



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Craig Godbout
Program Manager - Water Supply Reserve Account Grant Program
Water Supply Planning Section

DATE: July 8, 2016

AGENDA ITEM: 16 (a-i) WSRA Grant Requests

Staff Recommendation - Action Items: WSRA Grant Requests

A summary of staff's recommendation for each WSRA application is provided in the first component of the attached table. If applicable, the table also includes a breakdown of match amounts for applications that include a request for Statewide Account WSRA funds.

Favorable recommendations may be contingent on providing the CWCB with additional information, clarifications, or modifications in the scope of work. Please refer to the Water Activity Summary Sheets contained within this agenda item to find a summary of staff's review and any conditions associated with each recommendation.

Background:

For this agenda item the Board is provided with a brief overview of applications to the Water Supply Reserve Account (WSRA). Attachments to this memo include:

- Summary spreadsheet detailing funding requests for the basin and statewide accounts;
- Summary spreadsheet displaying current WSRA Balance Summary of Fund Appropriations and Receipts by Fiscal Year, and Fund Distribution by Basin and Statewide Account.
- Water Activity Summary Sheets which provide an overview, discussion, issues/additional needs, and staff recommendation regarding funding, partial funding, or not funding the applications.

Staff's review of the applications involves the following steps:

- 1) Applications are reviewed for completeness based on the information requirements, which are primarily outlined in Part 2 of the Criteria and Guidelines (C&G).
- 2) Applications are reviewed to verify that the water activity meets the eligibility requirements in Section 39-29-108 (III) C.R.S. (C&G, Part 2) and the threshold criteria, which are based on the requirements of Section 39-29-108 (III) C.R.S., and two



sections of the Water for the 21st Century Act (House Bill 1177); Section 37-75-102 and Section 37-75-104(2)(c) (C&G, Part 3). Staff also verifies that the applicant was an eligible entity to receive funding (C&G, Part 2).

- 3) Staff then prepares the Water Activity Summary Sheet which documents the outcome of the review process and contains staff's recommendations.

Water Supply Reserve Account Balance Summary and Project Status Report:

To provide the Board updates on the status of specific Water Supply Reserve Account grant applications and projects, staff provides a status report in the CWCB Director's Report. The WSRA status report includes the following information:

- List of completed WSRA projects;
- List of WSRA projects in progress; and
- List of WSRA projects in the contracting and procurement process.



Water Supply Reserve Account Applications for Consideration at the CWCB July 2016 Board Meeting

Agenda Item	Basin	Applicant	Name of Water Activity	Basin(s) Account Request	Statewide Account Requests	Total Request	Cash Match	In-Kind Match	Total Match	Total Project or Study Costs	Staff Recommendations	PM
16(a)	Colorado	East Mesa Water Company	Thomas Creek Crossing and Pipeline and Flume Replacement	\$30,000	\$0	\$30,000	\$53,945	\$0	\$53,945	\$113,945	Staff recommends approval of up to \$30,000 from the Colorado Basin Account	Brent Newman
16(b)	Colorado	The New Multa Trina Ditch Company	North Thompson Ditch	\$20,000	\$0	\$20,000	\$135,000	\$5,000	\$140,000	\$160,000	Staff recommends approval of up to \$20,000 from the Colorado Basin Account	Brent Newman
16(c)	Gunnison	Surface Creek Ditch and Reservoir Company	Eggleston Dam Outlet Repair Project	\$46,911	\$0	\$46,911	\$31,947	\$0	\$31,947	\$78,858	Staff recommends approval of up to \$46,911 from the Gunnison Basin Account	Brent Newman
16(d)	Gunnison	Marcot Park Ditch and Reservoir Company	Marcot Dam Outlet Repair	\$49,649	\$0	\$49,649	\$37,461	\$0	\$37,461	\$87,110	Staff recommends approval of up to \$49,649 from the Gunnison Basin Account	Brent Newman
16(e)	Gunnison	Shavano Conservation District	Ditch Mapping of Colona Area	\$13,658	\$0	\$13,658	\$3,413	\$2,200	\$5,613	\$19,271	project titled: Marcot Dam Outlet Repair.	Brent Newman
16(f)	Southwest	Bauer Lake Water Company	Jackson Lake/Bauer Lake #2 Ditch Upgrade Project	\$55,000	\$0	\$55,000	\$0	\$3,000	\$3,000	\$58,000	Staff recommends approval of up to \$55,000 from the Southwest Basin Account	Craig Godbout
16(g)	Southwest	Animas Consolidated Ditch Company	Culvert Replacement Project	\$34,354	\$0	\$34,354	\$34,353	\$0	\$34,353	\$68,707	Staff recommends approval of up to \$34,354 from the Southwest Basin Account	Craig Godbout
16(h)	Yampa/White/Green	City of Steamboat Springs	Steamboat Springs Yampa River Management Plan	\$21,000	\$0	\$21,000	\$76,875	\$12,000	\$88,875	\$109,875	Staff recommends approval of up to \$21,000 from the Yampa/White/Green Basin Account	Chris Sturm
				\$270,572	\$0	\$270,572						

Change of Fiscal Agent (Grantee)

Agenda Item	Basin	Current Fiscal Agent (Grantee)	Proposed Fiscal Agent (Grantee)	Name of Water Activity								
16(i)	Arkansas	Lower Arkansas Water Conservancy District	Upper Arkansas Water Conservancy District	Arkansas Roundtable Basin Implementation Plan Coordinator								

Basin	Basin Account Requests	Statewide Account Requests	Total Requests	Current Basin Account Balances	Remaining Basin Account Balances (if all requests approved)	Current Statewide Account Balance
Arkansas Basin	\$0	\$0	\$0	\$184,903	(1)	\$184,903
Colorado Basin	\$50,000	\$0	\$50,000	\$473,327		\$423,327
Gunnison Basin	\$110,218	\$0	\$110,218	\$702,572		\$592,354
Metro Basin	\$0	\$0	\$0	\$334,337		\$334,337
North Platte	\$0	\$0	\$0	\$953,900		\$953,900
Rio Grande	\$0	\$0	\$0	\$345,156		\$345,156
Southwest	\$89,354	\$0	\$89,354	\$580,057		\$490,703
South Platte	\$0	\$0	\$0	\$423,806		\$423,806
Yampa/White/Green	\$21,000	\$0	\$21,000	\$1,185,624	(1)	\$1,164,624
Water Supply Reserve Account Total Requests	\$270,572	\$0	\$270,572	\$5,183,682		\$4,913,110

(1) Arkansas and Yampa/White/Green Current Basin Account Balances do not reflect May 2016 conditional approvals by CWCB

COLORADO WATER CONSERVATION BOARD
Water Supply Reserve Account - Balance Summary
June 2016

7/5/2016

Fund Appropriation and Receipts				
Fiscal Year	Legislative Appropriation	Funds Received	Statewide Account	Basin Account
2006/2007	\$10,000,000	\$10,000,000	\$5,500,000	\$4,500,000
2007/2008	\$6,000,000	\$6,000,000	\$4,200,000	\$1,800,000
2008/2009	\$10,000,000	\$7,000,000	\$4,300,000	\$2,700,000
2009/2010	\$5,775,000	\$5,775,000	\$4,215,750	\$1,559,250
2010/2011	\$6,000,000	\$6,000,000	\$4,380,000	\$1,620,000
2011/2012	\$7,000,000	\$7,000,000	\$4,732,000	\$2,268,000
2012/2013	\$10,000,000	\$7,157,724	\$4,580,943	\$2,576,781
2013/2014	\$10,000,000	\$10,091,639	\$6,458,649	\$3,632,990
2014/2015	\$10,000,000	\$10,000,000	\$6,400,000	\$3,600,000
2015/2016	\$10,000,000	\$9,103,590	\$5,826,298	\$3,277,292
Interest	N/A	\$2,857,935	\$1,829,078	\$0
Prior Years Interest Adjustment			\$1,028,856	\$0
2014/2015 Interest	N/A	\$ 240,216	\$240,216	\$0
2015/2016 Interest	N/A	\$ 180,824	\$180,824	\$0
TOTAL	\$84,775,000	\$81,406,927	\$53,872,614	\$27,534,313

Interest diverted to SW per DNR reconciliation

Note: The WSRA is a Severance Tax "Tier II" program with 40% of funds distributed on July 1, 30% on January 1, and the final 30% on April 1.

In FY 2008/2009 the final 30% installment of \$3,000,000 was not received due to the State's budgetary shortfall.

In January 2012 interest for the program from its inception to date was credited directly to the Statewide Account.

Interest from January 2012 on is regularly calculated by the Treasury and credited to the Statewide Account.

Fund Distribution					
Basin	Approved Basin Grants	Total Basin Funds	Basin Account Balance	Approved State Grants	Statewide Account Balance
Arkansas	\$2,874,465	\$3,059,368	\$184,903 (1)	\$8,739,504	
Colorado	\$2,586,041	\$3,059,368	\$473,327	\$5,612,524	
Southwest *	\$2,479,311	\$3,059,368	\$580,057	\$7,199,911	
Gunnison *	\$2,356,796	\$3,059,368	\$702,572	\$4,249,681	
Metro	\$2,725,031	\$3,059,368	\$334,337	\$7,346,148	
North Platte	\$2,105,468	\$3,059,368	\$953,900	540,942	
Rio Grande	\$2,714,212	\$3,059,368	\$345,156	\$10,350,323	
South Platte *	\$2,635,562	\$3,059,368	\$423,806	\$6,955,510	
Yampa/White	\$1,873,744	\$3,059,368	\$1,185,624 (1)	\$731,747	
TOTAL	\$22,350,631	\$27,534,313	\$5,183,682	\$51,726,289	\$2,146,325
TOTAL APPROVED GRANTS					\$74,076,919

Note: Only includes grants approved by CWCB

(1) Arkansas and Yampa/White/Green Current Basin Account Balances do not reflect May 2016 conditional approvals by CWCB

*See Comments - Figures have changes due to grantee's withdrawn funding

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
July 20-21, 2016
Agenda Item 16(a)

Applicant & Fiscal Agent: East Mesa Water Company

Water Activity Name: East Mesa Water Company Thomas Creek Crossing and Pipeline replacement and measuring flume at headgate

Water Activity Purpose: Agricultural

County: Garfield

Drainage Basin: Colorado

Water Source: Crystal River

Amount Requested/Source of Funds: \$30,000 Colorado Basin Account
\$30,000 Total Basin Account request

Matching Funds: Applicant Match: \$53,945 = 47% of the total project cost of \$113,945
(refer to *Funding Summary/Matching Funds* section below)

Staff Recommendation:

Staff recommends approval of up to \$30,000 from the Colorado Basin Account to help fund the project titled: East Mesa Water Company - Thomas Creek Crossing and pipeline replacement and measuring flume at headgate.
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Water Activity Summary: WSRA funds, if approved, will help fund the project titled: East Mesa Water Company - Thomas Creek Crossing and pipeline replacement and measuring flume at headgate. The East Mesa Water Company will install a 48 inch ADS plastic pipeline over Thomas Creek to replace the existing failing flume. This pipeline is located about 5 miles south of the intersection of Highway 82 and 133 at Carbondale, Colorado. Current plans are to complete the proposed work this spring or this fall and winter while the ditch is not in use.

The proposal is to construct a 140 ft. of 48-inch diameter pipe over the creek. The other small project of the Ditch is to replace about 140 feet of rusted pipe with 48 inch plastic ADS pipe in a section of the ditch that has historically leaked and the ditch embankment fails. This pipeline is located about 8.5 miles south of the intersection of Highway 82 and 133 at Carbondale, Colorado.

The third phase will be the replacement of the failing measuring flume and short pipe section at the headgate. A new 48 inch Parshall Flume will be installed along with a 20 ft. section of 46 inch elliptical Corrugated Metal Pipe. The new Parshall Flume will provide the ditch company with accurate reading for the amount of water diverted. This portion of the project is located nine miles south of Carbondale, Co. This project and service area lies in the Crystal River Valley in the western portion of Pitkin County and serves an area in the southeastern portion of Garfield County, Colorado. The Ditch Company has approximately 8.5 miles of distribution ditch starting at the diversion 9 miles south of the intersection of Highway 82 and 133 at Carbondale, Colorado. The service area is 740 acres in size and is known locally as East Mesa of the Crystal River and lies approximately one to

five miles south of Carbondale, Colorado. It should also be noted that much of this acreage is in numerous conservation easements held by Aspen Valley Land Trust. Therefore, the inherent continued irrigation of this property protects the beauty of Mount Sopris, the open space and agricultural setting of the area.

The ditch company services the 740 total acres with 12 users including private landowners and home owners association. The land use is nearly 100% agricultural. Irrigated acreage within the service area is primarily used for cattle ranching, nursery trees, and to grow hay and forage crops. The hay crop is used as cattle and horse feed, or is sold.

Discussion: The Colorado Basin Roundtable voted unanimously at its May 23, 2016, meeting to support the East Mesa Water Co. WSRA grant request, but at the 50 percent level: \$30,000. This is not a reflection on the merits of the project but of the fact that Severance Tax Funds are down and affecting WSRA Basin Account funding.

This project meets three major themes of the Colorado Basin Implementation Plan; 1) Sustain, Protect, and Promote Agriculture; 2) Encourage Conservation, and 3) Stream Health.

This project also meets additional critical actions identified in the Critical Action Plan (Chapter 10) of Colorado's Water Plan:

- **D2:** Encourage ditch-wide and regional planning to explore system-wide conservation and efficiency opportunities and tradeoffs, the potential for water sharing, and long-term infrastructure maintenance needs.
- **D3:** Provide grants, loans, and technical support to update and improve Colorado's aging agricultural infrastructure, especially where improvements provide multiple benefits.

Issues/Additional Needs: Staff will work with applicant to update budget and schedule, based on the Colorado Basin Roundtable's decision to fund this project at 50% of the request.

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
CRWCD	\$35,000	\$0	\$35,000
Ditch Company funds	\$18,945	\$0	\$18,945
Subtotal Matching Funds	\$53,945	\$0	\$53,945
WSRA Colorado Basin Account	\$30,000	n/a	\$30,000
Total Project Costs	\$83,945	\$0	\$83,945

*** Staff will work with project proponent to ensure that sufficient funds are in-hand to fully fund the project, given the CBRT decision to fund at 50%.**

CWCB Project Manager: Brent Newman

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 will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
July 20-21, 2016
Agenda Item 16(b)

Applicant & Fiscal Agent: The New Multa Trina Ditch Company
Water Activity Name: North Thompson Ditch
Water Activity Purpose: Agricultural
County: Garfield
Drainage Basin: Colorado
Water Source: West Divide Creek
Amount Requested/Source of Funds: \$20,000 Colorado Basin Account
\$20,000 Total Basin Account request
Matching Funds: Applicant Match: \$140,000 = 87.5% of the total project cost of \$160,000
(refer to *Funding Summary/Matching Funds* section below)

Staff Recommendation:

Staff recommends approval of up to \$20,000 from the Colorado Basin Account to help fund the project titled: North Thompson Ditch.
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Water Activity Summary: WSRA funds, if approved, will help fund the project titled: North Thompson Ditch. Approximately 2 to 3 years ago the US Forest Service clear-cut the timber above the north collection ditch that is part of the Thompson diversion ditch system. The ditch company believes that the combination of the clear cut and the above average rainfall in the month of May 2015 caused the ground to slip taking out approximately 500 feet of ditch.

The New Multa Trina Ditch Company is going to pipe 500 feet of ditch with an inverted siphon. The work will be completed between July 1, 2016 and November 1, 2016. The outcome from the slide would cause the shareholders to lose one to two weeks of water to irrigate their agriculture land. Piping would also cut down the loss to evaporation. The shareholders of the ditch company want to avoid losing the amount of water delivered at a very crucial time of year, due to not being able to transfer the water from the north drainage that is carried by the north collection ditch of the Thompson Creek diversion project.

The long term goals of the TNMTDC are to pipe as much of the ditch as can be so to reduce water loss. When there are needed repairs pipe will be used, if feasible. Repairing the Thompson creek project will make sure that the late water needs of shareholders are met, thereby protecting the water right. The project will be funded by USDA, Colorado River Water Conservation District, cash and in kind (miles and time) from shareholders. The water is needed to preserve the ranches and farms that rely on the New Multa Trina Ditch Company for irrigation water.

Discussion: The Colorado Basin Roundtable voted unanimously at its May 23, 2016, meeting to support the New Multa Trina Ditch Company's WSRA grant request, but at the 50 percent level:

\$20,000. This is not a reflection on the merits of the project but of the fact that Severance Tax Funds are down and affecting WSRA Basin Account funding.

This project meets two major themes of the Colorado Basin Implementation Plan; 1) Sustain, Protect, and Promote Agriculture and 2) Encourage Conservation.

This project also meets additional critical actions identified in the Critical Action Plan (Chapter 10) of Colorado's Water Plan:

- **D2:** Encourage ditch-wide and regional planning to explore system-wide conservation and efficiency opportunities and tradeoffs, the potential for water sharing, and long-term infrastructure maintenance needs.
- **D3:** Provide grants, loans, and technical support to update and improve Colorado's aging agricultural infrastructure, especially where improvements provide multiple benefits.

Issues/Additional Needs: Staff will work with applicant to update budget and schedule, based on the Colorado Basin Roundtable's decision to fund this project at 50% of the request.

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
CRWCD	\$40,000	n/a	\$40,000
USDA	\$85,000	n/a	\$85,000
Ditch Company	\$10,000	\$5,000	\$15,000
Subtotal Matching Funds	\$135,000	\$0	\$140,000
WSRA Colorado Basin Account	\$20,000	n/a	\$20,000
Total Project Costs	\$155,000	\$5,000	\$160,000

*** Staff will work with project proponent to ensure that sufficient funds are in-hand to fully fund the project, given the CBRT decision to fund at 50%.**

CWCB Project Manager: Brent Newman

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 will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
July 20-21, 2016
Agenda Item 16(c)

Applicant & Fiscal Agent: Surface Creek Ditch and Reservoir Company
Water Activity Name: Eggleston Dam Outlet Repair Project
Water Activity Purpose: Multipurpose
County: Delta
Drainage Basin: Gunnison
Water Source: Surface Creek
Amount Requested/Source of Funds: \$46,911 Gunnison Basin Account
\$46,911 Total Basin Account request

Matching Funds: Applicant Match: \$31,947 = 40% of the total project cost of \$78,858
(refer to *Funding Summary/Matching Funds* section below)

Staff Recommendation:

Staff recommends approval of up to \$46,911 from the Gunnison Basin Account to help fund the project titled: Eggleston Dam Outlet Repair Project.

Water Activity Summary: WSRA funds, if approved, will help fund the project titled: Eggleston Dam Outlet Repair Project. Eggleston Reservoir is located on the Grand Mesa. Eggleston Reservoir is one of 16 reservoirs operated by the Surface Creek Ditch and Reservoir Company. The company was formed and incorporated in 1886. It is a stock company with 810 shares owned by 283 shareholders. Eggleston holds 2,555 acre feet of water. Impoundment rights totaling 2,555 acre feet in Eggleston Reservoir were obtained through legal appropriations between 1886 and 1937.

The reservoir services are extended to the south/southeast of the reservoir approximately 18 miles along Kiser Creek, Big Ditch and Surface Creek Ditch, which run through the town of Cedaredge, Colorado. Irrigated acreage within the service area is primarily used to grow fruit and row crops as well as limited livestock watering. The existing outlet pipe was installed in 1949.

Concerns were cited after video inspection of the existing pipe showed rust at the welded joints where the original bituminous coating is missing. The pipe has several joints that are corroded and coated with calcium deposits. The joint at approximately 90 feet from the downstream end was observed leaking clear water. It was noticed a few years ago and verified through video inspection that the pipe that was initially installed in 1949 has several corroded joints and about 90 feet from the downstream end a leak was observed. Since the pipe itself does not show any signs of structural weakness, distortion or collapse in any of the video inspection this pipe is an excellent candidate for rehabilitation using a Cured-In-Place-Pipe (CIPP) liner.

The objective of this project is to install the CIPP liner into the current downstream outlet pipe to preserve the integrity of the pipe. This will preserve the decrees and continue to provide the allocated water to agriculture and municipalities.

Discussion: This project meets the measurable objectives and action items in the Gunnison Basin Implementation Plan, including the rehabilitation of existing reservoirs on the Grand Mesa.

This project also meets additional critical actions identified in the Critical Action Plan (Chapter 10) of Colorado's Water Plan:

- **D3:** Provide grants, loans, and technical support to update and improve Colorado's aging agricultural infrastructure, especially where improvements provide multiple benefits.
- **E2:** Prioritize grants and loans to support the implementation of BIP-identified multipurpose projects and methods, taking into consideration locally identified geographic and seasonal gaps.

Issues/Additional Needs: No additional issues or needs were identified.

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Surface Creek	\$31,947	n/a	\$31,947
Subtotal Matching Funds	\$31,947	\$0	\$31,947
WSRA Gunnison Basin Account	\$46,911	n/a	\$46,911
Total Project Costs	\$78,858	\$0	\$78,858

CWCB Project Manager: Brent Newman

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 will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
July 20-21, 2016
Agenda Item 16(d)

Applicant & Fiscal Agent: Marcot Park Ditch and Reservoir Company

Water Activity Name: Marcot Dam Outlet Repair

Water Activity Purpose: Agricultural

County: Delta

Drainage Basin: Gunnison

Water Source: Marcot Creek

Amount Requested/Source of Funds: \$49,649 Gunnison Basin Account
\$49,649 Total Basin Account request

Matching Funds: Applicant Match: \$37,461 = 43% of the total project cost of \$87,110
(refer to *Funding Summary/Matching Funds* section below)

Staff Recommendation:

Staff recommends approval of up to \$49,649 from the Gunnison Basin Account to help fund the project titled: Marcot Dam Outlet Repair.
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Water Activity Summary: WSRA funds, if approved, will help fund the project titled: Marcot Dam Outlet Repair. Marcot Park Ditch and Reservoir Company (MPDRC) has embarked on a long-term effort to upgrade the aging earth-compacted Marcot Dam located on the Grand Mesa. In addition to the maintenance requirements indicated by periodic inspection by Colorado Dam Safety, MPDRC is aggressively working to minimize seepage from the reservoir, improve the dam crest, and improve placement or rip-rap. Photo and video examination of the outlet piping during dam inspections revealed however, that the priority should be shifted to rehabilitation of the outlet piping.

The dam's outlet, installed in 1955, is a 20-inch OD steel with ¼ inch wall thickness, bituminous coating within and on the pipe's outer surface. MPDRC, in cooperation with Colorado Dam Safety, has monitored the condition of the pipe via videos and photographic means. Concerns were cited in an inspection report by the Colorado Dam Safety Engineer dated July 16th, 2012, after a video inspection of the outlet pipe. In the summer of 2015, MPDRC engaged an engineering firm (DOWL, LLC) to examine the outlet, the historical data, and determine the best course of action for repair.

The conclusion of the DOWL investigation was that the Marcot outlet is a very good candidate for Cured- in-Place-Pipe (CIPP), a composite liner permanently emplaced by a thermo-curing process inside the host pipe. The report was accompanied by engineering calculations intended for submission to the Colorado Dam Safety Dept. In addition, DOWL submitted an Engineer's Estimate of Probable Cost. All these were delivered to MPDRC on September 15, 2015 for a cost of \$5240.00. This amount was paid from a previous WSRA study grant in the amount of \$ 10,000.00.

Following receipt of the engineering findings, MPDRC met with personnel from Colorado Dam Safety on September 18, 2015 and submitted plans, calculations, the Engineering report and an application to apply a CIPP repair to the Marcot Reservoir outlet. MPDRC then contacted qualified contractors for bids to perform the CIPP repair, a copy of which is included in the appendix.

Discussion: This project meets the measurable objectives and action items in the Gunnison Basin Implementation Plan, including the rehabilitation of existing reservoirs on the Grand Mesa.

This project also meets additional critical actions identified in the Critical Action Plan (Chapter 10) of Colorado's Water Plan:

- **D3:** Provide grants, loans, and technical support to update and improve Colorado's aging agricultural infrastructure, especially where improvements provide multiple benefits.
- **E2:** Prioritize grants and loans to support the implementation of BIP-identified multipurpose projects and methods, taking into consideration locally identified geographic and seasonal gaps.

Issues/Additional Needs: No additional issues or needs were identified.

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
MPDRC	\$37,461	n/a	\$37,461
Subtotal Matching Funds	\$37,461	\$0	\$37,461
WSRA Gunnison Basin Account	\$49,649	n/a	\$49,649
Total Project Costs	\$87,110		\$87,110

CWCB Project Manager: Brent Newman

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 will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
July 20-21, 2016
Agenda Item 16(e)

Applicant & Fiscal Agent: Shavano Conservation District
Water Activity Name: Ditch Mapping of Colona Area
Water Activity Purpose: Multipurpose
County: Ouray
Drainage Basin: Gunnison
Water Source: Gunnison tributaries
Amount Requested/Source of Funds: \$13,658 Gunnison Basin Account
\$13,658 Total Basin Account request

Matching Funds: Applicant Match: \$5,613 = 30% of the total project cost of \$19,271
(refer to *Funding Summary/Matching Funds* section below)

Staff Recommendation:

Staff recommends approval of up to \$13,658 from the Gunnison Basin Account to help fund the project titled: Ditch Mapping of Colona Area.
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Water Activity Summary: WSRA funds, if approved, will help fund the project titled: Ditch Mapping of Colona Area. The Shavano District encompasses 1,191,438 acres including all of Ouray County and portions of Montrose, Gunnison and Delta Counties. As a designated salinity control area, Shavano Conservation District holds salinity control as a top priority.

This application requests funding to complete the GIS ditch mapping efforts in the Colona area. Digital mapping of irrigation ditches and documentation of their operations is required by the Bureau of Reclamation for calculation of salt loads contributing to salinity in the Colorado River system. These salt loads must be established by the BOR for a ditch company to be eligible to apply for grants offered through the BOR-Basinwide Salinity Control Program. Ditch companies in the Colona area have expressed interest in applying for funds through this program to pipe portions of their irrigation delivery canals, however they are unable to do so until ditch mapping is completed in this area. The BOR has expended \$98,000 on the ditch mapping effort in the Lower Gunnison Basin over the past 3 years, and has no more funds available to complete this work in the Upper Uncompahgre area. Because interest in applying for federal funds to improve irrigations ditches has been expressed in the Colona area, and the ditch mapping work has been initiated, the Shavano Conservation District is seeking funds to complete the effort in this targeted area.

Completion of the ditch mapping effort is essential for the Colona area ditches to apply for significant federal funds available to finance piping projects. The BOR-Basinwide Salinity Control Program typically offers \$40M in grants every three years for ditch improvement projects in the Upper Colorado River Basin.

Since 2009, 122 ditches have been documented, with 730 miles of canal digitized in the Lower Gunnison basin, coordinated by Shavano and Delta Conservation Districts. The BOR-Basinwide Salinity Control Program, which relies on this ditch mapping data to rank the cost effectiveness of project applications, has awarded nearly \$90M to fund irrigation system improvements in the Lower Gunnison basin. Completion of this proposed project will extend eligibility to apply for these funds to another 12 ditches including 34 miles of canal.

Discussion: This project meets the measurable objectives and action items in the Gunnison Basin Implementation Plan including:

- Protects existing water uses in the Gunnison Basin;
- Discourages conversion of productive agricultural land to other uses;
- Improves agricultural water supplies to reduce shortages;
- Improves water quality;
- Restores, maintains, and modernizes critical water infrastructure.

This project also meets additional critical actions identified in the Critical Action Plan (Chapter 10) of Colorado's Water Plan:

- **D3:** Provide grants, loans, and technical support to update and improve Colorado's aging agricultural infrastructure, especially where improvements provide multiple benefits.
- **E2:** Prioritize grants and loans to support the implementation of BIP-identified multipurpose projects and methods, taking into consideration locally identified geographic and seasonal gaps.

Issues/Additional Needs: Staff will work with applicant to assemble a Scope of Work which meets the criteria for State contracting.

Threshold and Evaluation Criteria: The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Trout Unlimited	\$500	\$700	\$1,200
Shavano Conservation District	\$2,913	\$1,500	\$4,413
Subtotal Matching Funds	\$3,413	\$2,200	\$5,613
WSRA Gunnison Basin Account	\$13,658	n/a	\$13,658
Total Project Costs	\$17,071	\$2,200	\$19,271

CWCB Project Manager: Brent Newman

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 will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and

Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
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Applicant & Fiscal Agent: Bauer Lake Water Company

Water Activity Name: Jackson Lake/Bauer Lake #2 Ditch Upgrade Project

Water Activity Purpose: Agricultural

County: Montezuma

Drainage Basin: Southwest

Water Source: Chicken Creek, Mancos River and Jackson Lake

Amount Requested/Source of Funds: \$55,000 Southwest Basin Account
\$55,000 Total Grant Request

Matching Funds: Applicant Match (\$3,000: in-kind) = 5.5% of total project costs (\$58,000)
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$55,000 from the Southwest Basin Account to help fund the project titled: Jackson Lake/Bauer Lake #2 Ditch Upgrade Project.

Water Activity Summary: WSRA funds, if approved, will be expended to fund the replacement of a diversion dam, headgate, conveyance pipe and Parshall Flume in the Bauer Lake Ditch. The existing 36" conveyance pipe will be replaced with approximately 100 feet of 53" elliptical pipe, and both the Jackson Gulch ditch, and the Bauer Lake ditch will undergo additional cleaning, grading and berm work to improve water delivery efficiencies. These facilities are used to irrigate over 1200 acres of land that produces grains, produce, alfalfa and grass used for hay and pasture land.

Discussion: This project meets the goals and objectives identified in the Southwest Basin Implementation Plan. This project is a component of the Mancos Sub Basin IPP 9-M and is consistent with the Multi-Basin IPP addressing "Ditch Company Improvements and Efficiency Project".

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

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Bauer Lake Water Company	\$0	\$3,000	\$3,000
WSRA Southwest Basin Account	\$55,000	n/a	\$55,000
Total Project Costs	\$55,000	\$3,000	\$58,000

CWCB Project Manager: Craig Godbout

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 will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
July 20-21, 2016
Agenda Item 16(g)

Applicant & Fiscal Agent: Animas Consolidated Ditch Company
Water Activity Name: Culvert Replacement Project
Water Activity Purpose: Agricultural
County: La Plata
Drainage Basin: Southwest
Water Source: Animas River & Hermosa Creek
Amount Requested/Source of Funds: \$34,354 Southwest Basin Account
\$34,354 Total Grant Request
Matching Funds: Applicant & 3rd Party Match (\$34,353: cash) = 50% of total project costs (\$68,707)
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$34,354 from the Southwest Basin Account to help fund the project titled: Culvert Replacement Project.
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Water Activity Summary: WSRA funds, if approved, will be expended to fund the replacement of approximately 84 linear feet of 48” elliptical pipe which is failing under current conditions. This effort consists of three components: surveying, engineering and construction (removal and replacement of existing corrugated metal pipe with a similarly sized concrete elliptical pipe). The existing pipe delivers approximately 30 cfs to approximately 1,000 acres of irrigated agriculture and other water users.

Discussion: This project meets the goals and objectives identified in the Southwest Basin Implementation Plan. This project is an extension of IPP 21A and is consistent with the Multi-Basin IPP addressing “Ditch Company Improvements and Efficiency Project”.

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

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Animas Consolidated Ditch Company	\$24,047	\$0	\$24,047
Adjacent Landowners	\$10,306	\$0	\$10,306
Subtotal Matching Funds	\$34,353	\$0	\$34,353
WSRA Southwest Basin Account	\$34,354	n/a	\$34,354
Total Project Costs	\$68,707	\$0	\$68,707

CWCB Project Manager: Craig Godbout

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 will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

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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.

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
July 20-21, 2016
Agenda Item 16(h)

Applicant & Fiscal Agent: City of Steamboat Springs

Water Activity Name: Steamboat Springs Yampa River Management Plan

Water Activity Purpose: Nonconsumptive/Study

County: Routt

Drainage Basin: Yampa

Water Source: Yampa River

Amount Requested/Source of Funds: \$21,000 Yampa/White/Green Basin Account
\$21,000 Total Grant Request

Matching Funds: Applicant & 3rd Party Match (\$88,875: cash & in-kind) =
76% of total project costs (\$109,875)
(refer to *Funding Summary/Matching Funds* section)

Staff Recommendation:

Staff recommends approval of up to \$21,000 from the Yampa/White/Green Basin Account to help fund the project titled: Steamboat Springs Yampa River Management Plan.
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Water Activity Summary: WSRA funds, if approved, will be expended to assist in funding a Stream Management Plan for the Yampa River through Steamboat Springs to include the reach from the Chuck Lewis State Wildlife Area to the Steamboat Springs Waste Water Treatment Plant. that engages its community and acts upon the guidance of the 2003 Yampa River Management Plan, the State of the Watershed Report, and the Yampa/White/Green's Basin Implementation Plan. By assessing water quality, aquatic life, and channel morphology, flow targets can be refined that are data-based and that fit within the context of water rights administration. As the Yampa/White/Green Basin Roundtable's Basin Implementation Plan (BIP) and Colorado's Water Plan point out, the link between water quality and water supply is in-severable. Employing flow management strategies to meet the non-consumptive needs, such as storage releases from Stagecoach Reservoir, helps to mitigate the potential environmental impacts to our river. But a long-term strategy for supplying non-consumptive needs of the Yampa River has yet to be secured. This effort addresses this need. WSRA Funds will be expended to complete Tasks 3, 4 and 7 as presented in the attached Statement of Work.

Discussion: This project meets many of the goals and objectives identified in the Yampa/White/Green Basin Implementation Plan (YWG BIP). This project has been identified in the YWG BIP as: IPP #10 – Yampa Preferred Target Flow Through Steamboat Springs, and; IPP #11—Recreational, habitat, & management strategy improvements (Yampa River through Steamboat.) Stream Management Plans have also been identified as a need and goal in Colorado's Water Plan.

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

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria.

Tier 1-3 Evaluation Criteria: n/a**Funding Summary/Matching Funds:**

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
CWCB Watershed Restoration Grant	\$51,875	\$0	\$51,875
City of Steamboat Springs	\$15,000	\$12,000	\$27,000
Rout County	\$5,000	\$0	\$5,000
Yampa Valley Flyfishers – Trout Unlimited	\$5,000	\$0	\$5,000
Subtotal Matching Funds	\$76,875	\$12,000	\$88,875
WSRA Yampa/White/Green Basin Account	\$21,000	n/a	\$21,000
Total Project Costs	\$97,875	\$12,000	\$109,875

CWCB Project Manager: Chris Sturm

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