

**Water Supply Reserve Fund – Grant and Loan Program**  
**Water Activity Summary Sheet**  
**March 20-21, 2019**  
**Agenda Item 24(i)**

**Applicant & Grantee:** Leroux Creek Water User’s Association  
**Water Activity Name:** Leroux Creek Reservoir System, Dam Outlet Rehabilitation  
**Water Activity Purpose:** Agricultural & M&I/Implementation  
**County:** Delta  
**Drainage Basin:** Gunnison  
**Water Source:** Leroux Creek  
**Amount Requested:** \$50,000 Gunnison Basin Account  
\$150,000 Statewide Account  
\$200,000 Total Request

**Matching Funds:** Applicant Match (cash & in-kind) = \$55,146  
    • 37% of the Statewide Account request (meets 10% min)  
Basin Account Match = \$50,000  
    • 33% of the Statewide Account Match (meets 10% min)  
Total Match (Applicant & Basin Account) = \$105,146  
    • 70% of the Statewide Account request (meets 50% min)

**Staff Recommendation:**

Staff recommends approval of up to \$50,000 from the Gunnison Basin Account, and \$150,000 from the Statewide Account to help fund the project titled: Leroux Creek Reservoir System, Dam Outlet Rehabilitation.

**Water Activity Summary:** WSRF grant funds, if approved, will assist the Leroux Creek Water User’s Association (LCWUA) upgrade outlet pipes on two existing dams within the Leroux Creek Reservoir System; the Gray Reservoir and the Goodenough Reservoir, both located on the Grand Mesa within Delta County. Recent video inspections of the outlet pipe in the Gray Reservoir dam revealed numerous pipe corrosion defects which indicate that the pipe is nearing the end of its useful life. If left uncorrected, the pipe will become unsafe for storage releases in the near future. At some point (probably within the next 5 to 10 years), lining of the pipe may no longer be feasible, requiring removal and replacement, which will nearly quadruple the cost of rehabilitation. The existing Gray outlet pipe consists of 213 feet of 18" diameter corrugated steel pipe. Recent video inspections of the Goodenough Reservoir dam and other investigations have not revealed any significant defects in the pipe. However, there are a number of factors that contribute to concerns over the pipe's expected future life and have led to the decision by LCWUA to pursue outlet rehabilitation. These factors include the Significant Hazard rating by the Colorado State Engineer, the fact that the outlet pipe consists of uncoated steel pipe which is subject to corrosion, the age of the pipe (70 years) and the fact that a significant portion of the pipe retains water when the regulating gate is closed (preventing inspection of the full internal surface of the pipe). The Goodenough Dam outlet consists of 234 feet of 12" diameter smooth steel pipe.

This project is intended to extend the life expectancy of both outlet pipes by placement of an internal liner by use of the Cured-in-Place Pipe method and by installation of a filter drain surrounding the pipe at the downstream end of each outlet. The funding will be used for the construction work described above as well as permitting, bidding, final design and project administration. These two reservoirs are part of a system that can serve an area of up to 2,000 irrigated acres plus domestic water systems.

**Discussion:** This effort will assist the Gunnison Basin Roundtable achieve the goal of protecting existing water uses in the Gunnison Basin as called for in the Gunnison Basin Implementation Plan, as well as assisting the state achieve the goal of maintaining existing storage as indicated in Chapter 10, Section 10.3 of Colorado’s Water Plan.

**Issues/Additional Needs:** No issues or additional needs have been identified.

**Eligibility Requirements:** The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

**Evaluation Criteria:** This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to Basin Roundtable Chair’s Recommendation Letter and the WSRF Grant Application for applicant’s detailed response.

**Funding Summary/Matching Funds:**

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>	<u>Status</u>
Leroux Creek Water User’s Association	\$20,000	\$35,146	\$55,146	Secured
WSRF Gunnison Basin Account	\$50,000	\$0	\$50,000	Secured
Sub-total	\$70,000	\$35,146	\$105,146	
WSRF Statewide Account	\$150,000	\$0	\$150,000	
<b>Total Project Costs</b>	<b>\$220,000</b>	<b>\$35,146</b>	<b>\$255,146</b>	

**CWCB Project Manager:** Craig Godbout

*The Gunnison Basin Roundtable  
210 West Spencer, Suite B  
Gunnison, CO 81230*

February 4, 2019

Mr. Craig Godbout  
Water Supply Management Section  
COLORADO WATER CONSERVATION BOARD  
1313 Sherman St., Room 718  
Denver, CO 80203

Re: WSRF Grant Request: Leroux Creek Reservoir System Dam Outlet Rehabilitation Project

Dear Mr. Godbout:

This letter is presented to advise you that the grant application submitted by the Leroux Creek Water Users Association for \$150,000 from Statewide Account funds and \$50,000 from Basin Account funds from the Water Supply Reserve Fund for the Leroux Creek Reservoir System Dam Outlet Rehabilitation Project was reviewed by the Gunnison Basin Roundtable and its Project Screening Committee. The request for funding was approved by a unanimous vote of the Gunnison Basin Roundtable during our meeting on January 21, 2019.

This water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes. The requirements/language from the statute is provided in Part 3 of the Criteria and Guidelines. In addition, this project meets Goals 1, 2, 3, 4, 5, 6, 7, and 8 of the Gunnison Basin Implementation Plan.

Thank you for your support of this grant application.

Sincerely,



Frank J. Kugel  
Gunnison Basin Roundtable

cc: Kathleen Curry (email)  
Tom Alvey (email)  
Leroux Creek Water Users Association, applicant (email)



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**Colorado Water Conservation Board**  
**Water Supply Reserve Fund**  
**Grant Application**

**Instructions**

All WSRF grant applications shall conform to the current [2016 WSRF Criteria and Guidelines](#).

To receive funding from the WSRF, a proposed water activity must be approved by a Roundtable(s) **AND** the Colorado Water Conservation Board (CWCB). The process for Roundtable consideration and recommendation is outlined in the 2016 WSRF Criteria and Guidelines. The CWCB meets bimonthly according to the schedule on page 2 of this application.

If you have questions, please contact the current CWCB staff Roundtable liaison:

<b>Arkansas</b>  Ben Wade <a href="mailto:ben.wade@state.co.us">ben.wade@state.co.us</a> 303-866-3441 x3238	<b>Gunnison   North Platte            South Platte   Yampa/White</b>  Craig Godbout <a href="mailto:craig.godbout@state.co.us">craig.godbout@state.co.us</a> 303-866-3441 x3210	<b>Colorado   Metro   Rio Grande            Southwest</b>  Megan Holcomb <a href="mailto:megan.holcomb@state.co.us">megan.holcomb@state.co.us</a> 303-866-3441 x3222
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**WSRF Submittal Checklist (Required)**

X	I acknowledge this request was recommended for CWCB approval by the sponsoring roundtable.
X	I acknowledge I have read and understand the <a href="#">2016 WSRF Criteria and Guidelines</a> .
X	I acknowledge the Grantee will be able to contract with CWCB using the <a href="#">Standard Contract</a> . <sup>(1)</sup>
Application Documents	
X	Exhibit A: Statement of Work <sup>(2)</sup> ( <i>Word – see Template</i> )
X	Exhibit B: Budget & Schedule <sup>(2)</sup> ( <i>Excel Spreadsheet – see Template</i> )
	Letters of Matching and/or Pending 3 <sup>rd</sup> Party Commitments <sup>(2)</sup>
X	Map <sup>(2)</sup>
	Photos/Drawings/Reports
	Letters of Support
Contracting Documents <sup>(3)</sup>	
	Detailed/Itemized Budget <sup>(3)</sup> ( <i>Excel Spreadsheet – see Template</i> )
	Certificate of Insurance <sup>(4)</sup> ( <i>General, Auto, &amp; Workers' Comp.</i> )
	Certificate of Good Standing <sup>(4)</sup>
X	W-9 Form <sup>(4)</sup>
	Independent Contractor Form <sup>(4)</sup> ( <i>If applicant is individual, not company/organization</i> )
	Electronic Funds Transfer (ETF) Form <sup>(4)</sup>

(1) Click "Grant Agreements". For reference only/do not fill out or submit/required for contracting  
 (2) Required with application if applicable.  
 (3) Additional documentation providing a Detailed/Itemized Budget maybe required for contracting. Applicants are encouraged to coordinate with the CWCB Project Manager to determine specifics.  
 (4) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.

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<b>Schedule</b>		
<b>CWCB Meeting</b>	<b>Application Submittal Dates</b>	<b>Type of Request</b>
January	December 1	Basin Account; BIP
March	February 1	Basin/Statewide Account; BIP
May	April 1	Basin Account; BIP
July	June 1	Basin Account; BIP
September	August 1	Basin/Statewide Account; BIP
November	October 1	Basin Account/BIP

<b>Desired Timeline</b>	
Desired CWCB Hearing Month:	March, 2019
Desired Notice to Proceed Date:	April 30, 2019

<b>Water Activity Summary</b>	
Name of Applicant	Leroux Creek Water Users Association
Name of Water Activity	Leroux Creek Reservoir System, Dam Outlet Rehabilitation
Approving Roundtable(s)	Basin Account Request(s) <sup>(1)</sup>
Gunnison Basin	\$50,000
Basin Account Request Subtotal	\$50,000
Statewide Account Request <sup>(1)</sup>	\$150,000
Total WSRF Funds Requested (Basin & Statewide)	\$200,000
Total Project Costs	\$255,145.61

(1) Please indicate the amount recommended for approval by the Roundtable(s)

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Grantee and Applicant Information	
Name of Grantee(s)	Leroux Creek Water Users Association
Mailing Address	30869 L25 Road, P.O. Box 275, Hotchkiss, CO 81419
FEIN	84-6038426
Grantee's Organization Contact <sup>(1)</sup>	Mark Smith
Position/Title	President/General Manager
Email	tms2560@aol.com
Phone	970-872-2196
Grant Management Contact <sup>(2)</sup>	Bruce Marvin
Position/Title	Engineering Consultant
Email	westeng23@gmail.com
Phone	970-242-5202
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

**(1)** Person with signatory authority

**(2)** Person responsible for creating reimbursement invoices (Invoice for Services) and corresponding with CWCB staff.

Description of Grantee
Provide a brief description of the grantee's organization (100 words or less).
<p>Leroux Creek Water Users' Association (LCWUA) was incorporated in 1948 as a non profit irrigation company. Its principle assets are 29 small reservoirs in the Leroux Creek drainage which contain a combined active volume of approximately 5,000 Acre-Feet, the water rights for these reservoirs and direct flow rights from Leroux Creek. The reservoirs were built in the early 1900's by individual farmers and ranchers who pooled their interests in exchange for stock in the Association in 1948. LCWUA participated in the U.S. Bureau of Reclamation Paonia Project (sponsored by the North Fork Water Conservancy District) by acquiring and redistributing water rights traded by farmers who received Paonia Reservoir water in exchange. There are 5,614 shares of reservoir stock outstanding including 5,109 shares applied to agriculture and 505 held by municipal/domestic water users. The service area includes 2,000 acres of irrigable land, with over 90 percent of those acres currently irrigated. Current land use includes 95 parcels with a crop distribution of about 53 percent grass-pasture, 20 percent alfalfa, 1 percent grapes, and 26 percent orchards. Two municipal/domestic water users own shares including the Town of Hotchkiss and the Rogers Mesa Domestic Water Company. Maps of the reservoir service area and the locations of the Gray and Goodenough reservoirs are attached as exhibits to this application.</p>



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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> are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.
	<b>Non-governmental organizations:</b> broadly, any organization that is not part of the government
	<b>Covered Entity:</b> as defined in <a href="#">Section 37-60-126 Colorado Revised Statutes</a>

Type of Water Activity (check one)	
	Study
X	Implementation

Category of Water Activity (check all that apply)	
	Nonconsumptive (Environmental)
	Nonconsumptive (Recreational)
X	Agricultural
X	Municipal/Industrial
	Needs Assessment
	Education & Outreach
	Other
	Explain:

Location of Water Activity	
Please provide the general county and coordinates of the proposed activity below in <b>decimal degrees</b> . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Countries	Delta
Latitude	Goodenough Dam, 39.037° N, Gray Dam 38.993° N
Longitude	Goodenough Dam 107.678° W, Gray Dam 107.701° W

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### Water Activity Overview

Please provide a summary of the proposed water activity (200 words or less). Include a description of the activity and what the WSRF funding will be used for specifically (e.g. studies, permitting, construction). Provide a description of the water supply source to be utilized or the water body affected by the activity. 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, area of habitat improvements. 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, and Schedule.

The proposed activity consists of rehabilitation of the outlet pipes for two dams within the Leroux Creek Reservoir System. Gray Dam outlet consists of 213 feet of 18" dia. corrugated steel pipe. Recent video inspections have revealed numerous pipe corrosion defects which indicate that the pipe is nearing the end of its useful life. If left uncorrected, the pipe will become unsafe for storage releases in the near future. At some point (probably within the next 5 to 10 years), lining of the pipe may no longer be feasible, requiring removal and replacement, which will nearly quadruple the cost of rehabilitation. Goodenough Dam outlet consists of 234 feet of 12" dia smooth steel pipe. Recent video inspections and other investigations have not revealed any significant defects in the pipe. However, there are a number of factors that contribute to concerns over the pipe's expected future life and have led to the decision by LCWUA to pursue outlet rehabilitation. These factors include the Significant Hazard rating by the Colorado State Engineer, the fact that the outlet pipe consists of uncoated steel pipe which is subject to corrosion, the age of the pipe (70 years) and the fact that a significant portion of the pipe retains water when the regulating gate is closed (preventing inspection of the full internal surface of the pipe). This project is intended to extend the life expectancy of both outlet pipes by placement of an internal liner by use of the Cured-in-Place Pipe method and by installation of a filter drain surrounding the pipe at the downstream end of each outlet. The funding will be used for the construction work described above as well as permitting, bidding, final design and project administration. These two reservoirs are part of a system that can serve an area of up to 2,000 irrigated acres plus domestic water systems (see the paragraph "Description of Grantee" for more detailed land use information).

### Measurable Results

To catalog measurable results achieved with WSRF funds please provide any of the following values.

	New Storage Created (acre-feet)	
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
1,296	Existing Storage Preserved or Enhanced (acre-feet)	
	Length of Stream Restored or Protected (linear feet)	
	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
	Area of Restored or Preserved Habitat (acres)	
	Length of Pipe/Canal Built or Improved	
	Other	Explain:

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### Water Activity Justification

Provide a description of how this water activity supports the goals of [Colorado's Water Plan](#), the most recent [Statewide Water Supply Initiative](#), and the respective [Roundtable Basin Implementation Plan and Education Action Plan](#) <sup>(1)</sup>. 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).

For applications that include a request for funds from the Statewide Account, the proposed water activity shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan criteria for state support (CWP, Section 9.4, pp. 9-43 to 9-44;) (Also listed pp. 4-5 in [2016 WSRF Criteria and Guidelines](#)).

**A. Gunnison Basin Implementation Plan (BIP):**

1. Primary goal - Protect existing water uses in the Gunnison Basin - If these outlet pipes are not rehabilitated, the eventual outcome would consist of administrative/regulatory storage restrictions, followed by mandated dam breaching, followed by water right abandonment. For at least the last 50 years agricultural water users in Western Colorado have not had the financial ability to build new or replace water storage projects without significant involvement from Municipal or Industrial (M&I) participants. Therefore, loss of storage from either Gray or Goodenough reservoirs would likely be a permanent loss for Leroux Creek agricultural water users. The water rights for these reservoirs are very senior and, in the event of abandonment of the water rights, even if it were possible to replace the storage, the associated water rights would be much more junior in the priority system. A significant portion of these water rights have a pre-1922 appropriation date and are therefore exempt from curtailment under the Colorado River Compact. The State of Colorado places a very high value on these pre-compact water rights because of their potential use in mitigating the potential for curtailments resulting from a Colorado River compact call.

2. Complementary goals:

a. Discourage the conversion of productive agricultural land to all other uses within the context of private property rights - Abandonment of these reservoirs and their water rights would result in permanent loss of water available to agricultural users in the area inevitably followed by conversion of a portion of the irrigated land in the service area to other uses.

b. Improve agricultural water supplies to reduce shortages - The BIP (Table 13) identified the agricultural needs shortage for the North Fork of the Gunnison as 68,000 ac-ft/yr, by far the highest (by a factor of 4) of all the Gunnison River basins. Loss of these two facilities would further increase already acute shortages in the basin.

c. Identify and address municipal and industrial water shortages - Since part of the water from these reservoirs is used to supply municipal and domestic water, their abandonment would increase shortages for those purposes.

d. Quantify and protect environmental and recreational water uses - Goodenough reservoir is large enough and accessible enough that it is an attractive destination for camping and fishing. Water released from the two reservoirs occurs mostly during mid to late summer months when natural stream flows are at their lowest. Therefore, the water released from these reservoirs has the effect of maintaining vital and healthy fish habitat in Leroux Creek during the driest parts of the year. Leroux Creek is a productive and popular fishery year round because of the reservoir releases. Additionally, the irrigation return flows from these water releases contribute to minimum stream flows in channels downstream from the irrigated lands (including the main stem of the Gunnison River) during the critical periods. In the event of abandonment, these flow contributions would be lost.

e. Maintain or, where necessary, improve water quality throughout the Gunnison basin - The direct flows in Leroux Creek from reservoir releases as well as the irrigation return flows mentioned above likely have a dilution effect on downstream waters without which water quality would likely decrease.

f. Describe and encourage the beneficial relationship between agricultural and environmental and recreational water uses - see items A.2.d and A.2.e above.

g. Restore, maintain and modernize critical water infrastructure including hydropower - The goal of this project is to restore and maintain water infrastructure components on the two subject dams.

3. BIP Proposed Projects (Table 18 - Proposed Gunnison Basin Projects) - Gray and Goodenough reservoirs are specifically identified in Table 18 under Reference Item number 17 - "Rehabilitation/Enlargement of 28 Reservoirs LCWUA". Gray and Goodenough reservoirs are two of those 28 facilities. Additionally, Table 18, reference item number 16 - "Inventory of Irrigation



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## Water Activity Justification

Infrastructure Improvement Needs-District 40, Upper North Fork" refers to an inventory which was completed in June, 2011 and included evaluation of these two reservoirs. This Inventory identified further investigations of the outlet pipes for the Gray and Goodenough reservoirs as high priority tasks.

B. Evaluation Criteria for State Support (from the Colorado Water Plan as presented in the 2016 WSRF Criteria and Guidelines):

1. Does the project proponent demonstrate a commitment to collaboration? Does the project proponent:

a. Address more than one type of need - The two storage facilities provide water for a combination of agricultural, municipal/domestic, environmental and recreational uses.

b. Consult with a broad set of local stakeholders and local governments before or early in the regulatory process or provide meaningful opportunities for input - The list of stakeholders includes all shareholders in LCWUA and associated water users, encompassing the Town of Hotchkiss, the Rogers Mesa Domestic Water Company as well as the agricultural enterprises. All of these individuals and entities have been consulted and given the opportunity for input. The condition of Gray reservoir outlet had not been raised as a concern of the Colorado State Engineer, Dam Safety until the project proponent raised concerns of their own and enlisted the assistance of Dam Safety to perform further investigations. Similarly, even though Dam Safety had raised concerns about the condition of the Goodenough outlet pipe, the proponent requested Dam Safety's assistance in monitoring and characterizing the outlet condition.

2. Does the project proponent address an identified water gap? Is the project:

a. Included in a BIP - As mentioned in item A.3. above, the two reservoir projects comprising the water activity which are the subject of this application were specifically identified as proposed projects in the Gunnison BIP as well as being addressed in an inventory study that was included in the proposed project list of the Gunnison BIP.

b. Identified as meeting a defined need in a basin needs assessment - See item A.2.b. above.

c. Identified as meeting a defined need in the SWSI - The 2010 SWSI report (section 4.3.2) presented a projected 2050 water supply shortage for the Gunnison basin of 16,000 ac. ft./yr, which represents 7 percent of the 1,722,000 projected Statewide shortage. Preservation of these two facilities and their respective water rights avoids further increasing that need.

d. Identified as part of the no-and-low-regrets scenario planning process - The Colorado Water Plan (Page 6-8) included the following component for definition of "regret": "Significant consequences to Colorado's agriculture, environment, or economy because Colorado's water community did not implement projects and methods consistent with Colorado's water values". Under this definition, abandonment and loss of facilities and water rights such as comprise Gray and Googenough reservoirs would certainly be considered a regret.

3. Does the project proponent demonstrate sustainability? - Using the UN World Commission on Environment and Development definition of "sustainability" as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs", maintaining these two reservoirs satisfies that definition since it benefits both current and future generations with no adverse impacts.

Does the project proponent:

a. avoid adverse effects to environmental and recreational interests - see item A.2.d. above.

b. avoid adverse impacts to, mitigate, or enhance water quality such as exceeding water quality standards or impairment of classified uses. - see item A.2.e. above.

c. Mitigate or avoid economic and social impacts on agricultural and rural communities - See item A.1 and items A.2.a and A.2.b above. The entire purpose of this project is to maintain the viability of the entire agriculture community that relies on the Leroux Creek reservoirs for critical late-season irrigation water.

d. Maximize the use of water resources (through reuse, firming the yield of existing supplies, water sharing arrangements, improving or modernizing aging infrastructure, or aquifer storage and recharge projects) - The proposed project consists of improving aging infrastructure.

e. Demonstrate that the project will not unreasonably increase the risk of non-compliance with any interstate compact or the curtailment of existing water rights - A portion of the water rights for these reservoirs have appropriation dates extending back to 1892 and a significant portion of them have pre-1922 appropriation dates. Pre-1922 water rights are not subject to curtailment under the Colorado River Compact and are, therefore highly valuable in developing curtailment mitigation strategies such as "water banking". The State has a strong stated interest in preserving all pre-1922 water rights within

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### Water Activity Justification

the Colorado River system and loss of any of these rights or their associated structures would increase the risk of curtailment resulting from a Colorado River Compact call.

4. Does the project proponent establish the fiscal and technical feasibility of the project? Does the project proponent demonstrate:

a. Overall cost-effectiveness - The outlet rehabilitation project described in this application has a cost of roughly \$250,000. If the outlet pipes were allowed to continue to deteriorate to the point that they had to be removed and replaced the repair cost would be around four times that much. Alternatively, if the facilities and water rights were allowed to reach the point of abandonment, the permanent on-going cost to the local water users (in lost revenue) and to the State as a whole would far exceed this amount.

b. Local investment or contribution - The LCWUA is contributing to the cost of the project by means of shareholder assessments, possible loans and potential other funding sources.

c. An intent to leverage any state grant or loan with private, local or federal funding. - See item B.4.b above.

d. Technical and legal availability of water supplies for the project - Assuming that the outlet pipes are rehabilitated in the very near future these two reservoirs will continue to operate as they historically have in accordance with their respective water rights and shareholder water needs. The diversion records indicate that Gray reservoir has a very high yield performance. It fills nearly every year (97.3% of the years) and the average annual storage is 92.5% of the full storage capacity of 424 ac-ft. Goodenough fills 25.6% of the time. That is only because the foundation and abutments contain zones of higher permeability. If these permeable zones were treated, the reservoir could be expected to fill in most years because of the reliable annual runoff capacity of the drainage basin. The average annual storage of the Goodenough reservoir is 74.5% of its 872 ac-ft capacity meaning that, even with the permeable foundation zones, it still stores about 650 acre-feet in an average year..

e. Readiness to proceed upon receipt of necessary funding and permits (i.e. completed preliminary planning and design work, obtained necessary water rights, secured necessary financial commitments) - Sufficient planning, investigation and design work has been performed to date so that all aspects of the work have been identified and characterized and a reliable cost estimate has been developed. The work on the structure is expected to be performed during the fall of 2019 and prior to that time all permitting and design details will be obtained and/or developed. The LCWUA is confident that the funding and financing requirements will be met.

(1) Access Basin Implementation Plans or Education Action Plans from Basin drop down menu.

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**Matching Requirements: Basin Account Requests**

**Basin (only) Account** grant requests require a 25% match (cash and/or in-kind) from the Applicant or 3<sup>rd</sup> party and shall be accompanied by a **letter of commitment** as described in the 2016 WSRF Criteria and Guidelines (submitted on the contributing entity's letterhead). Attach additional sheet if necessary.

Contributing Entity	Amount and Form of Match (note cash or in-kind)
Total Match	\$
If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived.	

**Matching Requirements: Statewide Account Requests**

**Statewide Account** grant requests require a 50% match as described in the 2016 WSRF Criteria and Guidelines. A minimum of 10% match shall be from Basin Account funds (cash only). A minimum of 10% match shall be provided by the applicant or 3<sup>rd</sup> party (cash, in-kind, or combination). The remaining 30% of the required match may be provided from any other source (Basin, applicant, or 3<sup>rd</sup> party) and shall be accompanied by a **letter of commitment**. Attach additional sheet if necessary.

Contributing Entity	Amount and Form of Match (note cash or in-kind):
Gunnison Basin Roundtable	\$50,000 cash
Leroux Creek Water Users' Association	\$20,000 cash
Leroux Creek Water Users' Association	\$35,145.61 in-kind
Total Match	\$105,145.61
If you requested a Waiver to the Statewide Account matching, indicate % you wish waived. (Max 50% reduction of requirement).	

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**Related Studies**

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

North Fork Water Conservancy District Water Management Plan (Bureau of Reclamation 2001 updated 2009).

Safety and Serviceability Needs Inventory for Reservoirs in the Leroux Creek Drainage Basin (LCWUA, June, 2011)

**Previous CWCB Grants**

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

Applicant: Leroux Creek Water Users' Association  
 Water Activity Name: Safety and Serviceability Needs Inventory for Reservoirs in the Leroux Creek Drainage Basin  
 Approving RT: Gunnison Basin  
 CBWB Board meeting date: March, 2007  
 Contract/P.O number: 8000000008

Applicant: Leroux Creek Water Users' Association  
 Water Activity: Hanson Reservoir Outlet Rehabilitation  
 Approving RT: Gunnison Basin  
 Water Activity Name: Hanson Reservoir Outlet Rehabilitation  
 CWCB Board meeting date: May, 2010?  
 Contract/P.O number: 11000000068

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### Tax Payer Bill of Rights

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

There are no applicant TABOR limitations related to the potential grant funds for this water activity.



Last Update: January 9, 2018

<b>Colorado Water Conservation Board</b>	
<b>Water Supply Reserve Fund</b>	
<b><u>Exhibit A - Statement of Work</u></b>	
<b>Date:</b>	<b>11/28/18</b>
<b>Water Activity Name:</b>	<b>Leroux Creek Reservoir System, Dam Outlet Rehabilitation</b>
<b>Grant Recipient:</b>	<b>Leroux Creek Water Users' Association</b>
<b>Funding Source:</b>	<b>Gunnison Basin Account/Statewide Account</b>
<b>Water Activity Overview:</b> (Please provide brief description of the proposed water activity (no more than 200 words). Include a description of the overall water activity and specifically what the WSRF funding will be used for.)	
<p>The proposed activity consists of rehabilitation of the outlet pipes for two dams within the Leroux Creek Reservoir System. Gray Dam outlet consists of 213 feet of 18" dia. corrugated steel pipe. Goodenough Dam outlet consists of 234 feet of 12" dia smooth steel pipe. This project is intended to extend the life expectancy of both outlet pipes by placement of an internal liner by use of the Cured-in-Place Pipe (CIPP) method and by installation of a filter drain surrounding the pipe at the downstream end of each outlet. The WSRF funding will be used for engineering, construction, inspection and documentation.</p>	
<b>Objectives:</b> (List the objectives of the project)	
<ol style="list-style-type: none"> <li>1. Divert stream flow around the reservoir and/or work areas.</li> <li>2. Remove deteriorated portions of the downstream end of the outlet pipes as needed.</li> <li>3. Extend the downstream end of the outlet pipes with new pipe as needed.</li> <li>4. Install filter drain around the outside of the downstream portions of the outlet pipes.</li> <li>5. Clean the inside of the outlet pipes by flushing and/or high pressure jetting.</li> <li>6. Install and cure CIPP liners inside both outlet pipes.</li> <li>7. Install protective stainless sleeves at the outlet pipe inlet for both pipes.</li> <li>8. Perform a final video inspection of the lined outlet pipes.</li> </ol>	



Last Update: January 9, 2018

<b>Tasks</b>
Provide a detailed description of each task using the following format:
<b><u>Task 1 - Final Permitting and Engineering</u></b>
Description of Task:
Obtain necessary permits, approvals and prepare construction documents
Method/Procedure:
This task will include obtaining all environmental, land use, access and other related permits. The work will also include any necessary field investigations, surveys. Final design drawings and specifications will be prepared including review and approval by the Colorado State Engineer, Dam Safety department.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Approved and signed permits.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Approved and signed permits, investigation reports, drawings and specifications.



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<b>Tasks</b>	
<b>Task 2 - Construction</b>	
Description of Task:	
Construct the outlet filter drain and install the CIPP liners.	
Method/Procedure:	
<p>This task will encompass all activities related to rehabilitating the outlet pipes including construction surveys, mobilization and demobilization of all necessary equipment, diverting stream flows around the work areas, constructing the outlet pipe filter drains, furnishing all materials, cleaning the inside of the outlet pipes, installing and curing the CIPP liner, performing a final video inspection of the lines pipes and performing all necessary quality assurance tests, and all quality assurance inspections.</p> <p>The CIPP lining method involves insertion of a liner through the pipe by either winching or inversion (pushing the liner through the pipe with air or water pressure by inverting it like a sock). After liner insertion into the pipe, the liner is inflated with either air or water pressure to press it against the interior surface of the pipe and then the liner is hardened by using a curing process. There are generally two types of liners used. First is a felt liner that has been saturated with a thermal-sensitive resin. In this case, the liner is cured by passing either steam or hot water through the inside of the liner for a pre-determined period of time until the resin has fully hardened. Second is a fiberglass liner that has been saturated with an ultraviolet light sensitive resin. In this case, the liner is cured by running a train of UV lights through inside of the liner. Dam outlets have been lined using these methods for approximately 10 years in the Western Colorado area. Most of the prior lining projects have been by use of the thermal curing methods. However, there are significant advantages to the UV cure methods over thermal curing. The internal CIPP lining mitigates the pipe's future internal corrosion potential, but there are remaining external corrosion processes that continue. To address the potential for soil migration along the outside of the outlet pipes as a result of progressive corrosion effects, a "diaphragm" filter drain will be constructed near the downstream end of each pipe. This filter consists of a sand filtering material placed around the outside of the pipe with a piped drainage system to the ground surface. The purpose of the filter drain is three-fold - to intercept any seepage flows running along the outside of the pipe, filter out any soil particles being carried with the seepage water and allow monitoring observations of the drain discharge to quantify any external seepage which is occurring.</p>	
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)	
Invoices and payment requests.	
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)	
Invoices, payment requests, grant disbursement requests and project status reports.	



Last Update: January 9, 2018

<b>Tasks</b>
Provide a detailed description of each task using the following format:
<b><u>Task 3 - Completion Documentation</u></b>
Description of Task:
Document all construction activities.
Method/Procedure:
This task will include preparing a construction report containing a description and chronology of all construction activities, photo records, field changes to the design, unexpected conditions encountered, quality assurance test results and inspection reports and any notes from any significant meetings. Also, as-constructed drawings will be prepared. Also included will be a summary of matching contributions.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
Quality assurance testing performed by entities other than the engineer.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
Final construction report, as-constructed drawings and summary of matching contributions.

**Repeat for Task 3, Task 4, Task 5, etc.**



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### Budget and Schedule

**Exhibit B - 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. A separate excel formatted Budget is required for engineering costs to include rate and unit costs.

### Reporting Requirements

**Progress Reports:** The grantee 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 grantee shall provide the CWCB a Final Report on the grantee'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.

### Payments

Payment will be made based on actual expenditures, must include invoices for all work completed and must be on grantee's letterhead. 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.

The CWCB will pay the last 10% of the entire water activity 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 water activity and purchase order or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to CWCB within 90 days of the expiration of a purchase order or contract may be denied consideration for future funding of any type from CWCB.

### Performance Requirements

Performance measures for this contract shall include the following:

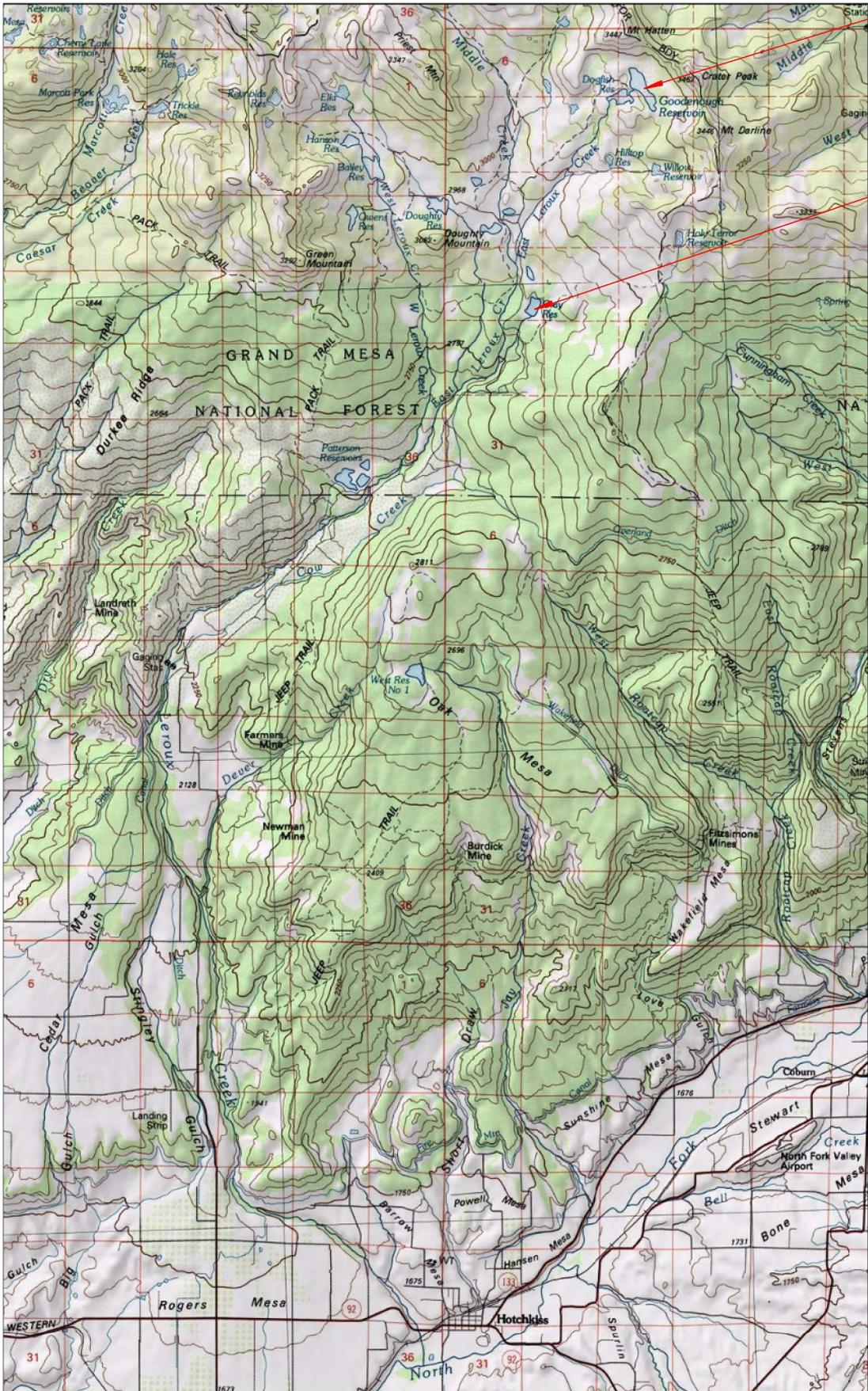
(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Grant Guidelines, the CWCB will pay out the last 10% of the budget when the final deliverable is completed to the satisfaction of CWCB staff. Once the final deliverable has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per the 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 the 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.

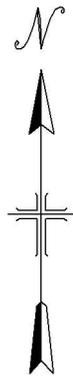
(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.





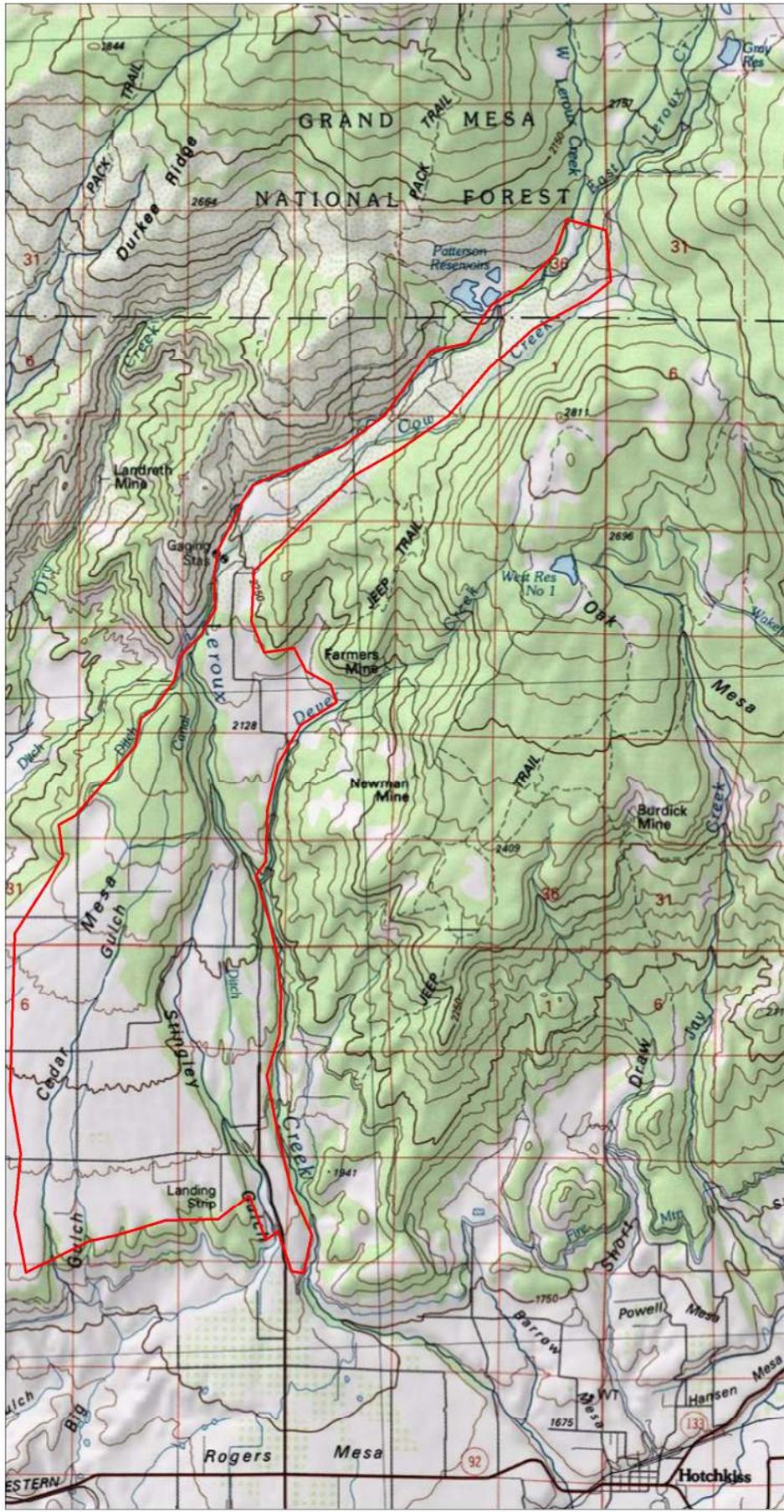
GOODENOUGH RESERVOIR

GRAY RESERVOIR



**LEROUX CREEK WATER  
USERS ASSOCIATION  
GRAY AND GOODENOUGH RESERVOIR  
LOCATION MAP**





LEGEND:  
 — SERVICE AREA BOUNDARY

LEROUX CREEK WATER  
 USERS ASSOCIATION  
 SERVICE AREA

