

1313 Sherman Street Denver, CO 80203

P (303) 866-3441 F (303) 866-4474 John Hickenlooper, Governor

Mike King, DNR Executive Director

James Eklund, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Craig Godbout

Program Manager

Water Supply Planning Section

DATE: May 5, 2015

AGENDA ITEM: 10 (a-h) WSRA Grant Requests

Staff Recommendation - Action Items: WSRA Grant Requests

A summary of staff's recommendation for each WSRA application is provided in the attached table. If applicable, the table also includes a breakdown of match amounts for applications that include a request for statewide 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 R	eserve Account Ap	pplications for Consideration	on at the	CWCB N	lay 2015 B	oard Meetii	ng					
Agenda Item	Basin	Applicant	Name of Water Activity	Basin(s) Account Request	Statewide Account Request	Total Request	Applicant's Cash Match	Applicant's In-Kind Match	Applicant's Total Match	**	Total Project or Study Costs	Staff Recommendations	PM
10(a)		Grand Valley Water Users Association	Grand Valley Water Users Association Water Management Plan Update		\$0	\$45,000	\$35,000	\$55,000	\$90,000	ĺ	\$135,000	Staff recommends approval of \$45,000 from the Colorado Basin Account	Brent Newman
10(b)	Colorado	Basalt Water Conservancy District	Roaring Fork Watershed - Missouri Heights Groundwater Monitoring Program Phase IIA	\$25,000	\$0	\$25,000	\$31,521	n/a	\$31,521	\$56,521	\$56,521	Staff recommends approval of \$25,000 from the Colorado Basin Account	Brent Newman
10(c)	Gunnison	Marcot Park Ditch & Reservoir Co.	Engineering Review of Marcot Dam & Outlet Structure	\$10,000	\$0	\$10,000	\$19,300	n/a	\$19,300	\$29,300	\$29,300	Staff recommends approval of \$10,000 from the Gunnison Basin Account	Brent Newman
10(d)		Colorado Division of Parks and Wildlife	Mallon Extension Ditch Bypass Structure	\$35,900	\$0	\$35,900	\$3,500	\$7,772	\$11,272	n/a		Staff recommends approval of \$35,900 from the North Platte Basin Account	Craig Godbout
10(e)	Rio Grande	Trout Unlimited	Kerber Creek Restoration Project – Middle Parcel	\$30,000	\$0	\$30,000	\$227,667	\$20,000	\$247,667	n/a	\$277,667	Staff recommends approval of \$30,000 from the Rio Grande Basin Account	Chris Sturm
10(f)	Rio Grande	Conejos River System Water Users Association	Conejos Groundwater Monitoring and Analysis	\$19,000	\$200,000	\$219,000	\$90,000	\$27,500	\$117,500	\$136,500	\$336 500	Staff recommends approval of \$19,000 from the Rio Grande Basin Account, and \$200,000 from the Statewide Account	Craig Godbout
10(g)	Southwest	Trout Unlimited	Upper Dolores CAMP (Coldwater- Fisheries Adaptive Management Plan)	\$15,000	\$0	\$15,000	\$22,000	\$12,900	\$34,900	n/a	\$49,900	Staff recommends approval of \$15,000 from the Southwest Basin Account	Craig Godbout
10(h)	Southwest	Town of Mountain Village	Town of Mountain Village 2015 Waterline Extension Project	\$30,000	\$0	\$30,000	\$1,597,070	\$0	\$1,597,070	n/a	\$1,627,070	Staff recommends approval of \$30,000 from the Southwest Basin Account	Craig Godbout

\$209,900 \$200,000 \$409,900

<u>Basin</u>	Basin Account Requests	Statewide Account Requests	<u>Total</u>	Currer Basin Accour Balance	Account Balances (if	Current Statewide Account Balance	Remaining Statewide Account Balance (if all requests approved)
Arkansas Basin	\$0	\$0	\$0	\$360,963	\$360,963		
Colorado Basin	\$70,000	\$0	\$70,000	\$611,905	\$541,905		
Gunnsion Basin	\$10,000	\$0	\$10,000	\$575,278	\$565,278		
Metro Basin	\$0	\$0	\$0	\$242,811	\$242,811		
North Platte	\$35,900	\$0	\$35,900	\$1,413,47	\$1,377,574	\$2,351,873	\$2,151,873
Rio Grande	\$49,000	\$200,000	\$249,000	\$366,630	\$317,630		
Southwest	\$45,000	\$0	\$45,000	\$895,916	\$850,916		
South Platte	\$0	\$0	\$0	\$377,959	\$377,959		
Yampa/White/Green	\$0	\$0	\$0	\$1,008,35	2 \$1,008,352	_	
Water Supply Reserve Account Total Requests	\$209,900	\$200,000	\$409,900	\$5,853,28	\$5,643,387	_	

5/5/2015

COLORADO WATER CONSERVATION BOARD Water Supply Reserve Account - Balance Summary MAY 2015

Fund Appropriation and Receipts							
	Legislative		Statewide				
Fiscal Year	Appropriation	Funds Received	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			
Interest	N/A	\$2,857,935	\$1,829,078	\$1,028,856			
2014/2015 Interest	N/A	\$ 179,784	\$179,784	\$0			
TOTAL	\$74,775,000	\$72,062,082	\$46,776,204	\$25,285,877			

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 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.

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	Approved Basin	Total Basin	Basin Account	Approved State	Statewide
Basin	Grants	Funds	Balance	Grants	Account Balance
Arkansas	\$2,448,579	\$2,809,542	\$360,963	\$7,113,535	
Colorado	\$2,197,637	\$2,809,542	\$611,905	\$5,164,260	
Southwest	\$1,913,626	\$2,809,542	\$895,916	\$5,270,859	
Gunnison	\$2,234,264	\$2,809,542	\$575,278	\$4,037,791	
Metro	\$2,566,731	\$2,809,542	\$242,811	\$5,713,284	
North Platte	\$1,396,068	\$2,809,542	\$1,413,474	\$408,078	
Rio Grande	\$2,442,912	\$2,809,542	\$366,630	\$10,060,323	
South Platte	\$2,431,583	\$2,809,542	\$377,959	\$6,044,138	
Yampa/White	\$1,801,190	\$2,809,542	\$1,008,352	\$612,063	
TOTAL	\$19,432,590	\$25,285,877	\$5,853,287	\$44,424,331	\$2,351,873

TOTAL APPROVED GRANTS \$63,856,921

Note: Only includes grants approved by CWCB

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

Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet May 20-21, 2015 Agenda Item 10(a)

Applicant & Fiscal Agent: Grand Valley Water Users Association

Water Activity Name: Grand Valley Water Users Association Water Management Plan Update

Water Activity Purpose: Comprehensive water management plan update

County: Mesa

River Basin: Colorado

Water Source: Colorado River

Amount Requested/Source of Funds: \$45,000 Colorado Basin Account

\$45,000 Total grant request

Matching Funds: Basin Account Match (\$45,000) = 100% of total grant request

Basin Account & Applicant Match (\$135,000) = 81.4% of total grant request

Applicant Match (\$65,000) = 48% of total project costs (\$135,000)

(refer to Funding Summary/Matching Funds section)

Staff Recommendation:

Staff recommends approval of up to \$45,000 from the Colorado Basin Account to help fund the project titled: Grand Valley Water Users Association Water Management Plan Update.

Water Activity Summary: The Grand Valley Water Users Association (GVWUA) is seeking this grant to update their water Management Plan, which was developed in 2012. This management plan was originally developed to meet the requirements of the Reclamation Reform Act. The update to the plan will be a more comprehensive look at the future of the Association and the Grand Valley Project, as well as implementing conservation measures. This update builds on the work of the 2012 plan, preparing a conditional assessment of canal segments, identifying and documenting water losses, identifying priority projects, conducting a benefits assessment, ascertaining environmental concerns, determining costs associated with project implementation, and finally, creating a strategic funding plan to implement the priority projects.

Discussion: This update to the Water Management Plan was included as a priority project in the Colorado Basin Implementation Plan. The Plan will also allow the Association to honor commitments made in the Colorado River Cooperative Agreement (CRCA) and incorporate them into Association Planning.

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

		<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRA Colorado Basin Account		\$45,000	n/a	\$45,000
Bureau of Reclamation – Grant Program		\$25,000	n/a	\$25,000
Grand Valley Water Users Assn		\$10,000	\$55,000	\$65,000
	Total	\$80,000	\$55,000	\$135,000

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.

Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet May 20-21, 2015 Agenda Item 10(b)

Applicant & Fiscal Agent: Basalt Water Conservancy District

Water Activity Name: Roaring Fork Watershed – Missouri Heights Groundwater Monitoring

Program, Phase IIA

Water Activity Purpose: Groundwater Study

County: Garfield

River Basin: Colorado

Water Source: Roaring Fork

Amount Requested/Source of Funds: \$25,000 Colorado Basin Account

\$25,000 Total grant request

Matching Funds: Basin Account Match (\$25,000) = 100% of total grant request

Applicant Match (\$31,521) = 55.7% of total project costs (\$56,521)

(refer to Funding Summary/Matching Funds section)

Staff Recommendation:

Staff recommends approval of up to \$25,000 from the Colorado Basin Account to help fund the project titled: Roaring Fork Watershed – Missouri Heights Groundwater Monitoring Program, Phase IIA

Water Activity Summary: The Basalt Water Conservancy District supplies augmentation water for a number of contracts located in Missouri Heights. The expansion of development in this area has led to increased groundwater withdrawals and new demand for these contracts from the District. These wells deplete the Missouri Heights aquifer, but augmentation releases do not provide direct, physical recharge to the aquifer.

To monitor these effects of well withdrawals on this aquifer, the District has implemented Phases I and II of the Missouri Heights Groundwater Monitoring Program.

- Phase I monitored water levels at three wells and four springs in the vicinity of Missouri Heights.
- Phase II monitored real time groundwater levels at six wells.

The proposed phase (IIA) will continue to monitor the six wells from Phase II, plus an additional well. This new phase will provide a better understanding of the influences of development on the aquifer by verifying the trends and conclusions established in Phase II. Phase IIA will also seek to estimate the amount of recharge the aquifer receives.

Discussion: The groundwater levels at Missouri Heights were included as an identified need in the Colorado Basin Implementation Plan. Additionally, the District believes that the project will assist DWR in administering and protecting vested water rights on or influenced by Missouri Heights development, including CWCB instream flow rights on the Roaring Fork River.

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>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRA Colorado Basin Account		\$25,000	n/a	\$25,000
Basalt Water Conservancy District		\$31,521	<u>n/a</u>	\$31,521
	Total	\$56,521		\$56,521

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.

Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet May 20-21, 2015 Agenda Item 10(c)

Applicant & Fiscal Agent: Marcot Park Ditch and Reservoir Company

Water Activity Name: Engineering Review of Marcot Dam Outlet Structure

Water Activity Purpose: Agricultural/Municipal

County: Delta

River Basin: Gunnison

Water Source: Marcot Creek

Amount Requested/Source of Funds: \$10,000 Gunnison Basin Account

\$10,000 Total grant request

Matching Funds: Basin Account Match (\$10,000) = 100% of total grant request

Basin Account & Applicant Match (\$29,300)

Applicant Match (\$19,300) = 65.8% of total project costs (\$29,300)

(refer to Funding Summary/Matching Funds section)

Staff Recommendation:

Staff recommends approval of up to \$10,000 from the Gunnison Basin Account to help fund the project titled: Engineering Review of Marcot Dam Outlet Structure.

Water Activity Summary: Marcot Ditch and Reservoir Company is in the process of upgrading and evaluating Marcot Dam, located on the Grand Mesa. This reservoir provides agricultural water for farmland in Delta County as well as water for the Town of Orchard City's domestic water supply. After an evaluation showed that seepage was causing nearly 100 AF of stored water under certain conditions, the Company overlaid this area of the dam with clay and soil.

The outlet piping for the reservoir was installed in 1957, and consists of 175 feet of 20-inch OD, ¼ thickness steel pipe. This outlet has been examined by the Dam Safety Division of DWR. While most of the pipe is in good repair, there are small areas of corrosion and general erosion, which may cause scouring within the dam, leading to the necessity of breaching the dam for repairs.

This WSRA grant would be utilized to engage an engineering firm to examine the outlet pipe, evaluate the technologies available for in-place repairs, and prepare cost estimates for suggested improvements. The Company would like to evaluate the potential for pipe-in-place (PIP) technology, where a polymer substance is introduced into an existing pipe to seal off leakage. Because of the remote location of Marcot Reservoir, breaching and rebuilding would be prohibitively expensive, while allowing further deterioration of the pipe could lead to a no-fill order or a dam failure. The Company seeks this funding to prevent the loss of this 480 AF vessel, by proactively assessing the severity of the problem, and the cost to make repairs.

Discussion: This project was included as a priority (Tier 1) project in the Gunnison Basin Implementation Plan. The cash match for repairs was generated from a special shareholder

assessment, and shareholders have agreed that the importance of this project merits future special assessments if necessary to complete the 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>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRA Gunnison Basin Account	\$10,000	n/a	\$10,000
Marcot Park Ditch and Reservoir Company	\$19,300	<u>n/a</u>	\$19,300
Total	\$29,300		\$29,300

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.

Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet May 20-21, 2015 Agenda Item 10(d)

Applicant & Fiscal Agent: Colorado Division of Parks and Wildlife

Water Activity Name: Mallon Extension Ditch Bypass Structure

Water Activity Purpose: Nonconsumptive & Agricultural

County: Jackson

Drainage Basin: North Platte

Water Source: Roaring Fork Creek

Amount Requested/Source of Funds: \$35,900 North Platte Basin Account (Total grant request)

Matching Funds: Applicant & 3^{rd} party match: \$11,272 = 24% of total project costs (\$47,172)

(refer to *Funding Summary/Matching Funds* section below)

Staff Recommendation:

Staff recommends approval of up to \$35,900 from the North Platte Basin Account to help fund the project titled: Mallon Extension Ditch Bypass Structure.

Water Activity Summary: WSRA funds, if approved will be expended to assist in financing the construction of a bypass structure, gate and measuring device located on the Mallon Extension of the Wolfer Ditch, which diverts water from Roaring Fork Creek. In addition to direct flow irrigation water, the ditch delivers water for storage in the South and East Delaney Butte Lakes within the Delaney Butte Lakes State Wildlife Area (SWA), one of the premier public flat water fishing destinations in North Park. Both Colorado Parks and Wildlife (CPW) and the private Double R Ranch hold water storage rights in the Delaney Lakes and cooperate jointly on the management and operation of the lakes for agricultural irrigation, piscatorial, recreational and environmental uses.

The rational for this bypass structure is to allow hay cutting following the irrigation season. Prior to cutting, the ditch must be shut off in order to sufficiently dry out those fields lying below the ditch, and this project will allow this to occur.

Discussion: This project aligns with the several of the Goals and Measurable Outcomes as described in the North Platte Basin Implementation Plan (Goals #1, #3, #4, & #5; Section 1.2; page 18), and is identified as a Planned Environmental and Recreational Project or Method (Section 4.2 – Updated Project List; Table 4; page 70).

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

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
CPW	\$1,500	\$7,772	\$9,272
Tointon	\$2,000	\$0	\$2,000
Sub-total matching funds	\$3,500	\$7,772	\$11,272
WSRA North Platte Basin Account	\$35,900	n/a	\$35,900
Total	\$39,400	\$7,772	\$47,172

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.

Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet May 20-21, 2015 Agenda Item 10(e)

Applicant & Fiscal Agent: Trout Unlimited

Water Activity Name: Kerber Creek Restoration Project – Middle Parcel

Water Activity Purpose: Nonconsumptive (Environmental & Recreational)

County: Saguache

Drainage Basin: Rio Grande **Water Source:** Keber Creek

Amount Requested/Source of Funds: \$30,000 Rio Grande Basin Account

Matching Funds: Applicant & 3^{rd} party match: \$247,667 = 89.2% of total project costs

(\$277,667)

(refer to Funding Summary/Matching Funds section)

Staff Recommendation:

Staff recommends approval of up to \$30,000 from the Rio Grande Basin Account to help fund the project titled: Kerber Creek Restoration Project – Middle Parcel.

Water Activity Summary: WSRA funds, if approved, will be expended by TU to restore six acres of mine tailings contained within the floodplain of site KC16-M adjacent to Keber Creek in northern Saguache County. TU will institute phytostabilization as the treatment method of choice on the associated mine tailings. Phytostabilization treatment will consist of applying a pre-determined mixture of soil amendments consisting of lime, limestone, and compost to a depth of 18-24". TU will then plant metal-tolerant plants to reduce toxicity and metal mobility. TU's effort will coincide with 5,900 feet of adjacent in-stream improvements planned for 2015 by NRCS (estimated NRCS costs of \$247,667). Project monitoring will be conducted through tasks and objectives under a Colorado Nonpoint Source grant and will provide progress towards ecological goals as defined in a Project Implementation Plan approved by CDPHE.

Discussion: The proposed project aligns with many of the Goals and Measurable Outcomes identified in the Draft Rio Grande Basin Water (Implementation) Plan (Goals and Measurable Outcomes: #1, #6, #9, #11, #12, #13 & #14; Section 3.2.1, page 122). In addition, this project comports with "Projects that Address Environmental and Recreational Information Gaps" (#6; Section 6.5.3, page 277), also indentified in the Draft BIP.

Furthermore, this project compliments four existing instream flows reaches in Keber Creek held by CWCB. TU has successfully completed an earlier stream restoration project in Kerber Creek on the adjacent KC16-E parcel (a contiguous parcel to the east) funded by a WSRA Grant of \$34,871 awarded by CWCB during their July 2013 meeting. TU has also successfully completed improvements in the Kerber Creek through CWCB's two previous Colorado Watershed Restoration Program Grants.

Issues/Additional Needs: Applicant to work with CWCB Staff to ensure that geomorphic monitoring conforms to CWCB Standard Operating Procedure for Topographic Survey of Stream Channels (http://cwcb.state.co.us/environment/watershed-protection-restoration/Documents/Survey_SOP_CWCB.pdf).

All proposed river channel work shall conform to the CWCB Rules and Regulations for Regulatory Floodplains in Colorado.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria

Tier 1-3 Evaluation Criteria: n/a

Funding Summary/Matching Funds:

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Colorado Division of Reclamation and Mining	\$10,000	\$0	\$10,000
CDPHE 319 Nonpoint Source Grant	\$10,000	\$0	\$10,000
BLM	\$0	\$20,000	\$20,000
NRCS	\$207,667	\$0	\$207,667
Sub-total matching funds	\$227,667	\$20,000	\$247,667
WSRA Rio Grande Basin Account	\$30,000	n/a	\$30,000
Total	\$257,667	\$20,000	\$277,667

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.

Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet May 20-21, 2015 Agenda Item 10(f)

Applicant & Fiscal Agent: Conejos River System Water Users Association (CRSWUA)

Water Activity Name: Conejos Groundwater Monitoring and Analysis

Water Activity Purpose: Needs Assessment

County: Conejos

Drainage Basin: Rio Grande

Water Source: Conejos River/San Luis Creek, and Rio Grande Confined Aquifer

Amount Requested/Source of Funds: \$19,000 Rio Grande Basin Account

\$200,000 Statewide Account \$219,000 Total Grant Request

Matching Funds: Basin Account Match: \$19,000 = 8.7% of total grant request (meets 5% min);

Basin Account & Applicant Match: \$136,500 = 62% of total grant request (meets

25% min);

Applicant & 3rd Party Match: \$117,500 = 54% of total grant request (meets 5%

min) & 35% of total study costs (\$336,500) (refer to *Funding Summary/Matching Funds*)

Staff Recommendation:

Staff recommends approval of up to \$19,000 from the Rio Grande Basin Account, and \$200,000 from the Statewide Account to help fund the needs assessment titled: Conejos Groundwater Monitoring and Analysis.

Water Activity Summary: WSRA funds, if approved, will be expended to fund the Conejos Groundwater Monitoring and Analysis Study (the Project), which will install a groundwater monitoring network in the Subdistrict #3 area of the Rio Grande Water Conservation District. CRSWUA will place water level transducers in 16 local confined aquifer irrigation wells to record and monitor real-time water level data over a sustained length of time. A set of existing wells were identified for potential use within the monitoring network based on available information of perforated well intervals and a goal to achieve a regular spacing across representative aquifer conditions given the Thiessen polygon method that is used to spatially weight wells within the network (see attached graphic).

The Project will establish a scientific basis for evaluating the relationships/interconnectivity between different pumping wells in the area in and around Subdistricts #3 and #4 and providing a better understanding of the lateral transmissivity of the confined aquifer, the degree of connection to the overlying unconfined aquifer, and the potential connection to surface water bodies. By gathering groundwater data from a larger and more relevant sample, CRSWUA will provide to Colorado a scientific assessment to fine tune the model. Deliverables of the Project will prepare for future groundwater administration; help meet the short-term and long-term objectives of water users in the Conejos watershed; improve understanding of the regional groundwater system in the future

Subdistrict #3; provide data to influence the accuracy of the currently accepted groundwater model; improve current tools being used for meeting delivery obligations of the Rio Grande Compact; and significantly improve groundwater administration and management in the Rio Grande Basin.

Over the years, water users in the CRSWUA have collectively observed aquifer system behaviors that are not entirely in agreement with groundwater model outputs. The current groundwater model of the San Luis Valley uses available hydro-stratigraphic, well pumping, and water level data to calibrate recent water level and flow conditions. The State has used this model (part of the Rio Grande Decision Support System or RGDSS), to forecast future conditions under current and proposed pumping and hydrologic conditions, and intends to use that data in the future as the basis for promoting sustainable Basin groundwater administration.

Objectives:

- Develop ground water data to address "Rules Governing Withdrawal of Ground Water in Water Division No. 3"
- Support optimum use of water, consistent with preservation of the priority system of water rights
- Provide scientific data to the RG Basin and DWR to create a plan for groundwater sustainability
- Develop historical analysis and real time data to identify and address injurious stream depletions
- Help identify injurious depletions on the San Antonio, Conejos, La Jara, Alamosa and Rio Grande
- Improve Colorado's ability to more accurately meet its Rio Grande Compact obligations
- Support agriculture by helping to regulate and balance the use of limited surface and groundwater resources
- Help maintain a sustainable water supply in the Confined and Unconfined Aquifer

Discussion: The proposed needs assessment aligns with many of the Goals and Measurable Outcomes identified in the Draft Rio Grande Basin Water (Implementation) Plan (Goals and Measurable Outcomes: #2, #3, #5 & #6; Section 3.2.1, page 122). In addition, this project comports with aspects of the "Basin Roundtable Identified Projects and Methods" (Section 6.5.1, page 275), also indentified in the Draft BIP.

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:

Staff has reviewed and evaluated the applicant's response to the Statewide Account Supplemental Scoring Matrix and has determined that it satisfies the Evaluation Criteria. Please refer to WSRA Application for applicant's detailed response.

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Conejos Water Conservancy District	\$10,000	\$0	\$10,000
Alamosa/La Jara Water Conservancy District	\$5,000	\$0	\$5,000
Rio Grande Water Conservation District	\$75,000	\$0	\$75,000
Colorado Division of Water Resources	\$0	\$23,500	\$23,500
CRSWUA	\$0	\$4,000	\$4,000
Sub-total matching funds	\$90,000	\$27,500	\$117,500
WSRA Rio Grande Basin Account	\$19,000	n/a	\$19,000
WSRA Statewide Account	\$200,000	\$0	\$200,000
Total	\$309,000	\$27,500	\$336,500

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.

Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet May 20-21, 2015 Agenda Item 10(g)

Applicant & Fiscal Agent: Trout Unlimited

Water Activity Name: Upper Dolores CAMP (Coldwater-Fisheries Adaptive Management Plan)

Water Activity Purpose: Nonconsumptive Study

County: Dolores & Montezuma

Drainage Basin: Southwest

Water Source: Dolores River

Amount Requested/Source of Funds: \$15,000 Southwest Basin Account/Total grant request

Matching Funds: Applicant & 3^{rd} party match: \$34,900 = 70% of total project costs (\$49,900)

(refer to Funding Summary/Matching Funds section)

Staff Recommendation:

Staff recommends approval of up to \$15,000 from the Southwest Basin Account to help fund the project titled: Upper Dolores CAMP (Coldwater-Fisheries Adaptive Management Plan).

Water Activity Summary: Trout Unlimited, both national staff and the local Dolores CO chapter the Dolores River Anglers, has undertaken a multi-year project to develop a comprehensive, scientific, "hands on" decision tool that links systematic analysis of local watersheds/streams to relevant Best Management Practices ("BMPs") within the context of long term changes to climate and hydrology. The structured process and guidelines lead to the development of a stream specific "Coldwater-fisheries Adaptive Management Plan (CAMP). This project takes the best available fisheries and climate science and creates a step by step process to analyze rivers, streams, and stream reaches to determine what factors, if any, are limiting trout populations and then determine what cost effective solutions are available to mitigate for those factors, both currently and as temperatures and flow regimes change into the future.

Discussion: This project aligns with the several of the Goals and Measurable Outcomes as described in the Southwest Basin Implementation Plan (Section 1; Table 1: Goals and Measurable Outcomes A2, B2, D1, E1, & E2; pages 12 16), and is specified as a Proposed Dolores River Basin IPP, *Trout Unlimited and Montezuma Land Conservancy*; (Appendix A; Dolores and McElmo River Basins Draft IPP List; IPP ID no. 21-DM; page 16 of 18).

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

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
Montezuma Land Conservancy	\$5,000	\$0	\$5,000
Southwest Water Conservation District	\$5,000	\$0	\$5,000
TU	\$10,000	\$5,730	\$15,730
Dolores River Anglers (TU)	\$2,000	\$6,330	\$8,330
CPW & USFS	\$0	\$840	\$840
Sub-total matching funds	\$22,000	\$12,900	\$34,900
WSRA Southwest Basin Account	\$15,000	n/a	\$15,000
Total	\$37,000	\$12,900	\$49,900

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.

Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet May 20-21, 2015 Agenda Item 10(h)

Applicant & Fiscal Agent: Town of Mountain Village

Water Activity Name: Town of Mountain Village 2015 Waterline Extension Project

Water Activity Purpose: Municipal & Industrial

County: San Miguel

Drainage Basin: Southwest

Water Source: San Miguel River alluvium

Amount Requested/Source of Funds: \$30,000 Southwest Basin Account (total grant request)

Matching Funds: Applicant cash match: \$1,597,070

(refer to: Funding Summary/Matching Funds section below)

Staff Recommendation:

Staff recommends approval of up to \$30,000 from the Southwest Basin Account to help fund the project titled: Town of Mountain Village 2015 Waterline Extension Project.

Water Activity Summary: WSRA funds, if approved, will assist the Town of Mountain Village construct 13,815 lineal feet of 10-inch water line extension. The Town of Mountain Village provides potable water to an area of approximately 3.3 square miles and a population of 1,320 people. The Town's existing water supply is sufficient to meet potable water demands. However, recent water modeling has demonstrated that fire flows in the western portion of the Town are marginal in fighting a large structural fire, particularly one encompassing more than one home or a wildfire. The overall objective of the 2015 Waterline Extension Project (project) is to increase reliability and redundancy of the Town's water system, particularly to meet emergency water demand needs in the western portion of the Town. The project will connect two existing water storage tanks via a proposed 13,815-foot long, 10-inch diameter waterline. The waterline will help to feed water directly to the western portion of the Town from the Town's most reliable water source. As part of the project, the Town will take advantage of pressure differentials in the system by installing up to two microhydroelectric generators.

Discussion: This project aligns with the Goals and Measurable Outcomes as described in the Southwest Basin Implementation Plan (Section 1; Table 1; A1, A2, B2, C1, & C2; pages 12-14); and is specified as an Proposed San Miguel River Basin IPP, *Town of Mountain Village*; (Appendix A; page 18 of 18; San Miguel River Basin Draft IPP List; IPP ID no. 24-SM).

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

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria

Tier 1-3 Evaluation Criteria: n/a

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WSRA Southwest Basin Account		\$30,000	n/a	\$30,000
Town of Mountain Village		\$1,597,070	<u>\$0</u>	\$1,597,070
	Total	\$1,627,070	\$0	\$1,627,070

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.