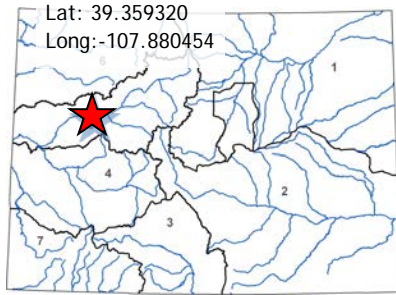


Water Plan Grant Application



L O C A T I O N	
County/Countries:	Mesa
Drainage Basin:	Colorado

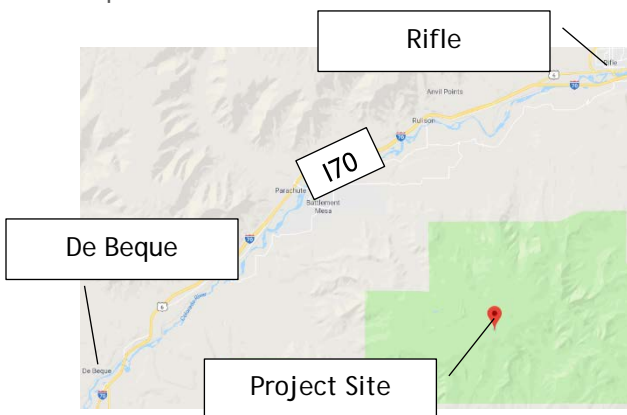
D E T A I L S	
Total Project Cost:	\$946,487
Water Plan Grant Request:	\$246,595
Recommended Amount:	\$0
Other CWCB Funding:	\$0
Other Funding Amount:	\$0
Applicant Match:	\$699,892
Project Type(s):	Construction
Project Category(Categories):	Storage & Supply
Measurable Result:	207 acre-feet recovered

Laramie Energy, LLC is a Denver based company focused on developing unconventional oil and gas reserves within the U.S. Rockies. Laramie Energy’s current operations are concentrated in the Piceance Basin in Western Colorado. Laramie Energy’s Land Department also operates large ranches in the Plateau Creek basin including the Hawxhurst Ranch and YT Ranch for grass/hay production and to improve and protect wildlife habitat on these ranches.

Hawxhurst Reservoir (a/k/a McCurry Reservoir) is a high altitude reservoir that provides supplemental irrigation water to approximately 800 acres of irrigated hay meadows and wildlife areas. Releases from the reservoir provide critical flows for a diverse riparian habitat on East Hawxhurst Creek and native cutthroat trout and rainbow trout populations within the instream flow reach on East Hawxhurst Creek. The reservoir also supports wildlife habitat mitigation for oil and gas drilling activities pursuant to a conservation easement with Colorado Parks and Wildlife.

Hawxhurst Reservoir was decreed for 283.2 acre feet with a date of appropriation of May 31, 1911. Since 2007, Hawxhurst Reservoir has been under a zero storage order based on deficiencies in the embankment and outlet works of the structure; specifically sink holes in the right upstream groin and the inability to close the outlet. In 2015, the Dam Safety Branch in 2015 approved the plans rehabilitation. The approval of those plans is effective until July 2020.

The obstacles to complete the project have included construction access to the reservoir site through United States Forest Service (USFS) roadless area, funding, and cost justification for agricultural hay production.



The objectives of the project are to: (1) improve road through USFS and BLM to provide construction access to reservoir site; (2) repair the dam embankment; (3) repair the existing outlet pipe; (4) replace the inlet structure; (5) construct an outlet structure and plunge pool; and (6) spillway improvements.

Funding Recommendation: Funding is not recommended because this project does not create additional storage. This type of activity is normal operations and maintenance for all dam owners to perform.



Last Updated: July 2019

Colorado Water Conservation Board
Water Plan Grant Application

Instructions		
<p>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.</p> <p>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:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> Water Storage Projects Conservation, Land Use Planning Engagement & Innovation Activities Agricultural Projects Environmental & Recreation Projects </td> <td style="width: 50%; vertical-align: top;"> Anna.Mauss@state.co.us Kevin.Reidy@state.co.us Ben.Wade@state.co.us Alexander.Funk@state.co.us Chris.Sturm@state.co.us </td> </tr> </table> <p>FINAL SUBMISSION: Submit all application materials in one email to <u>waterplan.grants@state.co.us</u> in the original file formats [Application (word); Statement of Work (word); Budget/Schedule (excel)]. Please do not combine documents. In the subject line, please include the funding category and name of the project.</p>	Water Storage Projects Conservation, Land Use Planning Engagement & Innovation Activities Agricultural Projects Environmental & Recreation Projects	Anna.Mauss@state.co.us Kevin.Reidy@state.co.us Ben.Wade@state.co.us Alexander.Funk@state.co.us Chris.Sturm@state.co.us
Water Storage Projects Conservation, Land Use Planning Engagement & Innovation Activities Agricultural Projects Environmental & Recreation Projects	Anna.Mauss@state.co.us Kevin.Reidy@state.co.us Ben.Wade@state.co.us Alexander.Funk@state.co.us Chris.Sturm@state.co.us	

Water Project Summary	
Name of Applicant	Laramie Energy, LLC
Name of Water Project	Hawxhurst Reservoir Rehabilitation
CWP Grant Request Amount	\$246,595
Other Funding Sources _____	\$
Other Funding Sources _____	\$
Other Funding Sources _____	\$
Applicant Funding Contribution	\$ 699,892
Total Project Cost	\$ 946,487



Last Updated: July 2019

Applicant & Grantee Information	
Name of Grantee(s)	Laramie Energy, LLC
Mailing Address	1401 17 th Street, Suite 1400, Denver, CO 80202
FEIN	90-0841728
Organization Contact	James G. Hohenstein
Position/Title	Vice President - Land
Email	jhoenstein@laramie-energy.com
Phone	303-339-4408
Grant Management Contact	James G. Hohenstein
Position/Title	Vice President - Land
Email	jhoenstein@laramie-energy.com
Phone	303-339-4408
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	
Description of Grantee/Applicant	
Provide a brief description of the grantee's organization (100 words or less).	
<p>Laramie Energy, LLC is a Denver based company focused on developing unconventional oil and gas reserves within the U.S. Rockies. Laramie Energy's current operations are concentrated in the Piceance Basin in Western Colorado. Laramie Energy's Land Department also operates large ranches in the Plateau Creek basin including the Hawxhurst Ranch and YT Ranch for grass/hay production and to improve and protect wildlife habitat on these ranches.</p>	



Last Updated: July 2019

Type of Eligible Entity (check one)	
	Public (Government): 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.
	Public (Districts): Authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises.
X	Private Incorporated: Mutual ditch companies, homeowners associations, corporations.
	Private Individuals, Partnerships, and Sole Proprietors: Private parties may be eligible for funding.
	Non-governmental organizations (NGO): Organization that is not part of the government and is non-profit in nature.
	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes .

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

Category of Water Project (check the primary category that applies and include relevant tasks)	
X	Water Storage - Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity and 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): Tasks 2-7 Restoring 207 AF of Existing Pre-Compact Storage</i>
	Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. <i>Applicable Exhibit A Task(s):</i>
	Engagement & Innovation - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website. <i>Applicable Exhibit A Task(s):</i>
	Agricultural - Projects that provide technical assistance and improve agricultural efficiency. <i>Applicable Exhibit A Task(s):</i>
	Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. <i>Applicable Exhibit A Task(s):</i>
	Other
	Explain:



Last Updated: July 2019

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/Countries	Mesa
Latitude	39.359320
Longitude	-107.880454

Water Project Overview
<p>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.</p> <p>The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.</p>
<p>Hawxhurst Reservoir (a/k/a McCurry Reservoir) is a high altitude storage component of the Hawxhurst Ranch agricultural water supply providing supplemental irrigation supplies to approximately 800 acres of irrigated hay meadows and wildlife areas. Releases from the reservoir provide critical flows for a diverse riparian habitat on East Hawxhurst Creek and native cutthroat trout and rainbow trout populations within the instream flow reach on East Hawxhurst Creek. The reservoir also supports wildlife habitat mitigation for oil and gas drilling activities pursuant to a conservation easement with Colorado Parks and Wildlife.</p> <p>Hawxhurst Reservoir was decreed for 283.2 acre feet with a date of appropriation of May 31, 1911 in Civil Action 2635. Since August 21, 2007, Hawxhurst Reservoir has been under a zero storage order based on deficiencies in the embankment and outlet works of the structure, specifically sink holes in the right upstream groin and the inability to close the outlet. Engineering plan for repair of the reservoir and replacement of the outlet works were approved by the Dam Safety Division in 2015. The approval of those plans is effective until July 2020.</p> <p>The obstacles to complete the project have included construction access to the reservoir site through USFS roadless area (due to current wheelbase restrictions), funding, and cost justification for agricultural hay production.</p>



Last Updated: July 2019

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
207	Existing Storage Preserved or Enhanced (acre-feet)
5.75 Miles E. Hawxhurst	Length of Stream Restored or Protected (linear feet)
	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
	Number of Coloradans Impacted by Engagement Activity
	Other Explain:

Water Project Justification
<p>Provide a description of how this water project supports the goals of Colorado's Water Plan, the most recent Statewide Water Supply Initiative, and the applicable Roundtable Basin Implementation Plan and Education Action Plan. 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>Commitment to Collaboration – This project will benefit the instream flow on East Hawxhurst Creek by releasing water in the late irrigation season to supplement native flows used for irrigating hay pastures and wildlife areas within Hawxhurst Ranch. Releases also benefit the native cutthroat and rainbow trout populations as well as supporting wildlife mitigation by reducing dry-up for oil and gas operations occurring on Hawxhurst Ranch pursuant to a conservation easement with Colorado Parks and Wildlife. This project will help to sustain agriculture in the Plateau Valley by providing late season irrigation supplies—an identified vulnerability in the Basin Implementation Plan for the Grand Valley Region.</p> <p>Water Gap and IPP – This project is included in the Grand Valley Region Comprehensive Lists of Projects in the Colorado Basin Implementation Plan for restoring restricted storage in an existing reservoir benefiting the agricultural gap and wildlife mitigation. Rehabilitation of Hawxhurst Reservoir will assure dependable basin administration and continued use of pre-compact irrigation storage rights.</p> <p>Demonstrate Sustainability – This project maximizes the use of water resources through firming the yield of existing supplies, improving and modernizing aging infrastructure.</p> <p>Fiscal and Technical Feasibility - Laramie Energy has spent in excess of \$200,000 on the engineering and permitting for this project. Laramie Energy has the financial capability to complete this project.</p>



Last Updated: July 2019

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.

East Hawxhurst Creek Instream Flow Staff Recommendations Executive Summary

BLM Grand Junction Field Office Stream Surveys July 2011; East Hawxhurst Creek

West Hawxhurst Creek Instream Flow Staff Recommendations Executive Summary
BLM Grand Junction Field Office Stream Surveys July 2016 – West Hawxhurst Creek

Outlet Works & Dam Rehabilitation Plans prepared by Western Heritage Consulting & Engineering

Engineer's Inspection Report, Colorado Dam Safety Division, dated June 20, 2018

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.

None

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.

Not applicable.



Last Updated: July 2019

Submittal Checklist	
X	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract .
Exhibit A	
X	Statement of Work ⁽¹⁾
X	Budget & Schedule ⁽¹⁾
X	Engineer's statement of probable cost (projects over \$100,000)
	Letters of Matching and/or Pending 3 rd Party Commitments ⁽¹⁾
Exhibit C	
X	Map (if applicable) ⁽¹⁾
X	Photos/Drawings/Reports
	Letters of Support (Optional)
	Certificate of Insurance (General, Auto, & Workers' Comp.) ⁽²⁾
	Certificate of Good Standing with Colorado Secretary of State ⁽²⁾
	W-9 ⁽²⁾
	Independent Contractor Form ⁽²⁾ (If applicant is individual, not company/organization)
Engagement & Innovation Grant Applicants ONLY	
	Engagement & Innovation Supplemental Application ⁽¹⁾

(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: July 2019

Colorado Water Conservation Board
Water Plan Grant - Exhibit A

Statement Of Work

Date:	August 1, 2019
Name of Grantee:	Laramie Energy, LLC
Name of Water Project:	Hawxhurst Reservoir Rehabilitation
Funding Source:	Colorado Water Plan Grants

Water Project Overview:

Laramie Energy is working with the Dam Safety Division on rehabilitating Hawxhurst Reservoir to remove the zero storage restriction. Hawxhurst Reservoir is a high altitude reservoir that provides supplemental irrigation water and supports wildlife mitigation on the Hawxhurst Ranch in the Plateau Valley near Collbran, Colorado. The reservoir was originally constructed in 1909 and the dam was raised in 1949. The condition of the dam and outlet resulted in the imposition of a zero storage restriction in 2007 preventing use of this pre-compact agricultural storage right.

Laramie Energy has engaged Ryan Altenburg, P.E., with Western Heritage Consulting and Engineering to design outlet works and dam rehabilitation plans. Those plans have been approved by the State Engineer's Dam Safety Division. Laramie Energy has been working with the USFS and BLM on approvals to improve the primitive road used to access the reservoir site to temporarily accommodate construction traffic.

Project Objectives:

The objectives of the project are as follows:

- 1.) Improve primitive road through USFS and BLM to provide construction access to reservoir site;
- 2.) Repair Dam Embankment Fill & Sink Hole fill;
- 3.) Repair Existing Outlet Pipe;
- 4.) Replace Inlet Structure;
- 5.) Construct Outlet Structure and Plunge Pool;
- 6.) Upgrade Spillway; and
- 7.) Reclamation of Reservoir Site and Access Road.



Last Updated: July 2019

Tasks
Task 1 – Improve primitive road through USFS to provide construction access to reservoir site.
Description of Task:
The primitive road through the USFS will be improved to a wheelbase width that allows temporary construction access to the reservoir site.
Method/Procedure:
Plans to improve the road will be approved by the USFS and BLM. The road will be temporarily widened from a primitive 4-wheel drive road to a standard necessary to accommodate construction trucks and heavy equipment.
Deliverable:
Documentation from USFS and BLM regarding temporary road improvement project. Engineering oversight report on road construction and completion.

Last Updated: July 2019

Tasks	
Task 2 – Repair Dam Embankment Fill & Sink Hole Fill and Filter Installation	
Description of Task:	
<p>The dam embankment will be repaired through the removal of vegetation, excavation and repair of sinkholes and grading and installing filter drain to control seepage through the dam face.</p>	
Method/Procedure:	
<p>The dam will be cleared of vegetation, the inlet structure will be removed, and the existing outlet pipe will be excavated, and the ends of the CMP outlet conduit removed.</p> <p>The right groin/right abutment will be excavated in the areas of the sink holes and subsidence. Any large debris, rocks, boulders in the dam will be removed. Controlled compaction of borrow material and select material removed from the groin will be used to reconstruct the dam per the approved engineering designs.</p> <p>Impervious lining material and filter material will be installed to control seepage through dam filter and toe drain.</p>	
Deliverable:	
<p>Engineering oversight progress reports and invoices for work completed.</p>	

Last Updated: July 2019

Tasks	
Task 3 – Repair Existing Outlet Conduit	
Description of Task:	
The existing outlet conduit CMP will be cleaned and lined.	
Method/Procedure:	
The existing 162 foot long 18” outlet conduit (CMP) will be inspected with video camera and lined with 18” CIPP Liner.	
Deliverable:	
Engineering oversight progress reports and invoices for work completed.	



Last Updated: July 2019

Tasks	
Task 4 - Replace Inlet Structure	
Description of Task:	
The existing inlet will be cleaned out and replaced with a precast concrete structure with slide gate, stem, oil tube and vent.	
Method/Procedure:	
The inlet will be cleaned, and any replacement fill necessary will be placed. A precast concrete structure will be installed with an 18" Fresno Type W slide gate connecting to the 18" steel pipe (CMP).	
Deliverable:	
Engineering oversight progress reports and invoices for work completed.	



Last Updated: July 2019

Tasks	
Task 5 – Construct Outlet Structure and Plunge Pool	
Description of Task:	
The existing outlet will be cleaned out, upgraded with a precast concrete structure, plunge pool, measuring device and wheelhouse.	
Method/Procedure:	
The outlet will be excavated/mucked out and a precast concrete structure will be installed. Rip rap will be placed in the plunge pool and a Parshall Flume and wheelhouse will be installed.	
Deliverable:	
Engineering oversight progress reports and invoices for work completed.	



Last Updated: July 2019

Tasks	
Task 6 – Upgrade Spillway	
Description of Task:	
<p>The spillway will be upgraded to meeting existing engineering designs and requirements for dam safety.</p>	
Method/Procedure:	
<p>The existing spillway and dam crest will be graded to return the structure to the geometry in the approved designs. The spillway elevation will be graded to meet the specifications in the approved designs. Trees and shrubs will be removed from the spillway flow channel and slide slopes below the design flow depth. Areas of subsidence and test holes will be graded to conform to the original slopes and shapes. Rip rap, topsoil and road base will be placed according to the approved engineering specifications.</p>	
Deliverable:	
<p>Engineering oversight progress reports and invoices for work completed.</p>	



Last Updated: July 2019

Tasks	
Task 7 – Reclamation of Reservoir Site and Access Road	
Description of Task:	
Construction site remediation, reclamation, demobilization and access road reclamation.	
Method/Procedure:	
The construction site will be graded and reseeded. Construction equipment will be demobilized. The improved road through the USFS and BLM will be returned to a semi-primitive condition.	
Deliverable:	
Engineering oversight progress reports and invoices for work completed.	



Last Updated: July 2019

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.

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.

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 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.

(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.



Last Updated: July 2019

Performance Measures

(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 Water Conservation Board

**Water Plan Grant - Exhibit B
Budget and Schedule**

Prepared Date: 8/1/2019

Name of Applicant: Laramie Energy, LLC

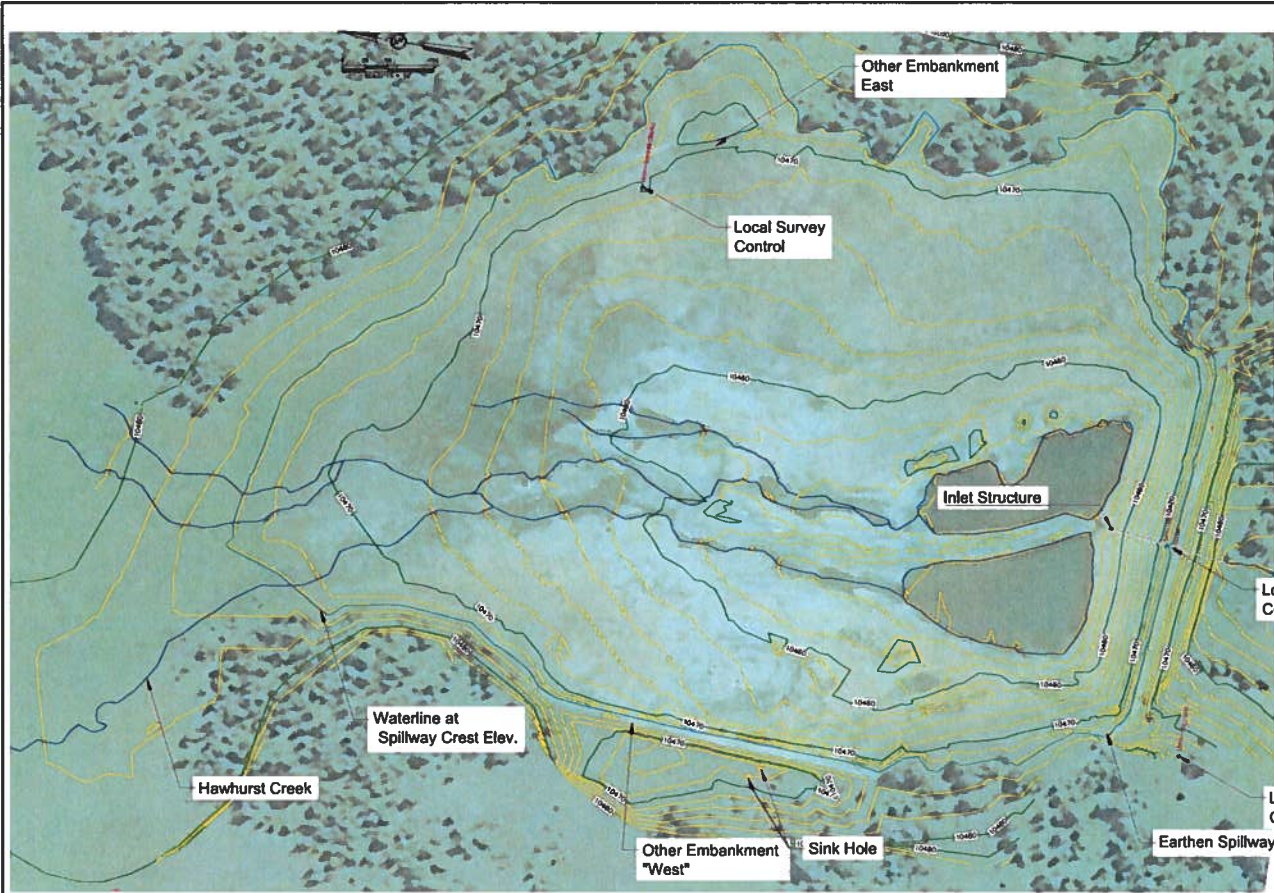
Name of Water Project: Hawxhurst Reservoir Rehabilitation

Project Start Date: 11/1/2019

Project End Date: 10/31/2021

Task No.	Task Description	Task Start Date	Task End Date	Grant Funding Request	Match Funding	Total
1	Access Road Permitting & Construction*	11/1/2019	8/1/2020		\$330,000	\$330,000
2	Repair Dam Embankment	6/1/2020	7/1/2021	\$75,204	\$112,805	\$188,009
3	Oulet Pipe Lining	8/1/2020	8/1/2021	\$47,495	\$71,243	\$118,738
4	Inlet Structure Replacement	7/1/2021	9/1/2021	\$11,487	\$17,230	\$28,717
5	Oulet Structure Replacement	7/1/2021	9/1/2021	\$11,682	\$17,523	\$29,205
6	Upgrade Spillway	8/1/2021	9/30/2021	\$96,617	\$144,926	\$241,543
7	Reclamation and Demobilization	9/1/2021	10/31/2021	\$4,110	\$6,165	\$10,275
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
Total				\$246,595	\$699,892	\$946,487

*Subject to BLM and USFS Permits for Road Construction



Hawhurst Dam
 DAM ID: 720136
 Site Visit Plan View
 515 TBS ROAD 6th, PM
 Mesa County, Colorado

Rev	By	Check	Date	Description
1	RLA			Initial Issue
2	RLA			Revised
3	RLA			Revised
4	RLA			Revised
5	RLA			Revised

Western Heritage
 Consulting & Engineering
 PO BOX 2117
 MAB, WY 82544
 ryan@westernh.com

WH
 11WHC005
 Ex-C