



COLORADO WATER CONSERVATION BOARD

WATER SUPPLY RESERVE ACCOUNT



Yellow Jacket Water Conservancy
District-Water Storage Feasibility

Name of Water Activity/Project

\$220,800.00

Amount from Statewide Account

Total Amount of Funds Requested

Amount from Basin Account

\$220,800.00

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1. Reference Information
2. Insurance Requirements (Projects Over \$100,000)
3. WSRA Standard Contract (Projects Over \$100,000)
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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 (CWCBC). The process for Basin Roundtable consideration/approval is outlined in Attachment 1.

Once approved by the local Basin Roundtable, the applicant should submit this application, a detailed statement of work, detailed project budget, and project schedule to the CWCBC staff by the application deadline.

The application deadlines are:

- Basin Account – 60 days prior to the bi-monthly Board meeting
- Statewide Account – 60 days prior to the March and September Board meeting

Board Meeting Dates	Basin Account Deadlines	Statewide Account Deadlines
3/17 - 3/18/2009	1/16/2009	1/16/2009
5/19 - 5/20/2009	3/19/2009	n/a
7/21 - 7/22/2009	5/21/2009	n/a
9/15 - 9/16/2009	7/15/2009	7/15/2009
11/17 - 11/18/2009	9/17/2009	n/a
January 2010	11/15/2010	n/a
March 2010	1/15/2010	1/15/2010
May 2010	3/15/2010	n/a

When completing this application, the applicant should refer to the WSRA Criteria and Guidelines available at: <http://cwcb.state.co.us/IWMD>.

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:

Mr. Todd Doherty
Colorado Water Conservation Board
Intrastate Water Management and Development Section
WSRA Application
1580 Logan Street, Suite 600
Denver, CO 80203
Todd.Doherty@state.co.us

If you have questions or need additional assistance, please contact Todd Doherty of the IWMD Section at 303-866-3441 x3210 or todd.doherty@state.co.us.

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

1. Applicant
Name(s):

Yellow Jacket Water
Conservancy District
c/o Trina Zagar Brown,
Secretary/Counsel

Mailing
address:

P.O. Box 2440
Meeker, CO 81641

Taxpayer
ID#:

841186742

Email
address:

trina@cooleyzagarbrown.com

Phone Numbers:

970-878-5065

Business:

970-878-5800

Cell:

2. Person to contact regarding this application if different from above:

Name:

Trina K. Zagar-Brown, Cooley Zagar Brown PC

Position/
Title

Secretary / Legal Counsel

3. Eligible entities that may apply for grants from the WSRA 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.

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Public (Districts) – special, water and sanitation, conservancy, conservation, irrigation, or 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.

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Non-governmental organizations – broadly defined as any organization that is not part of the government.

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4. Provide a brief description of your organization

The Yellow Jacket District is located in the northwest region of Colorado. The district boundaries encompass the eastern portion of Rio Blanco County, including the majority of the Piceance Creek Basin, a small but an important natural resource portion of Moffat County and a very small portion of Garfield Counties near the Piceance Creek Basin. The Yellow-Jacket Water Conservancy District's mission is to maintain and manage its water rights for the benefit of agricultural, municipal, industrial, wildlife and recreational uses. The Yellow Jacket Water Conservancy District was created in April of 1956 as part of the Colorado River Storage Act.

Nine directors govern the District representing nine geographical districts within the Yellow Jacket boundaries. The District's directors include professionals, businessmen, and ranchers. The District's directors participate in board meetings throughout the year and remain apprised of general water matters facing the District through their attendance in regional water meetings, educational seminars and their participation in other area boards. The Property taxes collected by the District is its only significant annual income and typically ranges from \$22,000.00 to \$26,000.00. Historically, the District expended about 75% of its annual budget on USGS water monitoring cost sharing. In 2009 the District's Board developed a plan to expend the majority of its funds and energies on the pursuit of a water storage project within the District. This reinvigorated effort to analyze and pursue a water storage project is timely for many reasons including the most obvious which are addressing reasonable regional water management in the face of significant industrial water needs.

The area served by the Yellow Jacket District is currently home to some of the most significant natural gas exploration, production and processing in the United States. Specifically, several industrial companies are implementing seismic technology to assist them in assessing the location and production levels of the natural gas sources within the Piceance Basin. These efforts are focused on what many refer to as "unconventional" natural gas reserves. Unconventional resources include natural gas reserves located in the rock shale formations heavily concentrated within the Yellow Jacket District in the Piceance Basin. The extraction of unconventional natural gas within these shale formations requires water for the hydraulic fracturing. Hydraulic fracturing is the process in which water, sand and drilling fluids are pumped into the shale under enormous pressure, creating fractures in the rocks that allow the gas molecules to escape. Hydraulic fracturing raises several environmental issues including the significant amounts of water used for these industrial purposes and the possible consequences of hydraulic fracturing on ground water, agricultural, stock water and recreational waters. In addition to natural gas development, the District remains cognizant of the potential impact of the development of oil shale on industrial water rights and storage within the District. Regional studies indicate that the industrial water requirements for both oil shale and natural gas development will be significant and deplete many of the existing resources.

Since its inception the District has engaged in a variety of in-depth analysis, studies and design efforts in its pursuit of the development of water storage projects. The sustained natural gas development within the District has refocused efforts regarding the consequences of the use of regional waters for

industrial purposes and the corresponding impact on other water users within the District.

The following excerpts from other sources highlight the potential impact of future development on the economy and water supply of the surrounding area.

Anticipated Future Natural Gas Activity Gas drilling activity will expand, and then stabilize: Gas drilling is projected to continue to increase through 2015 then remain relatively stable through the end of the forecast period (2035). Gas-related employment will continue to help drive the economy. New drilling technology requires fewer workers per well than just a few years ago. Over time, more and more of the gas-related jobs in the region will be tied to maintaining and reworking existing wells. There are currently about 7,500 operating wells in the region. Even with stable drilling activity, an estimated 50,000 additional wells may be drilled over the next 30 years. All wells will require support, gas processing, maintenance and distribution. Barring unforeseen changes in the national supply and demand for natural gas, the industry will provide a long-term supply of jobs. Exhibit ES-3 below depicts projected direct natural gas-related employment through 2035. Geographic focus will shift to the north. Gas development and the myriad of support services and secondary growth that accompanies this development will be a primary force behind growth in the region, particularly in Rio Blanco, Garfield and Moffat counties. Over the next two decades, the focus of new well development will shift north, from Garfield County to Rio Blanco County. Exhibit ES-4 below depicts the projected number of new wells drilled and completed by year and by county.

Potential Commercial Oil Shale Development Commercial oil shale appears more likely than in the past: The viability of commercial shale oil shale development remains uncertain, but the prospects appear better than in the past. Substantial private sector resources have been committed to solving the technical, environmental and economic issues associated with oil shale extraction and conventional oil supply, and price trends appear increasingly favorable to oil shale. Initial commercial production is likely more than ten years away. The study team expects the timing of future oil shale production to be consistent with estimates in the Draft Bureau of Land Management Preliminary Environmental Impact Statement (PEIS). The PEIS, however, does not estimate the magnitude of potential development. The study team has developed a scenario for rapid, yet reasonably foreseeable, oil shale development based on the experience with oil sands production in Alberta, Canada. More than twenty-five thousand direct and secondary workers by 2035. Within Colorado, commercial production is forecast to begin on a small scale in 2021. After 2025, about 50,000 barrels per day (bpd) of annual capacity is projected be added each year. All production will take place in Rio Blanco County. By 2035, oil shale development will require more than 9,300 direct workers. In addition, about 4,500 workers will be needed to produce additional natural gas as well as construct and maintain the electrical generation facilities necessary to meet oil shale's energy requirements. Over 12,000 secondary jobs would also be required to support the industry and its workforce. Exhibit ES-8 shows the additional direct and secondary energy-related jobs associated with commercial oil shale production compared to the baseline scenario.

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Oil shale challenges will grow beyond 2035. The year 2035 is the end of the modeling period for this study, but does not represent the end of the surge in oil shale production. The commercial oil shale scenario embodied in the model anticipates production levels of about 500,000 bpd by 2035. The U.S. Department of Energy has called for development of an industry capable of producing 2 million bpd, and Colorado has the best oil shale resources in the nation. Environmental and socioeconomic constraints. The potential introduction of commercial oil shale development will exacerbate the environmental and socioeconomic concerns already associated with the study area's rapid development. Major challenges include water conservation, greenhouse gas (GHG) emissions, land disturbance, waste management and existing environmental standards and limits. From a socioeconomic perspective, major issues of concern include an overwhelming demand on a limited population of skilled laborers and the affordability and availability of housing in the region.

Rio Blanco County will face extraordinary growth pressures. Northwest Colorado's most rural county will face extraordinary growth pressure if commercial oil shale develops as envisioned in this study. The county is unlikely to accommodate all of the growth pressure it will face under the baseline scenario, in which the population is forecast to triple between 2005 and 2035. With the development of commercial oil shale, Rio Blanco's population is projected to exceed 39,000 residents — more than double the baseline forecast of about 18,600 people. Exhibit ES-10 depicts the relative size and forecast distribution of Rio Blanco County's population in 2005 and 2035 under the baseline and commercial oil shale scenarios. The projected population levels in Meeker and Rangely reflect estimated capacity limits for each town, it is not known how or where the remainder of the population growth (shown in unincorporated) would be housed. (Meeker recently re-examined its capacity in a new study and believes it could accommodate up to 10,000 people—which would take some pressure off of the rest of the county).

Public Sector Financial Implications Municipal growth capacity and related financial support are pressing issues in Garfield, Rio Blanco and Moffat counties: *The levels of growth anticipated in three of the four counties in the study area exceed the reasonably long-term capacity of existing communities. Rifle and nearby communities are already stretching to accommodate additional development and Rio Blanco and Moffat counties have minimal growth capacity. Accommodating growth in this region is very challenging. The area is among the most rural in the United States and local communities have very limited ability to absorb and service new development. Public lands and topographic barriers can force inefficient development patterns. Existing road systems were never intended to serve high levels of traffic and heavy trucks. Projected street maintenance and repair costs are staggering expenses for most communities. Worker shortages, compounded by rising housing and cost of living expenses, make retention of service workers difficult and expensive. Similarly, the absence of contractors and the competition for their services along with shortages of materials drives up the costs of new projects and personnel. Capital investment is needed far in advance of likely revenue. As a rule, residents arrive first and revenues follow, sometimes years later. Nevertheless, residents require public*

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services, streets and utilities from the day of arrival. The problems with TABOR expenditure limitations, which require population to be in place before increased spending can be allowed, compound service provision

These quoted statements indicate that the impact of the natural resource development will be great, both from natural gas development and from the possible development of oil shale. These quotes also indicate a need for the District to seek alternate funding beyond the tax base for a storage project. The District's board recognizes the demand upon the existing tax base for other mandatory services and is pursuing funding sources beyond its mill levy for the development of a storage project. The population of Moffat County in 2005 is noted at 13,426 and estimated to be 17,705 in 2010. In 2015 it is estimated to be 19,798. The population of Rio Blanco County in 2005 is noted at 6,073 and is estimated to be 9,753 in 2010. In 2015 it is estimated to be 11,360. Northwest Colorado Socioeconomic analysis and Forecast (2008) BBC Research and Consulting.

The District recognizes the environmental impact and challenges associated with development and construction of such a project. Understanding these impacts and challenges the District continues to be committed to participating in regional and state meetings regarding water quality, water quantity and other environmental issues that will be impacted by the design and construction of the Project. In its efforts to plan for a storage project the District remain vigilant in its goal to preserve irrigated agriculture in the valley floors of the District. Yellow Jacket has had several work sessions within its board to discuss and create a strategy to implement the balance between municipal, agricultural and industrial water in the future.

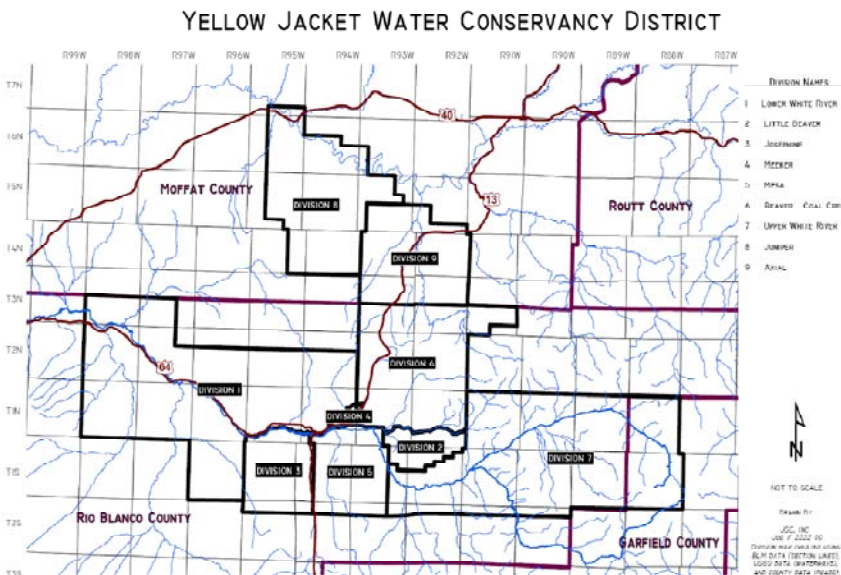
The District maintains conditional water rights for the following proposed projects:

1. **Yellow Jacket Canal and Josephine Basin Lateral** No. 476; capacity of 500 cubic feet per second.
2. **Ripple Creek Reservoir** No 476B, with a capacity of 27, 991.7 acre feet of water.
3. **Lost Park Reservoir** No. 476C, with a capacity of 33, 541.3 acre feet of water.
4. **Lost Park Feeder Canals** Nos. 1 and 2 No. 476 A, with capacities of 100 cubic feet of water per second for each, for a total of 200 cubic feet per second.
5. **The Fourth Enlargement of the Highland Ditch**, Ditch No. 32, for 61 cubic feet of water, with Priority No. 701, and an appropriation date of September 6, 1961.
6. **Thornburgh Reservoir** when constructed will have a capacity of 31, 807.6 acre feet of water. The sources of water are Milk Creek, a tributary of the Yampa River, and all named and unnamed tributaries entering above the site of the dam and all surface runoff and drainage around the perimeter, and Beaver Creek.
7. **The Axial Canal** has a capacity of 315 cubic feet of water per second of time. The sources of water are Mild Creek, a tributary of the Yampa River, and water released to Milk Creek from Thornburgh Reservoir.
8. **Morapos Feeder Canal** has a capacity of 70 cubic feet of water per second of time. The source of water is Morapos Creek, a tributary of the Williams Fork River.

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9. **West Milk Creek Canal** has a capacity of 90 cubic feet of water per second of time. The sources of water are Milk Creek, a tributary of the Yampa River, and water released to Milk Creek from Thornburgh Reservoir. The East Milk Creek Lateral heads at a turnout of the West Milk Creek Canal approximately two and one-half miles downstream from the head-gate and point of diversion.
10. **Lost Park Feeder Canal** has a capacity of 100 cubic feet of water per second of time. The source of water is an unnamed tributary of the South Fork of the Williams Fork River.
11. **Lost Park Feeder Canal No. 2** has a capacity of 100 cubic feet of water per second of time. The source of the water is an unnamed tributary of the South Fork of the Williams Fork River.
12. **Sawmill Mountain Reservoir** when constructed will have an active capacity of 77,000 acre feet, and dead storage of 3,000 acre feet. The sources of water are the North Fork of the White River, Big Beaver Creek, East Beaver Creek, Cow Creek, and tributaries thereto, tributaries of the White River.
13. **North Fork Feeder Conduit** has conditional decree of 500 cubic feet of water per second of time. The source of water is the North Fork of the White River, tributary to the White River.
14. **Bob Raley Tunnel:** Water from the point of diversion of the North Fork Feeder Conduit will be transported by pipeline to the Bob Raley Tunnel and thence to East Beaver Creek and the Sawmill Mountain Reservoir on Big Beaver Creek.



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

N/A

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

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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.

7. 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.

Yellow Jacket Water Conservancy District does not have any conflicts or limits on the amount of grant money it can receive based on TABOR.

Part B. - Description of the Water Activity

1. Name of the Water Activity/Project: **The Yellow Jacket Water Storage Feasibility Study**
2. What is the purpose of this grant application? (Please check all that apply.)

☒

Environmental compliance and feasibility study

☒

Technical Assistance regarding permitting, feasibility studies, and environmental compliance

☒

Studies or analysis of structural, nonstructural, consumptive, nonconsumptive water needs, projects

Study or Analysis of:

☒

Structural project or

☐

Nonstructural project or

☐

Consumptive project or

☐

Nonconsumptive project

☐

Structural and/ or nonstructural water project or

3. 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.

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WRSA funds will be used for the purpose of implementing a water storage feasibility study within the boundaries of the Yellow Jacket Water Conservancy District.

The Yellow Jacket Water Storage Feasibility Study shall include:

- **PROJECT OVERVIEW:** Review, Assessment and Recommendation for the Development of a Yellow Jacket District Water Storage Project

Phase I - Review of YJ Water Right Portfolio:

- Review and assessment of all of the District's conditional water rights
- Identification of water rights/storage sites that currently meet logistical, environmental, water quantity and quality, feasibility and potential water storage capacity.

Phase II - Analysis of Sites with Recommendation of Preferred Storage Project

- Assess overview of hydrological, geological, geographical, environmental factors for the three sites with resulting recommendation of one site to move to Phase III analysis.
- Compare and assess sites to determine potential site with the greatest water storage capacity, which will yield greatest benefit to the over all District.

Phase III – Analysis and Outline for Proposed Water Storage Project

- In-depth analysis and outline of action steps and timeline for a water storage project.
- Detailed report to include inclusive environmental review, geological review (core drilling – soil samples), real estate acquisition and access assessment, and preliminary design and build costs.
- Detailed assessment of storage capacity and corresponding beneficial uses.
- Assessment of community support, involvement and cooperation.
- Assessment of funding mechanisms to include review of public and private funding partnerships.

PROJECT SUMMARY: This process will yield a tangible contemporary assessment of Yellow Jacket water rights and alternative water rights with a recommendation, assessment and outline for the feasibility of a Yellow Jacket Water Storage Project.

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Part C. – 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.)

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

Yes, Yellow Jacket Water Conservancy District is eligible for funding, since it is a Public District with the mission to protect, conserve, and utilize water for its intended beneficial purposes.

a) 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 from the roundtable chair simply reference that letter.

The Yellow Jacket District initially presented this program to the Basin Roundtable on July 15, 2009, and was approved as a project for a possible funding to be heard at the Basin Roundtable meeting on September 2, 2009. At the September 2, 2009 meeting, the Yampa/White River Basin Roundtable recommended to use Basin funds in the amount of \$220,800 for a grant to support the Yellow Jacket Water District's Water Storage Feasibility Study.

The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.² Yes, this

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.

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

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project meets the criteria set forth in the statutes, because it seeks to manage and implement effective water supply and water supply storage by maximizing existing water sources and water rights.

- b) Specifically describe how the water activity either furthers the Roundtable's basin-wide water needs assessment or meets a consumptive or non-consumptive water supply need identified in the Roundtable's working needs assessment.

The Yellow Jacket Feasibility Study specifically addresses and furthers the Roundtable goals of assessing the availability and potential uses of water within its regional drainage. The Yellow Jacket Feasibility Study will result in a tangible assessment of YJ water rights and storage sites resulting in a recommendation and outline for the permitting, design and construction of an effective, efficient and beneficial water storage project. The study will evaluate the potential uses of the Yellow Jacket Water Rights to address the future needs of the State as studied in the State Water Supply Investigation (SWSI). The resulting outlined project will specifically respond to the region's growing need for water storage for the benefit of increasing agricultural, industrial, municipal, wildlife and recreational demands.

- c) 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. 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 CWCBC. Please describe the source(s) of matching funds. (NOTE: These matching funds should also be reflected in your Detailed Budget in Part D of this application)

Yellow Jacket Water Conservancy District is in the processes of securing additional funds for the study. Since it is a basin grant there is no requirement for additional matching funds, however, the scope requires more expenditure than what was granted. The Yellow Jacket District board has already committed additional funds and is seeking partnerships with basin stakeholders. The Yellow Jacket District is in the process of submitting grant applications to industrial and government organizations, as well as other private funding foundations. The Yellow Jacket District is cognizant of the current economic challenges confronting all facets of private and public life; however the District is optimistic that the initial positive responses to inquires for possible funding will result in active contributions amounting to approximately 20% of the basin grant approval.

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.

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2. For Applications that include a request for funds from the Statewide Account, describe how the water activity meets the **Evaluation Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines.)

N/A

Part D. – Required Supporting Material

Suggested Format for Scope of Work

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 the name/location of water bodies affected by the water activity.

1. **Yellow Jacket Canal and Josephine Basin Lateral** No. 476; capacity of 500 cubic feet per second.
2. **Ripple Creek Reservoir** No 476B, with a capacity of 27, 991.7 acre feet of water.
3. **Lost Park Reservoir** No. 476C, with a capacity of 33, 541.3 acre feet of water.
4. **Lost Park Feeder Canals** Nos. 1 and 2 No. 476 A, with capacities of 100 cubic feet of water per second for each, for a total of 200 cubic feet per second.
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6. **Thornburgh Reservoir** when constructed will have a capacity of 31, 807.6 acre feet of water. The sources of water are Milk Creek, a tributary of the Yampa River, and all named and unnamed tributaries entering above the site of the dam and all surface runoff and drainage around the perimeter, and Beaver Creek.
7. **The Axial Canal** has a capacity of 315 cubic feet of water per second of time. The sources of water are Mild Creek, a tributary of the Yampa River, and water released to Milk Creek from Thornburgh Reservoir.
8. **Morapos Feeder Canal** has a capacity of 70 cubic feet of water per second of time. The source of water is Morapos Creek, a tributary of the Williams Fork River.
9. **West Milk Creek Canal** has a capacity of 90 cubic feet of water per second of time. The sources of water are Milk Creek, a tributary of the Yampa River, and water released to Milk Creek from Thornburgh Reservoir. The East Milk Creek Lateral heads at a turnout of the West Milk Creek Canal approximately two and one-half miles downstream from the head-gate and point of diversion.
10. **Lost Park Feeder Canal** has a capacity of 100 cubic feet of water per second of time. The source of water is an unnamed tributary of the South Fork of the Williams Fork River.
11. **Lost Park Feeder Canal No. 2** has a capacity of 100 cubic feet of water per second of time. The source of the water is an unnamed tributary of the South Fork of the Williams Fork River.

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12. **Sawmill Mountain Reservoir** when constructed will have an active capacity of 77,000 acre feet, and dead storage of 3,000 acre feet. The sources of water are the North Fork of the White River, Big Beaver Creek, East Beaver Creek, Cow Creek, and tributaries thereto, tributaries of the White River.
13. **North Fork Feeder Conduit** has conditional decree of 500 cubic feet of water per second of time. The source of water is the North Fork of the White River, tributary to the White River.
14. **Bob Raley Tunnel:** Water from the point of diversion of the North Fork Feeder Conduit will be transported by pipeline to the Bob Raley Tunnel and thence to East Beaver Creek and the Sawmill Mountain Reservoir on Big Beaver Creek.

2. Please provide a brief narrative of any related or relevant previous studies.

Overtime, The District has engaged in a series of environmental, geological, hydrological and topographical studies for possible water storage projects. This data will be utilized when and where relevant and applicable in the proposed The Yellow Jacket Water Storage Feasibility Study.

These studies include:

“Effect of Proposed Private Power Development on Yellow Jacket Project-Colorado” April 1961, Bureau of Reclamation, Region 4, Salt Lake City, Utah

“Yellow Jacket Project”, prepared for Colorado Water Conservation Board by International Engineering Co., December 1982

“Yellow Jacket Project Colorado Alternative Summary Plans”, U.S. Bureau of Reclamation, Western Colorado Projects Office, Grand Junction, Colorado

“Yellow Jacket Project Colorado, Feasibility Report” April 1972, Appendix A, B, C, D

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.

Please provide a detailed statement of work using the following template. Additional sections or modifications may be included as necessary. Please define all acronyms. If a grant is awarded an independent statement of work document will be required with correct page numbers.

Statement of Work

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WATER ACTIVITY NAME –The Yellow Jacket Water District Water Storage Feasibility Study

GRANT RECIPIENT – Yellow Jacket Water Conservancy District

FUNDING SOURCE –Yampa and White River Water Basin Roundtable

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 Yellow Jacket Water District Water Storage Feasibility Study:

The Yellow Jacket District seeks funding for a Water Storage Feasibility Study. This proposed Feasibility Study will assess the Yellow Jacket water portfolio narrowing the available water rights/storage sites to three sites eligible for in-depth analysis resulting in the recommendation of one final water storage site recommendation. The Feasibility Report will include critical analysis and recommendations including preliminary environmental review, preliminary design and build costs, implementation time line. The Feasibility Report will also assess realistic funding mechanisms including public and private partnerships.

OBJECTIVES

List the objectives of the project

This object of this project is to obtain a professional critical analysis, recommendation and action plan for the implementation of a specific water storage project. This feasibility study is the first and most important step in Yellow Jacket's path to fulfilling its mission to ensure adequate water supply for the District's municipal, agricultural, industrial, wildlife and recreational needs. Northwest Colorado and specifically the Yellow Jacket District is blessed and burdened with an almost endless supply of natural resources. The utilization of these resources requires the utilization of a significant amount of the regions' water supply. Industrial use and depletion of regional water has a direct impact on existing agricultural, municipal, wildlife and recreational water uses. The Feasibility Study Report will assist Yellow Jacket in the implementation of effective regional water supply management.

The products and technical work that will be produced will conform to the CWCB loan program requirements

TASKS

Provide a detailed description of each task using the following format

Phase 1 – Task 1 Project Kickoff - One meeting will be held between the grant applicant, CWCB, the project consultants and sub-consultants. The purpose of the meeting will be to establish

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formal lines of communication, and to review the project tasks and schedule. A review of the proposed locations of dams and other infrastructure will be done to finalize a list and work plan.

Task Deliverables:

- A final work plan and schedule will be prepared and agreed to.
- A formal communication plan including roles and responsibilities will be finalized.
- Minutes of the meeting will be memorialized

Phase 1 – Task 2 Review of Existing technical studies – The project consultants will review existing records held by the Yellow Jacket Water Conservancy District (YJWCD), the U.S. Bureau of Reclamation (USBR), the Colorado River Water Conservation District (CRWCD), U.S. Forest Service, (USFS), U.S. Fish and Wildlife Service (USFWS), Bureau of Land Management (BLM), U.S. Geological Survey (USGS), State Engineers Office (SEO), Colorado Geological Survey (CGS) and other applicable sources of water information such as Colorado State University and the Division 5 and 6 Water Court. Pertinent documents will be catalogued for information that applies to the proposed study scope. This information will serve as background for collection of new data, and documentation of study efforts.

Task Deliverables:

- A bibliography of existing data for use in study efforts
- Compilation of support data to be used in additional tasks
- Technical Appendices for report

Phase 1 – Task 3 Water Supply Evaluation - Estimated water supplies available from project alternates will be prepared. The SWSI studies will be used to estimate future demands for the White River basin. Additional information that resulted from roundtable discussions will be used as well. This could include energy studies, expansion of basin demands to 2050, agricultural needs studies, and non-consumptive needs analysis. The consumptive and non-consumptive needs analysis will be used to determine how future White River basin demands can be met under the various scenarios of development. The conditional water rights that are owned by the YJWCD will be evaluated. Alternative water supplies that might be developed from other proposed projects and existing water rights will also be considered to determine the best option for developing additional water in the basin. Preliminary legal analysis on the viability of the water rights and their use for alternate project configurations will be done.

Task Deliverables:

- An estimate of preliminary water demands for the White River basin
- A preliminary estimate of water supplies that could be obtained from the YJWCD water rights
- A preliminary estimate of alternative water supplies that could be obtained from other projects and water rights in the basin..

Phase 1 – Task 4 Field Visits to sites – The project team will make visits to each dam site and diversion point that are included in the study. There may be additional sites that are identified and included as a part of the study. Off channel locations for dam sites are of particular interest where they minimize environmental impacts and permitting issues.

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Task Deliverables:

- Photo documentation of each site with written descriptions of existing conditions
- General observations of environmental issues that may be associated with each site
- Preliminary geologic mapping of the sites.
- Hydrologic issues mapped and compared in the field.
- Construction materials availability observations at project sites
- A written field report of each site visited that documents observations

Phase 1 – Task 5 GIS Base Mapping – A series of base maps will be compiled for each potential dam site. Information collected in the field plus pertinent data collected from existing information will be merged. This information will be used for preliminary design purposes in later tasks.

Task deliverables

- GIS maps and data base information compiled in an ARCVIEW format.

Phase 1 – Task 6 Documentation of changed conditions – A general review of the project data will be prepared that identifies changed conditions that exist in today's world that may impact the project. The State Water Supply Investigation (SWSI) will serve as the guiding document for water supply information. Other data will include policy and regulatory changes in the Endangered Species Act and the Clean Water Act. This information will be used to identify potential fatal flaws that may exist now that did not in the past. Later tasks that do comparative analysis of different projects will use this information as subjective input on relative risks for each project alternate.

Task Deliverables

- A summary memo report that tabulates assumptions used in original work and compares those assumptions to present day conditions.

Phase 1 – Task 6 Permit evaluation and risk analysis – Each project alternate will be evaluated for the type and number of permits that would be required. This will include local, State and Federal permits. A subjective risk analysis will be done to compare alternates. Risk is defined as the ability of a project proponent to actually build and operate a project under current regulatory constraints. The information developed in Task 5 will be used to identify potential changes in projects that may be necessary.

Task Deliverables:

- A tabulation of permits that are likely required for each project alternate.
- A summary report that outlines risks associated with specific sites.

Phase 1 – Task 7 Reconnaissance level cost estimates - Preliminary quantities and costs will be compiled for each project feature. Costs will include construction, legal, engineering, mitigation, and operations. A 30% contingency will be added to account for the lack of detail that exists at this level of study.

Task Deliverables:

- A summary tabulation of costs associated with each project alternate and feature.

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Phase 1 – Task 8 Preliminary geotechnical review – A preliminary study of existing data found in Task 2 and Task 3 will be prepared. It will summarize known conditions at each site, identify potential concerns that should be considered and make recommendations on additional work to be completed in future Phases.

Task Deliverables:

- A summary report on geotechnical conditions that exist at specific project locations.
- Recommendations for collection of additional information to be used in refining the study.

Phase 1 – Task 9 MCDA Alternative Screening – The data compiled in the 9 previous tasks will be used as input to a Multi-Criteria Decision Analysis tool. This tool is a spreadsheet optimization model, developed at Colorado State University, which can be used to input multiple decision criteria constraints and data such as project costs, regulatory permits, geotechnical information, engineering design, environmental information, water supplies, etc. It can then be used in multiple scenarios to weight values both objectively and subjectively. The results can be used to identify and rank the most feasible project alternates based on the input assumptions.

Task Deliverables:

- A comparative ranking of project alternates based on multiple scenarios and weighting criteria.
- A summary report of the results from MCDA analysis.

Phase 1 – Task 10 Summary Report of Phase 1 – An engineering report will be prepared that summarizes work that was completed in Phase 1. The report will discuss in detail the recommended course of action for future phases of work. If there are changes that are required in the scope of work those will be justified and budgeted for consideration by the grant applicant and CWCBC. The Yellow Jacket Board will receive a presentation of results. Input from the board will be incorporated into the next phases of the project.

Task Deliverables:

- 20 hard copies the Phase 1 engineering report
- A downloadable PDF of the Phase 1 report that will be available on-line.

Phase II – Task 1 Refined field work and mapping – Results from Phase 1 will be used to determine which project alternates and sites justify more study. At present, it is assumed there will be at least three sites selected for additional study. The project team will revisit those sites with a list of data queries that need to be answered. Additional mapping information will be collected for input into the GIS data base developed in Phase 1

Task Deliverables:

- Field reports for each site visited.
- A summary report of the additional work that was completed with a comparison to the recommendations outlined in Phase 1.

Phase II – Task 2 Refined Engineering Analysis – Results obtained from Task 1 will be used to revise preliminary layouts of project alternatives. Revised quantity and cost estimates will be prepared. Costs will include construction, legal, engineering, mitigation, and operations. A 25% contingency will be added to account for the lack of detail that exists at this level of study. All construction costs will be

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based on current unit price data where available from projects of similar complexity. Contractor interviews will also be conducted to update the Phase 1 estimates.

Task Deliverables:

- Detailed cost and quantity spreadsheets of each project alternate and project facility

Phase II – Task 3 Refined geotechnical information – Results from Task 1 will be used to update geologic and geotechnical information for each project site. The observations will be used to determine constructability issues associated with dam sites, canals, pump plants and other hydraulic structures potentially associated with each alternate. Recommendations will be offered for work to be completed in Phase III.

Task Deliverables:

- A summary geotechnical report of project alternates that outlines current results and recommendations

Phase II - Task 4 Refined permit and risk analysis- The results of Phase 1 and additional data collected in phase II will be used to refine the level and scope of permitting issues that will likely be associated with each project alternate. This task will require legal advice which will come from the Owners Representative/Project Manager, Trina Zagar-Brown, or consulting attorneys that may be brought in if specialty advice is deemed necessary. The engineering aspects of permitting will also be considered with a strategy of permit avoidance wherever possible. Technical advice will be offered to the legal team on engineering solutions if they exist. This information will be used to prepare a comparative risk analysis for further ranking of project feasibility.

Task Deliverables:

- Summary memo of identified permits for each project alternate.
- Tabulation of known advantages, disadvantages of each alternate

Phase II – Task 5 CDSS StateMod Implementation – The White River Basin Water Resources Planning Model, available from CDSS, will be used to develop a base flow Surface Water Model of the basin. The alternatives chosen for further study in Phase II would be included in future scenario models. The project consultants will use the models to test the impacts and efficacy of the proposed structures, including operational strategies. The results of the models will be included as constraint/ selection criteria in the Phase II MCDA analysis.

Task Deliverables:

- StateMod input files and results for each alternative summarized in a memo.

Phase II – Task 6 MCDA screening analysis refinement – The information that is developed in Phase II will be merged with Phase I data. The optimization modeling will be refined to rank project alternates with the improved information. The modeling tool may be revised and enhanced with new ranking criteria if the information gathered to date justifies it. New scenario planning results would be developed

Task Deliverables:

- A summary tabulation of revised project rankings that can be used to identify preferred alternative(s) that warrant further study.

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Phase II – Task 7 Selection of preferred study alternative(s) – The results from all tasks in Phase I and II will be used to make recommendations on the work to be completed in the final phase. The entire study process is geared towards identifying a project that would provide a benefit to the basin for multiple uses and purposes. There is a possibility that multiple project alternates may still be recognized as viable with the screening results. That will be recognized for future study in EIS documents if a project moves forward. However the highest ranked alternative will be identified as the project that warrants Phase III study.

Task Deliverables:

- A summary report of Phase II work with recommendations to the Yellow Jacket Water Conservancy District, the Yampa White basin Roundtable and CWCB.

Phase II – Task 8 Yellow Jacket Board Presentation - The results of Phase II will be presented to the Yellow Jacket Board for discussion and a decision point in the project.. The meeting is intended to reach a consensus of the Board whether the project should move forward to Phase III study.

Task Deliverables:

- A PowerPoint presentation that can be used for communication of study results.
- Minutes of the Yellow Jacket Board meeting that give direction on the course of action for Phase III work.

Phase II – Task 9 Yampa/White Basin Roundtable Presentation – The results of Phase I and II work will be reported to the roundtable. This communication is intended to report how taxpayer money that was approved by them was spent and the results and status to date. The input received from the Yellow Jacket Board will be reported to the roundtable. The roundtable would be asked for concurrence of the work completed to date.

Task Deliverables:

- Minutes of the Yampa/White Basin Roundtable meeting with comments and critique
- A summary report of Task 8 and 9 that will be delivered to CWCB staff as a status report.

Phase III – Task 1 Survey Mapping of final project site – A licensed professional surveyor will set control and gather data adequate for preliminary layout of project facilities that were identified for further study in Phase II. This work will focus on the preferred dam site and ancillary facilities such as pump stations (if necessary). Pipeline routes will not be topographically mapped at this phase. The mapping data will be used for design layout and refined quantity estimates of facilities.

Task Deliverables:

- Detailed topographic maps of selected project sites to an accuracy of 1 foot contours.

Phase III - Task 2 Detailed geotechnical exploration and geologic mapping – A licensed professional engineer and geologist will perform detailed field exploration of the selected dam site to a detail that can be used for preliminary layout and design. Boreholes along the dam axis, test pits at potential materials borrow sites and the requisite lab testing will be performed. Geologic mapping will be revised from Phase I and II based on the information collected at this Phase.

Task Deliverables:

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- A preliminary geotechnical report that summarizes the field work completed, the lab testing done and makes recommendations on the general physical layout of a dam that would meet the current standard of care for dam design and meet regulatory requirements.
- A preliminary geologic map of the site that summarizes all of the work collected in the 3 phases of study.
- A preliminary geologic report that summarizes the findings of the 3 phases and makes recommendations on design considerations for the proposed project, and possible additional exploration needed for final design.

Phase III – Task 3 Preliminary dam and project layout – A preliminary set of plans will be developed for the highest ranked alternate using results in tasks 1 and 2. The layout will incorporate sufficient detail that shows dam embankment, outlet works, spillway configuration and ancillary facilities such as a pump stations and filling infrastructure. The level of detail will be sufficient to obtain detailed quantity and cost estimates. Stage storage curves would be prepared. Wetlands would be delineated at dam and reservoir sites to determine the level of mitigation and permit requirements involved.

Task Deliverables:

- Preliminary layout of the highest ranked alternate identified in the study in an AutoCAD format.
- PDF files of the plan sheets developed for the preferred alternative.
- Wetlands delineations at proposed project facilities and a determination of probable mitigation requirements

Phase III – Task 4 Finalize water supply estimates and master plan – The results of the first 2 phases will be analyzed for compatibility to the information collected in the first 3 tasks of Phase III. Actual reservoir data developed in Task 2 would be used to estimate project yields from the water rights. Some refinement or revision may be warranted which would be run through the CDSS model again. In an extreme situation, additional study out of the scope of this work may be necessary which may be deferred to future EIS studies if the project moves forward.

Task Deliverables:

- A summary report on the available water supply that can be developed by the proposed project. Recommendations will be proposed recognizing the limitations of this analysis and further work that may be necessary for the permitting stages of this project.

Phase III – Task 5 Detailed quantity and cost estimates – The project layout completed in phase III will be used to revise and refine previous estimates. The level of detail will meet the standards for preliminary design of project facilities. Construction costs will be developed from current bids and market value of construction. A 20% contingency will be used for unknowns that exist at this stage of design. Other costs such as design, project management, operations and maintenance will also be estimated and tabulated.

Task Deliverables:

- Detailed cost and schedule of values for the proposed project

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Phase III – Task 6 Timeline for project implementation - A project timeline will be outlined based on the results developed in all 3 phases. The timeline will consider phasing with future needs, permitting and regulatory approvals, funding, design and construction.

Task Deliverables:

- A project implementation schedule developed in Microsoft Project that gives estimated time frames for specific phases of project tasks.

Phase III – Task 7 Analysis of funding options - A list of potential funding options will be developed based on the costs. Funding will include both loan and grant options from Federal, State and Private sources. These options will discuss possible partnering arrangements to make the economics of the project viable.

Task Deliverables:

- A list of funding options to be considered for the project with a discussion of the pros and cons for each option.
- An outline and discussion of possible project partnering arrangements.

Phase III – Task 8 Engineering Feasibility Report – A final Phase III report will summarize the study findings from all three phases. Report will include an Executive Summary, project discussion, conclusions and recommendations, appendices of support information, and GIS mapping of pertinent facilities. A discussion of the relationship this project would have in meeting the identified needs of SWSI for this basin would be presented. The purpose and need of the project as it relates to the basin will be outlined. This information would be used in future studies if the project moves forward. The appendices would specifically contain quantity and cost estimates with support data, MCDA analysis, CDSS modeling results, project timeline charts, pertinent sections of SWSI that apply to the White River, and water rights decrees.

Task deliverables:

- 20 hard copies of the final report for the Yellow Jacket Water Conservancy District
- A downloadable PDF file for the CWCB website to make available for public access and use.

Phase III – Task 9 Yellow Jacket Board Presentation – A presentation of the Phase III results will be made to the board. The presentation will focus on discussion of the next steps to be taken based on the results.

Task Deliverables:

- Communication of results to the Grant recipient via verbal and PowerPoint presentations.
- Recorded minutes of the meeting to memorialize decisions and discussion during the meeting.

Phase III – Task 10 Basin Roundtable Presentation – A presentation of the Phase III results will be made to the Yampa/ White Basin Roundtable via a meeting and preparation of a summary memo. This memo will also serve as communication from the basin roundtable to the IBCC and CWCB. The presentation will follow the format used for the Yellow Jacket board.

Task Deliverables:

- Communication of results to basin roundtable and IBCC.

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Phase III – Task 11 CWCB Board Presentation – A presentation will be made to the CWCB board to summarize the findings, conclusions and recommendations that were obtained from the feasibility study. The presentation will focus on the results and proposed steps in moving forward. It is intended to report to CWCB on the final results of using basin roundtable money for this particular project.

Task Deliverables:

- Communication of results to CWCB

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.

Final Deliverable: Yellow Jacket Water Storage Feasibility Study Report:

Yellow Jacket Water Storage Feasibility Study: A detailed report narrowing the Yellow Jacket Water District portfolio down to one specific proposed water storage project. The Feasibility Study Report will assess relevant environmental, hydrological, real estate access and acquisition, water storage capacity, preliminary design and construction issues. The Feasibility Study Report will outline specific action items addressing the necessary steps to commence the proposed water storage project. The Project is specifically intended to focus the District in on the most feasible water storage project which will yield the greatest good to the District's overall water users and overall water supply management.

Consultant Selection Process

The Yellow Jacket Water Conservancy District will use the following qualifications in selecting a consultant to perform this study:

1. Firm must be licensed to practice engineering in the State of Colorado and have licensed professional engineers as owners.
2. Project team must have experience in water rights, water supply investigations, basin modeling, dam design and construction, geotechnical evaluations, wetlands evaluations, environmental permitting and engineering economics.

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3. Firm personnel must be familiar with the legal and institutional framework of water conservancy districts.
4. Firm personnel must have experience in economic evaluations for project funding.
5. Firm personnel must be familiar with basin roundtable process and CWCB requirements for studies.
6. Firm personnel must be familiar with water supply issues in Colorado with particular emphasis on the Western Slope.
7. Other considerations may include:
 - a. Office location
 - b. Individual staff qualifications
 - c. References
 - d. Reputation

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BUDGET

Provide a detailed budget by task including number of hours and rates for labor and unit costs for other direct costs (i.e. mileage, \$/unit of material for construction, etc.). A detailed and perfectly balanced budget that shows all costs is required for the State's contracting and purchase order processes. Sample budget tables are provided below.

Please note that these budget tables are examples and will need to be adapted to fit each individual application. Tasks should correspond to the tasks described above.

A detailed budget has been supplied as an attachment for this application.

SCHEDULE

Provide a project schedule including key milestones for each task and the completion dates or time period from the Notice to Proceed (NTP). This dating method allows flexibility in the event of potential delays from the procurement process. Sample schedules are provided below. Please note that these schedules are examples and will need to be adapted to fit each individual application.

A Microsoft Project phase and task schedule has been supplied as an attachment for this application. Please refer to this.

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.

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

Signature of Applicant:

Print Applicant's Name: Trina K. Zagar Brown

Return this application to:

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

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Attachment 1 Reference Information

The following information is available via the internet. The reference information provides additional detail and background information.

Colorado Water Conservation Board (<http://cwcb.state.co.us/>)

Loan and Grant policies and information are available at – <http://cwcb.state.co.us/Finance/>

Interbasin Compact Committee and Basin Roundtables (<http://ibcc.state.co.us/>)

Interbasin Compact Committee By-laws and Charter (under Helpful Links section) –

<http://ibcc.state.co.us/Basins/IBCC/>

Legislation

House Bill 05-1177 - Also known as the Water for the 21st Century Act –

<http://cwcbweblink.state.co.us/DocView.aspx?id=105662&searchhandle=28318>

House Bill 06-1400 – Adopted the Interbasin Compact Committee Charter –

<http://cwcbweblink.state.co.us/DocView.aspx?id=21291&searchhandle=12911>

Senate Bill 06-179 – Created the Water Supply Reserve Account –

<http://cwcbweblink.state.co.us/DocView.aspx?id=21379&searchhandle=12911>

Statewide Water Supply Initiative

General Information – <http://cwcb.state.co.us/IWMD/>

Phase 1 Report – <http://cwcb.state.co.us/IWMD/SWSITechnicalResources/SWSIPhaseIReport/>

Attachment 2
Insurance Requirements

NOTE: The following insurance requirements taken from the standard contract apply to WSRA projects that exceed \$100,000 in accordance with the policies of the State Controller's Office. Proof of insurance as stated below is necessary prior to the execution of a contract.

13. INSURANCE

Grantee and its Sub-grantees shall obtain and maintain insurance as specified in this section at all times during the term of this Grant: All policies evidencing the insurance coverage required hereunder shall be issued by insurance companies satisfactory to Grantee and the State.

A. Grantee

i. Public Entities

If Grantee is a "public entity" within the meaning of the Colorado Governmental Immunity Act, CRS §24-10-101, et seq., as amended (the "GIA"), then Grantee shall maintain at all times during the term of this Grant such liability insurance, by commercial policy or self-insurance, as is necessary to meet its liabilities under the GIA. Grantee shall show proof of such insurance satisfactory to the State, if requested by the State. Grantee shall require each Grant with Sub-grantees that are public entities, providing Goods or Services hereunder, to include the insurance requirements necessary to meet Sub-grantee's liabilities under the GIA.

ii. Non-Public Entities

If Grantee is not a "public entity" within the meaning of the GIA, Grantee shall obtain and maintain during the term of this Grant insurance coverage and policies meeting the same requirements set forth in §13(B) with respect to sub-Grantees that are not "public entities".

B. Sub-Grantees

Grantee shall require each Grant with Sub-grantees, other than those that are public entities, providing Goods or Services in connection with this Grant, to include insurance requirements substantially similar to the following:

i. Worker's Compensation

Worker's Compensation Insurance as required by State statute, and Employer's Liability Insurance covering all of Grantee and Sub-grantee employees acting within the course and scope of their employment.

ii. General Liability

Commercial General Liability Insurance written on ISO occurrence form CG 00 01 10/93 or equivalent, covering premises operations, fire damage, independent Grantees, products and completed operations, blanket Grantual liability, personal injury, and advertising liability with minimum limits as follows:

(a) \$1,000,000 each occurrence; (b) \$1,000,000 general aggregate; (c) \$1,000,000 products and completed operations aggregate; and (d) \$50,000 any one fire. If any aggregate limit is reduced below \$1,000,000 because of claims made or paid, Sub-grantee shall immediately obtain additional insurance to restore the full aggregate limit and furnish to Grantee a certificate or other document satisfactory to Grantee showing compliance with this provision.

iii. Automobile Liability

Automobile Liability Insurance covering any auto (including owned, hired and non-owned autos) with a minimum limit of \$1,000,000 each accident combined single limit.

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iv. Additional Insured

Grantee and the State shall be named as additional insured on the Commercial General Liability and Automobile Liability Insurance policies (leases and construction Grants require additional insured coverage for completed operations on endorsements CG 2010 11/85, CG 2037, or equivalent).

v. Primacy of Coverage

Coverage required of Grantee and Sub-grantees shall be primary over any insurance or self-insurance program carried by Grantee or the State.

vi. Cancellation

The above insurance policies shall include provisions preventing cancellation or non-renewal without at least 45 days prior notice to the Grantee and the State by certified mail.

vii. Subrogation Waiver

All insurance policies in any way related to this Grant and secured and maintained by Grantee or its Sub-grantees as required herein shall include clauses stating that each carrier shall waive all rights of recovery, under subrogation or otherwise, against Grantee or the State, its agencies, institutions, organizations, officers, agents, employees, and volunteers.

C. Certificates

Grantee and all Sub-grantees shall provide certificates showing insurance coverage required hereunder to the State within seven business days of the Effective Date of this Grant. No later than 15 days prior to the expiration date of any such coverage, Grantee and each Sub-grantee shall deliver to the State or Grantee certificates of insurance evidencing renewals thereof. In addition, upon request by the State at any other time during the term of this Grant or any sub-grant, Grantee and each Sub-grantee shall, within 10 days of such request, supply to the State evidence satisfactory to the State of compliance with the provisions of this §13.

Attachment 3
Water Supply Reserve Account Standard Contract

NOTE: The following contract is required for WSRA projects that exceed \$100,000. (Projects under this amount will normally be funded through a purchase order process.) Applicants are encouraged to review the standard contract to understand the terms and conditions required by the State in the event a WSRA grant is awarded. Significant changes to the standard contract require approval of the State Controller's Office and often prolong the contracting process.

It should also be noted that grant funds to be used for the purchase of real property (e.g. water rights, land, conservation easements, etc.) will require additional review and approval. In such cases applicants should expect the grant contracting process to take approximately 3 to 6 months from the date of CWCB approval.

Attachment 4
W-9 Form

NOTE: A completed W-9 form is required for all WSRA projects prior execution of a contract or purchase order. Please submit this form with the completed application.