clarification as to how desired outcomes are to be accomplished is impinging progress – FTR needs to develop a strategic restoration plan which prioritizes specific watershed restoration activities and projects in the Teton River watershed. It is envisioned that the Teton River Advisory Council (TRAC) will do just that. The TRAC will identify, review, vet, and prioritize watershed restoration activities and

projects in the Teton River watershed, thereby developing a strategic restoration plan which advances the conservation goals and target metrics identified in the Model Watershed Document.

FTR has identified four phases for the development of this work. Each phase is discussed below. However, several specific principles will guide this process, irrespective of what phase of the project is currently underway. The core principles of the planning process are:

- The planning process will be inclusive, transparent, adaptive, and collaborative;
- It will be refined as necessary based on input from TRAC members;
- It acknowledges other external processes and will respond to and adapt to those processes as necessary so as to maximize synergy amongst various efforts; and
- Progress towards overall goals is expected to be incremental, allowing for continual monitoring and adaptation.

Phase I – Partnership Formation, Mission Statement, Goals, Challenges, and Needs Assessment

The first phase of the proposal calls for the identification of appropriate workgroup members, and partnership formation. FTR will recruit a broad range of workgroup members to participate on the Teton River Advisory Council (TRAC), including state and federal agency personal (Idaho Fish and Game, Idaho Department of Environmental Quality, Eastern Idaho Regional Public Health District, US Forest Service, Bureau of Reclamation, NRCS, Teton County Soil Conservation District, and Idaho Governor's Office of Species Conservation); local and regional decision makers (Teton County commissioners and representatives from the Cities of Driggs, Victor, and Tetonia); Teton County extension office representatives; irrigation and canal companies (Grand Teton Canal Company, Fox Creek Canal Company, Trail Creek Sprinkler and Irrigation Company); individual ranchers, farmers and landowners; recreation and tourism related businesses; representatives of homeowners associations and subdivision-level public water systems; representatives from Fall River Rural Electric Company; and other NGO's and conservation organizations (Teton Regional Land Trust, Valley Advocates for Responsible Development, and Trout Unlimited). Please note that tribal groups have not been included, simply because there are no known tribal interests in/near the watershed. After the workgroup has been formed, FTR staff will work with the entire group to develop a mission statement that will direct all future actions of the TRAC.

Subsequently, FTR staff will work with each individual workgroup member to clearly define and understand the unique water related needs and challenges facing each particular workgroup member. This will be done through a series of interviews with each workgroup member to characterize current water use and develop specific water management related goals.

Once the goals/needs of each interest have been developed, FTR will host a stakeholder workshop that will give participants an opportunity to present their goals and associated challenges to the broader group. The workshop will conclude phase I of the process.

Timeline: September 2013 – March 2014

Phase II – Identifying Project Proposals and Developing Scenarios

FTR and workgroup members will work collectively to identify various activities and projects, incorporating streambed and bank restoration, fish passage, and water supply components, that are cost-effective and that respond to workgroup member goals. The activities and projects identified by the workgroup will then be organized by FTR into a series of project proposals that optimize restoration outcomes for participating workgroup members. Each proposal will be evaluated for its ability to meet a documented goal and its cost effectiveness in doing so. All workgroup members will be invited to participate in a workshop to evaluate and refine the preliminary project proposals.

Timeline: March 2014 – July 2014

Phase III – Optimize Water Management Scenarios

Once a set of preliminary project proposals are agreed upon by the workgroup members, FTR will use existing hydrologic models to evaluate the water supply component of the various proposals. Surface water and groundwater impacts on the Teton River, relevant tributaries, and irrigation district water reliability will be considered. FTR is currently working with Dr. Rob VanKirk to update and further refine the upper Teton River surface and groundwater model which was developed through a USDA grant, and subsequently utilized by the Bureau of Reclamation in the Henrys Fork Basin Study which is currently ongoing. The water supply component of the various proposals will be refined and revised with partners as needed, based on modeling results.

A workshop will be convened to consider management scenario refinements which achieve both conservation objectives and workgroup member goals. Phases 1 through 3 will be repeated as necessary - an iterative process of project development, modeled impacts, and project optimization - until participants reach agreement. A summary report on the modeled impacts for each water supply and management scenario considered by the working group will be prepared.

Timeline: July 2014 – December 2014

Phase IV – Develop Strategic Restoration Plan for the Teton River

The final product is the development of a Strategic Restoration Plan for the Teton River ("Restoration Plan"), such that FTR is able to strategically address the conservation objectives identified in the Upper Teton River Model Watershed Document. After completing phase III, the working group will prioritize and catalog preferred projects, thereby outlining a series of action steps that not only assists FTR in the selection of conservation projects but also informs the timing and sequencing of project activities, thereby generating the Restoration Plan. FTR will assist with the writing of the Restoration Plan, and it will be provided to the workgroup for feedback and review. Due to the collaborative, transparent, iterative process outlined above, and the diverse set of interest represented by the working group, the action steps outlined in the Restoration Plan necessarily ensures that the Restoration Plan identifies those activities and projects which are viable for the community as a whole. It is anticipated that this process will

generate forward thinking resource and water supply solutions that are endorsed by the various interest groups in the watershed, thereby ensuring reduced conflict and higher likelihood of actual success.

Timeline: December 2014 – August 2015

FTR's Water Resource Director Sarah Rupp, with support from FTR's Executive Director Amy Verbeten, will be leading this project and will, together, coordinate the various activities of the Teton River Advisory Council. Work towards the deliverables and actions outlined above will begin in the fall of 2013 and continue through the two year grant period.

d. Evaluation Criteria

Subcriterion A1- Watershed Group Diversity: FTR was founded in 2000 by a diverse group of stakeholders, including farmers, anglers, scientists, agency personnel and environmentalists concerned by declines in the health and quality of the Teton River fishery, and the quality and quantity of the watershed's valuable water resources. Since the inception of the organization, a large component of FTR's work has centered on building bridges and cultivating effective communication between these various interests. Our board and membership continues to reflect this diversity. Additionally, over the past decade FTR has cultivated two tributary specific stakeholder groups (one located on Teton Creek and one on Trail Creek) that meet bi-annually to discuss issues related to their tributary. FTR also works closely with the City of Driggs, City of Victor, Teton County, Teton Regional Land Trust, Trout Unlimited, Idaho Fish and Game, US Forest Service, US Fish and Wildlife Service, National Fish and Wildlife service, among others. These working groups, and FTR's monthly participation in the Henry's Fork Watershed Council ensure that our projects and activities integrate and harmonize with various interests throughout the region. Please also see letters of support from our agency partners.

The Teton River Advisory Council (TRAC) will leverage the existing diversity of Friends of the Teton River and recruit a broad range of workgroup members to participate, including state and federal agency personal (Idaho Fish and Game, Idaho Department of Environmental Quality, Eastern Idaho Regional Public Health District, US Forest Service, Bureau of Reclamation, NRCS, Teton County Soil Conservation District, and Idaho Office of Species Conservation); local and regional decision makers (Teton County commissioners and representatives from the Cities of Driggs, Victor, and Tetonia); Teton County extension office representatives; irrigation and canal companies (Grand Teton Canal Company, Fox Creek Canal Company, Trail Creek Sprinkler and Irrigation Company); individual ranchers, farmers and landowners; recreation and tourism related businesses; representatives of homeowners associations and subdivision-level public water systems; representatives from Fall River Rural Electric Company; and other NGO's and conservation organizations (Teton Regional Land Trust, Valley Advocates for Responsible Development, and Trout Unlimited). Because FTR has worked for more than a decade in the Teton River watershed it has formed strong working relationships with many of the individuals, entities, and organizations discussed above. FTR will place particular emphasis on ensuring participation from irrigation and canal companies in the watershed, as their involvement and participation is key to the success of this project. FTR has found that the best way to ensure involvement from individuals targeted for participation is through direct communication and

outreach. Once committed to the TRAC, all workgroup members will be informed and have an opportunity to influence each phase of the activities and deliverables funded by this grant.

The work of the TRAC will be conveyed to the watershed as a whole in a variety of ways. FTR has an established track record of community engagement. We use the following methods: tributary stakeholder meetings, Wednesday Water Wise public education presentations, K-12 outreach program, teacher trainings, donor events, community picnics, field trips, fishing guide events, membership drives, bi-annual newsletters, and weekly e-blasts. As testimony to our integration in the community, an FTR staff member chaired the Natural Resource subcommittee of the Teton County Comprehensive Plan, and sits on the Core decision making committee. Additionally, FTR has been asked to help author code for water resource protection now that the Comprehensive Plan is finalized. These opportunities provide a forum from which the work of the TRAC can be discussed and integrated into other resource planning efforts. Further, it is anticipated the various workgroup members will engage their constituents and inform them of the work being performed by the TRAC.

Subcriterion A2- Geographic Scope: FTR operates in the upper Teton River Watershed, from the headwaters of the Teton River, to the old Teton Dam site. Our watershed's 8-didgit USGS HUC # is 17040204. See map and description in the Background Data Section, I.b., above.

Friends of the Teton River currently works in partnership with individuals and organizations throughout the entire geographic area as described in the Description of Applicant section, I.c.i., above. As discussed above, Friends of the Teton River will recruit a diverse and far reaching group of individuals and organizations to participate on the Teton River Advisory Council.

Evaluation Criteria B: Addressing Critical Watershed Needs

Subcriterion B1- Critical Watershed Needs and Issues: Previous sections discuss the critical issues and needs in the upper Teton, but we will elaborate below on the issues of water quality, hydrology, and fisheries.

Water Quality:
Despite Clean Water Act Section 303(d) listing for excessive nutrients, temperature, and sedimentation in the Teton River and three of its tributaries, until 2000, very little long-term surface and groundwater quality data existed for the Teton Basin. In 2001 FTR implemented a monthly surface water quality monitoring program and intermittent groundwater sampling, which continues on a bi-annual schedule with support from Wyoming's Teton Conservation District (TCD). Review of the water quality data collected over the past ten years indicates that dissolved Nitrogen concentrations in the main stem of the Teton River gradually decrease in the downstream direction (somewhat unusual), with highest average concentrations at the uppermost Teton River test site. Higher concentrations at this location are not necessarily surprising since it is located upstream of the confluence of the major tributaries draining the west slope of the Tetons, and the river upstream of the sampling site drains an area that includes a significant percentage of agricultural lands, many of which are fertilized. While

compromised water quality may not necessarily be a surprise, it is a concern due to the impacts it may have on human health, fisheries, and valued water resources in the region. FTR continues to gather annual water quality data, and is working diligently in partnership with Idaho Department of Environmental Quality to determine if additional portions of the Teton River should be 303(d) listed to prevent further degradation and preserve Teton Valley's valuable fisheries.

Hydrology:

FTR partnered with the Teton County Commissioners, Idaho Department of Environmental Quality, and the USGS to complete a watershed-scale, comprehensive aquifer study (Nicklin Earth and Water, Inc. 2003). The study was conducted to assess the impact of a growing population on local groundwater resources, and model effects on the aquifer. In response to agricultural interests about groundwater recharge, FTR worked with local farmers in the Fox Creek sub-watershed to monitor the aquifer's response to recharge.

In addition to the aquifer project, FTR worked with Humboldt State University professor Dr. Rob Van Kirk to complete an analysis of surface water hydrologic alteration (Van Kirk and Jenkins 2005; VanKirk (2012), http://www.humboldt.edu/henrysfork/index.html). This work led to important insights regarding the relationship of altered hydrology due to irrigation diversions and decline of native trout in the Teton Basin fishery. Irrigated agriculture is still the dominant land use, and most of the water that is diverted from streams for irrigation use seeps into the ground as canal seepage. This serves to increase groundwater levels, making more water available for domestic, commercial, or industrial use and groundwater irrigation. In particular, elevated groundwater levels are critical to sustaining residential growth and development, as many individuals rely upon individual, exempt groundwater wells to provide water to their homes. Conversely, widespread agricultural diversions result in the annual dewatering of the middle sections of Teton Valley's tributaries, serving to favor nonnative species over the native Yellowstone cutthroat trout.

A component critical to any effort to restore viable Yellowstone cutthroat trout populations in Teton Valley is restoration of the natural hydrologic and geomorphic processes in the Teton Range tributaries, between the base of the mountains and the river. Yet such restoration efforts must be balanced against the reality that the agricultural community and many residents of Teton Valley rely upon the practice of diverting water (often entire streams) down canals. Restoration efforts must also be placed within the context of increasing demand for water, as both residential growth and prolonged drought are anticipated to continue to increase over time.

Fisheries:

Between 1999 and 2003 population surveys performed by Idaho Fish and Game (IDFG) on the mainstem Teton River showed a precipitous 95% decline in native Yellowstone cutthroat trout populations and a 319% increase in non-native rainbow/hybrid and Eastern Brook Trout in the Teton River. Following the discovery of this decline, FTR began a series of investigations to better understand why the decline had occurred and identify possible recovery strategies. Between 2004 and 2007 FTR partnered with IDFG, Utah State University, and Idaho State University to sponsor graduate research by Martin Koenig to investigate habitat and biotic

factors influencing the distribution and recruitment of juvenile Yellowstone cutthroat trout in the Teton River. This study concluded that although the factors (including habitat degradation, nonnative competition, and hybridization) responsible for the decline of native fish species are numerous and interrelated; it is clear that loss of flows (due to irrigation diversions) in tributaries that feed the Teton River plays a major role in Yellowstone cutthroat trout decline. "Most importantly, water diversion modifies the hydrologic regime and changes stream habitat conditions to favor invasive trout" (Koenig 2006).

In 2005 FTR partnered with the USFS, IDFG, and the National Fish and Wildlife Foundation on an extensive baseline assessment of trout populations in 15 major tributaries of the Teton River. This assessment showed that the upper sections (historically inhabited by resident and fluvial Yellowstone cutthroat trout) of all but 4 tributaries have been invaded by and are now dominated by non-native brook trout, and since 1998, resident Yellowstone cutthroat trout have declined in all headwater tributaries except Trail Creek (Colyer 2006). These studies suggest that the upper Teton watershed has lost much of the fluvial life history form of Yellowstone cutthroat trout and resident forms in the major tributaries are in decline. A subset of the original survey sites on these tributaries were re-surveyed in 2010, and will be assessed every 5 years.

Given the range-wide decline in YCT abundance and distribution, it is likely that the species will be petitioned for listing under the ESA in the future unless significant progress is made towards stabilizing and increasing populations throughout the region. Given the reality of a potential listing, and the far reaching impact that would have on the local economy, the work contemplated through this grant is timelier than ever. The Teton River Advisory Council (TRAC) will serve a critical role in taking tangible steps towards implementing actual restoration activities that create more favorable conditions for Yellowstone cutthroat trout.

Subcriterion B2- Watershed Group Contributions that Address Watershed Needs or Issues: As of 12 years ago, very little scientific water resource data for the upper Teton watershed existed, including basic fisheries, hydrologic, and water quality data. FTR's first priority as a new organization in 2000 was to implement a comprehensive research and monitoring program, in order to understand the ecological character of the upper Teton watershed and identify factors limiting the system's ability to support important ecosystem services, including the keystone species native Yellowstone cutthroat trout. Based on this research, FTR and its partners were able to develop a series of prioritized actions that would contribute to achieving the overall restoration vision for the watershed. Initial priority actions include riparian and channel habitat restoration, flow restoration, and remediation of fish passage and entrainment issues.

Guided by research efforts, FTR has focused habitat restoration efforts on key tributary streams that drain the Teton Mountains and flow into the Teton River between the towns of Victor and Tetonia, including Trail, Fox, Teton, and South Leigh creeks. These tributaries contribute the majority of the flow to the Teton River, contain the largest resident populations of Yellowstone cutthroat trout, and offer the greatest ecological returns for restoration dollars invested. Additionally, each sub watershed has active stakeholder or irrigator groups who have partnered with FTR on a range of projects. FTR has completed large fish passage improvement projects on three tributaries and installed fish screens to prevent entrainment. In 2006 and 2007, FTR

worked with NRCS personnel to identify landowners and implement $800,000 in WHIP stream restoration projects.

On Trail Creek, FTR and partners have completed habitat surveys and several restoration and fish passage projects. Additionally, we have worked extensively with a Trail Creek specific stakeholder group, bringing together the various interests on that tributary to manage water more efficiently. On Fox Creek, FTR, landowners and several partners have completed approximately 6,000 linear feet of streambank, channel and fish passage restoration. Teton Creek poses the greatest stream bank and channel restoration challenge following massive illegal excavation and destabilization over 20 years by a local developer. FTR has completed an engineered restoration design and started one mile of stream restoration in the most highly impacted portion of the creek. Recently FTR helped Teton County acquire a $1.3 million dollar grant from FEMA to complete this noteworthy restoration effort and will re-commence work Fall 2012. On South Leigh Creek FTR is working closely with major landowners and water right holders to implement an intensive hydrologic monitoring and analysis project in order to produce a water management plan that will address needs of both fish and wildlife and irrigators.

One of the highest priority actions on each of these tributaries is restoration of streamflow during critical biological periods, in the late summer. In the upper Teton Watershed, historic patterns of irrigation diversion has resulted in the significant or complete dewatering of Teton River tributary streams for most of the year. The development of water resources for agriculture has deprived fish of adequate instream water, with the right timing and volume, to support their basic lifecycle needs. Under current conditions, the middle sections of the tributaries, which previously provided the most productive spawning habitat for fluvial fish, are now dry streambeds for 8 months of the year. This lack of connectivity between the tributaries and the main stem has equated to a loss of most fluvial Yellowstone cutthroat trout populations in the upper Teton watershed.

Between 2005 and 2007, FTR set the stage for our current efforts for flow restoration in the upper Teton Watershed by researching and cataloging water right holdings for six major Teton River tributary streams, investigating water transaction mechanisms, collecting hydrological data such as stream flow monitoring, irrigation diversions and seepage loss rates, and establishing relationships with local canal companies and irrigators. FTR is a partner of the Idaho Water Board to bring Columbia Basin Water Transaction money to Teton Valley. This funding source allows FTR to negotiate with landowners to purchase and lease water rights to restore stream flows. Flow restoration will be focused on the key Yellowstone cutthroat trout reproductive period, August 1-September 15, when fry are emerging from spawning redds and begin migrating to lower tributary reaches and the mainstem river.

Through this grant, FTR proposes expanding its existing activities to form a diverse, working group collaborative, called the Teton River Advisory Council (TRAC), which will identify, review, vet, and prioritize watershed restoration activities in the Teton River watershed. Funds will be used to recruit a broad based membership; fund the work of a watershed group coordinator who will help the group develop a mission statement, perform administrative activities, hold and facilitate regular meetings, and develop criteria by which to assess restoration projects. It

is envisioned that the group will collaboratively develop a restoration plan that identifies, prioritizes, and endorses a specific series of watershed restoration activities that improve water quality and the ecological resiliency of the Teton River and its tributaries by restoring valuable habitat and increasing stream flows. By bringing together representatives from all interest groups within the watershed it is anticipated that unique solutions will be developed which satisfy the needs and demands of multiple stakeholders, thereby decreasing the potential for water conflicts and ensuring that the goals of each entity are advanced more readily.
The development of a community-driven Strategic Watershed Restoration Plan for the Upper Teton River is an incredibly valuable tool for FTR at this juncture in our work history, and will help direct our future work.

Evaluation Criteria C: Implementation and Results

Subcriterion C1- Project Planning: The proposed grant activities conform to and meet the goals of both State and local water plans:

Teton Watershed Document – The Restoration Plan to be developed through the collaborative efforts of the Teton River Advisory Council will assist FTR in the selection of conservation projects and inform the timing and sequencing of project activities, such that FTR is able to strategically address the conservation objectives identified in the Upper Teton River Model Watershed Document. As such, the Restoration Plan directly supports the Teton Watershed Document.

Henrys Fork Basin Study, WaterSMART Grant - The Bureau of Reclamation, in partnership with the Idaho Water Resource Board, is currently engaged in an $800,000 Basin Study geared at identifying potential water supply solutions to address water supply needs in the Henrys Fork Basin and beyond. Entering its final phase (scheduled to conclude December 2013), the Study has endeavored to "identify opportunities for development of water supplies (i.e., above-ground storage, aquifer storage) and improvement of water management (i.e., conservation measures, optimization of resources) while sustaining environmental quality." In that vein, the Study has examined potential new dam sites, expansion of existing storage facilities, groundwater recharge, municipal conservation, piping and lining, demand reduction, and water marketing strategies. However, the Bureau and State have experienced problems addressing the water supply shortages specific to Teton Valley and, further, have found it challenging to demonstrate that environmental quality will be sustained if certain water supply strategies are pursued.

The Restoration Plan to be developed through the collaborative efforts of the Teton River Advisory Council (TRAC) will build upon, incorporate and support the objectives of the Henrys Fork Basin Study by evaluating the various water supply strategies which have been identified for potential implementation in this region. Specifically, the Basin Study has identified the following as mechanisms for addressing water supply in Teton Valley: demand reduction, canal automation, and municipal conservation. These solutions will be evaluated and considered by the TRAC. It will be determined if these solutions are, in fact, viable water supply solutions for this specific region of the Henrys Fork Basin – given the various interests and socio-political factors at work (discussed above). If appropriate, the Restoration Plan developed by the TRAC

will incorporate these water management solutions and determine where and how such strategies can be targeted for actual implementation. Therefore, the Restoration Plan directly supports the objectives and outcomes of the Henrys Fork Basin Study.

Idaho Comprehensive State Water Plan – The current Comprehensive State Water Plan, prepared by the Idaho Water Resource Board, imparts designations on certain stretches of the State's rivers. Certain portions of the Upper Teton River and its tributaries are designated recreational rivers and natural rivers. Those designations are outlined further below:

- Teton River: Trail Creek to Highway 33 (14 miles) – Designated as a recreational river reach and is recognized for its fishery values, outstanding wildlife habitat with water-dependent species present (used by anIdaho species of concern), and scenic values.
- Teton River: Highway 33 to Felt Dam (11 miles) – Designated as a recreational river reach and has an established minimum streamflow (106 cfs year round).
- Teton Creek: from the springs near Highway 33 to mouth (3 miles) – Designated as a recreational river and is recognized for its trout spawning habitat and containing habitat for an Idaho species of concern.
- Fox Creek: from the springs to mouth (2.5 miles) – Designated as a recreational river reach and is recognized for itstrout spawning habitat and containing habitat for an Idaho species of concern.
- Badger Creek: from the springs to mouth (3 miles) - Designated as a recreational river reach and is recognized for itstrout spawning habitat and containing habitat for an Idaho species of concern.
- Bitch Creek: Idaho Boarder to the railroad trestle (5 miles) – Designated as a natural river reach and is recognized for its fishery values and aesthetic values.
- Bitch Creek: Railroad trestle to Highway 32 (2 miles) – Designated as a recreational river reach and is recognized for its outstanding fishery and high aesthetic values.
- Bitch Creek: Highway 32 to mouth (7.5 miles) – Designated as a natural river reach and is recognized for its outstanding fishery and minimum streamflow (28 cfs year round).

The State's Comprehensive Plan encourages activities which maintain the aforementioned values with these river reaches and encourages cooperative basin planning particularly where management entities have overlapping interests. The Restoration Plan to be developed through the collaborative efforts of the Teton River Advisory Council will incorporate and support these river designations and their associated values, and will directly contemplate integration of management activities which support overall watershed health and resiliency.

IDF&G Management Plan for Conservation of Yellowstone Cutthroat Trout in Idaho – Idaho Fish and Game's Management Plan for Conservation of Yellowstone Cutthroat Trout in Idaho seeks to ensure the long-term persistence of the subspecies within its current range and to do so at levels capable of providing angling opportunities. The goals of the Management Plan are as follows:

- Ensure the long-term persistence of the subspecies within its current range in Idaho;
- Manage YCT populations at levels capable of providing angling opportunities; and
- Restore YCT to those parts of its historical range in Idaho where practical.

The Restoration Plan to be developed through the collaborative efforts of the Teton River Advisory Council will incorporate and support these goals, and be written with input from Idaho Fish and Game.

Teton County Idaho Comprehensive Plan – The Teton County, Idaho Comprehensive Plan serves as the vision for the future direction of Teton County, Idaho. The Comprehensive Plan specifically seeks to "[p]reserve natural resources and a healthy environment," and sets forth the following guiding principles to ensure such preservation:

- Conserve our public lands and natural resources (air, water, wildlife, fisheries, climate, trail systems, wetlands, dark skies, view sheds, soundscape, soils, open space, native vegetation)
- Balance private property rights and protection of our natural resources
- Recognize, respect and/or mitigate natural hazards, including but not limited to flooding, earthquakes, landslides, radon and fires
- Reduce infestation/introduction of invasive species
- Respect sensitive habitat and migration areas for wildlife
- Recognize that tourism is a fundamental component of our economy and is dependent on healthy natural resources

The Restoration Plan to be developed through the collaborative efforts of the Teton River Advisory Council will incorporate and support these guiding principles.

Teton River Subbasin Assessment and Total Maximum Daily Load (2003) - This subbasin assessment was prepared pursuant to the Idaho total maximum daily load (TMDL) development schedule (Idaho Sportsmen's Coalition v. Browner, No. C93-943WD, Stipulation and Proposed Order on Schedule Required by Court, April 7, 1997), §303(d) of the Clean Water Act (Public Law 92-500 as amended, 33 U.S.C. §1251 *et seq.*), and the United States Environmental Protection Agency (EPA) Water Quality Planning and Management Regulations (40 CFR Part 130.7). The goal of the TMDL is to restore identified impaired waterbodies to a condition that meets state water quality standards. Several waterbodies (stream reaches) located within the Upper Teton River Watershed (Badger Creek, Fox Creek, Darby Creek, Horseshoe Creek, Packsaddle Creek, Teton Creek, South Leigh Creek, North Leigh Creek and Spring Creek, and the Teton River) are listed under the Clean Water Act and have associated TMDL's which seek to restore applicable state water quality standards. The Restoration Plan to be developed through the collaborative efforts of the Teton River Advisory Council will incorporate projects and activities that support the TMDL and assist in restoration of these reaches.

Subcriterion C2- Readiness to Proceed: Friends of the Teton River is a 12 year old, well-established watershed stewardship group with the capacity and relationships to author a Strategic Watershed Restoration Plan for the Upper Teton River. FTR is a nationally-recognized leader in community-based watershed protection and restoration. We live and work in a community that is a melding of the old and new West, where a strong agricultural heritage exists side-by-side a tourism and recreation-based economy. We collaborate with a diverse group of stakeholders to accomplish our work; from farmers and ranchers, to subdivision and golf course developers, municipalities and small business owners, to NGO's, and state and federal agencies.

We realize that our success rests largely upon stakeholder involvement, support and buy-in. We have successfully completed habitat and fisheries restoration projects, water conservation and efficiency improvements, water quality and trout monitoring programs, and flow restoration projects with a diverse group of constituents. Due to our unique positioning, FTR is uniquely situated to address water quantity and quality issues within the watershed in a manner which promotes water conservation, ecological resiliency and reduces water conflicts.

As part of the prestigious "Model Watershed" designation and 10-year support from the Bonneville Environmental Foundation (2010-2020), FTR worked with leading YCT experts and climatologists to develop a document, termed the Upper Teton River Model Watershed Document, which details conservation outcomes for the watershed. The document includes baseline and target restoration metrics, a long-term monitoring plan, and outlines an adaptive management approach framework. In short, the document catalogs what must be accomplished to improve ecological resilience, and preserve and protect water resources in the Upper Teton River Watershed.

While the Model Watershed Document identifies desired conservation outcomes for the watershed, it is unclear exactly how FTR, and the community, should strategically advance those target metrics in the coming years. In short, FTR needs a Restoration Plan which clearly outlines and prioritizes on the ground activities and projects which advance progress towards the conservation outcomes and target metrics identified in the Model Watershed Document. A critical piece of this work and the long term ability to implement on the ground activities and actions, however, hinges on generating community support for the work. The Teton River Advisory Council will serve as a forum to identify, vet, discuss and prioritize projects, ultimately generating a Restoration Plan. Please see the Technical Proposal sections of this grant application for approach and timeline details.

At this juncture, FTR does not anticipate any specific problems or major difficulties in performing or accomplishing the goals and objectives outlined in this grant proposal. It appears that the time is ripe for community discussion and dialog surrounding water, and there is a great deal of interest in identifying and pursuing community based solutions which work for *our* community. This is particularly true when conversation shifts to the potential listing of Yellowstone cutthroat trout, and the risk and uncertainty associated with that designation. Likely, the most challenging component of this proposal is ensuring that each member of the workgroup is heard and their concerns understood, and from there that viable activities and projects are identified which address those concerns. Because of this, FTR has generated a very methodical and intentional process for empaneling and working with the TRAC, through the four phase approach outlined above, to generate a Restoration Plan.

Evaluation Criteria D: Watershed Group/Landscape Conservation Nexus

The Teton River Watershed straddles the border between the Great Northern LCC, which includes portions of British Columbia, Washington, Oregon, Idaho, Montana, and Wyoming; and the Great Basin LCC. After consulting with the coordinators of both the Great Basin LCC and the Great Northern LCC, FTR was invited to participate in the Rocky Mountain Partner Forum of the

Great Northern LCC, due to the high degree of overlap between the goals and species of focus for FTR and the Great Northern LCC (described below).

Climate change has been identified in the draft Great Northern Landscape Conservation Cooperative (GNLCC) Strategic Framework as a priority landscape-scale stressor in the region because of its potential to directly and indirectly degrade terrestrial and aquatic integrity. In a January, 2013 meeting/webinar, it was determined that the focal resource for the partner forum in 2013 will be watershed function in the face of climate change, with a particular focus on cold water systems. This focus includes native cold water fish (with specific focus on Yellowstone cutthroat trout, bull trout, and Westslope cutthroat trout); other cold water aquatic species; stream flows (quantity, temperature, and timing); riparian condition and function; and upland watershed hydrology. The ultimate goal of the multi-year partner forum project is to collaboratively develop a 5-10 year cold water systems climate adaptation action plan and associated monitoring plan. Outcomes of the plan include providing managers with a menu of options for managing cold water systems as climate changes; and identifying priority science needs for making current and future management decisions for those resources.

On June 4-5, 2013 FTR Executive Director Amy Verbeten attended the Rocky Mountain Partner Forum climate adaptation workshop. One of the primary outcomes of this meeting was to generate strategies for managing watershed function/cold water systems as climate changes that can be implemented by public and private land managers and conservation practitioners. As a member of the partner forum team, Amy will be working with the TRAC to integrate the strategies generated by the Rocky Mountain Partner Forum into the Teton watershed restoration plan.

An additional outcome of the June 4-5 workshop was to generate science/information needs to support the implementation of climate-informed, watershed function/cold water systems management strategies. Pending funding of this grant request, Amy will be working to determine specific additional information/science that the TRAC needs in order to integrate climate-informed strategies into the Teton watershed restoration plan.

FTR is also currently working with Dr. Robert Al-Chokhachy, of the USGS Rocky Mountain Research Center, on a Great Northern LCC-funded project entitled "Helping managers develop and implement a consistent method to prioritize conservation and identify climate adaptation strategies." A primary focus of this project is to establish an agreed-upon model for prioritizing Yellowstone cutthroat restoration activities. FTR is working with Dr. Al-Chokhachy to integrate FTR's data on water quality, flow, and Yellowstone cutthroat trout population trends into the model; pending funding of this grant request, Dr. Al-Chokhachy's model will also be integrated into the Teton Watershed Restoration Plan.

Required Permits or Approvals

No permits or approvals are necessary for the activities proposed in this grant application.

Letters of Project Support

Please see attached letters of support (starting on the next page) from the following partners:

- US Forest Service
- Idaho Fish and Game
- Bureau of Reclamation
- State of Idaho, Idaho Water Resource Board

Applicant/Watershed Group Resolution

The FTR Board of Director's Resolution is below.

Friends of the Teton River
Board of Directors Resolution

TO: Bureau of Reclamation

This is a certified copy of resolution that was passed by the Friends of the Teton River Board of Directors, by vote and endorsed by a quorom of members, at the regular board meeting held on 06/06/2013.

RESOLVED, that this Board of Directors hereby authorizes and directs Amy Verbeten, Executive Director, and Sarah Rupp, Water Resources Director and Staff Attorney, to enter into a Cooperative Watershed Management Program Grant agreement, to create a Teton River Advisory Council to create a prioritized watershed restoration plan for the Teton Watershed, on behalf of the Friends of the Teton River Board of Directors.

6/6/2013

Chuck Iossi, President **Date**

USDA United States Department of Agriculture | Forest Service | Caribou-Targhee National Forest | 1405 Hollipark Drive Idaho Falls, ID 83401 208-524-7500

File Code: 2600
Date: June 4, 2013

Bureau of Reclamation
Attn. Michelle Maher
Mail Code: 84-27850
PO Box 25007
Denver, CO 80225

Dear Ms. Maher,

I am writing in support of Friends of the Teton River's application to the Bureau of Reclamation for expansion of their watershed group work. I understand they are applying to create the Teton River Advisory Council (TRAC), a diverse watershed planning group, which will advise on and prioritize watershed restoration work in the Teton Watershed.

The Forest Service, Idaho Fish and Game, and Wyoming Game and Fish all work together with FTR to better understand, protect, and restore the Teton River and its tributaries. FTR continues to be an important partner for conservation work in this watershed. While FTR does not hold management authority, they collect data and conduct restoration projects that are highly beneficial to the watershed and which further our work there.

The Forest Service has collaborated with FTR since their inception, and finds their work to be based on scientific rigor and community involvement. FTR fills an important niche in the Teton Valley community. Without their efforts, much would be left undone in the valley as the agencies do not have the time and resources to focus efforts in Teton Valley to the extent FTR does. FTR would be a great candidate to facilitate a stakeholder's forum and formulate a watershed plan in conjunction with the managing agencies and public.

FTR's work with the Bonneville Environmental Foundation has further helped to define the life history patterns of Yellowstone cutthroat in the watershed, which will help to focus priorities based on real data. With limited resources for conservation, it is vital that conservation proceed in a prioritized manner, with broad-based community support. A stakeholder advisory group that creates a watershed restoration plan is essential to ensure the most focused and effective conservation efforts are advanced in the basin.

The Upper Teton River is a river system that has undergone much change with the introduction of non-native trout, shifts in irrigation practices through the years and diversions and dewatering that occurs on many tributaries. While many of these impacts have been negative some have helped isolate and preserve pure cutthroat in several tributaries. Research done has also shown a fairly isolated and intact fluvial population of Teton River cutthroat that are spawning in the lower reaches of Teton Creek and are maintaining a population of cutthroat in the Teton River.

I believe there are opportunities for flow restoration and tributary reconnection that could go a long way towards turning the tide more in favor of cutthroat. Many of the tributaries to the Teton River are larger flashier systems that I believe cutthroat can compete in and will in turn increase the resident and fluvial populations' in the Teton Valley. I believe a focused effort based upon a watershed wide plan will give cutthroat the best chance for success. Our continued work together as partners will best insure our success.

Sincerely,

s/ Lee W Mabey

Lee W. Mabey
Acting Forest Fisheries Biologist
Caribou-Targhee National Forest

IDAHO DEPARTMENT OF FISH AND GAME
UPPER SNAKE REGION
4279 Commerce Circle
Idaho Falls, Idaho 83401

C.L. "Butch" Otter / Governor
Virgil Moore / Director

May 31, 2013

Bureau of Reclamation
Attn. Michelle Maher
Mail Code: 84-27850
P O Box 25007
Denver, CO 80225

Dear Ms. Maher:

I understand that the Friends of the Teton River have applied for grant funds through BOR to form a Teton River Advisory Council, and that this diverse stakeholder group will identify, review, vet, and prioritize watershed restoration activities in the Teton River watershed. I would like to express my support for their efforts on this endeavor. Idaho Department of Fish and Game has worked closely with the Friends of the Teton River for over a decade now to bring about positive changes in the watershed that benefit both the fisheries resources found in the river and the local community that values those resources. FTR continues to be an essential partner for conservation work in this watershed. While FTR has no regulatory authority, the robust data collection they have done in our basin is very useful to IDFG and helps inform our management decisions.

The Friends of the Teton River are perfectly poised to convene a Teton River Advisory Council in conjunction with IDFG and other partners. A substantial amount of work has been completed to date that will be used as a starting point for a comprehensive watershed restoration plan. With limited resources for conservation, it is critical that conservation proceed in a prioritized manner. The proposed grant and resulting committee is essential to ensure the most appropriate conservation efforts are identified and, with broad based-community support, implemented in the basin.

Although the Teton River supports a robust trout fishery, habitat degradation, excess siltation, riparian damage and loss of connectivity between tributaries and mainstem river habitat have kept the Teton from reaching its fullest potential, and has suppressed native Yellowstone cutthroat trout abundance while allowing nonnative trout to expand. By prioritizing and addressing these issues in an organized approach, we should be able to help native trout remain healthy and abundant for future generations, while also reducing conflicts as demand for water continues to grow.

Sincerely,

Dan Garren
Regional Fisheries Manager
Idaho Department of Fish and Game
208-525-7290

Keeping Idaho's Wildlife Heritage

United States Department of the Interior

BUREAU OF RECLAMATION
Pacific Northwest Region
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520

IN REPLY REFER TO:

SRA-1200
ADM-1.00

JUN 06 2013

MEMORANDUM

To: Acquisition and Assistance Management Division, Denver, CO
Attention: 84-27850 (Maher)

From: Lesa J. Stark
ESA/Planning Manager

Subject: Memorandum of Support for the Friends of the Teton River (FTR)

I am writing in support of the FTR application for grant funds through Reclamation's WaterSmart Cooperative Watershed Management Program (CWMP) to form a Teton River Advisory Council (TRAC). It is my understanding that the TRAC will utilize a diverse stakeholder group to identify, review, vet, prioritize, and ultimately generate a restoration plan which outlines various restoration activities in the Teton River Watershed.

Reclamation has worked in coordination with FTR and other stakeholder groups over the past several years as we developed the Henrys Fork Basin Study. Through that process, FTR has demonstrated itself to be a committed partner, willing to work diligently to bring about positive changes in the watershed. The proposed work of the TRAC will build upon the Henrys Fork Basin Study framework by empowering a community-driven, local council to pursue various small scale water conservation/management solutions analyzed in the Basin Study process. This sort of grass roots effort will make all the difference in successfully identifying, prioritizing, and implementing projects and activities throughout the Teton River Watershed.

With limited resources available for conservation work in the region, it is important that efforts of this nature proceed in a prioritized manner. This CWMP grant will assist the TRAC in the development of a Teton River Watershed restoration plan to guide and focus conservation efforts where needed most.

Furthermore, the development of community-driven councils, similar to that proposed by FTR in this grant application, are often most adept at identifying water resource solutions which work for the community as a whole, and thus serve to reduce conflict and generate a higher likelihood of project implementation. FTR is an essential partner for conservation work in this watershed and is appropriately poised to convene a TRAC in conjunction with a wide array of partners.

IDAHO WATER RESOURCE BOARD

June 11, 2013

Bureau of Reclamation
Attn. Michelle Maher
Mail Code: 84-27850
P O Box 25007
Denver, CO 80225

Dear Ms. Maher:

We understand that the Friends of the Teton River has applied for grant funds through the Bureau of Reclamation to form a Teton River Advisory Council, and that this stakeholder group will identify, review, vet, prioritize, and ultimately generate a restoration plan which outlines various restoration activities in the Teton River watershed.

The Idaho Water Resource Board (IWRB) generally supports the establishment of stakeholder councils that can serve as a discussion forum for the various interest groups that have an interest in the conservation, development, management, and use of water resources. An example of a successful stakeholder council is in the neighboring Henrys Fork Basin, where the Henrys Fork Foundation and the Fremont Madison Irrigation District co-lead the Henrys Fork Watershead Council. The IWRB would support the establishment of a similarly structured council in the Teton Basin.

The IWRB and the U.S. Bureau of Reclamation are jointly undertaking the Henrys Fork Basin Study, which includes both the Henrys Fork and Teton River Basins, to evaluate options for additional water supplies needed both within the study area and within the Eastern Snake Plain Aquifer (ESPA) pursuant to Idaho's legislatively-approved ESPA Comprehensive Aquifer Management Plan. The IWRB would generally support restoration actions in the Teton River Basin that do not preclude water supply options identified in the Henrys Fork Basin Study

The IWRB has collaborated with Friends of the Teton River and other stakeholders for several years to bring about positive changes in the watershed that benefit both fishery resources in the river and irrigation interests that rely upon water to support a thriving agricultural economy, and will continue do so in the future.

Sincerely,

Brian Patton
Acting Administrator

322 East Front Street, Boise, Idaho 83720 Tel: (208) 287-4800 Fax: (208) 287-6700

Funding Plan and Letters of Commitment

No Federal funding sources, other than those applied for through this grant, have been obtained to support this project. The additional cost of funding this project ($19,476) will come from previously secured funds from Bonneville Environmental Foundation (BEF), a private funding source. A letter of funding commitment has been provided by BEF and is attached, on the following page.

Funding sources have been summarized, below.

Funding Sources	Funding Amount
Non-Federal Entities	
1. Bonneville Environmental Foundation	$19,476
Non-Federal Subtotal:	$19,476
Other Federal Entities	
1. None	$ -
Other Federal Subtotal:	$ -
Requested Reclamation Funding	$89,379.37
Total Project Funding:	$108,855

Matching fund Letter of Commitment:

Please see the letter of commitment from the Bonneville Environmental Foundation, attached on the next page.

June 1, 2013

Bureau of Reclamation
Atten: Michelle Maher
Mail Code: 84-27810
PO Box 25007
Denver, CO 80225

Dear BOR Grant Committee:

It is with great pleasure that I submit this letter of support on behalf of Friends of the Teton River (FTR) and their proposal "Expansion of an Existing Watershed Group: Improving Ecological Resilience, Conserving Water, and Reducing Conflicts through formation of the Teton River Advisory Council."

The Bonneville Environmental Foundation entered into a ten-year Model Watershed Project partnership with FTR in 2010. This long-term commitment followed an in-depth evaluation of over 80 watershed organizations located throughout the Western U.S. FTR was one of two organizations that stood above the rest in demonstrating a strong commitment to applying sound scientific principals, operating at a watershed-scale, and seeking to measure the long-term ecological results of their efforts. FTR and BEF have developed a rigorous monitoring plan for the watershed, particularly focused on assessing fisheries, hydrologic and water quality data on key tributaries such as Canyon Creek. BEF has committed $19,476 to funding this effort during the grant period, September 2013 to August 2015.

This organization is staffed with enthusiastic and diligent people that are genuinely dedicated to restoring the upper Teton Watershed and the values it provides to local and regional communities. The Bonneville Environmental Foundation has great confidence in the capacity of FTR's staff to prioritize the most impactful restoration projects and monitor their results effectively for the long-term.

If you have any questions regarding this letter, please feel free to contact me.

Best Regards,

Robert Warren
Model Watershed Program Director

bonneville environmental foundation

240 southwest 1st ave.
portland, oregon 97204

503.248.1905
www.b-e-f.org

Budget Proposal

BUDGET ITEM DESCRIPTION	COMPUTATION $/Unit and Unit	COMPUTATION Quantity	RECIPIENT FUNDING	RECLAMATION FUNDING	TOTAL
SALARIES AND WAGES					
Sarah Rupp, Water Resources Director					
(year 1)	$30.61/hour	910 hrs		$27,855.51	$27,855.51
(year 2)	$31.13/hour	910 hrs		$28,328.30	$28,328.30
Amy Verbeten, Executive Director					
(year 1)	$26.12/hour	520 hrs	$6,791.20	$6,791.20	$13,582.40
(year 1)	$26.56/hour	520 hrs	$6,905.60	$6,905.60	$13,811.20
FRINGE BENEFITS					
Sarah Rupp, benefits					
(year 1)	$2.67/hour	910 hrs		$2,429.70	$2,429.70
(year 2)	$2.79/hour	910 hrs		$2,538.90	$2,538.90
Amy Verbeten, benefits					
(year 1)	$2.03/hour	520 hrs	$527.80	$527.80	$1,055.60
(year 2)	$2.12/hour	520 hrs	$551.20	$551.20	$1,102.40
TRAVEL					
8 workgroup meetings: RT mileage Driggs to Victor	.565 cents per mile	160 miles		$90.40	$90.40
2 workgroup meeting: RT mileage Driggs to Rexburg	.565 cents per mile	180 miles		$101.70	$101.70
15 interviews:					
-5 trips (RT) Driggs to Victor	.565 cents per mile	80 miles		$45.20	$45.20
-8 trips (RT) Driggs to Newdale	.565 cents per mile	544 miles		$307.36	$307.36
-2 trips (RT) Driggs to Idaho Falls	.565 cents per mile	300 miles		$169.50	$169.50
EQUIPMENT					
None					
SUPPLIES/MATERIALS					
Copying Expense (10 workgroup meetings) B&W copies, front to back	$.25/page	1,500 pages (150 pages/meeting)		$375.00	$375.00
Bound final copies of watershed plan 150 pages per copy, color copies, front to back	$.98/page	750 pages (150 pages/copy, 5 copies)		$735.00	$735.00
Lenovo ThinkPad Edge 15 Notebook Computer + Microsoft Office Professional Plus 2010 Software				$1,007.00	$1,007.00
CONTRACTUAL WAGES					
Chircop & Colyer CPA's Accounting/grant tracking & administration	$60/hour	52 hours		$3,120.00	$3,120.00
Rob Van Kirk, Henry's Fork Foundation Hydrologic modeling of management scenarios	$50/hour	80 hours		$4,000.00	$4,000.00
ENVIRONMENTAL/REGULATORY COMPLIANCE					
N/A					

Budget continued on next page

OTHER					
Room rental for stakeholder workgroup meetings (2.5 hrs each)					
Driggs Senior Center Room	$40/hr	20 hours (8 meetings)	$800.00		$800.00
Rexburg Room	$80/hr	5 hours (2 meetings)	$400.00		$400.00
TOTAL DIRECT COSTS			**$15,975.80**	**$85,879.37**	**$101,855.17**
INDIRECT COSTS					
Sarah Rupp, portion of facilities cost	$4,454.55/year	1 year	$2,227.28	$2,227.27	$4,454.55
Amy Verbeten, portion of facilities cost	$5,090.90/year	.5 years	$1,272.72	$1,272.73	$2,545.45
INDIRECT COSTS SUBTOTAL (6.4% of budget)			$3,500.00	$3,500.00	$7,000.00
TOTAL PROJECT COSTS			**19,475.80**	**89,379.37**	**$108,855.17**

Budget Narrative

Salaries and Wages:

The primary project manager will be Sarah Rupp, FTR's Water Resource Director and Staff Attorney. It is estimated that Sarah will spend half her time (910 hours annually) on the project in Year 1 and Year 2. Sarah will oversee the development and completion of all stages of the project including: obtain input from stakeholders, assimilate and compile new technical (hydrologic and fisheries) data, work with and coordinate the activities of the Hydrologic Modeling contractor, and integrate feedback from scientific review sources.

Amy Verbeten, Executive Director will spend one quarter of her time (520 hours annually) on the project in Year 1 and Year 2. Amy will act as the direct facilitator of all workgroup meetings, will work with the TRAC to integrate the strategies generated by the Rocky Mountain Partner Forum of the Great Northern LCC into the Teton watershed restoration plan, will work to integrate the TRAC strategies with regional models for prioritizing Yellowstone cutthroat restoration activities, and will provide general project oversight and administration as needed.

Compensation calculations and rates are shown in the table below, and reflect the total cost of employment per year, per employee. A "Cost of Living Adjustment" for Year 2 was calculated using the existing rate of 1.7%. FICA, Workers' Comp and Idaho State Unemployment Costs were calculated using standard rates.

Salaries Year 1

Employee	Base Salary	FICA Taxes	Workers Comp	State Unemployment	Total Cost of Employment	Employee Hourly Cost
Executive Director	$49,418.00	$3,780.48	$217.44	$915.24	$54,331.16	$26.12
Water Resources Dir.	$50,350.00	$3,851.78	$599.17	$915.24	$55,716.18	$30.61
TOTAL	$99,768.00	$7,632.25	$816.60	$1,830.48	$110,047.34	$ -

Salaries Year 2

Employee	Base Salary +1.7%	FICA Taxes	Workers Comp	State Unemployment	Total Cost of Employment	Employee Hourly Cost
Executive Director	$50,258.00	$3,844.74	$221.14	$915.24	$55,239.11	$26.56
Water Resources Dir.	$51,206.00	$3,917.26	$609.35	$915.24	$56,647.85	$31.13
TOTAL	$101,464.00	$7,762.00	$830.49	$1,830.48	$111,886.96	$ -

Fringe Benefits:

Fringe benefits are calculated using the annual health insurance premium rate (Idaho Blue Cross) and retirement contribution (stipend) for each employee, and are calculated proportionally to the number of hours each employee will spend on the project. A 5% increase in health insurance was estimated in Year 2, according to anticipated increases. Please see the table below for rates/calculations.

Fringe Benefits Yr. 1

Employee	Health Insurance	Retirement	Benefits cost	Hourly Benefits Cost
Executive Director	$3,630.00	$600.00	$4,230.00	$2.03
Water Resources Dir.	$4,259.52	$600.00	$4,859.52	$2.67
TOTAL	$7,889.52	$1,200.00	$9,089.52	$ -

Fringe Benefits Yr. 2

Employee	Health Insurance +5%	Retirement	Benefits cost	Hourly Benefits Cost
Executive Director	$3,812.00	$600.00	$4,412.00	$2.12
Water Resources Dir.	$4,473.00	$600.00	$5,073.00	$2.79
TOTAL	$8,285.00	$1,200.00	$9,485.00	$ -

Travel:

The anticipated travel expenses include local/regional travel costs for 10 "Workgroup" meetings, as well as 15 stakeholder meetings. The federal mileage reimbursement rate (for use of personal vehicle) of $0.565/mile was used to calculate costs. Trips were calculated using the following distances (round-trip):

- Driggs to Victor—20 miles
- Driggs to Rexburg—90 miles
- Driggs to Newdale—68 miles
- Driggs to Idaho Falls—150 miles

Equipment:

FTR will not need to purchase any equipment to implement the proposed grant activities.

Materials and Supplies:

Copying expense was estimated using the rates of a local print shop, Peak Printing, to reproduce material for the 10 Workgroup meetings. It is estimated that an average of 15

participants in each meeting will receive 10 double-sided pages of material. Total cost of this line item is calculated at 1,500 total pages x $.25/page = $375.

Copying expense was estimated using the rates of Peak Printing, to print final, bound copies of the Watershed Plan document. It is estimated that 5 bound copies will be produced, at approximately 150 pages (color copies, double-sided) each. Total cost of this line item is calculated at 750 total pages x $.98/page = $735.

A laptop computer, to be used for presentations given at workgroup meetings, will be purchased, along with associated software. The meeting spaces provide LCD projectors and screens to aid in the presentations. This notebook will be equipped with a built-in camera for use of Skype and remote video-conferencing. A quote from BIT Direct, Inc. was used to estimate the expense for a Lenovo ThinkPad Edge 15.6" LED Notebook computer at $629. A quote from Amazon.com was used to estimate the expense for a licensing agreement for Microsoft Office Professional Plus 2010 + Software Assurance at $378.

Contractual:

FTR contracts with Chircop & Colyer CPA's to do our accounting, grant tracking and administration. This expense was estimated at Chircop & Colyer's rate of $60/hour and is estimated to take 1 hour per pay period during the 2 year grant timeline (a total of 52 pay periods/52 hours).

Dr. Rob Van Kirk, currently of the Henry's Fork Foundation (formerly at Humboldt State University), developed the groundwater-surface water model of the Henry's Fork Watershed that will be used as the basis for hydrologic modeling of management scenarios generated by the TRAC. Dr. Van Kirk will be contracted to input working group scenarios into the model, and to prepare a summary report on the modeled impacts for each water supply and management scenario considered by the working group. This expense was estimated by Dr. Van Kirk, who indicated that 80 hours of time will be needed to accomplish the work, at a contractual rate of $50/hour.

Environmental and Regulatory Compliance Costs:

Because this project is a planning effort, no environmental compliance will be necessary for the implementation of the proposed grant activities.

Other:

A meeting space for the 10 Workgroup meetings will be rented for 2.5 hours per meeting. 8 of these meetings will occur at the Driggs Senior Center ($40/hr rate) and 2 will occur in Rexburg at $80/hr rate.

Indirect Costs:

FTR does not currently have a federally-approved cost rate agreement in place, but can undertake preparation of an indirect cost rate proposal if BOR funds are granted. An explanation of how the indirect cost rate for this proposal was calculated is below.

The proposed Indirect Costs for this application were calculated based on the annual expenses of rent ($15,000), telephone & internet ($3,000), office utility fees ($600), office insurance

($400), Board of Directors & Liability Insurance ($1,940), and project insurance ($5,100). Annual cost of these line items total $26,040. A proportional indirect cost rate was then calculated based upon each employee's percentage time of employment (as a percent of FTE)x Annual Indirect Cost/total Organizational FTE's, as explained below.
Executive Director—1 FTE x $26,040/5.115 (total organizational FTE's) = $5,090.90
Water Resources Director—.875 FTE x $26,040/5.115 = $4,454.55
The indirect cost total represents 6.4% of the direct cost line items.

Total Cost:
The total cost of the project is $108,855. Of this, FTR respectfully requests $89,379 from the Bureau of Reclamation. The remainder of the project funds, $19,476 will be provided by Bonneville Environmental Foundation, in the form of non-federal funding which has already been secured.

Budget Form SF-424A is attached.

Thank you for your consideration of this grant proposal.