



Big Thompson Conservation District

P.O. Box 441; Berthoud, CO 80513

Phone/FAX: 970-667-1052

web site: www.nococd.org

email: info@nococd.org

February 17, 2014

Submitted electronically to chris.sturm@state.co.us

Colorado Water Conservation Board
Mr. Chris Sturm
1313 Sherman Street, Room 721
Denver, CO 80203

RE: Little Thompson River Watershed Master Plan Grant application with special considerations for the Town of Milliken and surrounding unincorporated Weld County properties.

Dear Mr. Sturm and members of the Colorado Water Conservation Board:

The Big Thompson Conservation District and Town of Milliken are taking a lead role in coordinating the development of a master plan for the Little Thompson River watershed.

The attached documents reflect application materials and supplemental information requested. We appreciate the opportunity to seek grant funds and look forward to working collaboratively with the Colorado Water Conservation Board through flood recovery efforts.

Most Sincerely,

Handwritten signature of Gordon D. Kilitrag in black ink.

President of the Board
Big Thompson Conservation District
email: gordon@bigthompson.org
phone: 970-988-6412

Handwritten signature of Anne Best Johnson in black ink.

Anne Best Johnson
Community Development Director
email: AnneJohnson@town.milliken.co.us
phone: (970) 660-5046

Section 1.0: Little Thompson River Corridor Master Plan Project Proposal Summary Sheet

Project Title: Little Thompson River Corridor Master Plan

Project Location: Starting at the headwaters of the Little Thompson River and terminating at the confluence of the Little Thompson River and the Big Thompson River.

Grant Request/Amount: \$150,000.00

Cash Match Funding: \$25,000.00

In-Kind Funding: \$50,000.00

Project Sponsor(s): Big Thompson Conservation District and Town of Milliken

Contacts:

Big Thompson CD
Gordon Gilstrap, President of the Board
(970) 988-6412 gordon@bigthompson.org
PO Box 441
Berthoud, CO 80513

Anne Best Johnson, Community Development Director
(970) 660-5046 AnneJohnson@town.milliken.co.us
1101 Broad Street, P.O. Box 290
Milliken, CO 80543

Brief Project Description:

At the peak of the 2013 flood, the Little Thompson River sustained water flows approaching the levels of the Big Thompson River but in a much smaller river bank system. The result was significant damage to the river and many properties and homes along the river. Restoring the river under a well considered master plan is essential to developing resiliency in the Little Thompson watershed.

Berthoud, Johnstown and Milliken are the only towns in the Little Thompson Watershed. The Town of Milliken was the only community that experienced flooding and significant damage in their central urban area. All three towns and the majority of private property owners in the watershed are included in the Master Planning effort.

The money from this grant will be used to hire a consultant(s) to develop a master plan for the Little Thompson River watershed, engage additional stakeholders, and provide an action plan for projects requiring immediate implementation and long range projects requiring additional planning/engineering. Floodplain management plans for the watershed are an anticipated outcome of the master plan. A DOLA grant to the Town of Milliken will be used as matching money for the CWCB master plan grant.

The \$50,000 in kind matching will consist of consulting time from landowners along the watershed, the Big Thompson Conservation District and town and county agencies.

Section 2.0: Applicant Qualifications

2.1: Identify the lead project sponsor and describe the other stakeholder's level of participation and involvement.

The Board of the Big Thompson Conservation District will be the lead sponsor for the Little Thompson watershed master plan. The board has already contacted 200 plus landowners with properties adjacent to the river. The response to this initial contact has been very positive with the majority of responding landowners wanting to know how they can help with river restoration planning and execution. A meeting to formally establish the Little Thompson Watershed Restoration Coalition (LTWRC) was held January 18, 2014 with 140 plus landowners, stakeholders and agency representatives in attendance. Five committees were formed and populated in the meeting: Steering Committee for oversight of the watershed initiative, Technical Committee to oversee hiring and managing the watershed consultant, Fiscal Committee to ensure integrity of financial flows, Resources Committee to seek out further funding and volunteers, and Allocation Committee to make recommendations regarding how funds and volunteers should be used.

The Town of Milliken Community Development Department along with the Town's contract Town Engineer will collaborate and co-lead the project with the Big Thompson Conservation District. Affected and interested landowners within the Town limits and those located in unincorporated Weld County have expressed interest in this project. Thus far, of the 27 affected property owners, the Town has heard from 20 who are interested in participating with the Town in future planning efforts.

2.2: What information is the project sponsor using to develop the proposed plan or project? Include any relevant information regarding existing watershed plans, geomorphic assessments, flood studies, fire protection plans, riparian conditions assessments, aquatic/terrestrial habitat conditions, wildlife studies, an/or river restoration reports.

Damage survey reports compiled by the Natural Resources Conservation Service for the Little Thompson watershed and will be available to the consultant. GIS and LIDAR data will be available from Larimer County. Landowner contact information, meeting organization and coordination will be provided by the BTCDC. We will commission the consultant(s) to use this information in the master plan along with any relevant hydrology information developed by CDOT, NRCS, CWCB and USGS. We will further refine the plan by working with the coalition of landowners and all appropriate government agencies.

2.3: Specify in-kind services and cash contributions (match) amount for the proposed activities. CWCB recommends that the applicant provide 50% match of the project's total cost. Discuss whether other funding sources are secured or pending.

All members of the board of the Big Thompson Conservation District are volunteers. The time dedicated to this work by the board members and members of the landowner coalition will form the majority of the in kind contribution. We have already identified board

members and coalition members who can volunteer expertise in fundraising, project management, fiscal management, conservation and construction.

Larimer County will contribute a twenty-five thousand dollar cash match.

The town of Milliken has contracted the services of Omar Herrera as Town Engineer to assist in the development of master plan. All of his services in helping with the master plan will be in kind match.

It is possible that the money requested in this grant will not suffice to complete the master plan. The Big Thompson Conservation District and the town of Milliken, working with the landowner coalition, stand ready to find those extra funds through other grants, loans and contributions from individuals and foundations.

Section 3.0: Organizational Capability

3.1: What is the applicant organization's history of accomplishments in the watershed? Provide several past project examples. List partner organizations and agencies with which applicant worked to implement past projects.

The Big Thompson Conservation District has a sixty-nine year history of working with agricultural producers and small acreage owners to institute new programs, infrastructure and training for conservation practices. Past projects have included the development of new irrigation infrastructure, institutionalizing the process for conversion of flood irrigation to sprinkler irrigation and developing specific training programs for agricultural producers and small acreage owners. The primary partners of the District are the landowners, the Natural Resources Conservation Service and CSU Extension Services.

It is important to note that the Big Thompson CD board has a strong constituency that includes:

- Two highly regarded agricultural producers with many years of successful farming experience.
- A retired Hewlett-Packard executive with experience in managing multi-national organizations and global projects.
- A highly educated and experienced conservation expert.
- A small acreage owner with strong experience in sales and marketing.

The town of Milliken has demonstrated its ability to complete multiple projects that have made the town an increasingly attractive setting for business and home ownership. The growth of the town and the quality of the new residential neighborhoods are testament to the leadership in the town.

The Committees of the LTWRC are populated with landowners that have expertise including civil engineering, accounting, project management, marketing, media management and habitat health.

3.2: *What level of staffing will be directed toward the implementation of the proposed project/planning effort? Discuss the number of staff and amount of time dedicated for the project. Will volunteers be utilized, and if so, how?*

The BTCDD Board and the volunteer committees listed above will work towards project oversight, fiscal management and additional resource allocation. We expect the consultant(s) to provide the staffing to analyze, design and coordinate work required for the master plan. We will allocate twenty thousand dollars in this grant for coalition building by providing a part time person to coordinate the activities and schedules for the coalition of landowners to ensure they are up to date on river restoration plans and have adequate opportunities to input their ideas to those plans. Many Milliken residents have offered their support and help as volunteers in this effort.

Section 4.0: Effectiveness of Proposal

4.1: *Demonstrate that the project budget and schedule are realistic. Please use the attached budget/ timeline spreadsheet.*

Stream and riparian master planning has never been performed on the Little Thompson watershed and the effects of the September 2013 flood emphasize the need for a plan for river-riparian resiliency while rebuilding the community and regional infrastructure. Initial discussions with other communities suggest that the funding request is appropriate. We anticipate funding unexpected tasks with matching funds from the counties. We anticipate a planning process of 6 months following the selection of a contractor.

The Technical Committee of the LTWRC will begin reviewing RFPs for consult

4.2: *Discuss the multi-objective aspects of the project and how they relate to each other. Describe similar activities in the watershed and how this project complements but does not duplicate those activities. Multi objectives may include but are not limited to channel stabilization, riparian re-vegetation, habitat improvement, recreation opportunity enhancement, natural hazard reduction, flood mitigation, water supply delivery improvement, fish migration improvement, ephemeral/intermittent channel stabilization, and upland erosion mitigation.*

Multiple benefit projects will reduce flood and geomorphic risk and increase resiliency and incorporate habitat enhancements for absent ecologic parameters (such as riffle/ pool complexes or floodplain vegetation). Through our ecological assessments and our risk analysis, we will be able to classify all reaches based on their susceptibility to flood and geomorphic damage as well as the quality of their riparian habitat. Our master planning process will consider the three components of a healthy riparian corridor-- hydrology/hydraulics, geomorphology, and ecology--and design conceptual projects and programs that address the assessed baseline conditions in all three categories. Our master plan will conclude with priorities for implementation and the priority structure will be based on how well projects are able to provide both risk reduction (flood and geomorphic) and environmental enhancements resulting in multi-benefit projects. We also recognize the potential cost-shares that can come in implementing multi-objective projects and will work to identify partnerships and potential co-funding sources for construction and maintenance.

The Big Thompson Conservation District, through its history and its partnerships, also works with local volunteers on land stewardship. We will, wherever possible, integrate our existing conservation, agriculture and water quality/quantity programs into our planning efforts. Additionally, we recognize the link between forest health and riparian health and flood risk and fire risk in the Little Thompson Canyon. Noting that we are at risk for both floods and fires, and that fires exacerbate floods, we will necessarily be looking for management strategies in our plan that also address upland vegetation, hill slope erosion, and perhaps developing guidelines for “river-friendly defensible space”.

Emergency debris removal and bank stabilization will focus on preparing for spring 2014 runoff and will be performed concurrently with the master planning to assure short term fixes do not hinder long term vision. Jeff Crane of Crane Associates will provide technical and organizational assistance to ensure projects are complementary and not duplicate.

4.3: Describe the proposed implementation plan. How will the master planning lead to prioritization and implementation of projects that mitigate flood risk and improve stream function?

We will work with the consultant(s) to craft a master plan that details the work to be done, the priority of the plan elements, the success criteria for each of the plan elements and the cost of each element. We will then work with the LTWRC, stakeholders and government agencies to determine an overall timeline based on available funding and resources. The Technical Committee of the LTWRC will monitor project work results to ensure the success criteria are being met. The Technical Committee will also monitor critical stream safety and health factors to ensure that long term goals are being met. We will have data from the Big Thompson Watershed Forum to determine water quality and will employ volunteer monitoring for all other factors of stream health, habitat health, re-vegetation and bank stability.

4.4: Discuss how the applicant plans to work together with its respective Basin Roundtable and/or the CWCB to incorporate the results of its master plan into Sections 4.2, 4.4, and/or 4.7 of the Roundtable’s Basin implementation Plan and/or sections 5.3 or 5.7 of Colorado’s Water Plan Annotated Framework.

Members of the Little Thompson Watershed Restoration Coalition will work with CWCB to ensure a thorough understanding of the Basin Plan and Colorado Water Plan. Our consultant will craft the master plan so it can be effectively integrated with the Basin Implementation Plan and the Colorado Water Plan. The LTWRC will participate in the South Platte Basin Roundtable and will approach the Roundtable for implementation funds at the appropriate time following the delivery of the master plan.

Section 5.0: Attachments

Attachment A: Scope of Work

Attachment B: Budget and Timeline

Attachment C: Example of Flood Damage

Attachment 5.A - Scope of Work

GRANTEE and FISCAL AGENT (if different) : Big Thompson Conservation District

PRIMARY CONTACT: Gordon Gilstrap

ADDRESS: PO Box 441, Berthoud, CO 80513

PHONE: (970) 988-6412

PROJECT NAME : Little Thompson Watershed Master Plan

GRANT AMOUNT : \$150,000

INTRODUCTION AND BACKGROUND

This project will develop a citizen-led master plan of the Little Thompson watershed to build consensus and collaboration towards a new ecological resiliency. The outcome will be a prioritized list of proposed projects designed to meet the goals of the community.

OBJECTIVES

List the objectives of the project. Please include objectives for all aspects of the project whether funded by the CWCB or not

- Compile hydrologic and morphologic data from the CWCB and CDOT for use in analyzing future return events
- Identify and compile all stakeholders in the watershed and organize community meetings to generate local information, build consensus and develop collaborations.
- Compile a prioritized list of potential projects designed by the community to improve safety, enhance aquatic and riparian habitat, reconstruct irrigation diversion structures and rehabilitate the damaged riverine ecosystem.

CWCB FUNDED TASKS

TASK 1 – Public Engagement, Coordination, and Reporting

Description of Task-Identify stakeholders and landowners in the watershed, develop a stakeholder communication system, organize and facilitate community meetings, generate consensus and build collaborations.

Method/Procedure- Construct an email listserve and organize community meetings

Deliverable- Watershed communication system that keeps stakeholders informed and allows for remote comments and input. Documentation of results.

TASK 2 – River Corridor Evaluations

Description of Task- Observe and evaluate morphological, hydrological and physical condition of the river corridor

Method/Procedure – NRCS rapid watershed assessment

Deliverable – Prioritized description of problem areas

TASK 3 – Hydrology & Hydraulics, Risk Assessments

Description of Task- Obtain HEC-RAS model from CWCB, ground truth, calibrate and perform risk assessments

Method/Procedure – HEC-RAS and standard risk assessment procedures

Deliverable – Prioritized ranking of high risk sites

TASK 4 – Identify Strategies & Project Frameworks

Description of Task- Identify solutions to problem areas identified by risk assessments

Method/Procedure – Professional judgment and experience

Deliverable – Documented solutions vetted by the community

TASK 5 – Conceptual Design and Management Frameworks

Description of Task- Develop conceptual designs at specific sites with approximate cost estimates

Method/Procedure – GIS and CAD drawings for public input

Deliverable – Conceptual designs capable of generating RFP's for design/build projects

TASK 6 – Prioritize Projects

Description of Task- Generate community input to prioritize proposed projects

Method/Procedure – Public meetings and remote comment capabilities

Deliverable – Documented list of prioritized projects with costs and potential funding strategies

TASK 7 – Draft and Final Master Plan

Description of Task- Organize and publish draft and final master plan

Method/Procedure – Desktop publishing

Deliverable – Final Master Plan adopted by the community and local governments

REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the statement of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

OTHER TASKS NOT FUNDED BY CWCB

TASK 1 - Removal of High Risk Debris

Description of Task- Acquire funding and volunteer workforce to remove from the riverbed any large debris that could cause further damage from heavy spring runoff or other high flow events.

TASK 2 - Individual Property Restoration

Description of Task- Work with individual landowners to ensure they know what government and/or community programs might assist in restoring their damaged properties and/or agricultural operations.

TASK 3 - Local Sponsorship Determination and Leadership

Description of Task- Work with NRCS, Larimer County, Weld County and Boulder County to determine local sponsorship for NRCS non-exigent restoration work and Colorado Department of Local Affairs CDBG-DR restoration grants. Lead or directly support any initiatives to acquire NRCS and DOLA funding.

Attachment 5.B - Budget and Timeline

Task	Description	Target Start Date	Target End Date	CWCB funds	Other Funds Cash (1)	Other Funds In-kind	TOTAL
1	Public Engagement, Coordination, and Reporting	Mar-14	Aug-14	30,000	5,000	15,000	50,000
2	River Corridor Evaluations	Mar-14	Apr-14	20,000			20,000
3	H&H, Ecosystem & Geomorphic Risk Assessments	Mar-14	Apr-14	35,000	5,000		40,000
4	Identify Strategies & Project Frameworks	Apr-14	May-14	25,000	10,000	10,000	45,000
5	Conceptual Design and Management Frameworks	May-14	Jun-14	30,000	5,000	10,000	45,000
6	Prioritize Projects	Jun-14	Aug-14	5,000		10,000	15,000
7	Draft and Final Master Plan	Jun-14	Sep-14	5,000		5,000	10,000
	TOTALS			\$ 150,000	\$ 25,000	\$ 50,000	\$ 225,000

(1) Grant request for \$25,000.00 submitted to Larimer County Commissioners with full support of Commissioner Tom Donnelly. Grant request for \$25,000.00 also submitted to Berthoud Community Fund.

Attachment 5.C - Example of Flood Damage

We offer the following letter and the attached pictures as examples of the type of flood damage and adverse consequences we are seeing in the Little Thompson watershed. The letter also exemplifies the general lack of public knowledge or concern for the river. We plan to change that situation through a robust media program.

Letter to Gordon Gilstrap:

Hi! I think you have already talked to Brad Drotar my son, I thought you might get some more insight to our problems from my writings.

Roger

A Thousand Year Rain

We have received our copy of "A Thousand Year Rain" and we can not find any references to the Little Thompson Canyon nor the Little Thompson River. Yes there is a Little Thompson as opposed to the famous Big Thompson. It has no public road up it. (The only front range canyon without a road.) The main three phase power lines to Pinewood Springs goes up this canyon. The flood wiped out at least 4 power poles and therefore cut the power to Pinewood. (Power was temporally restored by REA from another direction.)

The water was 515 feet across and at least 12 feet deep at our ranch houses. It took out almost all the trees, 1/3 of our pastures, all of our irrigation equipment and much more. We had two big propane tanks still hissing on our land. Our upstream neighbor had two houses and more tanks with their bridge gone. Since we had no telephone service including cell phones and our electric power gone, we used a generator to keep the freezer working which saved our food. We boiled water and cooked on a grill we made in our fireplace. River water was hauled up by the bucket for the toilets. Only one house was usable so all six of us were able to live in the other house.

Our cars were trapped on the wrong side of the river. After 2 1/2 weeks the water was low enough to allow us to carefully wade across the river. We then rented a car so our 16 year old granddaughter could go to school and our daughter-in-law could go to work.

We have silt 2 to 3 feet deep so all of our yards were impassable, trapping our cars on the hill behind the homes. We knew the only way out was to buy a Cat Skid-steer and move the silt ourselves. The Cat people were able to get one to use on October 18th. Our son was able to dig out our cars and our road maintainer. We hired a big back hoe to open a crossing and then "faried" back and forth to the cars on the other side.

We had more water damage because we have a narrower canyon and three dams in Big Elk Meadows broke sending big surges down on us. *(Grant writer note: It hasn't been confirmed that the dam bursts contributed greatly to the flood.)*

We thank our neighbors Carl, and Dan and our friend Don who helped clean our way out. Also REA who ran a line just for us "backward" from Pinewood. We only had enough gasoline left so we could stay seven more days or all six of us would have had to leave...

Since we lost 1/3 of our pastures, irrigation equipment, we will not be able to continue our business of Grass Fed Beef.

We are very concerned about the possible spring floods. The river has changed channels and so the Corp of Engineers will surely examine the 1/2 mile of river through our property to see what may be needed? With the amount of debris on our property and the properties above us we probably will have flooding again and also lose our electricity and phone when the power poles are once again destroyed.

QED Roger Drotar 09 January 2014 A.D.

100 Thunder Road, Longmont CO, 80503.

Before the Flood



After the flood.

