

STATE OF COLORADO

Colorado Water Conservation Board

Department of Natural Resources

1313 Sherman Street, Room 721

Denver, Colorado 80203

Phone: (303) 866-3441

Fax: (303) 866-4474

www.cwcb.state.co.us



John W. Hickenlooper
Governor

Mike King
DNR Executive Director

Jennifer L. Gimbel
CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Ryan Edwards, P.E., Project Manager
Kirk Russell, P.E., Chief
Finance Section

DATE: September 18, 2012

SUBJECT: **Agenda Item 23a, September 27-28, 2012 Board Meeting**
Finance/Water Supply Planning – WSRA Grant & Construction Fund Loan
Town of Ridgway – Lake Otonowanda Rehabilitation Project

Introduction

The Town of Ridgway (Town), acting by and through its Water Enterprise, is applying for a WSRA grant and CWCB loan to finance the Lake Otonowanda Rehabilitation Project (Project). The purpose of the Project is to rehabilitate Lake Otonowanda (Otonowanda) and increase the Town's raw water storage capacity to ensure a reliable water supply is available under future drought conditions. The total cost of the Project is estimated to be \$2,080,850. The Town was approved for a \$600,000 grant by the Gunnison River Basin Round Table from the Water Supply Reserve Account and has requested a CWCB loan to assist with Project costs. See the attached Project Data Sheet for a location map and project summary.

Staff Recommendation for WSRA Grant

Staff recommends grant approval of \$540,000 from the Statewide Account and \$60,000 from the Gunnison Basin account to help fund the Town of Ridgway's Lake Otonowanda Rehabilitation Project.

Staff Recommendation for Construction Fund Loan

Staff recommends the Board approve a loan, from the Construction Fund, not to exceed \$606,000 (\$600,000 for Project costs and \$6,000 for the 1% Loan Service Fee) to the Town of Ridgway, acting by and through its Water Enterprise, for the Lake Otonowanda Rehabilitation Project. The loan terms shall be 30 years at a middle-income municipal interest rate of 3.0% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Staff further recommends the following loan contract condition: Prior to disbursement of funds the Town shall have the necessary funds secured to finance the entire Project.

Background

The Town is responsible for supplying potable water to 695 single family equivalence (SFE's). It derives the majority of its raw water supply from two sources: the Ridgway Ditch system and the Happy Hallow system. Diversions from these two systems directly feed the Town's treatment plant. During 2002, all of the Town's water rights fell out of priority due to extended drought conditions. Over the past decade the Town has dedicated technical and financial resources towards studying, designing and constructing improvements to increase the reliability and efficiency of its municipal water system to avoid a recurrence of 2002. The rehabilitation of Otonowanda will improve the Town's overall supply and storage system.

Otonowanda is a 109-AF reservoir located approximately 4 miles south of the Town. It lies within the Ridgway Ditch system and is situated in a natural depression, and the storage volume is created by a dam crossing the depression. Ridgway Ditch gets its water from diversions on the mainstem and East Fork of Beaver Creek. A wooden diversion box along Ridgway Ditch, adjacent to Otonowanda, can direct water to the reservoir or allow it to bypass to the Otonowanda Pipeline. The pipeline is a direct conveyance to the treatment plant's sedimentation basin. The existing Otonowanda outlet structure is located on the northwest side of the reservoir and consists of a tunnel that collapsed years ago, rendering the outlet inoperable. The Town owns a pump that it can install to draw water from Otonowanda in an emergency event.

The improvements proposed with this Project include constructing a functional outlet system to control release rates, line a portion of Otonowanda to protect against seepage, and replace the existing dam with a larger dam, increasing the storage capacity from 109 AF to 363 AF. The reconstructed dam will increase the surface area of Otonowanda from 26 AF to 29 acres.

Loan Feasibility Study

The loan feasibility study titled "*Town of Ridgway – Lake Otonowanda Rehabilitation Project*," dated July 9, 2012, was prepared by Joanne Fagan, P.E., Town Engineer for Ridgway. Legal support was provided by city attorney John Kappa, Esq. The study was prepared in accordance with CWCB guidelines and includes a preliminary engineering design that was used in the determination of the total Project cost.

A related study titled "*Ridgway Ditch & Otonowanda Reservoir*," dated January 2012, was prepared by Craig Ulman, P.E., from Applegate Group, Inc. The study provided the Town an analysis of available water supplies and potential alternatives for meeting current and future potable water demands. Information from the study was used in preparation of the loan feasibility study.

Town of Ridgway

The Town of Ridgway is a home rule municipality established in 1891. It is located along the Uncompahgre River in the foothills of the San Juan Mountains in southwest Colorado, and has a population of approximately 1,000 people. The Town is responsible for the delivery of water to the local businesses and residents within its municipal boundary. It operates its water treatment and delivery services through a Water Enterprise Fund. The Enterprise generates the majority of its operating revenue through a monthly service charge and monthly water usage fees. Tap fees, transfer fees and investment income supplement the revenue stream but generally in minor amounts.

The Town's water facilities include the Beaver and East Fork Beaver diversion gates, Happy Hollow diversion gate, two 300,000 gallon storage tanks, the treatment facility and the pipe distribution network. On average, the Town delivers approximately 280 AF of treated water annually.

Water Rights

The Town is located in the Gunnison River Basin, District 68. The Town owns multiple direct flow rights, a 746-acre storage right in Otonowanda, and a 14.9-acre storage right in the sedimentation ponds. The rights all have an adjudication date of August 2, 1905 and appropriation dates ranging from June 1, 1890 to March 1, 1892.

Project Description

The primary goal of the Project is to make Otonowanda a reliable source of raw water storage by constructing a functional outlet control system and increasing the storage capacity, enabling the Town to store a greater percentage of its appropriated rights. The Applegate Group study included field surveys, geotechnical analysis, preliminary engineering design, and permitting requirements; and produced two alternatives for enlarging the reservoir:

Alternative A: On Property - involves removing the existing dam and constructing a larger dam in its place. This scenario would limit the expansion of the Otonowanda footprint to 3 acres (from 26 acres to 29 acres) while increasing the volume by approximately 254 AF (from 109 AF to 363 AF).

Alternative B: Off Property - involves removing the existing dam and using the natural topography. An existing saddle on adjacent property (private), requiring minimal grading, would function as the new dam. A spillway or overflow pipe and outlet works would be constructed to control discharge from the reservoir. This scenario would increase the storage volume by approximately 268 AF (from 109 AF to 377 AF), the surface area by 36 acres (from 26 acres to 62 acres), and require lease, construction and access easements across the adjacent property.

Both alternatives included options for seepage control, outlet control, inlet rehabilitation, and spillway design. After analyzing both, the Town selected Alternative A: On Property. Although the estimated construction costs are slightly greater, the Town felt it is a better alternative at this time versus dealing with the potential complications related to securing the necessary rights and access to the adjacent land. Table 1 provides a detailed summary of Project costs associated with the selected alternative.

TABLE 1: TOTAL PROJECT COST SUMMARY

Task	Cost
Engineering and Construction Management	\$217,860
Permitting and Easement Acquisition	\$36,157
Construction	\$1,660,751
Contingency (10%)	\$166,082
Total	\$2,080,850

The Town has coordinated with local, state and federal authorities in regards to permitting for the Project. The Ouray County Planning and Zoning staff has indicated that no local permits will be required. A Stormwater Management Plan and potentially a dewatering permit will be required in accordance with Colorado Department of Health and Environment (CDPHE) guidelines. And the U. S. Army Corps of Engineers concurred there are no jurisdictional wetlands impacted by the project; therefore, a 404 permit will not be required.

It is anticipated that the proposed dam will be classified as a small jurisdictional, non-public hazard dam and would require design approval by the State Engineer's Office (SEO). Final engineering, geotechnical design, and survey work is scheduled for this fall. It is anticipated that construction will begin as early as July 2013 and be completed in the summer of 2014.

Table 2 provides a summary of the financing components for the Project.

TABLE 2: PROJECT FUNDING SUMMARY

Applicant Contribution (in-house eng. design and construction mgmt.)	\$161,250
Department of Local Affairs (Energy and Mineral Impact Fund grant)	\$600,000
River District	
Design Grant	\$19,600
<u>Construction Grant</u>	<u>\$100,000</u>
TOTAL	\$119,600
WSRA Grant	
Gunnison River Basin	\$60,000
<u>Statewide</u>	<u>\$540,000</u>
TOTAL	\$600,000
CWCB Construction Fund Loan	\$600,000
Total Project Cost	\$2,080,850

CWCB disbursement of loan and WSRA grant funds will be issued at a prorated ratio of 1:1, up to the approved limit, for construction activities outlined in the Statement of Work detailing which tasks and subtasks will be funded with CWCB loan and WSRA grant monies.

Water Supply Reserve Account Grant

At the June 4, 2012 Gunnison Basin Roundtable meeting the Roundtable granted approval of the Lake Otonowanda Rehabilitation Project application request for \$60,000 in Basin Funds, and recommended approval of \$540,000 of Statewide Funds.

Source of Funds: \$540,000 Statewide Funds, \$60,000 Gunnison Basin Funds

Matching Funds: \$600,000 CWCB Loan, \$600,000 DOLA Energy & Minerals Assistance Fund (EIAF), \$161,250 Applicant Contribution, \$119,600 Colorado River District

Threshold and Evaluation Criteria: The application articulates how the Project satisfies the Threshold and Evaluation Criteria as summarized below:

Tier 1: Promoting Collaboration/Cooperation & Meeting Water Management Goals & Identified Needs: By making structural improvements to the outlet works, this Project provides interbasin needs at the municipal level. Increasing the capacity to store pre-1922 waters will provide value to western slope users in the event of a Compact Call. The Project is included in the SWSI 2010 Projects and Processes (IPP's) identified as needed to meet future water supply demands and is identified in the Basin's Needs Assessment.

Tier 2: Facilitating Water Activity Implementation: Without WSRA funding, the Town would not be in a financial position to implement this Project. The Project is the culmination of planning, design and implementation efforts dating back to 2002, and to this point the Town has contributed financially with cash funds and in-kind services. Funding the full Project cost exclusively through rate increases would place too great a burden on the average user's ability to pay. The Town is prepared to contribute an estimated \$161,250 towards the Project in the form of cash, in-house engineering design, and construction management activities. The Town has requested a \$600,000 CWCB loan which will be paid through a rate increase of up to \$5 per month; however, joining forces with State and local stakeholders is the only practical means the Town has to implement this Project at this time.

Tier 3: The Water Activity Addresses Issues of Statewide Value and Maximizes Benefits: This is a multipurpose project that benefits both consumptive and nonconsumptive uses. In addition to enlarging the reservoir, a portion of the reservoir will be lined to prevent against the excessive seepage that presently occurs. The Project will have an immediate impact on the Town of Ridgway and its ability to store its pre-1922 waters, assisting both the Town and Basin in the event of a Compact Call. The reservoir lies outside the Town's municipal boundary, on the edge of the San Juan Mountains, adjacent to a private conservation easement. Expanding Otonowanda will improve wildlife and the native plant habitat in the vicinity. Both the consumptive and nonconsumptive benefits are attainable at a price of less than \$6,000 per AF which is below the average cost of a majority of M&I projects in the region.

Discussion: The requested WSRA funds will enable the Town to finance a multi-purpose project in the Gunnison River Basin that will bolster raw water storage for serving current and future residents of the Town and enhance the habitat in and adjacent to the reservoir.

In addition to the requested WSRA funds, the applicant is seeking CWCB loan funds in the amount of \$600,000, a \$600,000 DOLA (EIAF) grant, \$119,600 from the Colorado River District for design and construction expenses, and plans to contribute in excess of \$161,000 of cash and in-kind contributions.

Issues/Additional Needs: CWCB staff requests that the following issues be addressed during contracting and Project execution:

- The applicant has the necessary funds secured to construct the entire Project.
- Applicant to provide a Statement of Work detailing which tasks and subtasks will be funded with the CWCB loan and WSRA grant monies.
- The sequencing of CWCB fund disbursements will be issued at a prorated ratio of 1:1, up to the approved limit, for construction activities as outlined in the Statement of Work.

Reporting and Deliverables: All products, data and information developed as a result of this grant must be provided to CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform.

Staff would like to highlight additional reporting and final deliverable requirements in accordance with the revised WSRA Criteria and Guidelines:

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the scope of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the Project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

Engineering: All engineering work (as defined in the Engineers Practice Act (§12-25-102(10) C.R.S.)) performed under this grant shall be performed by or under the responsible charge of professional engineer licensed by the State of Colorado to practice Engineering.

CWCB Construction Fund Loan

Financial Analysis

The Town qualifies for a middle-income municipal interest rate of 3.00% for a 30-year term. Table 3 provides a summary of the financial aspects of the loan request.

TABLE 3: FINANCIAL SUMMARY

CWCB Loan Amount	\$600,000
CWCB Loan Amount (including 1% Service Fee)	\$606,000
CWCB Annual Loan Payment	\$30,918
CWCB Loan Obligation (including 10% debt reserve funding)	\$34,009
Number of SFE's	695
Cost of Project (per month per SFE)	\$4.08
Cost of Project (per AF, based on 363 AF)	\$5,732

Creditworthiness: The Water Enterprise Fund has sufficient cash reserves on hand to cover its share of the Project and the fund has grown annually over recent years due to a surplus in operating revenues versus operating expenses. The surplus is a result of a recurring increase in service charges over the last three years, implemented in anticipation of this Project. The Enterprise is prepared to increase service charges, usage fees, or both as required to meet its financial obligations.

The Enterprise currently has four outstanding debt obligations. Table 4 provides a summary of the terms. The Town, nor the Enterprise, has ever defaulted on a loan, and all current obligations are in good standing.

TABLE 4: OUTSTANDING DEBT SUMMARY

Lender	Balance (as of July 9, 2012)	Annual Payment	Maturity Date
CWCB – Water Plant ¹	\$53,143	\$7,571	2020
DOLA – Water Plant ²	\$75,633	\$9,795	2021
CWRPDA ³	\$405,000	\$22,500	2030
Montrose Bank ⁴	\$122,325	\$15,225	2019

Collateral on the outstanding debt is as follows:

¹ Approximately 11,050 LF of water line and an intake structure

² A pledge of assessment revenues

³ A pledge of assessment revenues

⁴ A pledge of property tax revenues

Table 5 provides Financial Ratios for the Enterprise.

TABLE 5: FINANCIAL RATIOS

Financial Ratio	2011*	Future w/ Project
Operating Ratio (operating revenues/operating expenses) weak: <100% - average: 100% - 120% - strong: >120%	108% (average) \$335K/\$311K	101% (average) \$350K/\$345K
Debt Service Coverage Ratio (total eligible revenues-operating expenses)/total debt service weak: <100% - average: 100% - 120% - strong: >120%	144% (strong) (\$335K-\$256K)/\$55K	106% (average) (\$350K-\$256K)/\$89K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	144% (strong) \$447K/\$311K	130% (strong) \$447K/\$345K
Average Residential Water Bill (monthly) weak: >\$60 - average: \$30 - \$60 - strong: <\$30	\$32 (average)	\$42 (average)
Debt per Tap (based on 695 SFE) weak: >\$5,000 - average: \$2,500 - \$5,000 - strong: <\$2,500	\$944 (strong) \$656K/695	\$1,807 (strong) \$1.26M/695

**The historical ratios are based on calendar year 2011 financial statements as the previous year's statements are not representative of current financial ratios for the Town's Water Enterprise Fund. The Fund operated at a loss from 2008-2010. Starting in 2009 the Town imposed an annual increase in the water service fee of \$5 per month, raising the fee from \$22/ month in 2009 to its current 2012 rate of \$37/ month.*

Collateral: As security for the loan, the Town's Water Enterprise Fund will pledge its service charge and usage fee revenues backed by a rate covenant and provide annual financial reporting. This is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Joanne Fagan, P.E., Town Engineer, Town of Ridgway
Susan Schneider, AGO
Peter Johnson, AGO

Attachment: Water Project Loan Program – Project Data Sheet

CWCB Construction Loan Program Project Data Sheet

Borrower: Town of Ridgway

County: Ouray

Project Name: Lake Otonowanda Rehabilitation Project

Project Type: Reservoir Enlargement

Drainage Basin: Gunnison, District 68

Water Source: Ridgway Ditch

Total Project Cost: \$2,080,843

Funding Sources: Construction Fund, WSRA, DOLA, CO River District

Type of Borrower: middle-income municipal

Avg. Diversion: 280 AF (363 AF of reservoir storage)

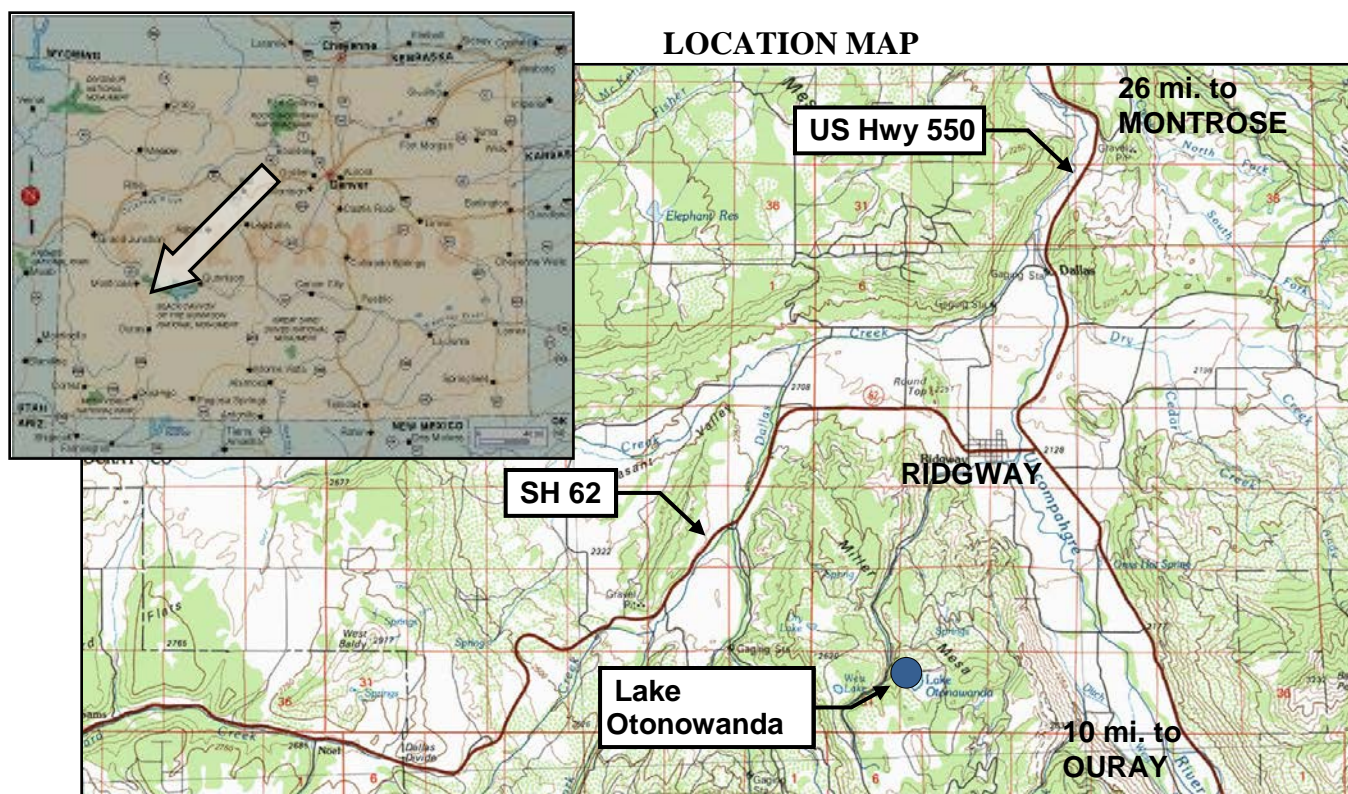
Loan Amount: \$606,000 (Including 1% fee)

Interest Rate: 3.0%

Term: 30 years

WSRA Grant Amounts: \$60,000 Gunnison Basin & \$540,000 Statewide

The Town of Ridgway is requesting a CWCB loan for rehabilitation improvements and enlargement of Lake Otonowanda to ensure a reliable water supply of raw water is available under future drought conditions. Otonowanda is the primary storage facility for the town, responsible for treating and delivering potable water to 695 SFE. Otonowanda, with a current capacity of 109 AF, does not have a functional outlet works; therefore, no way to control reservoir discharge. During 2002, all of the Town's water rights fell out of priority due to extended drought conditions and the Town was dangerously close to running out of water. The improvements to the reservoir, including: replacement of the outlet works, reservoir lining and a 254-AF enlargement, will provide the Town the ability to store more of its adjudicated water rights and a controlled means to release the water, firming the Town's water supply in the event of future call outs.



**The Gunnison Basin Roundtable
P. O. Box 544
Lake City, CO 81235**

June 6, 2012

**Mr. Todd Doherty
Intrastate Water Management and Development Section
COLORADO WATER CONSERVATION BOARD
1580 Logan Street, Suite 600
Denver, CO 80203**

**Re: Grant Request from the Water Supply Reserve Account
Town of Ridgway
Town of Ridgway Lake Otonowanda Renovation Project**

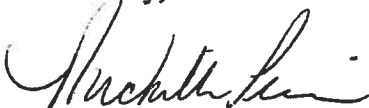
Dear Mr. Doherty:

This letter is presented to advise you that the grant application submitted by the Town of Ridgway for \$60,000 from Basin Account funds and \$540,000 from Statewide Account funds for the Town of Ridgway Lake Otonowanda Renovation Project was reviewed by the Gunnison Basin Roundtable and its Project Screening Committee, recommended for approval by that committee, and approved by a unanimous vote of the Gunnison Basin Roundtable during our meeting on June 4, 2012.

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.

This activity furthers the Gunnison Basin Roundtable's ongoing basin-wide water needs assessment process in that it rehabilitates existing infrastructure and provides augmentation water to offset a municipal shortage for the Town of Ridgway.

Sincerely,



**Michelle Pierce
Chair**

Cc: Tom Alvey (e-mail)



COLORADO WATER CONSERVATION BOARD
WATER SUPPLY RESERVE ACCOUNT
APPLICATION FORM



Town of Ridgway Lake Otonowanda Renovation Project

Name of Water Activity/Project

Town of Ridgway

Name of Applicant

Gunnison Basin

Amount from Statewide Account: \$540,000

Amount from Basin Account(s): \$60,000

Total WSRA Funds Requested: \$600,000

Approving Basin Roundtable(s)

(If multiple basins specify amounts in parentheses.)

Application Content

Application Instructions	page 2
Part I – Description of the Applicant	page 3
Part II – Description of the Water Activity	page 5
Part III – Threshold and Evaluation Criteria	page 7
Part IV – Required Supporting Material	
Water Rights, Availability, and Sustainability	page 10
Related Studies	page 10
Signature Page	page 12

Required Exhibits

- A. Statement of Work, Budget, and Schedule
- B. Project Map
- C. As Needed (i.e. letters of support, photos, maps, etc.)

Appendices – Reference Material

- 1. Program Information
- 2. Insurance Requirements
- 3. WSRA Standard Contract Information (Required for Projects Over \$100,000)
- 4. W-9 Form (Required for All Projects Prior to Contracting)

Water Supply Reserve Account – Application Form

Revised December 2011

Instructions

To receive funding from the Water Supply Reserve Account (WSRA), a proposed water activity must be approved by the local Basin Roundtable **AND** the Colorado Water Conservation Board (CWCB). The process for Basin Roundtable consideration and approval is outlined in materials in Appendix 1.

Once approved by the local Basin Roundtable, the applicant should submit this application **with a detailed statement of work including budget and schedule as Exhibit A** to CWCB staff by the application deadline.

WSRA applications are due with the roundtable letter of support 60 calendar days prior to the bi-monthly Board meeting at which it will be considered. Board meetings are held in January, March, May, July, September, and November. Meeting details, including scheduled dates, agendas, etc. are posted on the CWCB website at: <http://cwcb.state.co.us> Applications to the WSRA Basin Account are considered at every board meeting, while applications to the WSRA Statewide Account are only considered at the March and September board meetings.

When completing this application, the applicant should refer to the WSRA Criteria and Guidelines available at: <http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf>

The application, statement of work, budget, and schedule **must be submitted in electronic format** (Microsoft Word or text-enabled PDF are preferred) and can be emailed or mailed on a disk to:

Greg Johnson – WSRA Application
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
gregory.johnson@state.co.us

If you have questions or need additional assistance, please contact Greg Johnson at: 303-866-3441 x3249 or gregory.johnson@state.co.us.

Water Supply Reserve Account – Application Form
Revised December 2011

Part I. - Description of the Applicant (Project Sponsor or Owner);

1.	Applicant Name(s):	Town of Ridgway		
	Mailing address:	PO Box 10 Ridgway, CO 81432		
	Taxpayer ID#:	84-6000714		
	Primary Contact:	Jen Coates	Position/Title:	Town Manager
	Email:	jcoates@town.ridgway.co.us		
	Phone Numbers:	Cell: 970 729 1142	Office:	970 626 5308 x12
	Alternate Contact:	Joanne Fagan	Position/Title:	Town Engineer
	Email:	jfagan@town.ridgway.co.us		
	Phone Numbers:	Cell: 970 729 1282	Office:	970 626 5227

2. Eligible entities for WSRA funds include the following. What type of entity is the Applicant?

- ☒ Public (Government) – municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities and the local entity should be the grant recipient. 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.
- ☐ Private Incorporated – mutual ditch companies, homeowners associations, corporations.
- ☐ Private individuals, partnerships, and sole proprietors are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.
- ☐ Non-governmental organizations – broadly defined as any organization that is not part of the government.

Water Supply Reserve Account – Application Form

Revised December 2011

3. Provide a brief description of your organization

The Town of Ridgway is a home rule municipality with a Town Council/ Town Manager form of governance located in Ouray County, Colorado, and first incorporated in 1891.

Our local government organization retains 13 full-time employees with additional independent contracting services as necessary. Public Safety and Public Works, including water and wastewater services, road maintenance, and parks and recreation. The local government and community are guided by a Home Rule Charter, Municipal Code, Master Plan and a Strategic Plan.

The Town provides water and wastewater services to users within its incorporated boundaries. According to the 2010 US Census, 924 residents occupied Ridgway in 2010, representing an increase of 211 residents since 2000. The most dramatic rate of growth was 11.3% in 2005 – 2006. An additional 193 housing units (a 60.7% increase) were constructed within the municipal boundary between 2000 and 2010. The Census also reports 79% of all housing units as occupied, indicating a substantial year-round population for our rural community. From 2002 through the end of 2011 the Town welcomed 174 additional residential utility users and 43 additional commercial utility users, 67% and 64% increases respectively. These numbers are quite significant for our small community and indicative of the increasing demands on our utility infrastructure.

The Ridgway Local Government has worked actively for many decades to manage growth in a sustainable manner using various land use tools including numerous planning documents, land use regulations and a intergovernmental agreement with Ouray County. The economic recession has yielded a significant drop in construction and development activity and the Town is seizing the opportunity to evaluate and consider growth impacts and service demands. At this time we have a better understanding of our organizational and utility demands for a smart future when growth and development return. The Town water rates have become increasingly aggressive in the last decade and land use regulations encourage conservation.

Address: 201 N. Railroad Street, P.O. Box 10, Ridgway, Colorado 81432

Phone: (970) 626-5308

Town Manager - Jen Coates x12

4. If the Contracting Entity is different then the Applicant (Project Sponsor or Owner) please describe the Contracting Entity here.

N/A

5. Successful applicants will have to execute a contract with the CWCB prior to beginning work on the portion of the project funded by the WSRA grant. In order to expedite the contracting process the CWCB has

Water Supply Reserve Account – Application Form

Revised December 2011

established a standard contract with provisions the applicant must adhere to. A link to this standard contract is included in Appendix 3. Please review this contract and check the appropriate box.

☒

The Applicant will be able to contract with the CWCB using the Standard Contract

☐

The Applicant has reviewed the standard contract and has some questions/issues/concerns. Please be aware that any deviation from the standard contract could result in a significant delay between grant approval and the funds being available.

6. 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.

No issues are anticipated.

Water Supply Reserve Account – Application Form

Revised December 2011

Part II. - Description of the Water Activity/Project

1. What is the primary purpose of this grant application? (Please check only one)

☐

Nonconsumptive (Environmental or Recreational)

☐

Agricultural

☒

Municipal/Industrial

☐

Needs Assessment

☐

Education

☐

Other

Explain:

2. If you feel this project addresses multiple purposes please explain.

The primary purpose of the reservoir renovation is to insure an adequate municipal water supply for Ridgway residents and businesses for both the short-term (low water and drought years) and the long-term (population growth and development). The Town and Ouray County entered into an intergovernmental agreement (IGA) in 2002 whereby growth is targeted and focused to occur within the municipal boundary, capitalizing on available resources and infrastructure, including water supply and availability. The Town of Ridgway is better positioned than Ouray County to provide, conserve, distribute, and monitor water.

This Renovation Project improves on a pre-1922 water storage right for the Town and does not require any additional appropriation of our precious Colorado water supply. The Town is an active participant in the Gunnison Basin Roundtable and understands the value in exercising existing rights in combination with municipal water conservation measures. The Renovation Project is identified as one of the targeted solutions (IPP) in the Statewide Water Supply Initiative for the Gunnison Basin to reach the projected statewide demand for water in the year 2050.

The stored water and renovation of the reservoir will also have habitat value for the wildlife in the area, a valuable commodity in a diminishing open space arena.

3. Is this project primarily a study or implementation of a water activity/project? (Please check only one)

☐

Study

☒

Implementation

4. To catalog measurable results achieved with WSRA funds can you provide any of the following numbers?

New Storage Created (acre-feet)

New Annual Water Supplies Developed, Consumptive or Nonconsumptive (acre-feet)

Existing Storage Preserved or Enhanced (acre-feet)

Length of Stream Restored or Protected (linear feet)

Water Supply Reserve Account – Application Form

Revised December 2011

4. To help us map WSRA projects please include a map (Exhibit B) and provide the general coordinates below:

Latitude: 38°06'39" N

Longitude: 107°46'32" W

5. Please provide an overview/summary of the proposed water activity (no more than one page). Include a description of the overall water activity and specifically what the WSRA funding will be used for. A full **Statement of Work** with a detailed budget and schedule is required as **Exhibit A** of this application.

Over the past decade the Town of Ridgway has been working diligently and steadfastly to secure and improve a reliable and functional water supply for the community. The Town has completed various and ongoing water supply and conservation initiatives and projects, including but not limited to: the development and implementation of a non potable water supply system, audits of the water treatment and supply infrastructure, construction of a \$1.5 million water treatment plant, a \$450,000 water service line replacement project, 2005 feasibility study on the development of a collaborative treated water supply, emergency water supply interconnection, user fee increases and the completion of a water supply feasibility study. The Town is now in a position to realize the apex of these efforts, which is a renovation of the Ridgway municipal reservoir, Lake Otonowanda, a raw water storage facility referred to here as the "Renovation Project". The Renovation Project will provide for storage of sufficient water to meet the Town's water needs when the Town's water rights are out of priority by restoring the reservoir to utilize more of its allocated and adjudicated capacity. The renovation of the reservoir will assist the Town in being able to accommodate future growth and development as agreed upon in the 2002 Intergovernmental Agreement with Ouray County for the "efficient provision of public services", including water treatment and supply. By directing and accommodating growth within the municipal boundary, as opposed to encouraging development in unincorporated areas, we are better suited to manage, conserve, and monitor water usage and supply.

Because of the scope and cost of the Renovation Project we have divided it into three more manageable phases: Feasibility Study, Feasibility Follow Up/ Design, and Construction. The first phase, completed in early 2011, was a Ridgway Ditch and Lake Otonowanda Feasibility Study, funded with generous assistance from the CWCB Water Supply Reserve Account. The Feasibility Study was prepared by the Applegate Group Inc. to determine how best to insure an adequate water supply for the Town during times when the Town's water rights are out of priority. The Feasibility Study recommended significant renovations to the municipal reservoir including replacing the outlet works and the secondary dam so that the Town could store sufficient water within the municipal reservoir providing for a continuous supply to users even when the Town's flow rights are out of priority. The second phase of the Renovation Project will take the recommendations from the Feasibility Study through the final stages of feasibility assessment and on through completion of the design phase which is budgeted for 2012 and planned for completion in time to bid the construction phase in 2013. The final phase of the Renovation Project is the construction of the improvements, which at this time is targeted to commence during the 2013 construction season.

Water Supply Reserve Account – Application Form

Revised December 2011

This construction phase of the Renovation Project is anticipated to cost about \$2.0 million. As the Ridgway local government and Ridgway community have recently invested heavily in improvements to the Town's municipal water supply, treatment, and distribution systems, the cost of construction for this Renovation Project is beyond what the community and local government are able to fund without some outside assistance. This application is for assistance in funding this final phase: construction of the Lake Otonowanda Renovation Project.

Part III. – Threshold and Evaluation Criteria

1. Describe how the water activity meets these **Threshold Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines.)

This Renovation Project, a structural water project, is in need of supplemental financing. The Renovation Project is listed on the Gunnison Basin Roundtable IPP list and will upgrade a municipal reservoir with about 100 acre feet of storage no gravity outlet to at least 347 acre feet and an efficient delivery through a functional outlet system.

- a) The water activity is consistent with Section 37-75-102 Colorado Revised Statutes.¹

This project will fully comply with the Prior Appropriation Doctrine of the State of Colorado, and specifically the decreed water storage right held by the Town of Ridgway, which is a pre-1922 decreed right that is explicit, clear, and necessary for reliable municipal water supply.

- b) The water activity underwent an evaluation and approval process and was approved by the Basin Roundtable (BRT) and the application includes a description of the results of the BRT's evaluation and approval of the activity. At a minimum, the description must include the level of agreement reached by the roundtable, including any minority opinion(s) if there was not general agreement for the activity. The description must also include reasons why general agreement was not reached (if it was not), including who opposed the activity and why they opposed it. Note- If this information is included in the letter

¹ 37-75-102. Water rights - protections. (1) It is the policy of the General Assembly that the current system of allocating water within Colorado shall not be superseded, abrogated, or otherwise impaired by this article. Nothing in this article shall be interpreted to repeal or in any manner amend the existing water rights adjudication system. The General Assembly affirms the state constitution's recognition of water rights as a private usufructuary property right, and this article is not intended to restrict the ability of the holder of a water right to use or to dispose of that water right in any manner permitted under Colorado law. (2) The General Assembly affirms the protections for contractual and property rights recognized by the contract and takings protections under the state constitution and related statutes. This article shall not be implemented in any way that would diminish, impair, or cause injury to any property or contractual right created by intergovernmental agreements, contracts, stipulations among parties to water cases, terms and conditions in water decrees, or any other similar document related to the allocation or use of water. This article shall not be construed to supersede, abrogate, or cause injury to vested water rights or decreed conditional water rights. The General Assembly affirms that this article does not impair, limit, or otherwise affect the rights of persons or entities to enter into agreements, contracts, or memoranda of understanding with other persons or entities relating to the appropriation, movement, or use of water under other provisions of law.

Water Supply Reserve Account – Application Form

Revised December 2011

from the roundtable chair simply reference that letter.

The project is being submitted to the Roundtable for review in at their June meeting. **This section will be updated after the Roundtable review.**

- c) The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.² The Basin Roundtable Chairs shall include in their approval letters for particular WSRA grant applications a description of how the water activity will assist in meeting the water supply needs identified in the basin roundtable's consumptive and/or non-consumptive needs assessments.

As provided in Section 10.1.6 of the Statewide Water Supply Initiative report (SWSI Phase I), and specific to the Gunnison Basin, numerous M&I projects within the basin have been identified to reasonably meet projected 2030 water demands. Rehabilitation and enlargement of Lake Otonowanda municipal reservoir is included in Table 5-4 of the 2010 SWSI IPP's for Ouray County in the Gunnison Basin IPP's .

The Ridgway Lake Otonowanda Renovation Project will help meet projected in growth water supply demands in the Town of Ridgway for the benefit of Ouray County and the Gunnison Basin, and will also provide an augmentation water supply needed to meet calls by senior users. While water contracts are available with Tri-County Water Conservancy District's Ridgway Reservoir to supply augmentation water for downstream users on the Uncompahgre River, the Town's water supply can be called by senior users above Ridgway Reservoir. The Town was subject to a call in 2002 and to a lesser degree in 2003, and as of May 3, 2012, is partially under call again. The Town will certainly be subject again in future drought years, which are likely, if not imminent. The need for the Renovation Project is paramount and the Town is committed to completing it.

- d) Matching Requirement: For requests from the Statewide Fund, the applicants is required to demonstrate a **20 percent** (or greater) match of the request from the Statewide Account. Statewide requests must also include a minimum match of **5 percent** of the total grant amount from Basin Funds. Sources of matching funds include but are not limited to Basin Funds, in-kind services, funding from other sources, and/or direct cash match. Past expenditures directly related to the project may be considered as matching funds if the expenditures occurred within 9 months of the date the application was submitted to the CWCB. Please describe the source(s) of matching funds. (NOTE: These matching funds should also be reflected in your Detailed Budget in **Exhibit A** of this application)

² 37-75-104 (2)(c). Using data and information from the Statewide Water Supply Initiative and other appropriate sources and in cooperation with the on-going Statewide Water Supply Initiative, develop a basin-wide consumptive and nonconsumptive water supply needs assessment, conduct an analysis of available unappropriated waters within the basin, and propose projects or methods, both structural and nonstructural, for meeting those needs and utilizing those unappropriated waters where appropriate. Basin Roundtables shall actively seek the input and advice of affected local governments, water providers, and other interested stakeholders and persons in establishing its needs assessment, and shall propose projects or methods for meeting those needs. Recommendations from this assessment shall be forwarded to the Interbasin Compact Committee and other basin roundtables for analysis and consideration after the General Assembly has approved the Interbasin Compact Charter.

Water Supply Reserve Account – Application Form

Revised December 2011

The Town is seeking \$600,000 total from the Water Supply Reserve Account, \$60,000 from the Gunnison Basin funds and \$540,000 from the Statewide funds. The Town is also intending to apply for a \$650,000 CWCB loan and a \$500,000 Energy and Mineral Assistance Grant from the Department of Local Affairs. The Town recently secured a \$19,000 grant from the Colorado River District to assist with design and geotechnical evaluation, which are projected to cost a total of \$85,000. The balance of the option evaluation and design is \$66,000 (\$85,000 less the \$19,000 2012 River District Grant) is will be funded with Town in kind and cash both budgeted for expenditure in the Town's January - December 2012 Fiscal Year. Town cash and in kind will also fund construction management and likely some of the construction including hauling road base and road construction.

2. For Applications that include a request for funds from the **Statewide Account**, describe how the water activity/project meets all applicable **Evaluation Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines and repeated below.) Projects will be assessed on how well they meet the Evaluation Criteria. **Please attach additional pages as necessary.**

Evaluation Criteria – the following criteria will be utilized to further evaluate the merits of the water activity proposed for funding from the Statewide Account. In evaluation of proposed water activities, preference will be given to projects that meet one or more criteria from each of the three “tiers” or categories. Each “tier” is grouped in level of importance. For instance, projects that meet Tier 1 criteria will outweigh projects that only meet Tier 3 criteria. WSRA grant requests for projects that may qualify for loans through the CWCB loan program will receive preference in the Statewide Evaluation Criteria if the grant request is part of a CWCB loan/WSRA grant package. For these CWCB loan/WSRA grant packages, the applicant must have a CWCB loan/WSRA grant ratio of 1:1 or higher. Preference will be given to those with a higher loan/grant ratio.

Tier 1: Promoting Collaboration/Cooperation and Meeting Water Management Goals and Identified Water Needs

- a. The water activity addresses multiple needs or issues, including consumptive and/or non-consumptive needs, or the needs and issues of multiple interests or multiple basins. This can be demonstrated by obtaining letters of support from other basin roundtables (in addition to an approval letter from the sponsoring basin).

The Project will affect interbasin needs at the municipal level. The additional water which will be stored are pre 1922 waters and will provide some value to all western slope water users if there is a Compact Call on the Colorado River.

- b. The number and types of entities represented in the application and the degree to which the activity will promote cooperation and collaboration among traditional consumptive water interests and/or non-consumptive interests, and if applicable, the degree to which the water activity is effective in addressing intrabasin or interbasin needs or issues.

While the project is primarily municipal, some collaboration will occur with affected landowners near the involved water infrastructure and with other water rights holders utilizing water from Beaver Creek and Cottonwood Creek. The study phase of the project completed a water rights

Water Supply Reserve Account – Application Form
Revised December 2011

analysis and needs assessment, including consumptive and/or non-consumptive needs, specific to the Ridgway community. The project will meet one and likely more of the water management objectives identified in the Statewide Water Supply Initiative including providing augmentation supplies that will be needed for existing and future M&I growth in Ridgway, in Ouray County, and potentially the Gunnison basin as a whole.

- c. The water activity helps implement projects and processes identified as helping meet Colorado's future water needs, and/or addresses the gap areas between available water supply and future need as identified in SWSI or a roundtable's basin-wide water needs assessment.

The project is included in SWSI 2010 as a Projects and Processes (IPP's) identified as needed to help meet Colorado's water supply demands in the future and is identified in the Basin's Needs Assessment. The project will provide a high level of benefit to Colorado in relationship to the amount of funds requested with the cost per acre foot of storage projected to be under \$6000. If the Town is successful in securing the use of some additional ground adjoining the Town's Lake Otonowanda property, the volume stored could increase and the cost per acre foot could be significantly lower.

Tier 2: Facilitating Water Activity Implementation

- d. Funding from this Account will reduce the uncertainty that the water activity will be implemented. For this criterion the applicant should discuss how receiving funding from the Account will make a significant difference in the implementation of the water activity (i.e., how will receiving funding enable the water activity to move forward or the inability obtaining funding elsewhere).

Receipt of funds from the Account will make a significant difference in the implementation of the storage of the Town's municipal water supply. The Town is not in a position to fund the project without significant financial assistance. At approximately \$2 million, this project represents the most significant financial and infrastructure investment for the Ridgway community water supply. The urgency for the project couldn't be greater. The Town's water rights were subject to a call in 2002 and 2003 and we are on track this year for another potential call with severely low snowpack levels and little precipitation. Rehabilitating and expanding the municipal reservoir, the Town's only major raw water storage facility, will greatly enable the Town to withstand future calls on the river that place its municipal water supply at risk, while securing longer term municipal water supply to accommodate future growth.

- e. The amount of matching funds provided by the applicant via direct contributions, demonstrable in-kind contributions, and/or other sources demonstrates a significant & appropriate commitment to the project.

The Town has invested significant funds in this project:

2011 Applegate Reservoir and Ditch Feasibility Study (including remedial improvements to the Ridgway ditch, measuring devices, etc.) –

Attorney's Fees in Renovation Project – approximately \$10,000

Water Supply Reserve Account – Application Form

Revised December 2011

Design and Geotechnical - \$15k in 2012 budget \$19k in River District Funding
Town Engineer Salary and Benefits Investment for design in 2011-3 – \$95,000
Proposed loan to Enterprise Fund - \$600k or \$700k?
Proposed Construction Management and Road Construction in 2013 - \$120,000

The Town anticipates completing the design of the project in late spring of 2013 and hopes to start construction in late 2013, with the balance of the construction to be completed in 2014. The applicant is a municipal government with significant experience in water resources and in the design and construction of major projects. We have the ability to properly oversee and administer this project.

Tier 3: The Water Activity Addresses Other Issues of Statewide Value and Maximizes Benefits

- f. The water activity helps sustain agriculture & open space, or meets environmental or recreational needs.

Lake Otonowanda is situated outside of the Town's municipal boundary on the edge of the San Juan Mountains and is home to various wildlife and native plant species. The municipal reservoir is surrounded by a private conservation easement held by the Rocky Mountain Elk Foundation and the renovation will improve the habitat in this location. The new outlet pipe will provide for improved circulation and aeration of the reservoir, improving water quality and enhancing the overall appeal and benefit of the reservoir.

- g. The water activity assists in the administration of compact-entitled waters or addresses problems related to compact entitled waters and compact compliance and the degree to which the activity promotes maximum utilization of state waters.

The expanded reservoir will store pre 1922 waters which should assist both the Town and Basin in the case of Compact Call.

- h. The water activity assists in the recovery of threatened and endangered wildlife species or Colorado State species of concern.

Expanding Lake Otonowanda will improve wildlife habitat for many native species that inhabit the area including for eagles and migratory birds.

- i. The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested.

The projected cost per acre foot for the Renovation Project is about \$6000 or less. The \$6000 per AF assumes the renovations and storage are confined exclusively to land the Town currently owns. The Town is continuing to negotiate with the neighboring land owner to try to secure the use of some of their land on which the Town would expand the reservoir. If the town is successful, the project could potentially store over 600 AF of water and have a cost as low as \$3500 per AF. In either case the cost per acre foot is substantially below most M&I projects. This Renovation Project is very significant for a small, rural community of 924

Water Supply Reserve Account – Application Form

Revised December 2011

residents. As indicated previously, the project is identified in the SWSI 2010 to assist in meeting Colorado's water supply needs. For a small community to come to the table and participate in state-wide solutions for water supply is remarkable.

- j. The water activity is complimentary to or assists in the implementation of other CWCB programs.

The reservoir Renovation Project including a functional outlet and a deeper, partially lined basin will deliver water more efficiently and effectively to the Town of Ridgway, providing for less seepage loss. The ability for the Town to provide sufficient water supply during periods of drought, in combination with other water conservation efforts that are underway, will mitigate the impact of drought on the Ridgway community in so far as having water available to mitigate any call on the municipal water supply. Providing the Town with the ability to absorb future growth and an increased population base, as targeted in the Ridgway/Ouray County IGA, allows for targeted growth and development within the municipal boundary thereby alleviating growth pressures in Ouray County, which alleviates environmental issues associated with sprawl and rural/ exurban development. This also provides for more controlled water management and conservation efforts.

Continued: Explanation of how the water activity/project meets all applicable **Evaluation Criteria**.

Please attach additional pages as necessary.

Part IV. – Required Supporting Material

1. **Water Rights, Availability, and Sustainability** – This information is needed to assess the viability of the water project or activity. Please provide a description of the water supply source to be utilized, or the water body to be affected by, the water activity. This should include a description of applicable water rights, and water rights issues, and the name/location of water bodies affected by the water activity.

Lake Otonowanda has a storage decree of 746 AF. The Town's most senior decree is 2 cfs from the Sibert Ditch (appropriation 6/1/1882, adjudication 5/15/1897) transferred to the headgate on the Ridgway Ditch in CA-1496. The Town also has a 25 cfs decree for the Ridgway Ditch which supplies water to the municipal reservoir and to Town. The Town intends to fill the municipal reservoir when the Town's flow rights are in priority and to use the water from the municipal reservoir to supply the Town when the flow rates are out of priority.

2. Please provide a brief narrative of any related studies or permitting issues.

The Ridgway Ditch and Otonowanda Reservoir Feasibility Study prepared by the Applegate Group in January 2011 evaluated ways for the Town water supply to be protected when there is call on the Town's water rights. The report recommended the rehabilitation and expansion of the Town's municipal reservoir, Lake Otonowanda.

The Applegate Feasibility Study included a wetlands determination which included a classification by the US Army Corp of Engineers (ACOE) of Isolated Waters which means the wetlands are not subject to the jurisdiction of the ACOE. Applegate also consulted with Ouray County regarding any new land use permitting that might be required. Because the County has not adopted 1041 regulations and the municipal reservoir is not in a view corridor, Ouray County permitting is not required.

If a new dam is constructed, the design of the dam will be subject to the State's Dam Safety Regulations. That would require a Hazard Classification Report, Hydrology Report, Design Report, and review of construction plans and specifications. Because the basin in which the municipal reservoir sits is a closed basin project impacts will be minimal; however the above reports will still need prepared.

The project will impact more than one acre and thus will need a stormwater management plan, which will be submitted to the Colorado Department of Health and Environment (CDPHE) at least 10 days before construction commences. If dewatering is required for construction, a construction dewatering permit will be required. Application for a dewatering permit needs to be submitted to CDPHE about 60 days in advance of any dewatering activities.

The Town is completing a Source Water Protection Plan in 2012, which encompasses this municipal reservoir and surrounding watershed area. A stakeholder group is now in the process

Water Supply Reserve Account – Application Form

Revised December 2011

of identifying implementation mechanisms to protect and conserve Ridgway's municipal water supply. This is one mechanism to insure the Town's source water, including the municipal reservoir, is protected into the future.

3. Statement of Work, Detailed Budget, and Project Schedule

The statement of work will form the basis for the contract between the Applicant and the State of Colorado. In short, the Applicant is agreeing to undertake the work for the compensation outlined in the statement of work and budget, and in return, the State of Colorado is receiving the deliverables/products specified.

Please note that costs incurred prior to execution of a contract or purchase order are not subject to reimbursement. All WSRA funds are disbursed on a reimbursement basis after review invoices and appropriate backup material.

Please provide a detailed statement of work using the template in Exhibit A. Additional sections or modifications may be included as necessary. Please define all acronyms and include page numbers.

Statement of Work

WATER ACTIVITY NAME - Lake Otonowanda Rehabilitation and Expansion.

GRANT RECIPIENT – Town of Ridgway

FUNDING SOURCE - Water Supply Reserve Account Grant/Loan, Gunnison Basin Roundtable, Department of Local Affairs Energy and Mineral Impact Assistance Fund, Colorado River District, Town of Ridgway Water Enterprise Utility

INTRODUCTION AND BACKGROUND

Provide a brief description of the project. (Please limit to **no more than 200 words**; this will be used to inform reviewers and the public about your proposal)

The Renovation Project goals are:

1 - Protect and utilize more of the Town's pre-1922 water storage rights to provide the Town of Ridgway with a reliable water supply when the Town's municipal water flow rights are out of priority and to assist the Colorado River Basin in meeting Compact Calls.

2 – Improve the use, amount and functionality of the Town's pre-1922 deeded water storage right in the municipal reservoir, Lake Otonowanda;

3 – Provide a reliable municipal water source for future growth and development within the Town, which ultimately serves to manage growth in the unincorporated Ouray County

Water Supply Reserve Account – Application Form

Revised December 2011

pursuant to the Ridgway/Ouray County Intergovernmental Agreement.

The project includes new outlet works to replace the collapsed tunnel outlet, a new spillway, and replacement of the substandard secondary dam with a taller dam built to current design standards. The project will greatly increase the storage capacity of the municipal reservoir. The goal of the project is to construct sufficient storage from which the Town could draw water during a call and meet the Town's future municipal and industrial water needs. The reservoir would be filled when the town's water supply is in priority.

OBJECTIVES

List the objectives of the project

- 1 – Renovate and expand the Town's existing municipal reservoir and outlet works to improve the existing storage capacity and to more effectively and efficiently store and deliver municipal and industrial water
- 2 - Remove sediment from the Town's water supply in advance of the water treatment plant to facilitate water filtration treatment and conserve energy during the treatment process
- 3 – Upgrade the municipal reservoir to a simple, manageable, efficient and non-labor intensive water intake, storage, and outlet system

TASKS

Provide a detailed description of each task using the following format

TASK 1 – Finalize Option Selection and Geotechnical Evaluation (\$10,000)

Description of Task

Finalizing the details of the project will start from the recommendations from the 2011 Applegate Feasibility Study of Ridgway Ditch and Lake Otonowanda (Feasibility Study) through the final stages of feasibility assessment. including an assessment of the final design capacity for the rehabilitation and expansion. This phase also includes supplemental geotechnical evaluation to determine the best way to rehabilitate the outlet works.

Method/Procedure

Continued discussions with adjoining land owners to determine practicality of expanding the municipal reservoir surface area. If found practical, prepare documents for execution of property acquisition.

Geotechnical investigation of the outlet area to determine practicality and costs of outlet rehabilitation options.

Water Supply Reserve Account – Application Form

Revised December 2011

Model municipal reservoir expansion options to determine the most cost effective and practical option for expanding the municipal reservoir's capacity and the best municipal reservoir capacity given unit and total costs.

Deliverable

Assessment and recommendations for outlet works and municipal reservoir location and capacity.

TASK 2 – Permitting (\$35,000)

Description of Task

Secure all the permits and approvals needed for construction of the project including the required reports and assessments needed for SEO approval of the plans and specifications.

Method/Procedure

Prepare Hydrology Report
Prepare Spillway Capacity Assessment
Prepare Hazard Classification report
Prepare Dam Safety Design Report
Prepare Dewatering Permit
Coordinate other environmental permits if needed

Deliverable

Approval of the above reports
Issuance of any needed environmental permits.
Note: stormwater and dewatering permits are to be prepared and secured by the contractor

TASK 3 – Design (\$40,000)

Description of Task

Prepare all the design documents for construction of the rehabilitation and expansion of the municipal reservoir. It is anticipated that design work will include preliminary design documents which will be provided to review entities and final documents which be ready for bidding and construction of the work.

Method/Procedure

Use standard engineering criteria and methods to develop plans and specifications for the project.

Deliverable

Plans, Specifications, and Contract Documents for bidding and construction of the project. Will include preliminary and final documents.

TASK 4 – Bidding (\$2,500)

Description of Task

Issue the advertisement for bids
Address Bidder questions
Hold prebid meeting including site visit
Evaluate Bids and Bidders
Prepare recommendation for Town Council regarding contract award

Method/Procedure

Follow Town and funding agency bidding procedures

Deliverable

Prebid meeting summary
Any needed addenda
Summary of questions and answers
Summarize bids
Provide recommendation for award

TASK 4 – Construction (\$1,900,000)

Description of Task (Town tasks)

Conduct Preconstruction Conference
Review submittals and Shop Drawings
Oversee construction
Insure contractor complies with contract requirements
Address Contractor questions.
Review test results
Review pay requests
Prepare record drawings
Construct New Road to access headgate

Method/Procedure

Water Supply Reserve Account – Application Form

Revised December 2011

Standard Engineering and Construction practices
Construction in accordance with approved plans and specs and in accordance with contract documents.

Deliverable

A completed municipal reservoir renovation
Record drawings
SEO approval as needed
CWCB final report

REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion 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 Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

PAYMENT

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.

Water Supply Reserve Account – Application Form
Revised December 2011

The above statements are true to the best of my knowledge:

Signature of Applicant:



Print Applicant's Name: Jen Coates

Project Title: Lake Otonowanda Renovation Project

Return an electronic version (hardcopy may also be submitted) of this application to:

Greg Johnson – WSRA Application
Colorado Water Conservation Board
1580 Logan Street, Suite 200
Denver, CO 80203
gregory.johnson@state.co.us

Cost Estimate - Lake O Renovation on Town Owned Property					
				Qty	Unit \$
					Total
Mobilization		CY		1	\$ 78,000
Remove old embankment		CY		6783	\$ 5
Bottom grading		SY		1000	\$ 7.50
Foundation Preparation		CY		5200	\$ 5.00
Embankment Placement		CY		71403	\$ 12.00
Riprap - top 6'		CY		1050	\$ 85
Solar Pump System for Irrigation Tailw		LS		1	\$ 25,000
New Access Road		LF		1800	\$ 10
Outlet, Spillway		LS		1	\$ 300,000
Reservoir Liner		acre		10	\$ 19,000
Reservoir Inlet structure		LS		1	\$ 10,000
Seeding		acre		2	\$ 4,500
Construction Sub Total					\$ 1,643,501
Contingencies				15%	\$ 246,525
Access Easement (7000'l x 30'w)		AC		4.8	\$ 7,500
Const. Mgmt & observ, Const. Survey, Testing				10%	\$ 164,350
Total Construction					\$ 2,090,533
Design and Geotech					\$ 85,000
Total Cost					\$ 2,175,533
Cost per AF				363	\$ 5,993

Cost Estimate - Lake O Renovation on Town Owned Property								
				Town Est				
			Qty	Unit \$	Total	Grant funds	match Funds	
Mobilization		CY	1	\$ 78,000	\$ 78,000	\$ 60,000	\$ 18,000	
Remove old embankment		CY	6783	\$ 5	\$ 33,915	\$ 33,915		
Bottom grading		SY	1000	\$ 7.50	\$ 7,500	\$ 7,500		
Foundation Preparation		CY	5200	\$ 5.00	\$ 26,000	\$ 26,000		
Embankment Placement		CY	71403	\$ 12.00	\$ 856,836	\$ 472,585	\$ 384,251	
Riprap - top 6'		CY	1050	\$ 85	\$ 89,250		\$ 89,250	
Solar Pump System for Irrigation Tailw		LS	1	\$ 25,000	\$ 25,000		\$ 25,000	
New Access Road		LF	1800	\$ 10	\$ 18,000		\$ 18,000	
Outlet, Spillway		LS	1	\$ 300,000	\$ 300,000		\$ 300,000	
Reservoir Liner		acre	10	\$ 19,000	\$ 190,000		\$ 190,000	
Reservoir Inlet structure		LS	1	\$ 10,000	\$ 10,000		\$ 10,000	
Seeding		acre	2	\$ 4,500	\$ 9,000		\$ 9,000	
Construction Sub Total					\$ 1,643,501	\$ 600,000	\$ 1,025,501	
Contingencies			15%		\$ 246,525		\$ 246,525	
Access Easement (7000'l x 30'w)		AC	4.8	\$ 7,500	\$ 36,157		\$ 36,157	
Const. Mgmt & observ, Const. Survey, Testing			10%		\$ 164,350		\$ 164,350	
Total Construction					\$ 2,090,533	\$ 600,000	\$ 1,472,533	
Design and Geotech					\$ 85,000		\$ 85,000	
Total Cost					\$ 2,175,533	\$ 600,000	\$ 1,557,533	
Cost per AF			363		\$ 5,993			