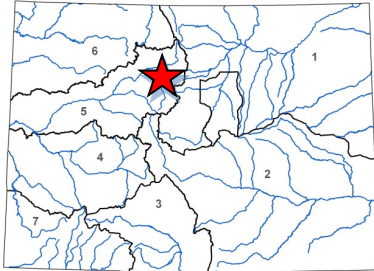




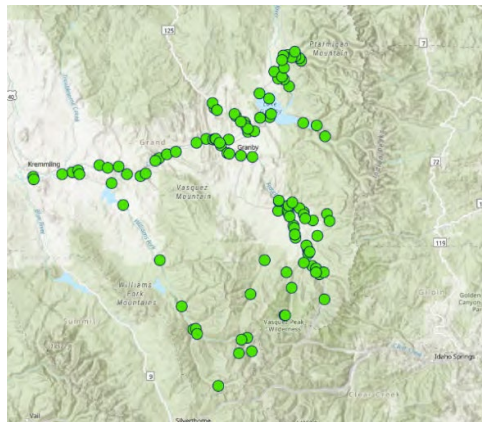
Colorado Watershed Restoration Program Application



L O C A T I O N	
County/ Counties:	Grand
Drainage Basin:	Colorado

D E T A I L S	
Total Project Cost:	\$415,767
Colorado Watershed Restoration Program Request:	\$207,725
Recommended amount:	\$207,725
Other CWCB Funding (Water Plan Grant & WSRF):	\$38,440
Other Funding Amount:	\$127,728
Applicant Match:	\$41,874
Project Type(s): Planning	
Project Category(Categories): Stream Management Plan	
Measurable Result: Updated Watershed Assessment including database	

The Grand County Learning By Doing Cooperative Effort (LBD) is a non-profit made up of partner organizations from both sides of the continental divide whose overarching goal is to maintain and when



1 Monitoring Locations in the Cooperative Monitoring Area

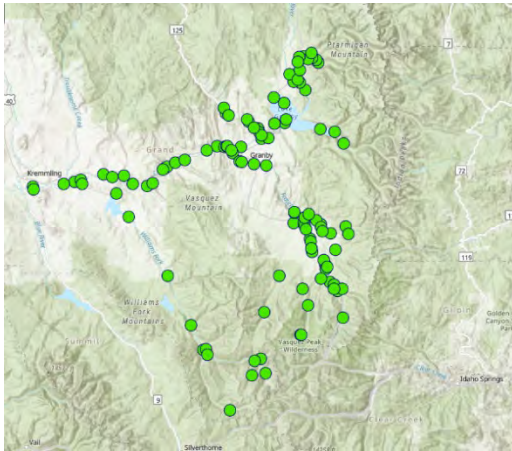
reasonably possible restore or enhance the aquatic environment in Grand County. The Grand County Stream Management Plan (GC SMP), created in 2010 and the first of its kind in Colorado, is the guiding framework for carrying out LBD's goal. LBD's focus is the Cooperative Effort Area (CEA), which includes over 100 river miles in the Colorado, Fraser, and Williams Fork River Basins upstream of the Colorado River's confluence with the Blue River in Grand County. Since LBD formed in 2013, they have made significant progress in establishing a long-term scientific-based program to collaboratively monitor and address changes in the Upper Colorado River Watershed. Each year, LBD designs, funds, and implements a plan for field data collection that achieves the goals of collaboratively monitoring key aquatic metrics in Grand County streams and rivers consistent with the GC SMP.

Since the inception of the GC SMP, changes have occurred throughout Grand County on both minor and landscape scales that warrant a necessary reexamination of the technical aspects of the SMP to better reflect current conditions. In addition, a significant amount of new data has been collected throughout the CEA that would support a robust watershed assessment to improve characterization and prioritization of areas of concern compared to the existing GC SMP. The Intergovernmental Agreements that founded LBD state that it is the task and responsibility of LBD to update the GC SMP. An update of the GC SMP is needed and LBD is best positioned to lead this work.

The purpose of this grant application is to 1) conduct a comprehensive analysis of data collected to date (i.e., watershed assessment) and 2) design a broad stakeholder outreach and engagement program, which will provide the foundation for updating the GC SMP. The watershed assessment and stakeholder engagement program will be Phase 1 and the actual update to the GC SMP will be Phase 2. This grant application is for Phase 1.

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Project Proposal Summary Sheet



Project Title: Grand County Stream Management Plan Update – Phase 1

Project Location: [click here for interactive map: Monitoring locations in the Cooperative Effort Area](#) (See Attachment C).

Grant Type: Stream Management Plan Grant

Grant Request/Amount: \$207,725

Cash Match Funding: \$90,442

In-kind Match Funding: \$117,600

Project Sponsor(s): Learning By Doing, Inc., a 501(c)3 non-profit organization

Contact person: Anna Drexler-Dreis, LBD Coordinator | aldrexler@gmail.com | (970) 531-1171

Brief Project Description

The Grand County Learning By Doing Cooperative Effort (LBD) is a non-profit made up of partner organizations from both sides of the continental divide whose overarching goal is to maintain and when reasonably possible restore or enhance the aquatic environment in Grand County. The Grand County Stream Management Plan (GC SMP), created in 2010 and the first of its kind in Colorado, is the guiding framework for carrying out LBD's goal. LBD's focus is the Cooperative Effort Area (CEA), which includes over 100 river miles in the Colorado, Fraser, and Williams Fork River Basins upstream of the Colorado River's confluence with the Blue River in Grand County. Since LBD formed in 2013, they have made significant progress in establishing a long-term scientific-based program to collaboratively monitor and address changes in the Upper Colorado River Watershed. Each year, LBD designs, funds, and implements a plan for field data collection that achieves the goals of collaboratively monitoring key aquatic metrics in Grand County streams and rivers consistent with the GC SMP.

Since the inception of the GC SMP, changes have occurred throughout Grand County on both minor and landscape scales that warrant a necessary reexamination of the technical aspects of the SMP to better reflect current conditions. In addition, a significant amount of new data has been collected throughout the CEA that would support a robust watershed assessment to improve characterization and prioritization of areas of concern compared to the existing GC SMP. The Intergovernmental Agreements that founded LBD state that it is the task and responsibility of LBD to update the GC SMP. An update of the GC SMP is needed and LBD is best positioned to lead this work.

The purpose of this grant application is to 1) conduct a comprehensive analysis of data collected to date (i.e., watershed assessment) and 2) design a broad stakeholder outreach and engagement program, which will provide the foundation for updating the GC SMP. The watershed assessment and stakeholder engagement program will be Phase 1 and the actual update to the GC SMP will be Phase 2. This grant application is for Phase 1.

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Project Proposal

Qualifications

1. *Identify the lead project sponsor and describe the other stakeholders' level of participation and involvement.*

The lead project sponsor is Learning By Doing (LBD) Inc., a 501(c)3 non-profit organization based in Grand County, Colorado. LBD's Board of Directors includes representatives from the Colorado River District, Denver Water, Grand County, Northern Water, and Trout Unlimited. LBD Inc. operates consistent with direction provided by the LBD Management Committee, which includes these entities in addition to representatives from: Colorado Parks and Wildlife and Middle Park Water Conservancy District. These member entities have a high level of participation by providing leadership and oversight for LBD. Regular meetings of the Management Committee occur every two months. Additional stakeholders in LBD's efforts include: Grand County Water and Sanitation District #1, Northwest Colorado Council of Governments, Town of Hot Sulphur Springs, U.S. Bureau of Land Management, and U.S. Forest Service. These entities participate on the LBD Technical Committee, which is also comprised of the LBD Management Committee member entities listed above. This shorter list of stakeholders only participates in certain projects or on technical matters.

For this Phase 1 update to the Grand County Stream Management Plan (GC SMP update or project), new stakeholders will be invited to open house meetings. These invitees include but are not limited to: the agricultural community, Upper Colorado River Watershed Group, Grand County municipalities and water districts, C Lazy U Ranch, Devil's Thumb Ranch, Metropolitan Recreation Districts, Open Lands, Rivers, and Trails Advisory Committee, private landowners, and the general public.

2. *Specify in-kind services and cash contributions (match) amount for the proposed activities. See section B.2 of the grant program guidance to determine match funding requirements. Discuss whether other funding sources are secured or pending.*

Type of funding	Source	Amount	Status
In-kind services	Learning By Doing	\$103,200	Secured
In-kind services	Grand County Water Information Network (GCWIN)	\$14,400	Secured
Cash contributions	CWCB Grant (PO 2393)	\$13,440	Secured
Cash contributions	Learning By Doing	\$41,874	Secured
Cash contributions	GCWIN	\$2,728	Secured
Cash contributions	GCWIN / Learning By Doing	\$7,400	Requested
Cash contributions	Colorado River Basin Roundtable Water Supply Reserve Fund Grant	\$25,000	Requested
TOTAL		\$208,042	

**Note: In-kind compensation for the LBD Coordinator (Task 4a), indicated in the attached Scope of Work, will be split 50/50 between LBD and CWCB under the existing CWCB grant (PO 2393).*

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Colorado Parks and Wildlife is a member of the LBD Management Committee, however it is not a financial contributor to this project grant application.

Organizational Capability

1. *What is the applicant organization's history of accomplishments in the watershed? Provide several past project or planning examples. List partner organizations and agencies with whom applicant worked to implement past projects or planning efforts.*
 - **The Cabin Creek Aquatic Organism Passage (AOP) Culvert Project** (completed September 2021): Most culverts were installed in the 1900s without concern for aquatic habitat. These old culverts are like waterslides (or barriers) for fish, which impacts the connectivity of the fish population, and inhibits their ability to migrate for spawning and other purposes. This AOP culvert is an arch with a natural river rock bottom, which provides improved fish passage for native Colorado River Cutthroat trout and amphibians in Cabin Creek (a tributary to the Fraser River). This project is a great example of LBD at work. LBD's Technical Committee identified this project as one that would fulfill the goals of LBD. The project occurs on Cabin Creek on National Forest System land. The U.S. Forest Service provided the engineering design for the project. LBD partners secured U.S. Fish and Wildlife grant funding for the project construction materials, which Trout Unlimited administered on behalf of LBD. Denver Water provided construction labor, whereby crews removed two old culverts and an old measuring flume.
 - **The Fraser Flats River Habitat Project** (completed October 2017): This was LBD's first stream restoration collaborative project. Fraser Flats is a public-private landowner partnership to maximize efficiencies and benefit river health along a nearly 1 mile stretch of the Fraser River. Revegetation efforts with 150 volunteers took place in spring 2017 and river construction wrapped up in the fall. On May 16, 2018, a dedication ceremony marked the opening of a new 0.4-mile public section for fishing.
 - **Annual Aquatic Resource Monitoring Plan** (2017-2021): LBD implements an annual monitoring program that assesses stream temperature, habitat, stream flows, and water quality in several locations in the Fraser River and Colorado River, as well as its tributaries. It also tracks monitoring efforts of other entities to document changes from year to year. Results from sampling inform decisions around what actions are needed to maintain or improve the health of the aquatic environment in the Fraser and Colorado River basins. The addition of CPW fish population studies provides a comprehensive long-term data set of Grand County's aquatic habitat.
 - **Fraser River Sediment Pond** (2011-2021): This annual project is a multi-jurisdictional collaboration of the LBD partners along with the Colorado Department of Transportation (CDOT), the Town of Winter Park, Army Corps of Engineers, and East Grand Water Quality Board to remove traction sand used along Highway 40, as well as normal and eroded sediment that collects in the Fraser River below Berthoud Pass. In 2019, CDOT hauled off approximately 500 tons of sediment. By collecting and removing excess sediment, project partners are restoring the proper functioning of the Fraser River ecosystem by improving

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- the water quality and aquatic habitat. Post-project monitoring downstream of the sediment pond shows significant habitat improvement.
- **Cooperative voluntary water releases to benefit the aquatic environment (2016-2021):** LBD partners implement an Annual Operations Plan to maximize stream environmental benefits. This plan prescribes operating procedures and timelines for LBD activities in support of operations. In June 2021, stream temperatures in the Upper Colorado River reached a critical point and a swift mitigation effort transpired. The Colorado River District, Denver Water, Northern Water, Grand County, and other LBD partners adjusted their operations to help boost water levels by voluntarily reducing diversions for nearly the entire month of June. This collaborative effort cooled down the stream which in turn was a huge benefit to the aquatic environment.
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? Include brief resumes for each member of the active project team.*

Two or more consultants will be hired using grant and matching cash funds to complete Tasks 2 and 3 which includes the watershed assessment and public outreach facilitation. Consultants have not yet been selected but it is estimated they will spend approximately 1,390 hours, as shown in the project budget. Additionally, there will be a high level of staff dedication from various LBD partner entities overseeing the implementation of this project, including: the LBD Management Committee, LBD Monitoring Subcommittee, GCWIN Database Committee, LBD Project Coordinator, and GCWIN Intern. A list of the staff hours budgeted for this project is summarized in the table below as shown in the project budget and detailed Scope of Work.

Scope of Work	Entity	Number of Staff	Total Staff Hours
Task 1	GCWIN Intern	1	620
Task 1	GCWIN Database Manager	1	46
Task 1	GCWIN Database Committee	3	240
Task 2	Consultant Team (Scientific Analysis)	2+	1150
Task 3	Consultant Team (Public Outreach)	2+	255
Task 4	LBD Management Committee	7	140
Task 4	LBD Monitoring Subcommittee	3	1440
Task 4	LBD Coordinator	1	672

Note: Refer to detailed project budget in Scope of Work

The LBD Monitoring Subcommittee will serve as the project management team and will provide the primary technical oversight of this project. The Subcommittee is made up of a variety of experts including aquatic biologists and ecologists, watershed scientists, and water quality specialists with over 40 years of combined experience. Grant funds will not be used to compensate any of the Subcommittee members, who will be dedicating their time as part of the

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in-kind match for the grant. As shown in the project budget, a total of three subcommittee members will each spend an average of five hours per week dedicated to this project. The three subcommittee members who will serve as project leads are: Jessica Alexander (Denver Water), Kayli Foulk (Grand County), and Jen Stephenson (Northern Water). See resumes in **Attachment A**.

3. *Demonstrate that the project budget and schedule are realistic. Please use the budget/timeline spreadsheet attached to the application. Please note that the start date will take place after funding awards are announced and grants are contracted.*

The framework and methodology by which this project is designed is largely based on information provided by the River Network and CWCB on the Colorado Stream Management Plan website. Additionally, LBD has reviewed costs from other watershed scale assessments and has met with consultants who have years of experience developing scopes of work and budgets for SMP's to ensure that LBD is on the right path. We have allotted 16 months for the watershed assessment and stakeholder outreach program development (Tasks 1-3), beginning in March 2022 and ending in July 2023. Additionally, we have accounted for additional time for stakeholders to review and provide revisions to the watershed assessment report and final recommendations from LBD as shown in Task 3 in the project budget. Lastly, with the data compilation already underway, we anticipate completing Task 1 by August 2022. LBD is confident that we have developed a realistic project budget and schedule to complete Tasks 1 through 4 outlined in the Scope of Work.

Proposal Effectiveness

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

Multiple groups have extensively collected data in the Upper Colorado River Watershed over the last 10-15 years. LBD's focus is the Cooperative Effort Area (CEA), which includes over 100 river miles in the Colorado, Fraser, and Williams Fork River Basins upstream of the Colorado River's confluence with the Blue River in Grand County. The data collected in the CEA to support the watershed assessment report for this Phase 1 project will come primarily from the following sources: (1) the existing GC SMP created in 2010 and its supporting annual reports from 2011-2018, (2) the long-term data set of water quality and aquatic habitat conditions that LBD has collected from 2017-2021, (3) Grand County Water Information Network's (GCWIN) extensive water quality database which houses over six million lines of data, and (4) the robust data collection efforts by the U.S. Geological Survey (USGS), Northern Water and Denver Water and other sources of data, (5) fish analyses/summaries conducted by CPW, and (6) other relevant watershed reports.

2. *Discuss the multiple objective aspects of the project and how they relate to each other. Describe similar activities in the watershed and how this project or plan complements but does not*

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duplicate those activities. Multiple 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.

The proposed project builds on the past planning effort of the original GC SMP, which was launched in 2010 and was the first of its kind in Colorado. The overall goal of this project is to use a scientific process to inform the LBD Management Committee's oversight of the GC SMP. This will allow LBD to direct collaborative projects and management strategies to maintain, restore, and enhance the health of rivers and streams in the CEA while also meeting water users' needs. To achieve this goal, the project has three primary objectives:

- 1) Continue to update and improve the GC SMP.** As written in the Intergovernmental Agreements that founded LBD, LBD is responsible for leading cooperative efforts to improve the existing GC SMP as 1) additional information is developed, 2) the understanding of desired stream conditions is better defined, and 3) the management goals for each stream reach are agreed upon.
- 2) Perform a watershed assessment.** The future update to the GC SMP will rely on an assessment of new data which will inform a better understanding of key issues and trends that will later assist in setting management goals.
- 3) Expand stakeholder engagement.** As the project lead, LBD with the assistance of consultants funded through this grant, will engage citizens and stakeholders in a professional outreach process to gather feedback on the process to update the GC SMP.

The proposed project will assess the functional health of the rivers and streams in the CEA by analyzing parameters such as macroinvertebrates, fish, sediment, stream temperature, stream flow, and water quality. This diverse set of data will provide LBD and the stakeholders with a watershed scale assessment so they can identify areas of concern and set objectives to address the concerns and prioritize areas where improvements are needed for the next phase of work.

4. Describe the proposed monitoring or implementation plan. How will the project or plan measure success of its objectives?

Project success will be measured by:

- Creation of a watershed scale assessment report of conditions in the CEA.
- Creation of a broad stakeholder outreach and engagement program, which will include active participation by a range of stakeholders during five open house meetings.
- Completion of all tasks in the Scope of Work on time and within budget.

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Scope of Work

GRANTEE: Learning By Doing, Inc., a 501(c)3 non-profit organization
PRIMARY CONTACT: Anna Drexler-Dreis
aldrexler@gmail.com
(970) 531-1171
PROJECT NAME: Grand County Stream Management Plan Update – Phase 1
GRANT AMOUNT: \$207,725

INTRODUCTION AND BACKGROUND

The Grand County Learning By Doing Cooperative Effort (LBD) is a non-profit made up of partner organizations from both sides of the continental divide in Colorado whose overarching goal is to maintain and when reasonably possible restore or enhance the aquatic environment in Grand County. The Grand County Stream Management Plan (GC SMP), created in 2010 and the first of its kind in Colorado, is the guiding framework for carrying out LBD's goal. LBD's focus is the Cooperative Effort Area (CEA), which includes over 100 river miles in the Colorado, Fraser, and Williams Fork River Basins upstream of the Colorado River's confluence with the Blue River in Grand County. Since LBD formed in 2013, they have made significant progress in establishing a long-term scientific-based program to collaboratively monitor and address changes in the Upper Colorado River Watershed. Each year, LBD designs, funds, and implements a plan for field data collection that achieves the goals of collaboratively monitoring key aquatic metrics in Grand County streams and rivers consistent with the GC SMP.

Since the inception of the GC SMP, changes have occurred throughout Grand County on both minor and landscape scales that warrant a necessary reexamination of the technical aspects of the SMP to better reflect current conditions. In addition, a significant amount of new data has been collected throughout the CEA that would support a robust watershed assessment to improve characterization and prioritization of areas of concern compared to the existing GC SMP. The Intergovernmental Agreements that founded LBD state that it is the task and responsibility of LBD to update the GC SMP. An update of the GC SMP is needed and LBD is best positioned to lead this work.

The proposed project builds on the past planning effort of the original GC SMP. However, the original SMP was based on limited data and had limited stakeholder involvement. The original GC SMP is the guiding framework for LBD, and many lessons have been learned over the years. LBD will build on this past planning effort by including a variety of datasets to compose the watershed assessment, create a more dedicated process for engaging stakeholders, and ultimately deepen stakeholder buy-in to meet the project objectives described below for this GC SMP Phase 1 update.

The purpose of this grant application is to 1) conduct a comprehensive analysis of data collected to date (i.e., watershed assessment) and 2) design a broad stakeholder outreach and engagement program, which will provide the foundation for updating the GC SMP. The watershed assessment and stakeholder engagement program will be Phase 1 and the actual update to the GC SMP will be Phase 2. This grant application is for Phase 1.

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OBJECTIVES

The overall goal of this project is to use a scientific process to inform the LBD Management Committee's oversight of the GC SMP. This will allow LBD to direct collaborative projects and management strategies to maintain, restore, and enhance the health of rivers and streams in the CEA while also meeting water users' needs. To achieve this goal, the project has three primary objectives:

- 1) Continue to update and improve the GC SMP.** As written in the Intergovernmental Agreements that founded LBD, LBD is responsible for leading cooperative efforts to improve the existing GC SMP as 1) additional information is developed, 2) the understanding of desired stream conditions is better defined, and 3) the management goals for each stream reach are agreed upon.
- 2) Perform a watershed assessment.** The future update to the GC SMP will rely on an assessment of new data which will inform a better understanding of key issues and trends that will later assist in setting management goals.
- 3) Expand stakeholder engagement.** As the project lead, LBD with the assistance of consultants funded through this grant, will engage citizens and stakeholders in a professional outreach process to gather feedback on the process to update the GC SMP.

This Phase 1 project will provide the foundation for the future update to the GC SMP in Phase 2. Phase 2 objectives, to be accomplished at a later date, will include, for example:

- 1) Identifying areas of concern and setting objectives to prioritize areas where improvements are needed.
- 2) Explore areas where coordinated operations could improve the aquatic habitat while maintaining water supply requirements and working within the framework of established minimum flushing flow requirements.
- 3) Developing web-based tools to facilitate communication with stakeholders and the general public.

TASKS

Implementation of Phase 1 of this project will include 4 primary tasks, as shown in the attached project budget:

1. Compile, organize and store applicable data into the Grand County Water Information Network's (GCWIN) AWQMS database.
2. Conduct a watershed assessment of conditions in the CEA in Grand County.
3. Design a broad stakeholder outreach and engagement program to support the future GC SMP update in Phase 2.
4. Project management and coordination.

Tasks 1 and 2 will include gathering data and developing the watershed assessment report to satisfy the primary Project Objective #1 and #2. Task 3 constitutes the stakeholder outreach program (Project Objective #3); this will begin concurrent with the start of Task 2 and be developed on a parallel path. Task 4 includes project management and coordination (Project Objective #1).

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TASK 1 – Data Compilation (*GCWIN-LBD cash match and in-kind services*)

Description of Task

The purpose of the task is to gather all available geomorphological, physicochemical, and biological data previously collected by LBD and others, which are necessary for a holistic assessment of the aquatic habitat in the CEA (macroinvertebrates, fish, sediment, stream temperature, stream flow, water quality). No new funding will be requested for this task. GCWIN and LBD will be providing cash match funding and in-kind services for this task.

Methods/Procedures

Existing data identified by LBD will be organized and compiled into a central database to support the watershed assessment. The GCWIN's public AWQMS database has been identified as the best location to house most data. Data that cannot be housed in the AWQMS database will be organized and centralized on GCWIN's website. Any fish survey data or summaries requested from or provided by CPW will be used and shared only as allowed by CPW's data sharing agreement.

LBD and GCWIN hired an intern in the summer of 2021 to begin this task. This internship will be extended into 2022 so that work may continue to compile and upload data into the AQWMS database. GCWIN and LBD will provide cash match and in-kind services needed to complete Task 1 in 2021 and 2022.

Deliverables

- Summary table of data to use for the watershed assessment.
- Excel files of data to support the watershed assessment.
- Links to data to support the watershed assessment.

TASK 2 – Watershed Assessment (*CWCB requested funding, and other cash match contributions*)

The purpose of this task is to hire a qualified consultant to conduct a comprehensive analysis of all available data in the CEA. This watershed scale assessment of conditions in the CEA is a necessary first step and will be used to inform the update to the GC SMP. The final deliverable will be a report which summarizes the conditions from at least the previous decade and will be used in Phase 2 to set objectives and prioritize areas of concern.

TASK 2a – Background Chapter

Description of Task

The purpose of Task 2a is to provide an introduction and summary of background conditions within the CEA. The existing [GC SMP and supporting annual reports](#) will serve as a starting point for the background chapter.

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Methods/Procedures

A qualified consultant will work with the LBD Monitoring Subcommittee to:

- Conduct a literature review.
- Gather an inventory of Denver Water's and Northern Water's operations and how they relate to stream flows and flushing flows.
- Gather an inventory of notable events (i.e., wildfire effects, drought, pine beetle kill) that have occurred during the period of record.
- Gather and inventory available information on population and land use over time.
- Summarize existing datasets.

Deliverables

- A written narrative background chapter with supporting maps and figures. The background chapter will include:
 - A summary table of existing data including period of record, monitoring entity and methodology.
 - Summary of hydrology in the CEA including operations of the major water users, local water users and irrigators.
 - Summary of significant findings from literature review.
 - Summary of changes over time in population demographics and land use/cover.
 - Summary of notable events, when the event occurred, and which part of the CEA was impacted.
- The background chapter will be included in the watershed assessment report.
- The consultant will prepare a summary presentation to support the stakeholder outreach and engagement effort.

TASK 2b – Analysis, Interpretation and Report Compilation

Description of Task

The purpose of this task is to assess the condition of the CEA. It will consist of analysis, interpretation and reporting for all available data in the CEA. This will include macroinvertebrate and fish populations, sediment levels on aquatic substrate, stream temperature and flows, and water quality parameters related to aquatic health.

Methods/Procedures

A qualified consultant will use all existing data (macroinvertebrates, sediment, temperature, flow, and water quality), CPW's fish analyses/summaries and will work with the LBD Monitoring Subcommittee to:

- Calculate summary statistics for selected parameters and monitoring locations. These will include period of record, number of measurements, minimum, maximum, mean, and median values, and the standard deviation.
- Analyze spatial and temporal trends.

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- Investigate effects and relationships between:
 - Streamflow trends on water quality and temperature trends.
 - The aquatic habitat and flow, water quality, temperature, and sediment.
 - Natural and anthropogenic factors on the aquatic habitat, water quality, and temperature.
 - Spatial patterns within the CEA.
- Assess magnitude and statistical significance of spatial and temporal trends.
- Evaluate recommended target flows in the existing GC SMP.
- Where there are significant trends, identify causal factors when possible.
- Assess Colorado water quality standards for selected parameters and monitoring locations.
- Recommendations for additional monitoring and special studies to address outstanding issues.
- Perform a synthesis of the results into the watershed assessment report.
- Stakeholder engagement will occur throughout this process to collect feedback and to ensure the project maintains a collaborative approach.

Deliverables

- A draft report which summarizes the findings of the analysis and interpretation of the data. The report will include relevant maps, figures, graphics, and diagrams and appendices to document analysis.
- A concise draft executive summary that is easy to read and can be shared with the broader stakeholder group and public.
- The consultant will prepare updates to support the stakeholder outreach and engagement effort.

TASK 2c – Finalize Report

Description of Task

The purpose of this task is to work with the LBD Management Committee and Monitoring Subcommittee to finalize the report.

Method/Procedure

The consultant will work with LBD Monitoring Subcommittee on report review and revisions. Drafts will be reviewed by and presentations made to the LBD Management Committee for approval of final reports.

Deliverable

- A final report.
- A final concise executive summary.
- The consultant will prepare a summary presentation for LBD and the broader stakeholder outreach and engagement effort.

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TASK 3 – Stakeholder Outreach and Engagement Program (*CWCB requested funding*)

Description of Task

The purpose of this task is to develop a stakeholder outreach and engagement program that will allow LBD to engage with a broad diversity of interest groups to inform and support the future update to the GC SMP in Phase 2. This task will begin concurrently with and on a parallel path to the start of Task 2 the watershed assessment report.

A neutral, third-party professional public outreach facilitator will be retained to design this program. With LBD guiding this process, this program will utilize LBD's existing collaborative partnership model, which has been highly successful to date.

Method/Procedure

A qualified professional public outreach facilitator will be retained to design the program. The program may include, but not be limited to, the following public engagement strategies:

- Five public virtual and/or in-person open house format meetings and networking events
- Documentation of meeting records and participant lists
- Development of advisory focus groups for topics of interest
- Development of advisory board of representatives from each focus group with whom LBD can engage
- Development of a process for public engagement in the future GC SMP update effort in Phase 2.
- Periodic updates on the watershed assessment report.

Deliverable

- A program summary that contains graphics, advisory focus groups, meeting summaries, timelines and/or flowcharts outlining the public outreach process to support the future GC SMP update in Phase 2, will be developed and housed on LBD's website, which will be available to interested citizens and stakeholders.

TASK 4 – Project Management and Coordination (*Existing 2020 CWCB grant, LBD cash match and in-kind services*)

Description of Task

- The purpose of this task is to provide project management services to administer the grant and maintain records on the project deliverables. No new funding is requested for this task. The LBD Management and Monitoring Subcommittee will be providing in-kind services. In addition, a cash match for LBD's Coordinator will be provided under an existing CWCB grant awarded to LBD Inc.
- In 2020, LBD Inc. received a \$43,200 WSR grant (PO 2393) to implement the existing GC SMP. This generous grant included a 50% cash match from LBD partners. Specifically, this grant and

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LBD's match provide the necessary funding for the Coordinator's salary over a three-year time period to cover LBD operations.

- For this Phase 1 update to the SMP, the Coordinator will provide assistance as needed to LBD's Monitoring Subcommittee meetings, LBD's Management and Technical Committee meetings, and keep LBD Inc. Board Members informed on the project's progress.
- The Coordinator will allocate an average of 7 hours per week at a rate of \$40/hour to manage this Phase 1 update to the SMP. These funds will be provided and funded for under the existing CWCB grant (PO 2393).
- See Anna Drexler-Dreis resume (**Attachment A**).

REPORTING AND FINAL DELIVERABLE:

- **Progress Reports:** LBD will provide a progress report to CWCB every 6 months, beginning from the date of the executed contract. The progress report will describe the completion or partial completion of each of the Tasks 1 through 4 identified above in this Scope of Work. If any major issues are encountered, these will be noted along with the appropriate corrective action(s), to address any such issues, if warranted.
- **Final Project Completion Report:** LBD will provide a final report to CWCB that summarizes the project's accomplishments, deliverables, and how the project objectives were met. The report will contain a written narrative supplemented with relevant supporting figures, photographs, meeting notes or other pertinent information.

Colorado Watershed Restoration Program
2021 Grant Application for
Grand County Stream Management Plan Update – Phase 1

PROJECT BUDGET & MILESTONES TABLE

Project Title: Grand County Stream Management Plan Update - Phase 1											
Detailed Project Budget & Milestones Table											
Task	Description	Target Start Date	Target Completion Date	Labor Hours Estimate	Labor (Rate/Hr) Estimate	Direct Costs (Materials, Mileage, etc.)	Subtotal	CWCB Funds Requested	In-Kind Match and Other Funding	PROJECT GRAND TOTAL	Status of In-kind Match and Other Funding (Source, Year)
1	Data Compilation	6/1/2021	8/1/2022								
	Organize and compile data (Intern 2021)			250	\$ 18	\$ -	\$ 4,500	\$ -	\$ 4,500		Secured Cash Match (LBD/GCWIN, 2021)
	GCWIN Database Manager (2021)			46	\$ 25		\$ 1,162		\$ 1,162		Secured Cash Match (GCWIN, 2021)
	Organize and compile data (Intern 2022)			370	\$ 20	\$ -	\$ 7,400	\$ -	\$ 7,400		Requested Cash Match (LBD/GCWIN, 2022)
	GCWIN Database Committee			240	\$ 60	\$ -	\$ 14,400	\$ -	\$ 14,400		Secured In-Kind Services (GCWIN, 2021, 2022)
	Total Data Compilation									\$ 27,462	
2	Watershed Assessment	3/1/2022	7/1/2023								
2a	Background chapter										
	Senior scientist			15	\$ 235	\$ -	\$ 3,525	\$ 3,525	\$ -		
	Mid-level scientist			90	\$ 160	\$ -	\$ 14,400	\$ 14,400	\$ -		
2b	Analysis, Interpretation and Report Compilation										
	Senior scientist			150	\$ 235		\$ 35,250	\$ 10,250	\$ 25,000		Requested Cash Match (Roundtable, 2022)
	Mid-level scientist			625	\$ 160		\$ 100,000	\$ 74,500	\$ 25,500		Secured Cash Match (LBD, 2022)
2c	Finalize Report										
	Report Revisions										
	Senior scientist			30	\$ 235		\$ 7,050	\$ 7,050	\$ -		
	Mid-level scientist			160	\$ 160		\$ 25,600	\$ 25,600	\$ -		
	Presentations										
	Senior scientist			40	\$ 235		\$ 9,400	\$ 9,400	\$ -		
	Mid-level scientist			40	\$ 160		\$ 6,400	\$ 6,400	\$ -		
	Total Comprehensive Report									\$ 201,625	
3	Stakeholder Outreach Program	3/1/2022	7/1/2023								
3a	Stakeholder Interviews/Research/Protocol										
	Principal/Senior Faciliator			40	\$ 180	\$ -	\$ 7,200	\$ 7,200	\$ -		
	Mid-level staff			20	\$ 160		\$ 3,200	\$ 3,200	\$ -		
3b	Stakeholder Communications Plan & Webpage										
	Principal/Senior Faciliator			10	\$ 180		\$ 1,800	\$ 1,800	\$ -		
	Mid-level staff			80	\$ 160		\$ 12,800	\$ 12,800	\$ -		
3c	Open House Stakeholder Meetings (5)										
	Principal/Senior Faciliator			75	\$ 180		\$ 13,500	\$ 13,500	\$ -		
	Mid-level staff			30	\$ 160		\$ 4,800	\$ 4,800	\$ -		
3d	Graphic designer, materials, mileage, prep					\$ 13,000	\$ 13,000	\$ 13,000	\$ -		
	Venue					\$ -	\$ -	\$ -	\$ -		
	Refreshments					\$ 300	\$ 300	\$ 300	\$ -		
	Total Stakeholder Outreach									\$ 56,600	
4	Project Management and Coordination	9/1/2021	7/1/2023								
4a	LBD Coordinator			672	\$ 40		\$ 26,880	\$ -	\$ 26,880		Secured Cash Match (LBD/CWCB, 2021, 2022, 2023)
4b	LBD Monitoring Subcommittee			1440	\$ 60		\$ 86,400	\$ -	\$ 86,400		Secured In-Kind Services (LBD, 2021, 2022, 2023)
4c	LBD Management Committee			140	\$ 120		\$ 16,800	\$ -	\$ 16,800		Secured In-Kind Services (LBD, 2021, 2022, 2023)
	Total Project Management and Coordination						\$ 415,767			\$ 130,080	
*Note: In-kind compensation for the LBD Coordinator (Task 4a) will be split 50/50 between LBD and CWCB under the existing CWCB grant (PO 2393).								TOTAL CWCB Funds Requested	\$ 207,725	\$ 208,042	\$ 415,767

Colorado Watershed Restoration Program
2021 Grant Application for
Grand County Stream Management Plan Update – Phase 1

ATTACHMENT A: Project Team Resumes

Anna Drexler-Dreis Resume

Professional Experience

Coordinator | Grand County Learning By Doing | May 2021-Present

- Provide organizational and administrative support to achieve LBD's goals.
- Work closely with LBD Management Committee members, Technical Committee, Subcommittees, and LBD Inc. Board members.
- Arrange and facilitate meetings, take/distribute meeting notes, and ensure tasks are completed.
- Assist with public outreach (quarterly newsletter and Annual Report) and media efforts.
- Manage contracts and grants and prepare reports.
- Assist with implementation of Grand County's Stream Management Plan and work to restore and protect the County's water, aquatic life, and natural resources.

Coordinator | Upper Colorado River Wild & Scenic Stakeholder Group | Nov. 2017-Present

- Coordinate Stakeholder Group (40+ participants) and committee (10+ participants) meetings. Prepare agenda and materials with chair(s) and prepare and distribute meeting summary.
- Assist committee chairs in facilitation of committee meetings to ensure discussions are on track, timely, and all voices are heard.
- Maintain and follow up on timelines and tasks with Stakeholder Group members.
- Prepare Annual Report and support the preparation of Annual Monitoring Report.
- With the Finance Committee, generate monthly financial statements and annual budgets.
- Maintain digital library, website, timeline and tasks lists, and Google applications.
- Schedule meeting dates and coordinate meeting logistics (in-person and virtual).
- Coordinate with federal agencies (BLM & USFS) and Stakeholders in submittal of the Amended & Restated Wild & Scenic Alternative Management Plan in June 2020.

Facilitator | Open Lands, Rivers, and Trails Fund | Grand County, CO | Jan. 2018-Present

The Open Lands, Rivers, and Trails Fund is a funding source that is generated by sales tax dollars, which supports land conservation and acquisition, river protection, and maintenance of hiking and biking trails.

- Management of all aspects of the Advisory Committee's public relations and serve as the principal contact for media and the public.
- In coordination with the Advisory Committee, manage bi-annual grant distributions from the \$1.5M Open Lands, Rivers, and Trails Fund.
- Actively seek educational opportunities for the Advisory Committee and keep the Advisory Committee informed of current or upcoming news that may affect the Open Lands, Rivers, and Trails Fund.
- All facets of grant administration from initial contact with potential grantees to filing of grant reports, organization and recording of all grants, and fulfillment including responding to grant inquiries.
- Expand and maximize opportunities through collaborative relationships with Grand County, the towns within Grand County, local non-profit organizations, etc.

- Prepare and present an annual report to the Board of County Commissioners and County Manager.
- Prepare financial reports and maintain financial accounting records.
- Manage the Open Lands, Rivers, and Trails website, newspaper ads and articles, and social media accounts (Facebook & Instagram).

Facilitator | East Grand Water Quality Board | Grand County, CO | November 2020-Present

- Prepare agendas, materials, and meeting minutes for the quarterly meetings of the Board.
- Facilitate review and renewal of monitoring contract with USGS on an annual basis.
- Manage onboard of new board members.
- Manage website and digital file storage.

Facilitator | Grand County Drought Preparedness Plan | Grand County, CO | Oct. 2019-July 2020

- Facilitated ten meetings surrounding water, land use planning, and drought in Grand County with the result being development of a Grand County Drought Preparedness Plan.
- Coordinated appropriate guest speakers for the virtual or in-person meetings.
- Prepared agendas and meeting minutes and distributed to the group in a timely fashion.
- Ensured adequate representation and participation from Towns, water districts, environmental organizations, government, golf courses, and agricultural interests.
- Scheduled meeting dates and coordinated meeting logistics (in-person and virtual).
- Submitted monthly progress reports and a final summary memo upon project completion.

Interim Executive Director | Colorado Headwaters Land Trust (CHLT) | Granby, CO | Nov. 2013-December 2018

- Spearheaded the Land Trust's effort for national accreditation by the Land Trust Accreditation Commission. After extensive review by the Land Trust Accreditation Commission, the Land Trust was awarded national accreditation in 2016.
- Organized Board of Directors meetings for 10+ professional directors and meetings for five committees, including preparation of agendas, distribution of meeting materials, and preparation and distribution of meeting minutes.
- Worked with Trust for Public Land to successfully write, campaign for, and pass ballot initiative 1A, that increased sales tax county-wide to generate a fund for open space acquisition, water acquisition, and maintenance of non-motorized trails.
- Developed the Land Trust's annual budget for approval by the Board of Directors. Throughout the year, made recommendations to the Board of Directors for adjustments to the annual budget.
- Strategically worked with The Conservation Fund and willing landowners to protect the 622-acre Troublesome Creek Ranch, located in the Upper Colorado River Priority Landscape.
- Implemented the Stewardship Program, monitoring 9,000 acres of conservation easements.
- Implemented the annual marketing and fundraising program.

Project Manager | Fraser Flats River Habitat Project | Tabernash, CO | Jan. 2016-July 2017

Organized the vegetation component of the Fraser Flats River Habitat Project. Worked in partnership with the collaborative Learning by Doing group in Grand County, Colorado and community volunteers.

- Managed six crew leaders and 100+ volunteers to harvest and plant thousands of willows and 90 Kremmling cottonwoods on a 1-mile stretch of the Fraser River in Tabernash over a 5-day period.
- Developed a Vegetation Plan, which was approved with minor revisions by Learning by Doing.
- Conducted and organized extensive marketing and outreach in the form of newspaper articles, public presentations, social media, and TV interviews.
- Used knowledge of GIS to create vegetation maps and to establish a photo point monitoring plan.

Education

Western State Colorado University | Gunnison, CO | Master in Environmental Management: Integrated Land Management, Completed: July 2017 | GPA 4.0

Master's Project: Saving a River Through Collaboration, the Fraser Flats River Habitat Project

Relevant Coursework: Ecological Restoration, Integrated Skills in Environmental Management, Science of Climate Change Mitigation & Adaptation, Environmental Politics and Policy, Strategic Alliances, Public Land Management, Geospatial Analysis, NEPA

Colorado State University | Fort Collins, CO | Bachelor of Science: Natural Resources Management and Watershed Science, Completed: May 2011 | GPA 3.6

Relevant Coursework: Land Use and Water Quality, Water Law, Land Use Hydrology, Natural Resource Ecology and Measurements, Rangeland Conservation and Stewardship, Integrated Ecosystem Management (+ lab), Natural Resources Sampling, Forest Vegetation Management, Ecology, Forest Ecology

Kayli Foulk

Detail-oriented coordinator with more than 7 years' experience in water quality program management, watershed science, data management, and environmental education. Adaptable and self-motivated with the ability to plan and execute multiple projects in high-stress environments. Proactive team leader with diverse managerial experience, offering organization and a positive attitude.

Skills

Team leader

Technical Writing

Program Development

Data Management

Project Management

Data Analysis

MS Office

Organization

Time Management

Experience

Water Quality Specialist

August 2021 - Current

Water Quality Technical Assistant

November 2021 – August 2021

Grand County Government, Colorado

- Coordinate and manage water quality monitoring programs in collaboration with Grand County partners.
- Collaborate with multiple watershed groups to develop, analyze, and interpret water quality reports.
- Serve as primary water quality specialist to provide input and support to various watershed groups.
- Conduct and coordinate community outreach.
- Represent and advocate for Grand County and West Slope water interests.
- Prepare grant proposals, reports, and financials.
- Perform database management tasks associated with water quality data and QA/QC.
- Co-Chair of the Learning By Doing Monitoring Subcommittee.

Executive Director

March 2017 – January 2020

Field Technician

September 2014 – March 2017

Grand County Water Information Network, Grand Lake, Colorado

- Planned and executed annual operational plans for the organization.
- Cohesively prepared and monitored an annual budget of \$100k with Board of Directors.
- Ensured that expenses were billed in accordance to the contract and scope of work for our members.
- Planned and executed environmental education programs and events for over 400 Grand County students annually.
- Managed water quality data, databases and associated processes.
- Calibrated new and existing equipment for optimal performance.
- Coordinated and performed water quality sampling in the Upper Colorado River Basin.

Education

2015

Slippery Rock University

Master of Science

Environmental Education

2010

Indiana University of PA

Bachelor of Science

Elementary Education

Jessica A. Alexander

Professional Profile

- ❖ Lead Scientist and supervisor with over 10 years of experience in complex environmental regulatory permitting processes, stakeholder negotiations, federal and state agency consultations, managing consultant teams, and scientific research

Education

California State University Sacramento, Sacramento, CA **Graduation: 2015**

- *Degree:* **Master of Science, Biology**
- *Emphasis:* **Ecology, Evolution, and Conservation**
- *Original Thesis Research:* An Investigation of Pollen Limitation and Seed Viability in *Lasthenia fremontii* in Constructed and Natural Vernal Pools
- *GPA:* 4.0/4.0

Bucknell University, Lewisburg, PA **Graduation: 2007**

- *Degree:* **Bachelor of Arts, Cum Laude**
- *Major:* **Environmental Studies, Spanish (double-major)**
- *GPA:* 3.59/4.0

Work Experience

Denver Water, Denver, CO **July 2019 – Present**

Lead Scientist

- Supervisor in the Environmental Planning Section of the Water Resource Strategy Division at Denver Water
- Project manager and environmental permitting expert with a leadership role in multiple projects of organization-wide importance
- Co-chair of the Learning By Doing Monitoring Subcommittee; represents Denver Water and takes an active part in LBD stakeholder relations, partner negotiations, and projects
- Represents Denver Water as a Board Member of the Grand County Water Information Network (GCWIN)

Denver Water, Denver, CO **March 2015 – July 2019**

Environmental Scientist

- Project Manager with experience in managing environmental mitigation programs including several stream restoration projects, coordinating with large stakeholder groups, overseeing contractors and consultant teams, and providing QA/QC for technical field studies and reports
- Experienced in securing environmental permits related to small- and large-scale water infrastructure projects and maintenance projects in Denver Water's collection and distribution systems

California State University Sacramento, Sacramento, CA **September 2013 – May 2014**

Graduate Student Research Assistant

- Researcher at the university's Herbarium where I performed data processing and cataloguing of plant specimens as part of the statewide Consortium of California Herbaria Project

Analytical Environmental Services, Sacramento, CA **April 2010 – July 2013**

Biologist

- Project management and regular consultation experience with federal and state agencies for environmental permits
- Primary author of technical studies in support of National Environmental Policy Act documents, facilitated consultations with U.S. Army Corps of Engineers and U.S. Bureau of Indian Affairs
- Conducted focused biological field surveys for wetlands, special status plant and animal species

Pacific Municipal Consultants, Rancho Cordova, CA **August 2008 – March 2009**

Biologist

- Conducted biological assessments, wetland delineations, and special-status plant and animal surveys to satisfy National Environmental Policy Act and California Environmental Quality Act requirements

Jessica A. Alexander

Environmental Science Associates, Sacramento, CA

February 2008 – July 2008

Associate Planner

- Contributing researcher and author of California Environmental Quality Act documents including Environmental Impact Reports and Mitigated Negative Declarations

Presentation Experience

Grand County State of the River, Grand County, CO

2017, 2018, 2019

Presenter on behalf of Learning By Doing

National Water Quality Monitoring Conference, Denver, CO

March 2019

Presenter on behalf of Learning by Doing

Society of Wetland Scientists National Conference, Fairplay, CO

May 2018

Presenter, led tour of Denver Water's Four Mile Fen Wetland Mitigation Bank

U.S. Environmental Protection Agency, Region 8, Fairplay, CO

May 2017

Presenter, led tour of Denver Water's Four Mile Fen Wetland Mitigation Bank for EPA Region 8 staff

Honors and Awards

CSUS Faculty Endowment for Student Scholarship Award

February 2014

Scholarship recipient, one of only two University scholarships awarded to represent the entire graduate student body

Alpha Lambda Delta, National Academic Honor Society

Fall 2003 – Spring 2007

Bucknell University Dean's List

Fall 2003, Spring 2004, Spring 2006, Fall 2006, Spring 2007

Other Experience

Denver Urban Gardens, Steele School Community Garden Leader

2018, 2019

Colorado State University, Native Plant Master Program participant

2015, 2016, 2017, 2018

Water Education Colorado, Water Fluency participant

June 2015

San Francisco State University, College of Extended Learning, Wetland Delineation Certification

April 2009

Jen Stephenson

Expertise

Collaborative Workgroups

Data Analysis

Data Management

Permit Compliance

Program Development

Project Management

QAQC Protocols

Technical Writing

Water Quality Regulations

Skills

Access

Advanced Excel

Aquarius

ArcGIS

AWQMS

Minitab

Power BI

R

Tableau

WISKI

PROFILE

Detail oriented coordinator of extensive water quality programs that span multiple watersheds. Successful advisor and planner in collaborative water quality processes. Extensive knowledge of Colorado water quality regulatory processes, permitting and workgroups.

EXPERIENCE

Water Quality Monitoring and Compliance Coordinator, Northern Water, Berthoud, CO

2018–Present

- Coordinate and manage water quality monitoring across multiple departments.
- Manage water quality data, databases and associated processes.
- Develop, implement and document QAQC protocols.
- Analyze water quality data and prepare reports.
- Develop monitoring plans and conduct data analysis in accordance with Federal, State and County permits.
- Participate in Colorado water quality regulatory hearings and workgroups.
- Provide technical expertise and leadership within collaborative watershed groups.

Environmental Specialist, Northern Water, Berthoud, CO **2008-2018**

- Assist in coordination of water quality monitoring activities.
- Maintain water quality databases.
- Develop data sharing tools and interfaces.
- Develop, document and implement QAQC protocols.
- Analyze water quality data and prepare reports.
- Assist in monitoring regulatory issues and access compliance of regulatory water quality standards.

Water Quality Analyst, City of Greeley, Greeley, CO **2005-2008**

- Collect and prepare water samples for analysis utilizing EPA approved methodology and in accordance with NPDES discharge requirements.
- Prepare media and reagents used for analysis.
- Update laboratory SOP, QAQC protocols and benchsheets.
- Maintain and calibrate laboratory, field equipment and multi-parameter sondes.
- Coordinate and perform sampling on the Poudre River in support of the Lower Poudre Alliance Monitoring Program.

State of Colorado
Regulatory Experience

10-Year Roadmap Workgroup

303(D) Listing Methodology Workgroup

401 Water Quality Certification

Basin Hearings

Policy 06-1

Policy 10-1

Policy 98-1

PFAS Narrative Standard Workgroup

Regulation 31

Regulation 85

Standards Assessment

Education

Colorado State University

B.S., Watershed Science

BOARDS AND COLLABORATIVE WORKGROUPS

Big Thompson Watershed Forum

- Science Committee: 2012 - Current
- Alternate Director: 2009 - Current
- Volunteer Monitoring Program: 2005 - 2015

Big Thompson Watershed Coalition

- River Envisioning Project TAC: 2020 - Current
- River Envisioning Project Water Quality Committee: 2020 - Current

Grand County Water Information Network

- Alternate Director: 2009 - 2016
- Director: 2017 - Current
- Database Committee: 2018 - Current

Grand County Learning By Doing

- Monitoring Subcommittee: 2017 - Current
- Technical Committee: 2017 - Current
- Management Committee: 2019 - Current

Colorado River Wild and Scenic

- Monitoring Subcommittee: 2018 - Current

Northern Colorado Compounds of Emerging Concern Program

- Program Lead: 2012 - Current

Poudre River Monitoring and Data Sharing Workgroup

- Group Lead: 2015 - Current

Lower Poudre River Alliance

- Participated in the group when it was first formalized: 2006 - 2008

REPORTS AND WORK PRODUCTS

- Northern Colorado Compounds of Emerging Concern Annual Reports - <http://www.northernwater.org/WaterQualityReports>
- Northern Water Annual Baseline Monitoring Quality Assurance and Quality Control Reports - <http://www.northernwater.org/WaterQualityReports>
- Northern Water's 2010 Water Quality Report - Flowing Sites - http://www.northernwater.org/2010_Flowing_Sites
- Learning By Doing 2019 Aquatic Resource Monitoring Plan (co-authored with Monitoring SubCommittee) - https://www.grandcountylearningbydoing/aquatic_resource_monitoring_plan
- Annual Northern Water Monitoring Program Summaries - <http://www.northernwater.org/MonitoringPrograms>

Colorado Watershed Restoration Program
2021 Grant Application for
Grand County Stream Management Plan Update – Phase 1

ATTACHMENT B: Letters of Support



GRAND COUNTY BOARD OF COMMISSIONERS

RICHARD D. CIMINO

District I, Fraser 80442

MERRIT S. LINKE

District II, Granby 80446

KRISTEN MANGUSO

District III, Kremmling 80459

E-Mail: grndcty1@co.grand.co.us

PHONE: 970/725-3100

Fax: 970/725-0565

EDWARD MOYER

County Manager

CHRISTOPHER LEAHY

County Attorney

October 12, 2021

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

RE: Letter of Support for Learning By Doing's Stream Management Plan Grant Application

Dear Mr. Sturm,

On behalf of Grand County, we wish to convey our support for Learning By Doing's (LBD) grant application for the Colorado Watershed Restoration Program – Stream Management Plan Grant.

In 2010, Grand County developed one of the first stream management plans in Colorado in partnership with Grand County, Northern Water, and Denver Water. The Upper Colorado River and Fraser River Watersheds serve as critical municipal, agricultural, recreational, and industrial water supply sources for the state of Colorado and is a key driver in our local economy. Given these factors, the Headwaters of the Colorado River are not only an integral place to maintain a long-term water management plan but also requires such a plan to ensure sustainability of the watershed to these various sectors.

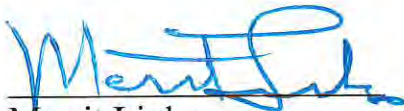
In partnership with LBD, Grand County supports the proposed Phase I update to the Grand County Stream Management Plan which will identify common goals as well as better understand the current conditions which supports agricultural

production, desired river uses, native species, and essential ecosystem functions. Ultimately, per intergovernmental agreements, LBD is charged with updating and maintaining the Grand County Stream Management Plan. This updated plan will identify actions that lead to improved river conditions and we feel LBD is an important leader and advocate for the Upper Colorado River and Fraser River Watersheds.

Grand County is committed to assisting LBD with the stream management plan update through our participation whenever possible, help with coordination, access to maps and imagery, property ownership, local communication and outreach, access within easements, and other means, as appropriate.

As a partner on the LBD Management Committee, this application is a critical step for our organization and the community to ensure diverse stakeholders are involved in long-term management strategies that improve our ability to manage the aquatic resources. This project has strong potential to rehabilitate parts of the watershed for long-term resilience and increased water security for our local communities – both of which are goals of the Colorado Water Plan. Therefore, Grand County fully supports this application and encourages the Colorado Water Conservation Board to fully fund the request. Thank you for your consideration.

Sincerely,



Merrit Linke
Commissioner Chair



Richard Cimino
Commissioner



Kristen Manguso
Commissioner

THE COLORADO BASIN ROUNDTABLE

C/O 201 Centennial Street, Suite 200
GLENWOOD SPRINGS, COLORADO 81601

October 6, 2021

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

RE: Letter of Support for Learning By Doing's Stream Management Plan Grant Application

Dear Mr. Sturm,

On behalf of the Colorado Basin Roundtable, I wish to convey our support for Learning By Doing's (LBD) grant application for the Colorado Watershed Restoration Program – Stream Management Plan Grant.

The Upper Colorado River and Fraser River Watersheds serve as critical municipal, agricultural, recreational, and industrial water supply sources for the state of Colorado and is a key driver in the local economy. Given these factors, the Upper Colorado River and Fraser River Watersheds are not only an integral place to maintain a long-term water management plan but also requires such a plan to ensure sustainability of the watershed to these various sectors.

In partnership with LBD, the Colorado Basin Roundtable supports the proposed Phase I update to the Grand County Stream Management Plan which will identify common goals and better understand the current conditions which supports agricultural production, desired river uses, native species, and essential ecosystem functions. Ultimately, the stream management plan update will identify actions that lead to improved river conditions and we feel LBD is an important leader and advocate for the Upper Colorado River and Fraser River Watersheds.

We support this project because it supports the Basin Implementation Plan's updated Identified Projects and Processes. In addition, one of the projects main goals is to improve the Upper Colorado River above the confluence with the Blue River, an important area to the Colorado Basin Roundtable.

This application is a critical step for the continued good work of LBD and the community to ensure diverse stakeholders are involved in long-term management strategies that improve our ability to manage the aquatic resources. This project has strong potential to rehabilitate parts of the watershed for long-term resilience and increased water security for the local communities – both of which are goals of the Colorado Water Plan. Therefore, the Colorado Basin Roundtable fully supports this application and encourages the Colorado Water Conservation Board to fully fund the request. Thank you for your consideration.

Regards,



Jason Turner
Chair, Colorado Basin Roundtable

October 25, 2021

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

RE: Letter of Support for Learning By Doing's Stream Management Plan Grant Application

Dear Mr. Sturm,

On behalf of Denver Water, we are in full support of Learning By Doing's (LBD) grant application for the Colorado Watershed Restoration Program Stream Management Plan Grant. LBD is an important leader and advocate for the Upper Colorado River and Fraser River Watersheds and is seeking grant funding for the Phase 1 update to the Grand County Stream Management Plan.

The Upper Colorado River and Fraser River Watersheds serve as critical municipal, agricultural, recreational, and industrial water supply sources for the state of Colorado. The watersheds provide critical aquatic and ecological habitat and are a key driver to the local economy. Given these factors, the Upper Colorado River and Fraser River Watersheds are not only an integral place to maintain a long-term water management plan but also requires such a plan to ensure sustainability of the watershed to these various sectors.

As written in the Intergovernmental Agreements that founded LBD, LBD is charged with updating and maintaining the Grand County Stream Management Plan. Denver Water supports LBD's proposed Phase 1 update to the Grand County Stream Management Plan, which will identify common community goals and provide an understanding of the current conditions which support agricultural production, desired river uses, native species, and essential ecosystem functions. Ultimately, this project's watershed assessment and stakeholder outreach program in Phase 1 is the necessary, comprehensive foundation that will support the future stream management plan update in a future Phase 2, which will identify actions that lead to improved river conditions.

Denver Water is committed to assisting LBD with the stream management plan update in Phase 1 through dedicating resources and staff time towards coordination with consultants, and by providing support during the design and review process for the watershed assessment report and stakeholder outreach program. In addition, Denver Water staff participate on the LBD Management Committee and LBD Monitoring Subcommittee, which will provide oversight and technical support for this project.

As a partner on the LBD Management Committee, this application is a critical step for our organization and the community to ensure diverse stakeholders are involved in long-term management strategies that benefit our aquatic resources. This project has strong potential to rehabilitate parts of the watershed for long-term resilience and increased water security for the local communities, both of which are goals of the Colorado Water Plan. Denver Water fully supports this application and encourages the Colorado Water Conservation Board to fully fund the request.

Thank you for your consideration.



Rachel Badger, Planning Manager
Environmental & Watershed Planning Section, Denver Water



COLORADO

Parks and Wildlife

Department of Natural Resources

NW Region Service Center
711 Independent Ave.
Grand Junction, CO 81505
P 970.255.6100

October 25, 2021

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

RE: Letter of Support for Learning By Doing's Stream Management Plan Grant Application

Dear Chris,

On behalf of Colorado Parks and Wildlife, I wish to convey our support for Learning By Doing's (LBD) grant application for the Colorado Watershed Restoration Program - Stream Management Plan Grant.

The Upper Colorado River and Fraser River Watersheds serve as critical municipal, agricultural, recreational, and industrial water supply sources for the state of Colorado and is a key driver in the local economy. Given these factors, the Upper Colorado River and Fraser River Watersheds are not only an integral place to maintain a long-term water management plan but also requires such a plan to ensure sustainability of the watershed to these various sectors.

In partnership with LBD, Colorado Parks and Wildlife supports the proposed Phase I update to the Grand County Stream Management Plan which will identify common goals and better understand the current conditions which supports agricultural production, desired river uses, native species, and essential ecosystem functions. Ultimately, the stream management plan update will identify actions that lead to improved river conditions and we feel LBD is an important leader and advocate for the Upper Colorado River and Fraser River Watersheds.

Colorado Parks and Wildlife is committed to assisting LBD with the stream management plan update through our involvement with LBD's various committees, as well as our responsibilities as an agency to perpetuate the wildlife resources of the state and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources.

Per Intergovernmental Agreements, LBD is charged with updating and maintaining the Grand County Stream Management Plan. This updated plan will identify actions that lead to improved river conditions, and we feel LBD is an important leader and advocate for the Upper Colorado River and Fraser River watersheds.

As a partner on the LBD Management Committee, this application is a critical step for our organization and the community to ensure diverse stakeholders are involved in long-term



management strategies that benefit our aquatic resources. This project has strong potential to rehabilitate parts of the watershed for long-term resilience and increased water security for the local communities - both of which are goals of the Colorado Water Plan. Therefore, Colorado Parks and Wildlife fully supports this application and encourages the Colorado Water Conservation Board to fully fund the request. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Lori M. Martin", with a stylized, flowing script.

Lori M. Martin
NW Region Senior Aquatic Biologist



MIDDLE PARK WATER CONSERVANCY DISTRICT

www.middleparkwcd.com

P.O. Box 145, Granby, CO 80446
(970)725-3460

October 25, 2021

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

RE: Letter of Support for Learning By Doing's Stream Management Plan Grant Application

Dear Chris,

On behalf of Middle Park Water Conservancy District, I wish to convey our support for Learning By Doing's (LBD) grant application for the Colorado Watershed Restoration Program – Stream Management Plan Grant.

The Upper Colorado River and Fraser River Watersheds serve as critical municipal, agricultural, recreational, and industrial water supply sources for the state of Colorado and are key drivers in the local economy. Given these factors, the Upper Colorado River and Fraser River Watersheds are not only an integral place to maintain a long-term water management plan but also require such a plan to ensure sustainability of the watersheds for these various sectors.

In partnership with LBD, Middle Park Water Conservancy District supports the proposed Phase I update to the Grand County Stream Management Plan which will identify common goals and better understand the current conditions which support agricultural production, desired river uses, native species, and essential ecosystem functions. Ultimately, the stream management plan update will identify actions that lead to improved river conditions, and we feel LBD is an important leader and advocate for the Upper Colorado River and Fraser River Watersheds.

Middle Park Water Conservancy District is committed to assisting LBD with the stream management plan update through continued participation in the LBD Technical and Management Committees.

Per Intergovernmental Agreements, LBD is charged with updating and maintaining the Grand County Stream Management Plan. This updated plan will identify actions that lead to improved river conditions, and LBD will continue to serve as an important leader and advocate for the Upper Colorado River and Fraser River watersheds in this regard.

As a partner on the LBD Management Committee, this application is a critical step for our organization and the community to ensure diverse stakeholders are involved in long-term management strategies that benefit our aquatic resources. This project has strong potential to rehabilitate parts of the watershed for long-term resilience and increased water security for the local communities – both of which are goals of the Colorado Water Plan. Therefore, Middle Park Water Conservancy District fully supports this application and encourages the Colorado Water Conservation Board to fully fund the request. Thank you for your consideration.

Jack Buchheister
President
Middle Park Water Conservancy District



October 26, 2021

Sent via email: chris.sturm@state.co.us

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

RE: Letter of Support for Learning By Doing's Stream Management Plan Grant Application

Dear Chris:

On behalf of Northern Water, I wish to convey our support for Learning By Doing's (LBD) grant application for the Colorado Watershed Restoration Program – Stream Management Plan Grant.

The Upper Colorado River and Fraser River Watersheds serve as critical municipal, agricultural, recreational, and industrial water supply sources for the state of Colorado and are key drivers in the local economy. Given these factors, the Upper Colorado River and Fraser River Watersheds are not only an integral place to maintain a long-term water management plan but also require such a plan to ensure sustainability of the watersheds to these various sectors.

In partnership with LBD, Northern Water supports the proposed Phase I update to the Grand County Stream Management Plan that will identify common goals and better understand current conditions, which supports agricultural production, desired river uses, native species, and essential ecosystem functions. Ultimately, the stream management plan update will identify actions that lead to improved river conditions, and we feel LBD is an important leader and advocate for the Upper Colorado River and Fraser River Watersheds.

Northern Water is committed to assisting LBD with the stream management plan update through providing a cash contribution, in-kind support and management of the work, and funding of the LBD stream monitoring program that supports the Stream Management Plan.

Per intergovernmental agreements, LBD is charged with updating and maintaining the Grand County Stream Management Plan. This updated plan will identify actions that lead to improved river conditions, and we feel LBD is an important leader and advocate for the Upper Colorado River and Fraser River watersheds.

As a partner on the LBD Management Committee, this application is a critical step for our organization and the community to ensure diverse stakeholders are involved in long-term management strategies that benefit our aquatic resources. This project has strong potential to rehabilitate parts of the watershed for long-term resilience and increased water security for the local communities – both of which are goals of the Colorado Water Plan. Therefore, Northern Water fully supports this application and encourages the Colorado Water Conservation Board to fully fund the request.

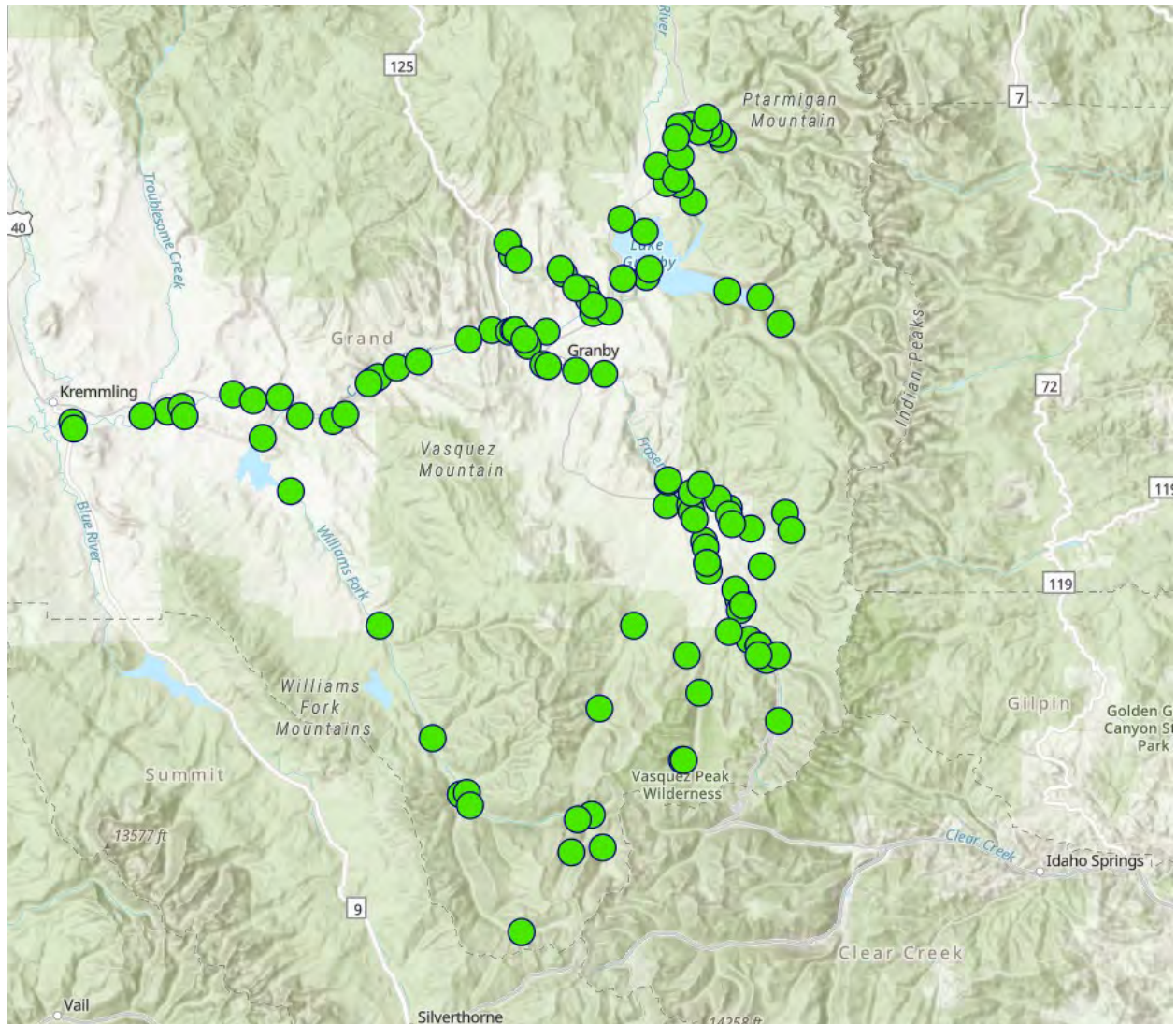
Thank you for your consideration.

Sincerely,

Jeff Drager, P.E.
Director of Engineering

Colorado Watershed Restoration Program
2021 Grant Application for
Grand County Stream Management Plan Update – Phase 1

**ATTACHMENT C: Monitoring Locations in the Cooperative Effort Area, Grand
County, Colorado**



Colorado Watershed Restoration Program
2021 Grant Application for
Grand County Stream Management Plan Update – Phase 1

ATTACHMENT D: Letters of Financial Commitment



November 3, 2021

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

RE: Committed Funds for Learning By Doing's Stream Management Plan Grant Application

Dear Chris,

The purpose of this letter is to confirm the \$41,874 in committed cash match funds towards Learning By Doing, Inc.'s application for the Colorado Watershed Restoration Grant Program, Stream Management Plan Grant for its project proposal entitled "Grand County Stream Management Plan Update – Phase 1."

Sincerely,

Learning By Doing Management Committee

Ed Moyer, Grand County
Rachel Badger, Denver Water
Jeff Drager, Northern Water
Jason Turner, Colorado River Water Conservation District
Kristina Wynne, Middle Park Water Conservancy District
Mely Whiting, Trout Unlimited



Grand County Water Information Network

610 Center Ave | PO Box 1503 | Grand Lake, CO 80447 | 970-627-8162
www.gcwin.org

November 3, 2021

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

RE: Committed Funds for Learning By Doing's Stream Management Plan Grant Application

Dear Chris,

The purpose of this letter is to confirm GCWIN's cash match of \$2,728 towards Learning By Doing, Inc.'s application for the Colorado Watershed Restoration Grant Program, Stream Management Plan Grant for its project proposal entitled "Grand County Stream Management Plan Update – Phase 1."

Sincerely,

Mary Price
Executive Director - Grand County Water Information Network