

February 27, 2019

Mr. Ben Wade
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, CO 80203

Grantee: Upper Arkansas Water Conservancy District
Roundtable: Arkansas Basin Roundtable
Contract #: CTGG1 2017-112, CMS #109261
Approval: March 2016
NTP Date: September 30th, 2016
Contact: Chelsey Nutter- Project Manager
PO Box 1090 Salida, CO 81201
(719) 221-8213
chelsey@arkcollaborative.org

Re: Lake Ranch Multi-Use Pilot Project Feasibility Study
Final Progress Report & Final Reimbursement
Reimbursement Request- \$24,228.00

Dear Mr. Wade:

Attached is the Upper District's final progress report and final reimbursement for the above referenced Lake Ranch Multi-Use Project. Exhibit A includes all supporting reimbursement documentation. For our final reimbursement, the District would like to request a reimbursement in the amount of **\$24,228** in accordance with the above-referenced contract. The project is complete and can be closed at this time. Exhibit B is the final education vision plan for the Lake Ranch. A final engineering report will be sent to the CWCB on or before March 15th, 2019. We did not use all the funds allotted for this project. The remaining balance that will not be utilized is \$98,576

We thank you for your support of this feasibility study that will help pave the way for future multi-use projects.

Sincerely,

Chelsey R. Nutter

Chelsey R. Nutter



UPPER ARKANSAS
WATER CONSERVANCY
DISTRICT

INVOICE

Upper Arkansas Water Activity Enterprise
PO Box 1090
Salida, Colorado 81201
719-539-5425

Bill to :

CWCB
Atten: Ben Wade
1313 Sherman St., Rm 718
Denver, CO 80203

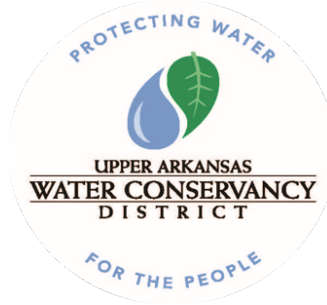
Invoice 1927

Date 02/27/19 Re: Lake Ranch

Lake Ranch Grant Contract \$24,228.00

Total Due \$24,228.00

Please make checks out to UAWAE and remit to above address



FINAL PROJECT STATUS REPORT- CTGG1 2017-112, CMS #109261

PROJECT SUMMARY

REPORT DATE	PROJECT NAME	PREPARED BY
February 27, 2019	Lake Ranch Multi-Use Pilot Project Feasibility Study	Chelsey Nutter Project Manager

STATUS SUMMARY

The Upper Arkansas Water Conservancy District is pleased to announce that the Lake Ranch Multi-Use Pilot Project Feasibility Study is complete. This is the final progress report which includes final reimbursement & the Lake Ranch Concept Plan for a 1 Acre apple orchard and irrigation demonstration garden. All tasks are complete, and a final engineering report will be submitted by March 15th, 2019.

PROJECT OVERVIEW

Task	% Complete	Funding Source	Notes
A-Water Rights Yield	100%	WSRF	Complete
A (2)- Water Rights Studies	100%	WSRF	Complete
B- Water Supply	100%	WSRF	Complete
C- Hydraulic Analysis	100%	WSRF	Complete
D- Alluvial Storage	100%	WSRF	Complete
D-2- Geotechnical Engineering	100%	STOA	Complete
E- Hydroelectric	100%	CWRPDA	Complete
F- Education & Outreach	100%	WSRF	Complete
G- Environment & Recreation	0%	WSRF	Did Not Include in Project
Total Project	100%	All	Complete

BUDGET OVERVIEW – WSRF ONLY

Total WSRF Budget	= \$ 194,140
Reimbursement #1	= \$ 7,694
Reimbursement #2	= \$ 63,642
Final Reimbursement	= \$24,228
WSRF Balance	= \$ 98,576

CONCLUSIONS

Final Engineering Summary

- Colorado River Engineering is finishing final engineering reports for the lake ranch multi-use project. Reports included Detailed Studies of the Cameron Ditch water rights to determine historic consumptive use, return flows, and historic river depletions. The detailed studies including analysis of the lease following alternatives. The work also included examining yield enhancement alternatives for the subject rights concerning maximizing augmentation supplies available to the South Arkansas River. A feasibility study report for the Helena Ditch examined improvement alternatives and costs to upgrade the hydraulic capacity of ditch and time of year delivery options to supply future alluvial storage, hydroelectric, or storage projects.

Education

- The District hired Kristie Nackord with Infinite Moon Communications to develop a concept plan for education and outreach at the Lake Ranch property. In partnership with the District's Project Manager, the team conducted several interviews and researched potential ideas for the 1-Acre plot. The final recommendations and analysis are attached in Exhibit B.

Project Management

- Our ambitions were high when we began to develop the concept of a multi-use project at the District's Lake Ranch property. We saw an opportunity to investigate the potential for alluvial storage, hydropower, lease following, and education and outreach. Through this process, we have learned much about the complexity of integrating all ideas into a single project. Early on, we discovered that due to the different clay layers in this area of Chaffee County, alluvial storage would not be feasible (see alluvial storage report). Next, we discovered that small scale hydropower could work but not in our situation. Ideally, you would need a year-round supply of water to make this component feasible (see hydropower study). We did discover that there is potential to develop a lease-following program at the Lake Ranch property. The District currently leases the land and water to a family who lives on and works the ranch. This unique partnership opens the door for lease-following options. The final engineering report provides details of lease-following options, moving forward. Lastly, due to the inability to store water in the alluvium, the recreational components were deemed unfeasible.

The Upper Arkansas Water Conservancy District thanks the Colorado Water Conservation Board for their support of this project. We have learned that our more massive Trout Creek project is highly unique and should be the primary focus for the District in the development of multi-use projects. We look forward to sharing our future successes in education and lease-following at the Lake Ranch that will be a direct result of your support through this study.

Thank you for your time and support of this innovate idea. Please contact Chelsey at 719-221-8213 with any questions.

Sincerely,

Chelsey R. Nutter

Chelsey R. Nutter

Lake Ranch Multi-Use Pilot Project - WSRF Grant- CTGG1 2017-112- Budget																
		COST SHARE APPLIED TO DATE							WSRF REIMBURSEMENTS TO DATE							
Tasks	Total Project Budget	Total Cost Share Budget	Total Cost Share Applied to Date			Total Cost Share Applied to Date	% Budget Used	Cost Share Budget Remaining	WSRF Total Budget	USGS WSRF Invoiced to Date			Total WSRF Invoiced to Date	% Budget Used	WSRF Budget Remaining	% Project Complete
			STOA	CWRDA	UAWCD					Reimb #1	Reimb #2	Reimb-Final				
Water Rights Yeild	\$ 16,017	\$ -				\$ -			\$ 16,017	\$ 2,114	\$ 1,018	\$ 11,000	\$ 14,131	88%	\$ 1,886	100%
Water Rights Studies	\$ 34,813	\$ -				\$ -			\$ 34,813	\$ 1,362	\$ 27,534		\$ 28,896	83%	\$ 5,917	100%
Water Yeild Enhanc.	\$ 11,999	\$ -				\$ -			\$ 11,999	\$ 809	\$ 3,956	\$ 5,500	\$ 10,265	86%	\$ 1,734	100%
Hydraulic Analysis	\$ 33,758	\$ -				\$ -			\$ 33,758	\$ 380	\$ 26,735	\$ 3,328	\$ 30,443	90%	\$ 3,315	100%
Alluvial Storage	\$ 17,427	\$ -				\$ -			\$ 17,427	\$ -	\$ -	\$ -	\$ -	0%	\$ 17,427	100%
Geotechnical Engineering	\$ 52,029	\$ -	\$ 45,290		\$ 4,529	\$ 49,819	#DIV/0!		\$ 52,029	\$ -	\$ -		\$ -	0%	\$ 52,029	100%
Hydroelectric	\$ 32,779	\$ 30,569		\$ 15,000	\$ 15,569	\$ 30,569	100%		\$ 2,210	\$ -	\$ -		\$ -	0%	\$ 2,210	100%
Education	\$ 13,221	\$ 5,000			\$ 5,000	\$ 5,000	100%		\$ 8,221	\$ 3,030	\$ 4,400	\$ 4,400	\$ 11,830	144%	\$ (3,609)	100%
Enviro/ Rec.	\$ 17,667	\$ -				\$ -			\$ 17,667		\$ -		\$ -	0%	\$ 17,667	100%
Totals	\$ 229,710	\$ 35,569	\$ 45,290	\$ 15,000	\$ 25,098	\$ 85,388	100%	\$ -	\$ 194,140	\$ 7,694	\$ 63,642	\$ 24,228	\$ 95,564	49%	\$ 98,576	100%

WSRF Final Reimbursement =

\$24,228.00