



Last Updated: July 2017

## 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

Education & 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	Fruitland Irrigation Company	
Name of Water Project	Fruitland Irrigation Renovation Project	
CWP Grant Request Amount	\$	500,000 (\$350,000 Ag, \$150,000 Env/Rec)
Other Funding Sources <u>Reclamation</u>	\$	7,451,349
Other Funding Sources <u>WSRF</u>	\$	900,000
Applicant Funding Contribution	\$	1,514,205
Total Project Cost	\$	10,455,554



Last Updated: July 2017

Applicant & Grantee Information	
Name of Grantee(s)	Fruitland Irrigation Company
Mailing Address	34918 Fruitland Mesa Rd, Crawford, CO 81415
FEIN	84-0207921
Organization Contact	Danny Todd
Position/Title	President
Email	toddcattlecompany@gmail.com
Phone	970-589-5230
Grant Management Contact	Beth Karberg
Position/Title	Salinity Program Field Coordinator
Email	beth.karberg@state.co.us
Phone	970-399-8185
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

Last Updated: July 2017

Description of Grantee/Applicant
Provide a brief description of the grantee's organization (100 words or less).
<p>Fruitland Irrigation Company (FIC) is a mutual ditch company and a non-profit corporation, established in 1901. There are currently 130 shareholders of FIC stock. The FIC operates and maintains the Fruitland Highline Canal - 17.7 miles of earthen ditch; the Gould Canal – 22 miles of earthen ditch, including 0.8 miles through two rock tunnels; and the Gould Reservoir with 10,168 acre-feet of decreed storage. Water is delivered via this system to irrigate an estimated 5900 acres on Fruitland Mesa, southwest of the town of Crawford, primarily used for cattle ranching and hay production.</p>

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.
✓	<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
✓	Construction
	Identified Process or Program
	Other



Last Updated: July 2017

Category of Water Project (check all that apply)		
	Supply and Demand Gap Projects - Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap. (Applicable Exhibit A Task(s) _____)	
	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. (Applicable Exhibit A Task(s) _____)	
	Conservation and Land Use Planning Projects - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. (Applicable Exhibit A Task(s) _____)	
	Engagement & Innovation Projects - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application available on the website. (Applicable Exhibit A Task(s) _____)	
✓	Agricultural Projects - Projects that provide technical assistance and improve agricultural efficiency. (Applicable Exhibit A Task(s) <u>2</u> )	
✓	Environmental & Recreation Projects – Projects that promote watershed health, environmental health, and recreation. (Applicable Exhibit A Task(s) <u>2</u> )	
	Other	Explain:



Last Updated: July 2017

### 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, a site map if applicable.

County/Counties	Gunnison, Delta
Latitude	38.603457
Longitude	-107.590801

### 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.

The two rock wall tunnels of the Gould Canal were constructed over 100 years ago, and have eroded to the point that collapse is threatened. If either of these tunnels collapse, water delivery out of Gould Reservoir will be obstructed, prohibiting irrigation water delivery to the service area after their direct flow diversion right is out of priority, typically by mid-June. This project plans to install 2 miles of pipe from the reservoir outlet through the two tunnels. Cellular concrete will be injected between the pipe and rock walls to stabilize the tunnel and protect the pipe. Another 10.3 miles of earthen delivery ditches will be improved with PVC-geotech liner covered with shotcrete.

CWP funding will contribute to financing piping the upper portion of this project. As a substantial agricultural infrastructure renovation project, the CWP funds requested are an essential, though minor portion of project funding (< 5%). These state funds will assist Fruitland Irrigation Company to compete for major project funding through the Colorado River Salinity Control Program administered by the Bureau of Reclamation.



Last Updated: July 2017

Measurable Results		
To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:		
	New Storage Created (acre-feet)	
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
10,000 af	Existing Storage Preserved or Enhanced (acre-feet)	
	Length of Stream Restored or Protected (linear feet)	
1,856 af/yr	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
	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	
5790 tons salt/yr 460 lbs Se/yr	Other	Explain: Gunnison & Colorado River water quality benefits, improving aquatic habitat for endangered species.

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>
<p>The Fruitland Irrigation Renovation Project is consistent with the following goals of the Colorado Water Plan (CWP Section 10, pgs. 3-4):</p> <ul style="list-style-type: none"><li>• Supports a vibrant agricultural economy;</li><li>• Improves the efficiency of water delivery infrastructure; and</li><li>• Promotes a strong &amp; healthy environment by improving water quality in the Colorado River, including aquatic habitat for the four endangered fish species.</li></ul> <p>This project supports of the Colorado Water Plan's identified Agricultural Critical Actions to (CWP Section 10, pg.10):</p> <ul style="list-style-type: none"><li>• Maintain agricultural viability; and</li><li>• Support agricultural water conservation and efficiency.</li></ul> <p>By reducing salt and selenium contributions to the Smith Fork, tributary to the Gunnison River, this project supports Watershed Health, Environment and Recreation critical actions (CWP Section 10, pg. 12):</p> <ul style="list-style-type: none"><li>• Recover Imperiled Species by improving water quality in critical aquatic habitat occupied by endangered fish species;</li></ul>



Last Updated: July 2017

## Water Project Justification

- Protect Healthy Environments;
- Promote Protection and Restoration of Water Quality.

Renovation of the Fruitland Irrigation delivery system 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;
- Promote cost-effectiveness by: -Achieving benefits at the lowest cost, by leveraging state contributions to secure significant federal funding.

The Fruitland Irrigation Renovation Project is supported by the Gunnison Basin Roundtable, evidenced by the approval of the WSRF grant application on June 5, 2017. Repair of the Fruitland Tunnels is listed as a Tier 2 project in the 2015 Gunnison Basin Implementation Plan (Gunnison BIP pg. 103), though it is a critical project to maintain water delivery to over 5000 irrigated acres. Uncertainty in 2014 regarding the timing and construction readiness of the project was the only factor that deferred this project from the Tier 1 list. (PC Tom Alvey, Gunnison Basin Selection Committee chair)

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

1. Primary Goal: Protect existing water uses in the Gunnison Basin,
2. Discourage the conversion of productive agricultural land to all other uses,
3. Improve agricultural water supplies to reduce shortages,
- ....
6. Improve water quality,
- ....
8. Restore, maintain, and modernize critical water infrastructure.

The Fruitland Irrigation Renovation Project will contribute to the improved management of 10,000 AF of water stored in Gould Reservoir, maximizing the use of this existing storage, reducing transit losses of 1,856 AF/year and reducing the 128,000 AF agricultural water supply gap identified in the Gunnison Basin 2010 SWSI report.

This project meets both agricultural water supply and instream water quality needs, including aquatic habitat benefits from reduced salinity and selenium contributions impacting the endangered fish species in the Gunnison and Colorado Rivers. These benefits accrue to both the Gunnison and Colorado River basins within Colorado, as well as to all downstream water users within the Colorado River basin beyond our state line. Support for this project will come from at least five collaborating entities: Fruitland Irrigation Co, Bureau of Reclamation, Colorado River District, CDA and CWCB.



Last Updated: July 2017

### 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.

Fruitland Irrigation Company, 2016 Feasibility Study, Applegate Group.

Fruitland Irrigation Company Water Management Plan, RHN Water Resources Consultants, 2002.

### 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.

#### **WSRF Basin & State Fund Grants**

Fruitland Irrigation Company  
Fruitland Irrigation Renovation Project  
Gunnison Basin Roundtable approved June 5, 2017  
CWCB consideration pending September 19-20, 2017  
Approval and contract pending  
WSRF funding is < 9% of total project costs

#### **Water Project Loan**

Fruitland Irrigation Company  
Fruitland Irrigation Renovation Project  
CWCB consideration pending September 19-20, 2017  
Approval and contract pending  
CWCB Loan 15% of total project costs

#### **Water Project Loan**

Fruitland Irrigation Company  
Gould Reservoir Outlet Repair  
CWCB approval 5/9/1989  
Contract No. C153542  
CWCB Loan provided 100% of project costs





Last Updated: July 2017

<b>Taxpayer Bill of Rights</b>
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.
As a private entity, the Fruitland Irrigation Company is not subject to TABOR limitations.

<b>Submittal Checklist</b>	
✓	I acknowledge the Grantee will be able to contract with CWCB using the <a href="#">Standard Contract</a> .
Exhibit A	
✓	Statement of Work <sup>(1)</sup>
✓	Budget & Schedule <sup>(1)</sup> ( <i>Spreadsheet</i> )
✓	Letters of Matching and/or Pending 3 <sup>rd</sup> Party Commitments <sup>(1)</sup>
Exhibit C	
✓	Map <sup>(1)</sup>
✓	Photos/Drawings/Reports
✓	Letters of Support (Support letter from Basin Roundtable encouraged)
	Certificate of Insurance (General, Auto, & Workers' Comp.)
	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.

Last Updated: Jan 9, 2018

Colorado Water Conservation Board	
Water Plan Grant - Exhibit A	

Statement Of Work	
Date:	February 1, 2018
Name of Grantee:	Fruitland Irrigation Company
Name of Water Project:	Tunnel and Canal Renovation
Funding Source:	The State and Gunnison Basin Water Supply Reserve Funds
Water Project Overview:	
<p>The Fruitland Irrigation Company (Company) owns and operates the 17.7 mile-long earthen Fruitland Highline Canal, the 22 mile-long earthen Gould Canal (including 0.8 miles through two rock tunnels), and the 10,168 AF Gould (aka Fruitland, aka Onion Valley) Reservoir.</p> <p>The two tunnels in the Gould Canal are over 100 years old and they have eroded to the point that the structural integrity is threatened. All water released from the Gould reservoir pass through these two tunnels. A collapse would eliminate the ability to deliver irrigation after the junior direct flow rights are out of priority, typically in mid-June.</p> <p>The Fruitland Highline and Gould Canals are located within the Colorado River salinity control area. The Water Management Plan completed for the Fruitland Irrigation System in 2002 estimated canal seepage losses to be 12.5 cfs, or 1,856 AF annually. This seepage loss equates to approximately 6,053 tons of salt and 484 pounds of selenium to the Colorado River system and results in losing approximately 15 irrigation days each year. Eliminating seepage from these earthen canals will reduce salinity and selenium contributions to the Lower Gunnison and Colorado River Systems, providing benefits to both downstream users and improving critical aquatic habitat for four endangered fish species.</p>	
Project Objectives:	
<p>The objectives of the Project are to: (1) stabilize the Company's water delivery system to ensure reliable water delivery; (2) reduce salinity and selenium contributions to the Gunnison and Colorado Rivers; (3) reduce seepage losses; (4) reduce ditch maintenance.</p>	

Last Updated: Jan 9, 2018

Tasks	
<b>Task 1 – Construction</b>	
Description of Task:	
<p><b>Install pipe from the outlet of Gould Canal through two existing tunnels, line earthen sections of Gould Canal, construction of wildlife habitat mitigation.</b></p>	
Method/Procedure:	
<p><b>Contractor selection will be accomplished through a competitive bid process. Selected contractor will be responsible for completing project in accordance with approved plans and specifications. The selected contractor will determine actual construction means and methods and will supply all necessary equipment, tools, facilities, field offices, materials, supplies, labor, and other items necessary to complete the work.</b></p>	
Deliverable:	
<p><b>The grantee shall provide CWCB copies of:</b></p> <ul style="list-style-type: none"> <li><b>construction documentation (periodic construction progress reports, change orders, meeting notes, schedule summaries); and</b></li> <li><b>as-constructed drawings.</b></li> </ul>	

Last Updated: Jan 9, 2018

Tasks	
<b>Task 2 – Engineering</b>	
Description of Task:	
<p><b>Complete design, bid project, and provide on-site construction monitoring. Complete required environmental studies.</b></p>	
Method/Procedure:	
<p><b>An engineer and consultants will be contracted to complete project design, complete environmental assessment and cultural resource survey, complete wildlife habitat assessment and cultural resource survey, complete watershed plan. Construction engineer will perform on site monitoring of construction progress to verify construction activities meet the approved plans and specifications. Engineer will be on site representative qualified to interpret construction plans and specifications and will prepare the as-constructed drawings. Engineer will review contractor's pay request in comparison to actual work done and will prepare construction change orders as necessary.</b></p>	
Deliverable:	
<p><b>The grantee shall provide CWCB copies of:</b></p> <ul style="list-style-type: none"> <li>• <b>permits; and</b></li> <li>• <b>design and construction documents.</b></li> </ul>	

Last Updated: Jan 9, 2018

### 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.

**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 pay out the last 10% of the budget when 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.

### Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

Project costs not covered by those or other grants, and are therefore the responsibility of the grantee, will be eligible for CWCB funds at the following percentages: 13% Water Plan Grant funds/53% Loan to 34% WSRF grant funds.

Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to CWCB in hard copy and electronic format as part of the project documentation.

Last Updated: Jan 9, 2018

### Performance Measures

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Water Plan Grant Guidelines, the CWCB will withhold disbursement of 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.

(b) Accountability: Per Water Plan Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Water Plan Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.

**COLORADO**Colorado Water  
Conservation Board

Department of Natural Resources

**Colorado Water Conservation Board**  
**Water Plan Grant - Detailed Budget Estimate**

Prepared Date:

Name of Applicant:

Fruitland Irrigation Company

Name of Water Project:

Fruitland Irrigation Tunnel and Canal Renovation Project

**Construction/Engineering****Task 1 - Construction****Estimated Cost per Task**

	Units	Quantity Estimate	Unit Cost Estimate	Total Cost Estimate
<b>Gravity Pipe Canal Section 1</b>				
Mobilization	%	-	6%	\$ 60,291.36
Clearing, Grubbing, Site Prep	LF	6744	\$ 7.00	\$ 47,208.00
Seeding	LF	6744	\$ 2.00	\$ 13,488.00
48" HP Storm Pipe	LF	6744	\$ 140.00	\$ 944,160.00
Gravity Pipe Subtotal				\$ 1,065,147.36
<b>Upper Tunnel</b>				
48" HP Storm Pipe	LF	1643	\$ 140	\$ 230,020.00
Tunnel Repairs	LF	1643	\$ 383	\$ 629,269.00
Upper Tunnel Subtotal				\$ 859,289.00
<b>Lower Tunnel</b>				
48" HP Storm Pipe	LF	2562	\$ 140	\$ 358,680.00
Tunnel Repairs	LF	2562	\$ 383	\$ 981,246.00
Upper Tunnel Subtotal				\$ 1,339,926.00
<b>Canal Lining Section 2</b>				
Mobilization	%	-	6%	\$ 54,040.35
Seeding	LF	11225	\$ 2.00	\$ 22,450.00
6' Bottom Width - Canal Prep	LF	11225	\$ 11.25	\$ 126,281.25
6' Bottom Width - Shotcrete	CY	1559	\$ 325.00	\$ 506,675.00
6' Bottom Width - Liner	SF	213275	\$ 1.15	\$ 245,266.25
Canal Lining Section 2 Subtotal				\$ 954,712.85
<b>Canal Lining Sections 3 &amp; 4</b>				
Mobilization	%	-	6%	\$ 156,523.68
Seeding	LF	24960	\$ 2.00	\$ 49,920.00
6' Bottom Width - Canal Prep	LF	7380	\$ 11.25	\$ 83,025.00
6' Bottom Width - Shotcrete	CY	1025	\$ 325	\$ 333,125.00
6' Bottom Width - Liner	SF	140220	\$ 1.15	\$ 161,253.00
8' Bottom Width - Canal Prep	LF	4020	\$ 12.75	\$ 51,255.00
8' Bottom Width - Shotcrete	CY	633	\$ 325	\$ 205,725.00
8' Bottom Width - Liner	SF	84420	\$ 1.15	\$ 97,083.00
10' Bottom Width - Canal Prep	LF	13560	\$ 14.25	\$ 193,230.00
10' Bottom Width - Shotcrete	CY	2386	\$ 325	\$ 775,450.00
10' Bottom Width - Liner	SF	311880	\$ 1.15	\$ 358,662.00
Turnouts	EA	30	\$ 10,000	\$ 300,000.00
Canal Lining Sections 3 & 4 Subtotal				\$ 2,765,251.68
<b>Canal Lining Section 5</b>				
Mobilization	%	-	6%	\$ 94,356.82
Seeding	LF	18472	\$ 2.00	\$ 36,944.00
4' Bottom Width - Canal Prep	LF	12172	\$ 9.75	\$ 118,677.00
4' Bottom Width - Shotcrete	CY	1465	\$ 325	\$ 476,125.00

4' Bottom Width - Liner	SF	206924	\$	1.15	\$	237,962.60
6' Bottom Width - Canal Prep	LF	6300	\$	11.25	\$	70,875.00
6' Bottom Width - Shotcrete	CY	875	\$	325	\$	284,375.00
6' Bottom Width - Liner	SF	119700	\$	1.15	\$	137,655.00
Turnouts	EA	21	\$	10,000	\$	210,000.00

Canal Lining Section 5 Subtotal \$ 1,666,970.42

Running Subtotal \$ 8,651,297.31

Habitat Mitigation 5% of all construction costs (\$8,651,297) \$ 432,564.87

**Subtotal Task 1 - Construction \$ 9,083,862.17**

**Task 2 -Engineering**

Engineering - Canal	5% of Construction Costs for Canal Sections 1, 2,	\$	322,604.12
Engineering - Tunnel	7% of Construction Costs for Upper and Lower	\$	153,945.05
NRCS Watershed Plan	EA 1 \$ 57,519	\$	57,519.27
NRCS Technical Assistance	10% of Construction Costs for Gravity Pipe,	\$	326,436.24
NEPA/Cultural Resources	2% of all construction costs (\$8,651,297)	\$	173,025.95
Engineering Oversight	5% of all construction costs (\$8,651,297)	\$	432,564.87
Running Subtotal		\$	1,466,095.48

Project Management 3.5% of all construction costs (\$1,458,576) \$ 51,313.34

**Subtotal Task 2 - Engineering \$ 1,517,408.82**

**Task 1 - Construction \$9,083,862.17**

**Task 2 - Engineering \$1,517,408.82**

**TOTAL \$10,601,271.00**



