



East Canyon Watershed Committee Willard Bay Settlement Proposal

Submitted By:

East Canyon Watershed Committee

www.eastcanyoncreek.org

Prepared By:

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UTAH DIVISION OF WATER QUALITY

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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: East Canyon Watershed Committee

Co-Applicant Name(s) (if applicable): Uinta Headwaters RC&D Council

Project Title: East Canyon Watershed Water Quality Improvement Project

Agency or Business Name (if applicable): _____

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Individual Non-Profit Govt. Agency Academic Commercial Other

1. Estimated Project Costs:

Objective	Labor	Materials	Equipment	Admin *	Misc	Estimated Funding Request	Estimated Match**	Total Project
1 Mountain Stabilization	\$10,000	\$50,000	\$10,000	\$2,500	\$5,000	\$57,500	\$20,000	\$77,500
2. Streambank and Riparian Habitat Restoration and Preservation	\$50,000	\$50,000	\$50,000	\$7,500	\$42,500	\$200,000	\$50,000	\$250,000
3a. Stormwater Education Course (3yrs)	\$5,000	\$10,000	\$0	\$750	\$3,000	\$15,750	\$3,000	\$18,750
3b. Water Quantity Outreach Campaign	\$3,000	\$7,000	\$0	\$500	\$2,000	\$10,500	\$2,000	\$12,500
Total	\$68,000	\$117,000	\$60,000	\$11,250	\$52,500	\$283,750	\$75,000	\$308,750

* Grant Administration from Uinta Headwaters RC&D is 5% of grant funds recieved.

** Match funding to come from EPA 319 and State NPS funds

2. Purpose and need of the project

The first TMDL for the reservoir and creek was written in 2001. Through efforts lead by the East Canyon Watershed Committee and the Snyderville Basin Water Reclamation District, water quality improved in the years leading up to a subsequent TMDL in 2010. The East Canyon Watershed Committee continues to successfully work to improve water quality in the watershed by establishing and encouraging a forum for local, county, state, and federal partners to discuss water quality concerns, coordinates individual efforts, as well as overseeing project implementation, as well as education and outreach efforts.

The watershed committee continues to strive to preserve the quality of the water that originates in this watershed so that all downstream users as well as the endpoint, Willard Bay, receive water of sufficient quality and quantity to maintain and enhance their various needs and the water's designated uses. In order to succeed in these endeavors and preserve the quality of the headwaters, the committee is proposing a two pronged approach. First the committee wishes to continue to work with partners to fund on the ground projects. Second, an outreach and education component that seeks to heighten awareness of the connection between the upper and lower watershed and the impact decision and actions in the upper watershed have on the rest of the users downstream. These two components will be described in greater detail below:

Objective 1: Mountain Stabilization

Ski Resorts own and/or manage a large portion of the upper reaches of the East Canyon Watershed. Resort maintenance often exposes sensitive areas on steep slopes, increasing erosion of phosphorus rich soils and sedimentation of stream systems. Thus these resorts are key partners in creating watershed scale land management efforts that improve water quality. Historically the East Canyon Watershed Committee has partnered with these resorts to assist in hill slope stabilization through structural as well as bioengineering techniques. This partnership remains strong, however, additional funding is needed to continue addressing water quality concerns on the mountain areas these resorts operate. The committee would like to continue working with these resorts to address areas of concern where sheet, rill, and gully erosion are occurring both along hill slopes and within perennial and ephemeral stream channels. Highest priority will be given to mitigating areas where erosion is transporting historic mining tailings that could contain heavy metals. Currently Park City Mountain Resort and the Canyons Resort representatives attend watershed committee meetings and are interested in doing projects on high priority hill slopes and drainage ways. Projects that are currently in the planning phase are:

- Thaynes Canyon Erosion Mitigation: Stabilize ephemeral stream channel that is down-cutting and transporting sediment and historic mining tailings downhill.
- Sediment detention pond improvements on Park City Mountain Resort: These sediment ponds capture runoff from ski runs. Much of the sediment trapped in these ponds contain historic mining tailings. Capture and retention of this sediment keeps these materials from entering the waterways of the watershed.

Objective 2: Streambank and Riparian Habitat Preservation and Restoration

Some of the most visible and talked about projects implemented in the watershed have been stream bank stabilization projects aimed at mitigating actively eroding banks and establishing robust riparian corridors for stream shading and riparian habitat. Within

the past 3 years alone the East Canyon Watershed Committee has aided in restoration efforts along several miles of stream, mitigated stream bank erosion, restored riparian habitat, and set the stage for a greater interest in water quality and riparian stewardship. These projects have ranged from riparian fencing to provide for more sensitive, riparian specific grazing management of livestock, to stream bank stabilization using structural and bioengineering techniques. These projects have been accomplished using a cooperative approach, enlisting local volunteers, using local resources and contractors, and careful planning with landowners to arrive at “win-win” solutions.

The watershed committee would like to continue to expand its work with partners to provide funding to projects that mitigate sedimentation of stream and reservoir systems and improve the health and expand the current boundaries of riparian corridor systems and aquatic habitat. Currently the watershed committee is working with several landowners to develop projects on their properties these include:

- Fish Passage at the Ice Dam on the Swaner Nature Center (approximately 5 miles of habitat reconnected)
- Streambank Restoration downstream of the Swaner Nature Center (.25 miles of channel improvement, estimated 40 tons of sediment removed each year.
- Streambank Restoration downstream upstream from Mormon Flats camping area (.25 miles of channel improvement, estimated 50 tons of sediment with associated nutrients removed each year.
- Channel reconstruction downstream of Jeremy Ranch Golf Course (8 miles of stream)

Objective 3: Outreach and Education:

In addition to the projects implemented within the watershed the East Canyon Watershed Committee has been active in increasing awareness about water quality, water quantity, and water related issues. The committee is working to develop new and innovative ways to use social media, video, and radio to increase awareness and effectively inform the public about relevant water issues. Two specific education and outreach projects currently being planned are:

- **3a.** The East Canyon Watershed Committee’s Education and Outreach subcommittee is working to develop an annual spring storm water prevention workshop for local contractors, developers, and engineering companies. This workshop is intended to address sediment and nutrient loading to the creek by tracking the sediment to the source. The workshop works to teach those that disturb the soil at the source not only how to implement best management practices (BMPs), but also make clear the connection between sediment leaving a construction site and the health of the stream. This workshop is intended to be led and sponsored by the watershed committee but be in partnership with the local water conservancy district, the county engineering department, and the county health department. The watershed committee would like to do the spring storm water prevention workshop for at least 3 years.
- **3b.** One of the principle constraints and challenges to water quality and aquatic health from the headwaters all the way to Willard Bay is water quantity. Low flows exacerbate even minimal water quality issues. The education and outreach subcommittee is working to develop an educational and outreach campaign to assist water users in the area to first conserve water, and second work with water

companies to release the conserved water into the streams to maintain minimum flows. The committee is developing ideas to better connect the user's water consumption, physically, mentally, and emotionally to the water that remains (or does not) in East Canyon Creek.

3. Time Frame



4. Project Location



5. How the Projects Affect Waterways Affected by the Diesel Release

The East Canyon Watershed is one of the headwaters of Willard Bay. Although physically separated, the health of the waters that link this watershed to Willard bay are intimately connected. The decisions and actions made in the small streams and creeks of this watershed have a significant (positive or negative) impact on water quality, quantity, and ecosystems of Willard Bay.

The East Canyon Watershed is located in western Summit County and is a tributary to the Weber River. The headwaters of the watershed originate in the mountains above the town of Park City. East Canyon Creek flows in a northwest direction until it enters East Canyon Reservoir. From the base of East Canyon Reservoir the creek flows northwest until it enters the main stem of the Weber River just downstream of the town of Morgan. The Weber River then carries the waters of East Canyon Creek into Willard Bay.

6. Projects Connectivity to other Natural Areas

Although all the proposed projects are located on private lands they are located either adjacent to or nearby the Swaner Nature preserve or state owned lands.

7. Social Benefits

The Wasatch back is a recreational destination for many residents of the Wasatch Front. Areas such as the ski resorts located in the East Canyon watershed, East Canyon Reservoir, Mormon Flats, and East Canyon Creek provide four season recreational

opportunities for locals, residents of the Wasatch front, as well as visitors from around the world. Sustaining the health and beauty of these ecosystems and the water that is their lifeblood has social benefits to all the user groups that live in, and recreate in the East Canyon watershed.

Additionally, removing pollutants from the waters at the upper reaches of the watershed means that the water enters the Willard Bay ecosystem cleaner and healthier. Willard Bay requires this kind of water to continue sustain the health of its ecosystem and the social benefits the ecosystem provides.

8. Project plans and details

Currently the site specific details of the proposed projects are under development.

9. Experience and Qualifications

The East Canyon Watershed Committee is uniquely positioned, its partnerships have spanned across agencies, and political jurisdictions all for the improvement of water resources. It has a history of stewardship, cooperation, and accountability that spans over a decade. The committee's membership include representatives from Summit County, Park City, NRCS, The Kamas Valley Conservation District, Recycle Utah, Friends of East Canyon Creek, US Bureau of Reclamation, Snyderville Water Reclamation District, Weber Basin Water Conservancy District, Snyderville Basin Recreation District, Trout Unlimited, Canyons Ski Resort, and Park City Ski Resort. The committee operates as a 501c3 organization with Uinta Headwaters Resource Conservation and Development Council acting as a fiscal agent.

To date the East Canyon Watershed Committee has played an integral part in helping to oversee over \$750,000 from various funding sources. The watershed committee has the structure, experience, partnerships and local connections, and drive to make each funded dollar be more effective and go further to ultimately accomplish more.

The water that originates as snowmelt at the very tops of the peaks that surround the watershed connects the Willard Bay to our watershed. The work performed by the East Canyon Watershed committee has the potential to provide the water to Willard Bay and the downstream users in between that helps them meet their needs. Willard Bay is the recipient of all the decisions and actions of the larger watershed, funding provided to the upper watershed will assist in improving those decisions and actions, ultimately improving the Willard Bay.

10 Ongoing maintenance

Maintenance requirements for individual projects is a constant challenge in restoration. Historically the watershed committee has worked in close partnership with landowners to assure a high level of engagement throughout the project. This kind of engagement has created an attachment to the restoration project and maintenance responsibility has been embraced by the landowner. The committee proposes to continue this type of process with long term maintenance being the responsibility of the landowner with a written contract established by the committee.

11. Partners

Uinta Headwaters RC&D Council
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435-602-9555
Attn: Jake Powell: Uinta Headwaters RC&D Secretary

Signature  Date May 5, 2014
Applicant

Signature  Date May 5, 2014
Co-Applicant (if applicable)