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## Colorado Water Conservation Board

### Water Plan Grant Application

#### Instructions

To receive funding for a Water Plan Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as “project”) funded by the CWCB will help meet the measurable objectives and critical actions in the Water Plan. Grant guidelines are available on the CWCB website.

If you have questions, please contact CWCB at (303) 866-3441 or email the following staff to assist you with applications in the following areas:

Supply and Demand Gap Projects: Gregory.Johnson@state.co.us

Water Storage Projects: Anna.Mauss@state.co.us

Conservation, Land Use Planning: Kevin.Reidy@state.co.us

Engagement & Innovation Activities: Mara.MacKillop@state.co.us

Agricultural Projects: Brent.Newman@state.co.us

Environmental & Recreation Projects: Linda.Bassi@state.co.us

Applicants interested in submitting an ‘Intent to Apply’ in the future are encouraged to check here and fill in all sections with the best information available at the time. Exhibits excluded.

This “Intent to Apply” will help CWCB prioritize Projects that are not ready for fully completed Water Plan Grant Application due to the initial timeframe and deadlines required.

#### Water Project Summary

Name of Applicant	Turner Ditch Company, Paonia, Colorado [Turner Ditch Company is the designated incorporated entity representing both Turner Ditch Company and Lone Cabin Ditch and Reservoir Company]	
Name of Water Project	Turner and Lone Cabin Ditch-Combination Salinity Reduction Project	
CWP Grant Request Amount		\$350,000.
Other Funding Sources <u>BoR 2017 FOA</u>		\$5,650,000.
Other Funding Sources _____		\$ 0
Applicant Funding Contribution		Only in-kind services estimated to be about \$200,000.
Total Project Cost		\$6,000,000.

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Applicant & Grantee Information	
Name of Grantee(s)	Turner Ditch Company
Mailing Address	12552 Roeber Road, Paonia, CO 81428
FEIN	84-0339510
Organization Contact	Steven J. Kossler
Position/Title	Turner Ditch Company President
Email	kcowkoss@tds.net
Phone	970-216-5578
Grant Management Contact	Paul J. Maudlin
Position/Title	Turner Ditch Company Board Member
Email	excelsior@paonia.com
Phone	970-333-2190
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

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### Description of Grantee/Applicant

Provide a brief description of the grantee's organization (100 words or less).

**Grantee: Turner Ditch and Lone Cabin Ditch and Reservoir Companies (Ditches Located SE of Paonia)**

Turner Ditch Company is the designated entity representing both Turner Ditch Company and Lone Cabin Ditch and Reservoir Company, Presidents: Steven J. Kossler and James R. Briscoe, respectively. MOA available upon request.

The Turner Ditch system serves 47 farms with 9 miles of open unlined ditch where crossings of unstable Mancos Shale hillsides in the Minnesota Creek drainage have been problematic. Irrigation operations include one diversion structure on Minnesota Creek, three lateral ditches on Lamborn Mesa and 55 user take-outs.

The Lone Cabin Ditch system serves 15 farms with 17.2 miles of open unlined ditch which includes two water intake diversions on Minnesota Creek Lake Fork, three lateral ditches on Lamborn Mesa and 15 user take-outs. The system also includes the Trade/Transfer Ditch (24,171 feet) and a secondary collection ditch called the Highline Ditch (14,250) above and to the southeast of Lone Cabin Reservoir.

The above ditch systems both access Beaver Reservoir (700 ac-ft) and irrigate a total of 1000 acres of farmland.

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Type of Eligible Entity (check one)	
	<b>Public (Government):</b> Municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
	<b>Public (Districts):</b> Authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises.
x	<b>Private Incorporated:</b> Mutual ditch companies, homeowners associations, corporations.
	<b>Private Individuals, Partnerships, and Sole Proprietors:</b> Private parties may be eligible for funding.
	<b>Non-governmental organizations (NGO):</b> Organization that is not part of the government and is non-profit in nature.
	<b>Covered Entity:</b> As defined in <a href="#">Section 37-60-126 Colorado Revised Statutes</a> .

Type of Water Project (check all that apply)	
	Study
x	Construction
	Identified Projects and Processes (IPP)
	Other

Category of Water Project (check all that apply and include relevant tasks)	
	Supply and Demand Gap Projects - Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap. <i>Applicable Exhibit A Task(s):</i>
	Water Storage Projects - Projects that facilitate the development of additional storage, artificial recharge into aquifers, and dredging existing reservoirs to restore the reservoirs' full decreed storage capacity. <i>Applicable Exhibit A Task(s):</i>
	Conservation and Land Use Planning Projects - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. <i>Applicable Exhibit A Task(s):</i>
	Engagement & Innovation Projects - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application available on the website. <i>Applicable Exhibit A Task(s):</i>
x	Agricultural Projects - Projects that provide technical assistance and improve agricultural efficiency.
	Environmental & Recreation Projects – Projects that promote watershed health, environmental health, and recreation. <i>Applicable Exhibit A Task(s):</i>

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	Other	
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### Location of Water Project

Please provide the general county and coordinates of the proposed project below in **decimal degrees**. The Applicant shall also provide, in Exhibit C, **see site Maps 1.1, 1.2, 1.3**

County/Countries	Mostly Delta County but also Gunnison County
Latitude	38.85538111°
Longitude	107.5639111°

### Water Project Overview

Please provide a summary of the proposed water project (200 words or less). Include a description of the project and what the CWP Grant funding will be used for specifically (e.g., studies, permitting process, construction). Provide a description of the water supply source to be utilized or the water body affected by the project, where applicable. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, and area of habitat improvements, where applicable. If this project addresses multiple purposes or spans multiple basins, please explain.

The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.

Our Salinity Control Project proposes to *combine* the irrigation operations of Turner Ditch, Lone Cabin Ditch and Reservoir, and Sweezy-Turner Ditch located in the Minnesota Creek and Reynolds Creek drainages into a closed, pressurized delivery system. The project objectives are to:

- (1) Decommission the use of 9.5 miles (out of 25 miles total) of open earthen ditches and their implied easements and associated structures;
- (2) Replace the remaining 15.5 mi of existing open ditch with HDPE and/or PVC plastic pipe;
- (3) Construct a new Turner diversion structure at the existing Sweezy-Turner diversion;
- (4) Pressurize the resulting combined system in excess of 50 psig;
- (5) Allow the new Lone Cabin system to directly access their Beaver Reservoir water (300 ac-ft) without water trades via a “connection” to the new Turner system;
- (6) Clean the irrigation water of vegetable matter down to 25 mesh (about 1 mm) using wedge screen at all head-gates.

This Project will eliminate delivery system losses (approximately 40%) and encourage on-farm sprinklers via pressure as a high efficiency replacement for flood irrigation in both the Reynolds and Minnesota Creek drainages. Irrigation water will be detained of alkalinity and selenium.

CWP funding (plus match) will be focused on diversion and piping of Lake Fork water located on the upper reach of Lone Cabin Reservoir, leveraging a larger Bureau of Reclamation (BoR) FOA Project.

### Measurable Results

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Measurable Results		
To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:		
1800 ac-ft via elimination of ditch seepage	New Storage Created (acre-feet)	
1200 ac-ft via sprinklers encouraged by Pressurized Closed System	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
Beaver and Lone Cabin Reservoirs better managed: 150 ac-ft	Existing Storage Preserved or Enhanced (acre-feet)	
	Length of Stream Restored or Protected (linear feet)	
1800 ac-ft via elimination of ditch seepage	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
10 acres of habitat replacement, 30 acres of ditch right-of-way remediated	Area of Restored or Preserved Habitat (acres)	
	Quantity of Water Shared through Alternative Transfer Mechanisms	
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning	
3500 Tons of salt detained per year, proportional quantity of Se	Other	Explain: Water Quality improvements (via detention of salinity and selenium)

Water Project Justification
<p>Provide a description of how this water project supports the goals of <a href="#">Colorado's Water Plan</a>, the most recent <a href="#">Statewide Water Supply Initiative</a>, and the applicable Roundtable <a href="#">Basin Implementation Plan</a> and <a href="#">Education Action Plan</a>. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).</p> <p>The proposed water project shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan Framework for State of Colorado Support for a Water Project (CWP, Section 9.4, pp. 9-43 to 9-44;)</p>

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## Water Project Justification

The Turner and Lone Cabin Ditch-Combination Salinity Reduction Project is consistent with the following goals of the Colorado Water Plan (CWP Section 10, pgs. 3-4):

- Improves the local agricultural economy with increased crop production
- Greatly improves the efficiency of off-farm water delivery systems and on-farm crop irrigation
- Promotes a healthy environment by improving water quality in the Colorado River Basin

This project supports the Colorado Water Plan's identified Agricultural Critical Actions to (CWP Section 10, pg.10):

- Maintain and increase agricultural viability
- Support agricultural water conservation and efficiency. The Project objective to construct a closed, pressurized system reduces delivery losses by 40%, and with increased sprinkler use over flood irrigation reduces by 50% the water needed for on-farm crop production

By reducing salinity and selenium contributions to the North Fork of the Gunnison River, this project supports Watershed Health, Environment and Recreation critical actions (CWP Section 10, pg. 12):

- Recover Imperiled Species by improving water quality in aquatic habitats that may be occupied by endangered species
- Promote Protection and Restoration of Water Quality

Renovation of the Turner, Lone Cabin and Sweezy-Turner irrigation delivery systems helps meet the following water supply gaps identified in SWSI 2010:

- Current Agricultural Demand gap of 128,000 AFY in the Gunnison Basin, (SWSI 2010 ES-19)
- Projected 2050 Agricultural Demand gap of 116,000 AFY in the Gunnison Basin, (SWSI 2010 ES-22)

This project also meets the following draft Vision Goals identified in SWIS 2010 (ES-28):

- Meet agricultural demands
- Optimize existing and future water supplies by - Minimizing non-beneficial consumptive use, e.g., overuse of water supplies by flood irrigation
- Promote cost-effectiveness by: -Achieving benefits at the lowest cost, by leveraging state contributions to secure significant federal funding

This project supports the following Gunnison Basin Roundtable goals, (GBRT BIP pg 2):

- Primary Goal: Protect existing water uses in the Gunnison Basin
- Discourage the conversion of productive agricultural land to all other uses
- Improve agricultural water supplies via efficiency to reduce shortages
- Improve water quality

CWP funding for this project would complement BoR FOA salinity and CWCB programs.

## Related Studies

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### Related Studies

Please provide a list of any related studies, including if the water project is complementary to or assists in the implementation of other CWCB programs.

The engineering feasibility and cost effectiveness of the Turner and Lone Cabin Ditch-Combination Salinity Reduction Project has been studied in three previous BoR FOA proposals in 2010, 2012 & 2015, the most recent of which has a cost analysis and construction gantt chart included in Exhibit C. This Project continues to be studied and refined and will be proposed as a 2017 BoR FOA project.

The geology survey of the Minnesota Creek and Reynolds Creek drainages as described in detail in the Open File Report 15-07, Geological Map of the Paonia Quadrangle, by D. Noe, Colorado Geological Survey David Noe, Colorado Geological Survey, 2015.

A recent environmental assessment (EA) was performed in support of the Minnesota Canal BoR FOA Project (2012 study). This EA studies the same two drainages (Minnesota and Reynolds Creek drainages) as those containing the proposed Turner and Lone Cabin Ditch-Combination Salinity Reduction Project.

### Previous CWCB Grants, Loans or Other Funding

List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order; 6) Percentage of other CWCB funding for your overall project.

Lone Cabin Ditch and Reservoir Company currently has two outstanding CWCB loans, both of which are associated with reservoir repairs. The Gunnison RT approved these grant/loan projects.

### Taxpayer Bill of Rights

The Taxpayer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect your application.



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Submittal Checklist	
	I acknowledge the Grantee will be able to contract with CWCB using the <a href="#">Standard Contract</a> .
Exhibit A	
x	Statement of Work <sup>(1)</sup>
x	Budget & Schedule <sup>(1)</sup> ( <i>Spreadsheet</i> )
	Letters of Matching and/or Pending 3 <sup>rd</sup> Party Commitments <sup>(1)</sup> [ GRT letter, CWCB letter from Anna]
Exhibit C	
x	Map (if applicable) <sup>(1)</sup>
	Photos/Drawings/Reports
	Letters of Support (Support letter from Basin Roundtable encouraged)
	Certificate of Insurance (General, Auto, & Workers' Comp.) <sup>(2)</sup>
	Certificate of Good Standing with Colorado Secretary of State <sup>(2)</sup>
	W-9 <sup>(2)</sup>
	Independent Contractor Form <sup>(2)</sup> (If applicant is individual, not company/organization)
Engagement & Innovation Grant Applicants ONLY	
	Engagement & Innovation Supplemental Application <sup>(1)</sup>

(1) Required with application.

(2) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.

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## Colorado Water Conservation Board

### Water Plan Grant - Exhibit A

#### Statement Of Work

<b>Date:</b>	October 1, 2017
<b>Name of Applicant:</b>	Turner Ditch Company
<b>Name of Water Project:</b>	Turner and Lone Cabin Ditch-Combination Salinity Reduction Project
<b>Funding Source (Main):</b>	Bureau of Reclamation, 2017 Salinity FOA

**Water Project Overview:** Please provide a summary of the proposed water project (200 words or less). The same summary can be used from Page 5 of the CWP Grant Application.

Our Salinity Control Project proposes to *combine* the irrigation operations of Turner Ditch, Lone Cabin Ditch and Reservoir, and Sweezy-Turner Ditch located in the Minnesota Creek and Reynolds Creek drainages into a closed, pressurized delivery system (please see Maps 1.1 thru 1.3 for the existing system ditching and Maps 2.1 thru 2.3 for the new pipeline routes). The project objectives are to:

- (1) Decommission the use of 9.5 miles (out of 25 miles total) of open earthen ditches and their implied easements and associated structures;
- (2) Replace the remaining 15.5 mi of existing open ditch with HDPE and/or PVC pressure rated pipe;
- (3) Construct a new Turner diversion structure at the existing Sweezy-Turner diversion;
- (4) Pressurize the resulting combined system in excess of 50 psig;
- (5) Allow the new Lone Cabin system to directly access their Beaver Reservoir water (300 ac-ft) without water trades via a “connection” to the new Turner system;
- (6) Clean the irrigation water of vegetable matter down to 25 mesh (about 1 mm) using wedge screen at all head-gates.

This Project will eliminate delivery system water losses (approximately 40%) and encourage on-farm sprinklers via pressurization as a high efficiency replacement for flood irrigation in both the Reynolds Creek and Minnesota Creek drainages. Irrigation water will be detained of alkalinity and selenium.

CWP funding will be focused on diversion and piping of intake water located on the upper reach of Lone Cabin Reservoir, leveraging a larger BoR FOA Project.

**Objectives:** List the objectives of the project.

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**See the Objectives in above Project Summary**

Tasks
Provide a detailed description of each project task using the following format:
<b>Task 1 – Environmental, Legal and Pipeline Routing [subtasks 1, 2, 3, 4, 5 from Fig. 4, Exhibit C]</b>
Description of Task:
<ul style="list-style-type: none"> <li>• Begin efforts focused on NEPA surveys and reports, and then complete an Environmental Assessment document</li> <li>• Select a Habitat Replacement Project (required by BoR) local to our project area [we have two candidates at the present time]</li> <li>• Procure legal/fiscal services and begin field surveying of pipeline easements and structure siting</li> <li>• Identification of routing complications: elevation drops, unstable geology, creek crossings, road crossings</li> <li>• Acquisition of new private land easement and negotiation of easement changes with FS and BLM</li> </ul> <p>Easement needed for the proposed pipeline route has been identified and includes existing Turner Ditch recorded easement, existing Sweezy-Turner Ditch implied easement, existing Lone Cabin implied easement, Delta County road easement along Minnesota Creek Road (already secured in writing from Delta County), new private land easement verbally secured from the landowners at no expense to the Project, and public land easement. Contact has been initiated with the BLM and the Forest Service regarding possible changes to existing Ditch easements on public lands; these contacts have been favorable. Turner Ditch has also retained a water attorney to oversee the easement changes and new acquisitions associated with the proposed route.</p>
Method/Procedure:

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Tasks
<p>The Turner and Lone Cabin Ditch Companies have stockholders with legal and engineering expertise (and in-kind man-hours) to administrate the above subtasks. Their duties would include managing and coordinating the subtasks, contracting with third parties and performing the needed groundwork.</p>
<p>Grantee Deliverable: Describe the deliverable the grantee expects from this task</p>
<ol style="list-style-type: none"> <li>1. EA document</li> <li>2. Final pipeline route identified</li> <li>3. Easements surveyed and mapped</li> <li>4. Easements legally described and filed</li> <li>5. Habitat Replacement Area identified</li> </ol>
<p>CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task</p>
<p>Six-month status reports of subtasks, and copies of associated deliverables</p>

Tasks
<p>Provide a detailed description of each project task using the following format:</p>
<p><b>Task 2 – Engineering Design and Construction Preparation [subtasks 6, 7, 8, 9, 10 from Fig. 4 Exhibit C]</b></p>
<p>Description of Task:</p>

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Tasks
<ul style="list-style-type: none"> <li>• Contract and complete an engineering design of the pipeline Project</li> <li>• Contract and complete an engineering design of the Habitat Replacement Project</li> <li>• Oversee the preparation of the plans and specifications for both projects</li> <li>• Search and select for construction contractors (via a bidding process)</li> <li>• Begin material procurement, and stockpiling and staging (mostly plastic pipe) as budget allows</li> </ul>
<p>Method/Procedure:</p> <p>The Turner and Lone Cabin Ditch Companies have stockholders with legal and engineering expertise (and in-kind man-hours) to administrate the above subtasks. Their duties would include managing and coordinating the subtasks, contracting with third parties and performing the needed groundwork.</p>
<p>Grantee Deliverable: Describe the deliverable the grantee expects from this task</p> <ol style="list-style-type: none"> <li>1. Engineering Design report</li> <li>2. Engineering Design report for the Habitat Replacement</li> <li>3. Preparation of Plans and Specifications documents</li> <li>4. Construction Contractor selected</li> </ol>
<p>CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task</p> <p>Periodic status reports of subtasks, and copies of associated deliverables</p>

Tasks
Provide a detailed description of each task using the following format:
<b>Task 3 – New Turner System Construction (see Maps 2.2 &amp; 2.3) [subtasks 11,12,13,14 from</b>

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Tasks
<b>Fig. 4, Exhibit C]</b>
Description of Task:
<p>A new Turner irrigation water diversion will be constructed at the existing location of the Sweezy-Turner diversion (see Map 2.2). The increased elevation of this new diversion will allow the Turner system to equalize pressures with the Lone Cabin system on Lamborn Mesa. Pipeline construction proceeds as shown on Maps 2.2 and 2.3, from the new diversion to the connection point (about 9 mi), which is a valve between the systems located close to the end of Lone Cabin Lateral #2 or at the end of the Turner South Lateral. This connection enables the transfer of Lone Cabin's 3/16ths Beaver Reservoir water using the new Turner System (Item 5 in the Summary), thus eliminating the need for the water trade/transfer ditch east of Lone Cabin Reservoir. The new pipeline will provide pressurized water to all Turner stockholders in excess of 50 psig. The water right of Michael and Sue Spurlock will also be assimilated into the Turner Ditch Company and System as part of our proposed Project (see Map 2.2 for location). Also of note is that three existing diversion structures on the Minnesota Creek, i.e., the Turner, Sweezy-Turner and Spurlock structures will be consolidated into one new diversion structure</p> <p>As mentioned above, this combination project assimilates the unincorporated Sweezy-Turner Ditch (Sweezy) which diverts water from the Minnesota Creek approximately one mile to the east of the current Turner diversion, and then routes the flow westward to the beginning of the existing Turner Ditch alignment. The Sweezy currently utilizes 2.68 miles of open ditch which supports two water right users irrigating a total of 99 acres. Integration of Sweezy into the Turner Ditch Company enables the move of the Turner diversion to the current Sweezy diversion location at an elevation of 6,436 feet; the Turner gravity head over the entire system will increase to 266 vertical feet realizing 116 psi of static pressure (once in plastic pipe). This combination would increase the irrigation water carried by the Turner to 21 cfs, and increase the total irrigated acreage to 685 acres.</p> <p>Project construction of the habitat replacement is initiated in this task, with a second construction phase scheduled during Task 4. The budget for a Habitat Replacement Plan consistent with 2017 BoR FOA assumes 5% of the total construction cost will be used to construct this Replacement. An ideal location for such a Replacement has already been identified on the eastern side of Spurlock's property in the Minnesota Creek drainage as indicated on Map 2.2. This is a small natural wetlands area, full of wildlife, that can be expanded and improved, and is already part of a private conservation easement monitored by Rocky Mountain Elk Foundation. This organization has in-house engineering staff that can design our Replacement Plan, and the current Landowners are supportive (i.e., no land purchases necessary).</p>
Method/Procedure:

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Tasks
<p>A construction engineering firm will be under contract to perform subtasks 11 and 12 focused on the installation of the new Turner system. Another construction engineering firm will be under contract to perform subtask 13 focused on the installation of the Replacement Habitat. Oversight of the installations will be provided by the design engineering firms. Administration and technical oversight will be provided by Turner Company Board members.</p>
<p>Grantee Deliverable: Describe the deliverable the grantee expects from this task</p>
<ul style="list-style-type: none"> <li>Completed construction of the Turner System capped at the lower end at the Lone Cabin connection point)</li> <li>Partial construction (say 50%) of the Replacement Habitat completed.</li> <li>Testing of the Turner stand-alone system completed and documented</li> </ul>
<p>CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task</p>
<p>Six-month status reports of subtasks, and copies of associated deliverable documentation</p>

Tasks
<p>Provide a detailed description of each task using the following format:</p>
<p><b>Task 4 – New Lone Cabin System Construction (see Maps 2.2 &amp; 2.3) [subtasks 15,16,17,18,19 from Fig. 4, Exhibit C]</b></p>
<p>Description of Task:</p>
<p>Starting with the replacement of Lake Fork headgate structure (see Map 2.2), irrigation water is piped 1.5mi down into the Lone Cabin reservoir, dissipating velocity (dynamic pressure) as the input water mixes with reservoir water. Pressure develops at the dam outlet structure as the piping route drops from the reservoir (7,368 feet) to the highest user tap at roughly 6670 feet (i.e., 304 psi static pressure), most of this pressure must be dissipated with pressure regulation values. As an alternative to three-staged pressure-regulation vaults, a small-hydro site can be located near the Paonia domestic water tank with an approximate elevation of 6,500 feet. The hydro-electric facility can be utilized to dissipate much of the excess pressure and produce electricity, potentially up to 200 kW.</p>
<p>West of the highest water user the piping splits into two laterals and taps 15 farm all located on</p>

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Tasks
<p>Lamborn Mesa. Connection of the Turner and Lone Cabin Systems occurs at the end of the southern lateral (see Map 2.3 for route and connection detail). A major improvement for Lone Cabin water users will be the delivery of their 3/16<sup>th</sup> share of Beaver Reservoir water via this <i>bottom</i> connection to the new Turner system on Lamborn Mesa; pressure at this connection point is sufficient to push Beaver water up to the higher Lone Cabin farms.</p> <p>A large impact on Lone Cabin irrigation operations is the remediation (abandoned, filled and planted) of 9.5 miles of open ditch (Item 1 in the Summary). The current effort required to maintain this 9.5 miles of open ditch will be eliminated, including 5.4 miles of the Transfer ditch and Highline ditch east and south of Lone Cabin reservoir (see Map 2.1).</p> <p>A benefit for all the above water users is that the delivered water will be cleaned down to 25 mesh with a head-gate wedge screen and reservoir silt trapping to encourage on-farm sprinkler use and future NRCS on-farm projects (EQIP).</p>
<p>Method/Procedure:</p> <p>A construction engineering firm will be under contract to perform subtask 15 focused on the installation of the new Lone Cabin System. Another construction engineering firm will be under contract to perform subtask 16 focused on the completion of the Replacement Habitat. Oversight of the installations will be provided by the design engineering firms. Administration and technical oversight will be provided by Turner Company Board members.</p>
<p>Grantee Deliverable: Describe the deliverable the grantee expects from this task</p>
<ul style="list-style-type: none"> <li>• Completed construction of the Lone Cabin System capped at the lower end at the Lone Cabin connection point)</li> <li>• Construction of the Replacement Habitat completed</li> <li>• Testing of the Lone Cabin stand-alone system and the connection point completed and documented</li> </ul>
<p>CWCB Deliverable: Describe the deliverable the grantee will provide CWCB documenting the completion of this task</p>



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## Tasks

Six-month status reports of subtasks, and copies of associated deliverable documentation

## Budget and Schedule

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.

## Reporting Requirements

**Progress Reports:** The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status 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. The CWCB may withhold reimbursement until satisfactory progress reports have been submitted.

**Final Report:** At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will withhold disbursement the last 10% of the budget until the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

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## **Colorado Water Conservation Board**

### **Water Plan Grant - Exhibit C**

#### **PROJECT MAPS**

##### **1.1 EXISTING TURNER DITCH SYSTEM**

##### **1.2 EXISTING LONE CABIN SYSTEM**

##### **1.3 EXISTING SWEEZY-TURNER SYSTEM**

##### **2.1 PROPOSED IMPROVEMENTS FOR TURNER, LONE CABIN & SWEEZY-TURNER**

##### **2.2 NEW SYSTEM EAST SIDE OF PROJECT**

##### **2.3 NEW SYSTEM WEST SIDE OF PROJECT**

#### **OTHER FIGURES**

##### **3. BOR PROJECT COST ANALYSIS**

##### **4. BOR PROJECT GANTT CHART**

##### **5. CWP BUDGET AND SCHEDULE**

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**COLORADO**  
Colorado Water  
Conservation Board  
Department of Natural Resources

## Colorado Water Conservation Board

### Water Plan Grant - Exhibit A Budget and Schedule

**Date: October 1, 2017**

**Name of Applicant: Turner Ditch Company**

**Name of Water Project: Turner and Lone Cabin Ditch-Combination Salinity Reduction Project**

Task No.	Task Description	Start Date <sup>(1)</sup>	End Date	Water Project Funding Category	Grant Funding Request	Match Funding	Total
1	Lake Fork headgate structure	6/1/2020	6/15/2020	Agricultural	25	25	\$50
2	Pipeline from headgate to reservoir (1.5mi)	6/15/2020	8/15/2020	Agricultural	\$275	\$275	\$550
3	Dam outlet refurbishment	6/1/2020	6/15/2020	Agricultural	\$20	\$20	\$40
4	Dam outlet structure	6/15/2020	7/1/2000	Agricultural	\$30	\$30	\$60
							\$0
							\$0
							\$0
							\$0
							\$0
							\$0
							\$0
							\$0
							\$0
							\$0
							\$0
<b>Total</b>					<b>\$350</b>	<b>\$350</b>	<b>\$700</b>

**(1)** Start Date for funding under \$100K, minimum 45 Days from Board Approval; Start Date for funding over \$100K, minimum 90 Days from Board Approval.

·Round values up to the nearest hundred dollars.

·Reimbursement eligibility commences upon the grantee's receipt of a Notice to Proceed (NTP)

·NTP will not be accepted as a start date. Project activities may commence as soon as grantee enters contract and receives formal NTP if prior to the listed "Start Date".

·The applicant shall provide a progress repost every 6 months, beginning from the date of contract execution.

·CWCB will withhold disbursement of the last 10% of the total grant amount until a Final Report is completed to the satisfaction of CWCB staff (2017 CWP Grant Guidelines).