

PUBLIC NOTICE

A MEETING OF THE FINANCE COMMITTEE OF THE CARSON WATER SUBCONSERVANCY DISTRICT WILL BE HELD ON WEDNESDAY, FEBRUARY 24, 2016, AT 8:30 A.M. IN THE CARSON WATER SUBCONSERVANCY DISTRICT CONFERENCE ROOM AT 777 EAST WILLIAM STREET, SUITE #110, CARSON CITY, NEVADA.

s/TONI LEFFLER
SECRETARY

AGENDA

1. Call to Order/Roll Call
2. Public Comment
3. Discussion for possible action regarding approval of the minutes from the Finance Committee meeting on March 4, 2015.
4. Discussion regarding the tentative General Fund FY 2016-17 budget and presentations for proposed projects.
5. Discussion regarding the tentative Acquisition/Construction Fund and tentative Floodplain Management Fund FY 2016-17 budgets.
6. Discussion for possible action regarding recommendations for the tentative General Fund, Acquisition/Construction Fund, and Floodplain Management Fund FY 2016-17 budgets.
7. Public Comment
8. Adjournment

Supporting information is available through Toni Leffler, 777 E. William St., #110A, Carson City, NV 89701, 775-887-7450, toni@cwsd.org and on CWSD website at www.cwsd.org. This notice has been posted on **FEBRUARY 17, 2016**, at the following locations:

-Dayton Utilities Complex
34 Lakes Blvd
Dayton, NV

-Minden Inn Office Complex
1594 Esmeralda Avenue
Minden, NV

-Lyon County Administrative Building
27 S. Main St.
Yerington, NV

-Churchill County Administrative Complex
155 N Taylor St.
Fallon, NV

-Carson City Hall
201 N. Carson St.
Carson City, NV

-Carson Water Subconservancy District Office
777 E. William St., #110A
Carson City, NV

-Alpine County Administrative Building
99 Water St.
Markleeville, CA

FINANCE COMMITTEE

February 24, 2016
Approximate Time Schedule

- 8:30 a.m.** Budget Overview
- 8:40 a.m.** Carson Valley Conservation District/Bioengineering & Carryover Request (1)
- 8:55 a.m.** Income Sources (CWSD staff)
- 9:05 a.m.** Administrative budget for FY 2016-17 (CWSD staff)
- 9:30 a.m.** Multi-Year and On-going Projects (CWSD staff)
7114 -00 Professional Outside Services
7117 & 7118 Lost and Mud Lake Expenses
7120-00 Integrated Watershed Projects
-07 Watershed Tour
-08 Regional invasive Species Programs
-10 Invasive Species Program
-25 Watershed Coordination Program (Grant)
7122-00 Water Conservation Program/BMP
7125-00 Environmental Education Program (Grant)
7404-00 Noxious Weeds Control
7214-00 Rec. Trails Signage (Grant)
7420-00 FEMA Floodplain Mapping Program MAS # 4 (Grant)
7426-00 FEMA Floodplain Mapping Program MAS # 5 (Grant)
7427-00 FEMA Floodplain Mapping Program MAS # 6 (Grant)
7428-00 Virginia/Rocky Project (Grant)
7429-00 Watershed Literacy Implementation (Grant)
7430-00 NFWF Weed Management (Grant)
7500-00 USGS Stream Gage Contract
7508-00 USGS Do. Co. GW Collection Data
7524-01 USGS GW Level & WQ Churchill Co.
7525-00 USGS Arsenic Study Carson Valley
7600-09 Alpine County- CASGEM
7610-10 Regional Pipeline Payment to Douglas County
7620-11 Regional Pipeline Payment to Carson City
7640-09 Lahontan Valley GW Level
7640-15 LCD Sand Bar Removal
- 10:00 a.m.** Carson River Projects
Carson River Work Days – River Wranglers (2)
Alpine County - Watershed Coordinator (3)
Carson Valley Conservation District/ Clearing & Snagging Projects (4)
Carson City Erosion Control (5)
Dayton Valley Conservation District River Project & Carryover Request (6)
Storey County Weed Treatment (7)
Lahontan Conservation District (8)
Sierra Nevada Journeys (9)
- 11:15 a.m.** New Projects
Churchill County Dixie Valley (10)
USGS Stream Gauge in Dayton (11)
USGS GW Basins Study (12)
- 11:45 p.m.** Acquisition/Construction Budget for FY 2016-2017
Floodplain Management Budget for FY 2016-2017
- 12:00 p.m.** Lunch
- 12:30 p.m.** Review Budgets and Make Recommendations to the Board

CARSON WATER SUBCONSERVANCY DISTRICT

TO: FINANCE COMMITTEE

FROM: EDWIN D. JAMES

DATE: FEBRUARY 24, 2016

Attached are the proposed tentative budgets for FY 2016-17 for the General Fund, Acquisition/Construction Fund, and Floodplain Fund, and the time schedule for the Finance Committee meeting. On the tentative budgets there are three columns. The left column shows the proposed budget for FY 2016-17, the center column shows the adopted budget for FY 2015-16, and the right column shows the projected actual income and expenses for FY 2015-16.

Copies of the project proposals will be handed out at the February Board meeting and can be found on the CWSD web site. The number at the top of each proposal correlates with the number in parenthesis on the schedule and indicates the order in which they will be heard.

Currently, \$101,000 needs to be cut out of the proposed General Fund budget. Many of the line item expenditures are tied to a grant or are being used as match to other grants. Staff has gone through each line item and has identified which expenditures have already been committed. All the line items shown in red have not been committed and could be reduced.

Staff wants to remind the committee members that we are over a million dollars short in the Acquisition/Construction Fund to help fund regional water system projects that were identified in 2010. The only money that goes into the Acquisition/Construction Fund comes from transfers out of the General Fund. Currently this proposed budget has no funds being transferred into the Acquisition/Construction Fund from the General Fund.

General Fund

	Proposed Tentative Budget	Revised Final Budget	Projected Actual Budget	
	Jul '16 - Jun '17	Jul '15 - Jun '16	Jul '15 - Jun '16	Notes
Income				
5008-00 . Alpine County	9,300.00	9,000.00	9,000.00	
5009-00 . Churchill County Ad Valorem	189,500.00	187,550.00	187,550.00	
5010-00 . Lyon County Ad Valorem	149,000.00	147,555.00	147,555.00	
5011-00 . Douglas County Ad Valorem	482,300.00	477,500.00	477,500.00	
5012-00 . Carson City Ad Valorem	380,900.00	377,150.00	377,150.00	
5022-00 . Mud Lake Water Lease	50,000.00	45,000.00	50,000.00	
5023-00 . Lost Lake Water Lease	1,800.00	0.00	1,800.00	
5025-00 . Int. Inc. - US Bank CD	800.00	850.00	1,040.00	
50??-00 . Interest Income - BOA Savings	20.00	80.00	40.00	
5031-00 . Interest Income - St Pool Reg	200.00	80.00	180.00	
5044-00 . Interest Income - First Independent Bank	800.00	850.00	1,050.00	
5050-00 . Watershed Coordinator	53,800.00	64,000.00	30,500.00	
5050-07 -CRC Donation	0.00	0.00	0.00	
5058-03 - 208 Plan NDEP- LID	0.00	4,700.00	5,013.00	
5060-00 . Misc. Income / Watershed Tour	5,900.00	5,900.00	5,900.00	
5063-01 . NDEP Grant-Watershed Education	49,255.00	50,000.00	43,254.00	
5077-00 . CR Conservation Tours	0.00	2,200.00	4,530.50	
5082-00 . CASGEM	1,680.00	750.00	1,960.00	
5087-00 . Alpine Co Mesa GW Study	400.00	0.00	600.00	
5086-00 . FEMA - MAS # 3	0.00	59,000.00	90,728.81	
5087-00 . FEMA - MAS # 4	124,200.00	250,000.00	133,700.00	
5090-00 . NDEP Watershed Literacy Grant	0.00	5,800.00	4,800.00	
5091-00 . NV Recreational Motorized Trails Grant	500.00	3,100.00	2,800.00	
5092-00 . FEMA - MAS # 5	22,060.00	150,000.00	191,800.00	
5093-00 . FEMA - MAS # 6	119,000.00	0.00	208,400.00	
5094-00 . Virginia/Rocky Project	45,310.00	0.00	1,550.00	
5095-00 . Watershed Literacy Implementation	37,000.00	0.00	25,000.00	
5096-00 . NFWF Weed Grant	25,300.00	0.00	650.00	
Total Income	1,749,025.00	1,841,065.00	2,004,051.31	
Expense				
ADMINISTRATIVE EXPENSES:				Notes
7015-00 . Salaries & Wages	351,100.00	334,400.00	331,000.00	
7020-00 . Employee Benefits	156,000.00	136,700.00	129,000.00	
7021-00 . Workers Comp Ins.	1,300.00	1,200.00	1,000.00	
7101-00 . Director's Fees	14,000.00	14,000.00	14,000.00	
7102-00 . Insurance	7,500.00	10,000.00	6,918.00	
7103-00 . Office Supplies	3,000.00	4,000.00	3,000.00	
7104-00 . Postage	1,000.00	1,250.00	650.00	
7105-00 . Rent	25,021.00	26,033.00	26,033.00	
7106-00 . Telephone	4,000.00	5,000.00	5,000.00	
7107-00 . Travel-transport/meals/lodging	15,000.00	17,000.00	13,500.00	
7108-00 . Dues & Publications	1,000.00	1,000.00	1,000.00	
7109-00 . Miscellaneous Expense	3,000.00	3,000.00	3,000.00	
7110-00 . Seminars & Education	3,000.00	3,000.00	3,000.00	
7111-00 . Office Equipment	0.00	16,000.00	16,000.00	Carryover
7112-00 . Bank Charges	200.00	200.00	50.00	
7115-00 . Accounting	10,000.00	16,500.00	14,000.00	
7116-00 . Legal	40,700.00	40,700.00	40,400.00	
Subtotal-Administrative Expenses	635,821.00	629,983.00	607,551.00	\$0.00

General Fund

Multi Year and On-Going Projects

	Proposed Tentative Budget	Revised Final Budget	Projected Actual Budget	
PROJECTS:	Jul '16 - Jun '17	Jul '15 - Jun '16	Jul '15 - Jun '16	Notes
7114-00 · Professional Outside Services	20,000.00	20,000.00	20,000.00	
7117-00 · Lost Lakes Expenses	7,500.00	7,000.00	6,000.00	
7118-00 · Mud Lake O & M	1,000.00	1,000.00	500.00	
7120-00 · Integrated Watershed Plan				
7120-07 · Watershed Tour	5,500.00	5,500.00	5,500.00	
7120-08 · Regional Invasive Species Programs	0.00	5,000.00	4,500.00	
7120-10 · Integrated Watershed Donation	0.00	0.00	0.00	
7120-25 · Watershed Coordinator Expenses	6,500.00	4,400.00	3,700.00	
7122-00 · Water Conservation Program/ BMP	0.00	5,000.00	0.00	
7125-00 · Environ. Education Coordinator Program	42,560.00	44,000.00	39,554.00	
7210-00 · CR Conservation Tours	0.00	1,800.00	1,934.73	
7214-00 · Motorized Rec. Trails Signage	0.00	900.00	1,000.00	
7215-00 · Sierra NV Journeys - Family Night	3,900.00	3,380.00	3,380.00	
7404-00 · Noxious Weeds Control	75,000.00	75,000.00	75,000.00	
7406-02 · 208 LID Program	0.00	0.00	202.00	
7419-00 · FEMA MAS #3 Carson Valley	0.00	58,000.00	89,140.00	
7420-00 · FEMA MAS #4 Carson Valley	115,300.00	240,000.00	106,600.00	
7424-00 · NDEP Watershed Literacy	0.00	4,800.00	3,600.00	
7426-00 · FEMA MAS #5	10,000.00	132,000.00	175,100.00	
7427-00 · FEMA MAS #6	107,000.00	0.00	160,500.00	
7428-00 · Virginia/Rocky Project	43,800.00	0.00	0.00	
7429-00 · Watershed Literacy Implementation	30,000.00	0.00	14,500.00	
7430-00 · NFWF Weed Grand	24,000.00	0.00	0.00	
7500-00 · USGS Stream Gage Contracts	70,232.00	70,232.00	70,232.00	
7508-00 · USGS Do. Co. GW Collection Data	15,500.00	15,500.00	15,500.00	
7524-01 · USGS GW level & WQ Churchill Co.	8,800.00	10,200.00	10,200.00	
7525-01 · USGS Arsenic Study Carson Valley	0.00	20,000.00	20,000.00	Carryover
Subtotal Multi Year & On-going Projects	586,592.00	723,712.00	826,642.73	0.00

Counties and River Projects

				Notes
7332-00 · Carson River Work Days	26,000.00	26,000.00	26,000.00	
7337-00 · Carson River Restoration			0.00	
7337-11 · CVCD CV Streambank Protection	50,000.00	60,000.00	60,000.00	Carryover
7337-02 · Carson City	125,000.00	0.00	0.00	
7337-31 · Dayton Valley Conservation	90,000.00	124,000.00	124,000.00	Carryover
7337-32 · DVCD Storey Co. Weed Abatement	5,000.00	5,000.00	5,000.00	
7337-04 · Lahontan Conservation District	20,000.00	20,000.00	20,000.00	
7600-05 · Alpine Co. Watershed Group.	25,000.00	23,000.00	23,000.00	
7600-09 · CASGEM	20.00	25.00	30.00	
7600-10 · Mesa GW Measurement Project	0.00	0.00	250.00	
7610-10 · Douglas Co Regional Pipeline	125,000.00	125,000.00	125,000.00	
7610-18 · Do. Co. Sierra Country Estates	0.00	24,500.00	24,500.00	Carryover
7620-11 · Regional Pipeline Payment to Carson City	125,000.00	125,000.00	125,000.00	
7630-10 · LyCO CR Imagery Project	0.00	27,644.00	27,644.00	
7640-09 · Lahontan Valley WTR Level Program	21,000.00	19,000.00	19,000.00	
7640-14 · W/R Dedication Tracking Database	0.00	8,420.00	8,420.00	
7640-15 · LCD Sand Bar Removal	0.00	20,000.00	20,000.00	Carryover
Subtotal Carson River Projects	612,020.00	607,589.00	607,844.00	

+ Request to carry over funds

New Projects

Churchill County Dixie Valley Project
 New River Gauge in Dayton
 CVCD Clearing & Snagging
 USGS GW Basins Study

General Fund

	Proposed Tentative Budget	Revised Final Budget	Projected Actual Budget	
	Jul '16 - Jun '17	Jul '15 - Jun '16	Jul '15 - Jun '16	Notes
	31,000.00			
	10,750.00			
	55,000.00			
	26,177.00			
Total Expenses for New Projects	122,927.00	0.00	0.00	
Total Expenditures	1,957,360.00	1,961,284.00	2,042,037.73	
Net Income	-208,335.00	-120,219.00	-37,986.42	
Beginning Equity	613,146.58	671,421.00	671,133.00	*
	613,146.58	671,421.00	671,133.00	
Other Expense				
8008-00 - Preliminary Planning	416,000.00	416,422.00	0.00	
Transfer from Gen. Fd. to Floodplain Fd.	0.00	0.00	0.00	
Transfer from Gen. Fd. to Acq./Const. Fd.	0.00	20,000.00	20,000.00	
Total Other Expense	416,000.00	436,422.00	20,000.00	
Net Balance from Beginning Equity & Other Expense	197,146.58	234,999.00	651,133.00	
ENDING BALANCE	-11,188.42	114,780.00	613,146.58	

* Based on 2015 Audit

\$90,000.00 Needed in Ending Balance

**CARSON WATER SUBCONSERVANCY DISTRICT
ACQUISITION/CONSTRUCTION FUND
2016-17 Tentative Budget**

ACQUISITION/CONSTRUCTION FUND	Proposed Tentative Budget	Approved Final Budget	Projected Actual Budget	Notes
	Jul '16 - Jun '17	Jul '15 - Jun '16	Jul '15 - Jun '16	
Ordinary Income/Expense				
Income				
5032-01 · Interest Inc - Inv. Pool	1,800.00	400.00	1,150.00	
5038-01 · Interest Income - Heritage CD	400.00	1,000.00	1,100.00	
Total Income	2,200.00	1,400.00	2,250.00	
Expense				
7325-01 Acquisition Wtr.	0.00	310,000.00	0.00	
Lyon County - Stagecouch Intertie	0.00	0.00	25,000.00	
Construction Projects	630,000.00	340,000.00	0.00	
Total Expense	630,000.00	650,000.00	25,000.00	
Net Ordinary Income	-627,800.00	-648,600.00	-22,750.00	
Other Income/Expense				
Other Income				
8000-01 · Beginning Equity	659,540.00	662,168.00	662,290.00	Based on Audit
8001-01 · Transfer In-General Fund	0.00	20,000.00	20,000.00	
Total Other Income	659,540.00	682,168.00	682,290.00	
Ending Equity	31,740.00	33,568.00	659,540.00	

**CARSON WATER SUBCONSERVANCY DISTRICT
FLOODPLAIN MANAGEMENT FUND
FY 2016-17 Tentative Budget**

FLOODPLAIN MANAGEMENT FUND	Proposed Tentative Budget	Adopted Final Budget	Projected Actual Budget
	Jul '16 - Jun '17	Jul '15 - Jun '16	Jul '15 - Jun '16
Ordinary Income/Expense			
Income			
5032-01 · Interest Inc - Inv. Pool	1,120.00	180.00	540.00
5033-03 · Interest Inc - Mutual Of Omaha CD	2,100.00	700.00	1,180.00
Total Income	3,220.00	880.00	1,720.00
Expense			
7203-03 Floodplain Planning	330,000.00	360,000.00	0.00
7206-03 Flood Project along SR 88 in Minden	40,000.00	40,000.00	0.00
Flood Protection Carson Valley	0.00	0.00	30,000.00
	0.00	0.00	
Total Expense	370,000.00	400,000.00	30,000.00
Net Ordinary Income	-366,780.00	-399,120.00	-28,280.00
Other Income/Expense			
Other Income			
8000-01 · Beginning Equity	401,056.00	429,206.00	429,336.00 *
8001-01 · Transfer In-General Fund	0.00	0.00	0.00
Total Other Income	401,056.00	429,206.00	429,336.00
Ending Equity	34,276.00	30,086.00	401,056.00

* Based on the 2015 Audit

CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING

Applicant: Carson Valley Conservation District

1702 County Road, Suite A

Minden, NV 89423 Douglas County

Mike.hayes@nv.nacdnet.net

(775)782-3661x102

Applicants Agent: Mike Hayes

Project Name: Bioengineering

Project Location: East Fork Carson River

Project Description: Use hand crews and bioengineering to repair eroding river banks

Project Goals/Benefits: Using bioengineering to protect eroding riverbanks and reduce sediment. The bioengineering also provides wildlife habitat, shades the water and cools it and covers bare ground where noxious weeds tend to start.

Total Estimated Project Costs: \$50,000 in addition to the remainder of this season's \$60,000 for a bioengineering project that could not be completed because of work by Granite Construction upstream from our original project site. I'd like to have an opening balance of \$50,000 each year for the bioengineering program for the next Fiscal Year.

Amount Requested from CWSD: \$50,000

Source of Other Funds: In kind match from CVCD and thousands of willows donated for mattresses, fascines, barbs, pole plantings, access from property owners.

Estimated Date Project To Begin: 11-1-16 to 1-1-17 depending on weather and river levels.

Estimated Time To Complete Project: One season, depending on flow levels and weather from July 1st to June 30th 2017. We anticipate completing any work started within the fiscal year that the project is funded.

Permit Requirements: None. No heavy equipment is to be used. Hand crews with hand tools will do work in and around the river. Our work amounts to placing and properly anchoring willows to take root in areas where damaged banks are being repaired.

Other Information: See attached

Signed: _____

Name: Mike Hayes

Title: Coordinator-Bioengineering Supervisor

Date: 2-8-2016



Carson Valley Conservation District

775-782-3661 ext 102

USDA Service Center

1702 County Road, Suite A

Minden, NV 89423

To; Carson Water Subconservancy District
Re: Bioengineering Project Funding
Monday, February 08, 2016

In a marathon meeting at the east Fork Fire Protection District some 21 stakeholders met and reviewed our river segment from the old Power Dam to Cradelbaugh Bridge. We identified 49 sites that could be made into projects. The sites were prioritized and our number one site is the scoured and sand and gravel barred area on the East Fork south of the Rocky-Virginia diversion on tribal land. We are currently working with the Washoe Tribe and Crockett Construction to address two other project sites that came up when we walked the site. The areas of concern are in need of maintenance and repair to help prevent the river from jumping the bank in high flows and getting into the Virginia ditch and overloading that structure and possibly flooding the Carson Medical Center, and assisted living facility, Gardnerville Town Water Company, Wal-Mart and other development in the area. The EFFPD Fire Chief and Emergency Management people have made this a priority/emergency project. We did get the IFC to set aside \$98,000 for this project.

I would like to have funds to do bioengineering, bank restoration and clear and snagging maintenance with hand crews on an annual basis. The vegetation management in the riverbed is extremely important to maintain channel capacity. It remains to be seen if the work on the tribal ground will happen this year or whether the runoff or storms start flows too great to properly maneuver equipment to accomplish the first phase of the project. I only run hand crews but they can come in behind, or in front of, the heavy equipment and plant willows to reinforce the banks, provide wildlife habitat, reduce sediment and provide shade for the river.

I was approved for \$60,000 for bioengineering the property that used to belong to Dr. Eisenhower and is now owned by Mr. Tyndall. Currently Granite Construction is working in, around and under the north bridge at Cradelbaugh on HWY 395 preventing my crew from working in this area. When Granite finishes we will make this site a priority. From Cradelbaugh going south through the TNC Ranch and continuing on to parts of the Park Cattle Company's fields. These areas have concave and sloughing banks that will benefit from bioengineering projects in these areas. Water quality is degraded by the sediment that comes from the eroding banks.

I have used about \$20,000 of the \$60,000 approved for bioengineering last funding cycle. The crews were using chainsaws to remove dead, dying or damaged trees in the riverbed of the river. Property owners and ranchers who irrigate with river water are concerned about the amount of vegetation and sand and gravel bars in the river currently. In order to try and maintain the correct capacity and for safety concerns from the Emergency Management director we will be increasing the amount of projects we do in the river corridor that runs through Douglas. This will become an annual evolution that the CVCD River and Grant Manager will undertake. The CVCD Coordinator will work in concert with the River and Grant Manager as time and funding permits. There may be

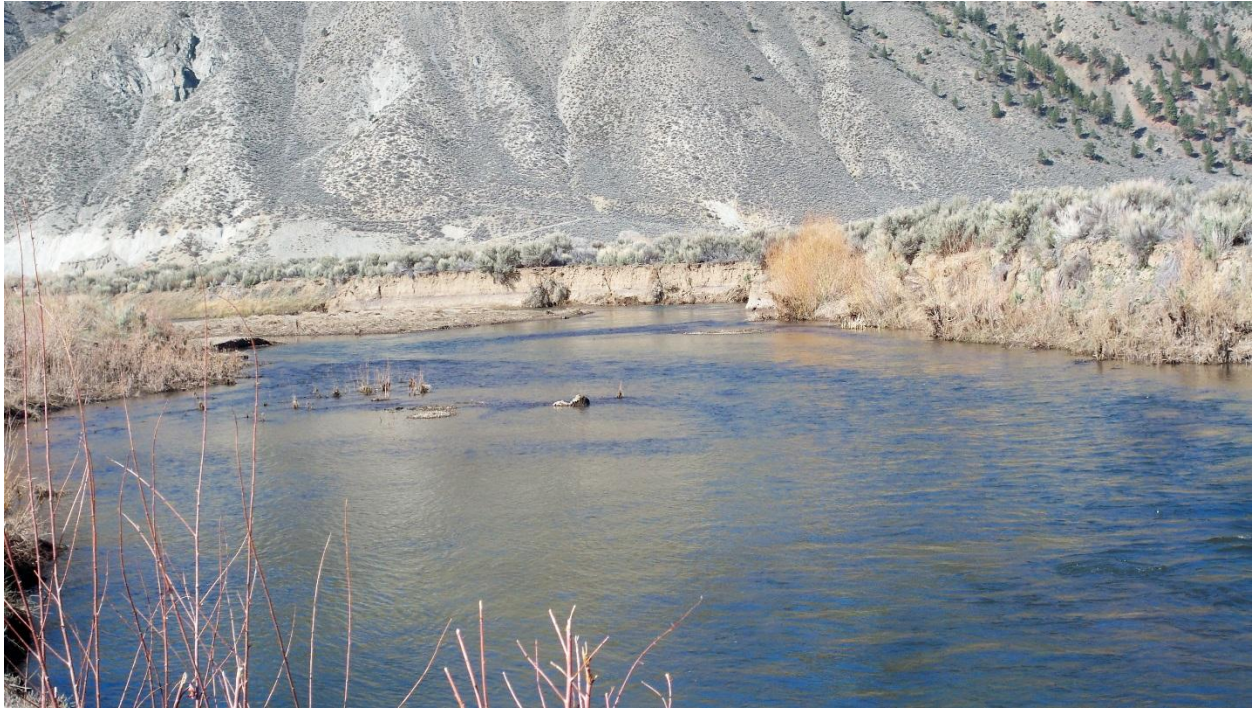
portions of “hard rock” restoration that can benefit from some bioengineering and we can see working together on some projects.

Since we have used about \$20,000 of the \$60,000 requested for vegetation management and bioengineering in areas other than the targeted Dr. Eisenhower’s site, I am requesting a \$50,000 in project funding to replace the funds used for clearing and snagging work and for the bioengineering work we are currently doing. The river has been yo-yoing up and down and reached a high flow of 1,300 cfs earlier this month. We have work that will still be completed this season with funds from the Eisenhower bioengineering project while the flows are low. I also request that any funds from the original \$60,000 project money not used this season be carried forward and be applied to next seasons funding request. I won’t know the total spent from the \$60,000 until the end of the season.

The \$98,000 secured for “Snagging and Clearing” will be used on the emergency/priority project that borders tribal land to the east and located south of Riverview Bridge and south of the 10th green of CVGC on the West bank, north to the Riverview Bridge. We are pleased to have an active River-Grant Manager on staff who is undertaking actual physical projects on an annual basis. This is a major project that will be phased in. It’s also noteworthy that we have a good working relationship with the Washoe Tribe who will be seeking federal funds for the second phase of the work.

Obviously we are at the mercy of the weather to allow the crews into the river to work. We use no motorized equipment in the river, just hand crews. Attached are pictures of bioengineering we did on the TNC Ranch in Genoa and project sites south of Genoa Lane. The project by Cradelbaugh Bridge is not included because we have no control over Granite Constructions bridge work upstream from our original proposed project site. I have included a photo of the original project site taken in 2014, the most recent Google Earth photo available. You can see the poor condition of the banks in this area. It is interesting to note that these structures withstood flood in excess of 1,000cfs in last year’s runoff and storm cycle. It is important to use an integrated approach for successful river projects. Some places require engineered, “hard rock” solutions but using bioengineering as a component of the work is beneficial.

Here are some of the vertical and collapsing banks in Genoa south of the TNC Ranch. Banks from this point south are heavily eroded.



Here is a stretch that we are working on; notice the condition of the banks south of the bioengineering.



This is a typical bioengineered eroded bank. When the willows take root the anchor the willow patch job and start to mend the damaged bank.



Map of project sites in north end of the county



CRITERIA FOR EVALUATING FUNDING REQUESTS:

A. All funding requests shall meet all of the following criteria:

1. CWSD can legally participate in the funding of the project. **Met**
2. CWSD finds the project to be technically and environmentally sound. **Met**
3. CWSD finds that the project can be permitted within a reasonable period of time. **Met**

B. All funding requests should be consistent with the Carson River Stewardship Plan ([copy of the plan can be found on CWSD website](#)) and meet one or more of the following criteria:

1. The project will provide regional benefits within the Carson River Watershed. **Yes**
2. The project will improve water quality. **Yes**
3. The project will in the long term prevent further stream bank erosion. **Yes**
4. The project will reduce flooding along the Carson River. **Bioengineering will lessen riverbank blow outs but will have little or no impact on flooding.**
5. The project will improve the administration and management of river and stream systems. **Yes.**
6. The project will assist water users and/or the general public in understanding current water issues. **Bank stabilization and erosion, lessen sediment and improve water quality. The bioengineering also provides habitat for indigenous wildlife and shades the water lowering the temperature.**

Thank you for your time and consideration.

Mike Hayes

CVCD Coordinator – Bioengineering Supervisor

CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING

APPLICANT: River Wranglers
 Name
PO Box 1612
 Address
Dayton Lyon NV 89403
 City County State Zip Code

APPLICANT'S AGENT:

Linda Conlin, director
 Name
PO Box 1612
 Address
Dayton Lyon NV 89403
 City County State Zip Code

PROJECT NAME: Conserve Carson River Work Days and Vegetation Management

PROJECT LOCATION: The Carson River watershed including but not limited to Douglas, Carson, Lyon, Storey and Churchill counties in Nevada and Alpine County,

PROJECT DESCRIPTION: Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

River Wranglers continues to expand Conserve Carson River Work Days throughout the watershed. In 2015 there were 11 work days involving 1090 students. The students were involved in conservation and vegetation management projects along the Carson River. The grant allocates \$2,400 per county or \$9,600 for Conserve Carson River Workdays projects. These projects typically involve local conservation district employees to construct projects along the Carson River and/or tributaries. In addition, state, federal, and county partners work on these projects. The grant earmarks \$3,600 per county or \$14,400 for Vegetation Management Projects and education. These projects utilize local labor crews and conservation crews to cut and plant willows for workdays and restoration, weed control, seeding and projects to reduce potential flood hazards in the river and tributaries. The remaining \$2000 covers administration costs and travel related to the grant.

PROJECT BENEFITS: Briefly describe the benefits to be realized if the project is implemented. Additional sheets may be attached.

The benefits of Conserve Carson River Workdays are numerous. The events link all of the communities in the watershed and provide hands-on conservation activities for volunteers. Participants realize they are part of a larger, watershed wide community and that efforts made in one location will benefit that community as well as communities downstream.

The work done focuses on stabilizing river banks, providing habitat for nesting birds and bats, and protecting the cottonwood gallery forest (one of the largest and most beautiful in our state). River Wranglers organizes Conserve Carson River Work Days and arranges for elementary and high school students to work on the riverbanks with the conservation district employees. This educational day, focusing on projects and watershed education, has a ripple effect as it educates the teachers, their students and students' families. As a result, Carson River issues often become a part of dinner time conversation.

In summary, this grant proposal meets several criteria for funding established by the CWSD; it provides regional benefit and improves water quality by preventing stream bank erosion. The vegetation projects also reduce flooding. By involving the public in the projects, we increase their understanding of watersheds, nonpoint source pollution and current water issues. The Conserve Carson River Work Days and Vegetation Management grant is consistent with the Stewardship Plan for the Carson River.

AL ESTIMATED PROJECT COST:

AMOUNT REQUESTED FROM CWSD: \$26,000.00

SOURCE OF OTHER FUNDS: List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

ESTIMATED DATE PROJECT TO BEGIN: July 1, 2016

ESTIMATED TIME TO COMPLETE PROJECT: June 30, 2017

REQUIRED APPROVALS: List all permits, licenses and approvals, if any, that are required to complete the project. Provide the current status of each approval required. If approval has not been requested or is in progress, provide the estimated date on which approval can be expected. Additional sheets may be attached.

OTHER INFORMATION: Provide any other information that may be important to the approval of this application.

SIGNED:

Linda d. Conlin

NAME: Linda d. Conlin

TITLE: Executive Director, River Wranglers

DATE: February 4, 2016

THE CARSON WATER SUBCONSERVANCY DISTRICT RESERVES THE RIGHT TO DENY ANY AND/OR ALL APPLICATIONS FOR FUNDING.

CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING

APPLICANT: Alpine Watershed Group Contact: Sarah Green
Name
P.O. Box 296
Address
Markleeville Alpine CA 96120
City County State Zip Code
awg.sarah@gmail.com 530-694-2327
Email Phone #

PROJECT NAME: Upper Carson River Watershed Programs

PROJECT LOCATION/ADDRESS: Service area - Alpine County
AWG office - 270 Laramie Street, Markleeville

PROJECT DESCRIPTION: Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

The Alpine Watershed Group (AWG) is seeking funds for the fiscal year 2016-17 from the Carson Water Subconservancy District for the coordination of its Upper Carson River Watershed programs. For over ten years, AWG has implemented a comprehensive community-based watershed program in Alpine County. AWG's mission is to preserve and enhance the natural system functions of Alpine County's watersheds for future generations. In order to further the stewardship of our county's natural resources, our organization has developed diverse partnerships around watershed issues. We also organize volunteers and inspire community participation to address water quality monitoring and restoration needs.

AWG's staff work to: 1) involve local citizens in watershed stewardship, 2) plan and implement watershed monitoring and restoration activities, 3) recruit diverse stakeholders and strengthen community partnerships, and 4) support local watershed education and community outreach.

PROJECT GOALS AND BENEFITS: Briefly describe the goals and benefits to be realized if the project is implemented. Additional sheets may be attached.

The Alpine Watershed Group's role is to monitor water quality, conduct needed restoration projects and engage community participation in order to maintain healthy watershed systems. Our organization promotes public awareness of watershed health and community involvement in stream and landscape restoration. AWG has been instrumental in serving as a network for watershed planning and communication in Alpine County since 1999. AWG staff and board members have been actively engaged in the county's ongoing discussions about water quality and natural resource management.

The Alpine Watershed Group has three primary organizational goals. Within each of these goals, we have made tremendous progress since our inception.

Goal #1: Assess and restore the natural systems – This goal involves identifying impacts to watershed systems and addressing these degradations with monitoring and restoration practices. AWG has programs that cover a variety of water quality aspects including basic water chemistry (temperature, pH and dissolved oxygen), bacteria sampling, stream discharge monitoring and bioassessment surveys. In 2015, AWG coordinated 25 monitoring events involving 23 volunteers who contributed 590 hours.

AWG held our 16th Annual Markleeville Creek Day on September 12. The event involved a total of 78 volunteers in eight different stream cleanup and restoration projects throughout the Upper Carson River watershed. The following is a summary of accomplishments:

- 600 feet of stream bank stabilized on Shay Creek and the West Fork of the Carson River
- 1,000+ willow stakes planted on the West and East Forks of the Carson River
- 210 native species planted at OHV restoration sites on the East Fork
- 800 pounds of white sweet clover removed from banks along the East Fork
- Over 500 pounds of invasive weeds removed from Grover Hot Springs Meadow
- Native Plant Demonstration Garden installed at Grover Hot Springs State Park
- 165 pounds of litter removed from our creeks and streams

AWG now has several larger, site-based restoration projects going on in the Upper Carson River watershed. Here is a summary of each of those efforts:

- The Rivers and Ranches program has been an effort to install BMP's on the Ace Hereford Ranch along the West Carson River. The goal of the project is to find mutually beneficial solutions that improve pasture utilization while advancing protections for the water quality of the West Carson River. The techniques implemented over the past two years include riparian fencing, bridged cattle crossings, off-site watering for cattle and wetland enhancements.
- The East Fork of the Carson Restoration Project is being implemented to protect and restore riparian habitat which has been impacted by motor vehicle encroachment. These restoration activities have included better delineation of vehicle access and restoration of riparian vegetation.
- The Hazardous Fuels Reduction Project is a collaborative project with Alpine County to remove light and flashy fuels from along the county's roadsides. The project will help inhibit fire from carrying deeper into the watershed.
- The Markleeville Creek Restoration Project has been steadily progressing with the County's acquisition of the property and the completion of the design plan in 2014. In 2015, an Interim Use Plan was developed in partnership with the Alpine County Heritage Tourism Committee to encourage short-term use of the property for parking and picnicking.

Goal #2: Increase community awareness and participation for watershed stewardship – AWG strives to educate community members and our visitors about the values of our natural resources. We reach out in a variety of ways - from tabling regional events to providing

educational presentations to community groups. Our organization is also active in engaging youth in the study of earth sciences and providing hands-on opportunities to participate in restoration projects. Community education is critical in providing for the long term protection of our watersheds.

AWG held the 2nd Annual Alpine Aspen Festival on October 10-11, 2015. In partnership with the Friends of Hope Valley, AWG offered 33 educational activities with a total of 226 registrants and more than 700 attendees overall, generating about \$4,000 for AWG programs in 2016.

AWG held its first Invasive Species Awareness Day at Grover Hot Springs State Park on July 29th, 2015. In partnership with the Carson Water Subconservancy District and Alpine Upper Carson Weed Management Area the AWG supported 30 volunteers who removed over 2,000 pounds of bull thistle in 3 hours.

Goal #3: Build the capacity of the Alpine Watershed Group – The Alpine Watershed Group continues to strengthen and expand its capacity to serve Alpine County’s watershed stewardship needs. An important part of this capacity involves AWG’s partnerships with natural resource agencies and community organizations. Since AWG’s inception our staff has maintained collaborations with regional land managers, local resource specialists and diverse community organizations in order to identify watershed needs and develop a community response.

AWG had support from 54 different natural resource agencies, community organizations and local businesses. AWG’s active partners which are involved in project planning include American Rivers, Alpine County, Alpine Fire Safe Council, Bureau of Land Management, California Department of Fish and Wildlife, California State Parks, Friends of Hope Valley, Lahontan Regional Water Quality Control Board, Markleeville Public Utility District, Nevada Department of Environmental Protection, River Wranglers, U.S. Forest Service (Carson Ranger District), Washoe Environmental Protection Department, and the Washoe Tribe Community Council.

TOTAL ESTIMATED PROJECT COST: \$150,000

AMOUNT REQUESTED FROM CWSD: \$25,000

SOURCE OF OTHER FUNDS: List all other sources of funds to be used to match funds requested from CWSD. List the provider of the matching funds and the amount requested from each provider.

The committed and projected matching funds are as follows:

California State Parks OHV – committed	\$70,000
Department of Water Resources – pending	\$50,000
American Rivers – committed	\$8,000
Sierra Nevada Conservancy – pending	\$7,500
Sierra Nevada Conservancy – committed	\$6,000
Aspen Festival Sponsorships – projected	\$5,000
Aspen Festival 2015 income – committed	\$4,000
Alpine County Chamber of Commerce - projected	\$1,500
Individual donations – projected	\$800

ESTIMATED DATE PROJECT TO BEGIN: July 1, 2016

ESTIMATED TIME TO COMPLETE PROJECT: June 30, 2017

REQUIRED APPROVALS: List all permits, licenses and approvals, if any, that are required to complete the project. Provide the current status of each approval required. If approval has not been requested or is in progress, provide the estimated date on which approval can be expected. Additional sheets may be attached.

This item is scheduled for approval by the Alpine County Board of Supervisors at their meeting on February 2.

OTHER INFORMATION: Provide any other information that may be important to the approval of this application.

The Alpine Watershed Group's water monitoring and restoration programs directly benefit the headwaters of the Carson River. AWG strives to enhance the health of our water resources, the availability of wildlife habitat and the quality of recreational opportunities, including fishing, boating, swimming and scenic benefits. The organization's outreach efforts educate the community about watershed processes by engaging individuals in hands-on learning and stewardship activities focusing on stream functions, wildlife habitat and riparian corridors.

SIGNED:  _____

PRINT NAME: Sarah Green

TITLE: Executive Director

DATE: 1/21/16

THE CARSON WATER SUBCONSERVANCY DISTRICT RESERVES THE RIGHT TO DENY ANY AND/OR ALL APPLICATIONS FOR FUNDING.

AGENDA TRANSMITTAL

TO: Board of Supervisors

FROM: Don Jardine, Supervisor - District 1

DATE OF MEETING: February 2, 2016

PREPARED BY: Stephanie Fong, Asst. County Clerk



TITLE: Request approval of Alpine Watershed Group's funding proposal to the Carson Water Subconservancy District for \$25,000 for watershed programs for the Fiscal Year 2016-2017

SUMMARY:

The Carson Water Subconservancy District (CWSD) is currently seeking funding requests for the Fiscal Year 2016-17. The CWSD provides an opportunity to apply for this funding to each of their member jurisdictions each year. For many years now the Board of Supervisors has supported this funding going to the Alpine Watershed Group to provide the matching funds needed to continue the important monitoring, restoration and outreach programs for Alpine County.

RECOMMENDED ACTION: Approve request

ISSUE STATEMENT AND DISCUSSION:

The Alpine Watershed Group's watershed programs and staffing are currently funded by grants from American Rivers, California State Parks Off-Highway Motor Vehicle Recreation Division, and Sierra Nevada Conservancy, with matching funds provided by Carson Water Subconservancy District. Funds from the CWSD will be used to support program staffing, monitoring and restoration supplies, and lab fees.

The Carson Water Subconservancy District is currently seeking funding requests for the Fiscal Year 2016-17. The Alpine Watershed Group would like to pursue these matching funds with the Board of Supervisors support. The \$25,000 in matching funds from CWSD is crucial for continuation of the watershed programs. These funds will enable the Alpine Watershed Group to continue to provide regional collaboration and watershed benefits within the Carson River Watershed. Project proposals are due to the CWSD office by February 8.

FISCAL IMPACT:

1) Budgeted Current Fiscal Year	<input type="checkbox"/> (Not Applicable)
2) Total Anticipated Cost Current Year	<u>\$0.00</u>
3) Total Anticipated Cost Annual Year	<u>\$0.00</u>

SOURCE

<input type="checkbox"/> Unanticipated	<u>\$0.00</u>
<input type="checkbox"/> Revenue From Contingency	<u>\$0.00</u>
Other:	

FUNDING SOURCE:

INSTRUCTIONS TO CLERK: Copy to: Brian Peters, Community Development Director; Sarah Green, Alpine Watershed Group Director

Approved 2/2/2016

APPROVED



Alpine Watershed Group

Protecting the Headwaters of the California Alps

Markleeville Creek Day 2015

Photo Summary

Welcome & Introduction



Native Plant Demonstration Garden - Grover Hot Springs State Park



Invasive Weed Removal – Grover Hot Springs State Park



East Fork Carson River Restoration



Shay Creek Restoration



Great Sierra River Clean-up



CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING

Applicant: Carson Valley Conservation District
1702 County Road, Suite A
Minden, NV 89423 Douglas County
Craig.Burnside@nv.nacdnet.net (775)782-3661x112

Applicants Agent: Craig Burnside

Project Name: 1. Clearing and Snagging of Undesirable Vegetation and Debris
2. Vegetation Management

Project Location: 1. Various locations on the East Fork of the Carson River from the Rocky-Virginia Diversion to Highway 88, in accordance with the areas identified as part of the Carson River Flood Event Planning Project Report.
2. As needed on both forks of the Carson River in Douglas County and Carson City.

Project Description: 1. The low flows associated with the past few years of drought have led to copious amounts of vegetation growing in the river channel. Not only does this undesirable vegetation itself lead to decreased capacity, it traps debris and sediment, which further lead to an even greater loss of capacity. This funding request is to get into the channel at key, problematic spots to remove vegetation and debris to help restore channel capacity.

2. Recent beaver activity and its resultant damage, has been unusually high. Carson City's Open Space Manager has requested that the Conservation District request \$2,500 for Vegetation Management for Carson City and we are requesting \$2,500 for the Carson Valley portion of the watershed. The District had to stop the trapper when he reached 20 tails because the \$1,000 requested for vegetation management last year was insufficient to control the active beaver population. Since we're such good customers the trapper has agreed to continue to remove active animals by working a deal with the property owner. We anticipate the high numbers of problem animals to continue throughout the rest of this year and into next. Controlling these animals is very important to the agriculture businesses that depend on the surface water conveyances to irrigate their crops and fields.

Project Goals/Benefits: 1. Restore capacity, allowing normal flows to naturally clean the channel.
Benefits include increased capacity, allowing the river course to remain where it should.
2. Prevent undesirable blockages which negatively affect surface flows and irrigation water conveyance systems.

Total Estimated Project Costs: 1. \$100,000
2. \$5,000
Amount Requested from CWSD: 1. \$50,000
2. 5,000

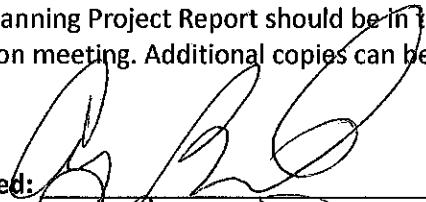
Source of Other Funds: State Snag and Clearing Fund

Estimated Date Project To Begin: July 1, 2016

Estimated Time To Complete Project: June 30, 2017

Permit Requirements: Should be able to be completed with existing Rolling Stock Permit. If required, a Temporary Working in Waterways Permit will be acquired from NDEP.

Other Information: Copies of the Carson River Flood Event Planning Project Report should be in the possession of members that attended the initial data collection meeting. Additional copies can be provided as needed. Photos attached.

Signed: 
Name: Craig Burnside
Title: River Coordinator
Date: 2/8/16



CARSON CITY, NEVADA

CONSOLIDATED MUNICIPALITY AND STATE CAPITAL

February 5, 2016

Carson Water Subconservancy District
777 East Williams Street, Suite 110A
Carson City, Nevada 89701

Dear Ed James,

Carson City is excited to apply for funding through the Carson Water Subconservancy District for erosion control and watershed improvement work in Carson City. This funding request will allow Carson City to proactively manage natural resource issues on the southeast side of the Prison Hill Recreation Area near Golden Eagle lane. These erosion issues are causing severe impacts to the Prison Hill, Golden Eagle Lane and the Carson River. Carson City Staff has noted severe channel incision, sediment transport, impacts to native vegetation and impaired water quality at this location.

Carson City has adopted the Carson River Floodplain Management Plan and as a result we are managing impacts to the Carson River Floodplain and the watershed as a whole. Carson City would like to thank you for providing this funding opportunity and the guiding principles needed to effectively manage the Carson River and its floodplain.

Please accept this funding request on behalf of Carson City and thank you for your efforts to protect the Carson River.

Respectfully,

Roger Moellendorf
Director
Carson City Parks, Recreation and Open Space Department

CARSON WATER SUBCONSERVANCY DISTRICT REQUEST FOR FUNDING

APPLICANT: Carson City
Name
3303 Butti Way Building #9
Address
Carson City Carson City NV 89701
City County State Zip Code
 (775)887-2262
Email Telephone #

APPLICANT'S AGENT (if different from Applicant):

Richard Wilkinson
Name
3303 Butti Way Building #9
Address
Carson City Carson City NV 89701
City County State Zip Code
rwilkinson@carson.org (775)887-2262
Email Telephone #

PROJECT NAME: Golden Eagle Lane Erosion Control Project

PROJECT LOCATION/ADDRESS: 4526 Golden Eagle Lane
Carson City, NV 89705

PROJECT DESCRIPTION: Briefly describe the project. Provide maps, drawings, photographs or other information. Additional sheets may be attached.

Golden Eagle Lane, Prison Hill Recreation Area and the Carson River have been impacted by a series of flash flooding events, drought and OHV use. These events have caused severe erosion and water quality impacts to the Carson River and the Golden Eagle Lane access for residents. These erosion problems have impacted Open Space property by damaging the trail access area identified in the Unified Pathways Master Plan. These erosion events have left an incised channel which will continue to impact the Prison Hill Recreation Area, Golden Eagle Lane and the Carson River Watershed. Staff is still working on the design and cost estimates, but it is anticipated the project will cost approximately \$150,000. This project will provide regional benefits within the Carson River Watershed. This project will improve water quality, help provide long term prevention of further stream bank erosion and will help reduce flooding along the Carson River. The project will help slow the water flows, allow for sediment to drop out and be trapped and allow for the natural establishment of vegetation.

Potential design features include: rock rip rap armoring, rock check dams or gabions and a retention basin with a stove pipe culvert system for separating sediment before it enters the Carson River. Please see the attached map of the project area and pictures of the erosion. Formal site plans and design will not be complete until we have hired an engineering firm and a formal survey has been completed.

PROJECT GOALS AND BENEFITS: Briefly describe the project goals and benefits to be realized if the project is implemented. Additional sheets may be attached.

This project will capture and hold sediment from the eroding channel and drainage. The proposed work will minimize future erosion to a designated trail access and a portion of the Prison Hill trail system. It will also minimize erosion and improve the drainage system keeping the road from eroding into the river channel. All of the proposed changes will benefit both private land owners, Carson City Open Space and the Carson River Watershed from further damage.

TOTAL ESTIMATED PROJECT COST: \$150,000.00
AMOUNT REQUESTED FROM CWSD: \$125,000.00

SOURCE OF OTHER FUNDS:

The matching funds will be provided by the Carson City Open Space Division and budgeted for maintenance and management of Open Space properties. Carson City Open Space staff will be working with a Consultant to complete a Section 106 review to determine an area of potential effect for the State Historic Preservation Office.

ESTIMATED DATE PROJECT TO BEGIN: 7/1/2016

ESTIMATED TIME TO COMPLETE PROJECT: 06/30/2017
(If completion date is greater than a year, please indicate how much funding is needed in each fiscal year.)

PERMIT REQUIREMENTS: If your project requires a permit, license and/or approval from a governmental agency to proceed, please provide the current status of each requirement. If approval has not been requested or is in progress, please provide the estimated date on which approval can be expected. Additional sheets may be attached.

Carson City will be performing erosion control work on the south end of Prison Hill Recreation Area. This land was conveyed by the Bureau of Land Management through the 2009 Omnibus Public Lands Management Act. With the conveyance of this property Carson City has signed a Programmatic Agreement and a Conservation Easement which states how the lands will be managed. The process for starting work includes a consultation with SHPO and Washoe Tribe, with a copy to the BLM. Carson City will be submitting the required section 106 review for the determination of any adverse effects on historic properties. Depending on the final design, it may be necessary to establish a "right of entry" permit from the Nevada Division of State Lands. Carson City will consult with the United States Army Corp of Engineers to determine if we need a Nationwide Permit for the project. We started the section 106 review in February 2016. We anticipate starting the other permits after receiving notice of the grant award.

OTHER INFORMATION: Carson City is dedicated to the Carson River Floodplain Management Plan and the Carson River Stewardship Plan adopted by Carson City. We feel that this project will benefit the Carson River Watershed by trapping excess sediment, repairing an incised channel and helping re-establish native and desirable vegetation. This project will help minimize impacts to the Carson River from flash flooding events and help protect the riverbank from sloughing off into the river.

SIGNED: 

NAME: Roger Moellendorf

TITLE: Parks & Recreation Director

DATE: 2/8/16

THE CARSON WATER SUBCONSERVANCY DISTRICT RESERVES THE RIGHT TO DENY ANY AND/OR ALL APPLICATIONS FOR FUNDING.



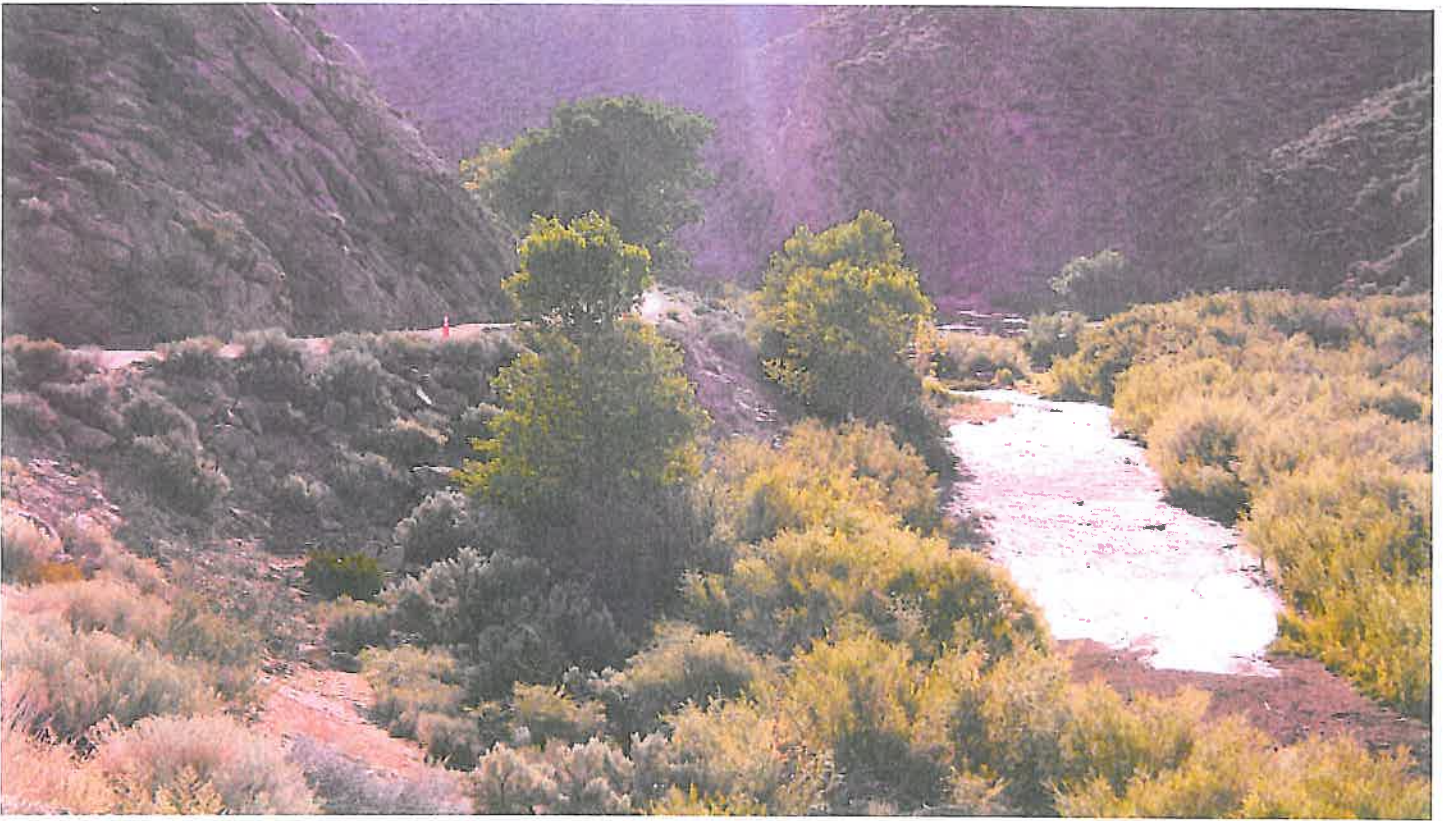
Golden Eagle lane Erosion Control Project



Erosion near Golden Eagle Lane on the Southwest side of prison Hill. Erosion and sediment plume in proposed trail access area identified in the Unified Pathways Master Plan.



Approximate 2.5 feet of sediment deposited in area designated as a potential Trail Access area.



Sediment plume entering the Carson River approximate size 150 feet wide and 90 feet into the channel.



Debris and sediment along riverbank on Carson River and the edge of Golden Eagle Lane



Incised channel approximately eleven feet tall at its deepest point and averages five feet.



Erosion and scour continues for approximately 500 feet as you go up in elevation on Prison Hill.

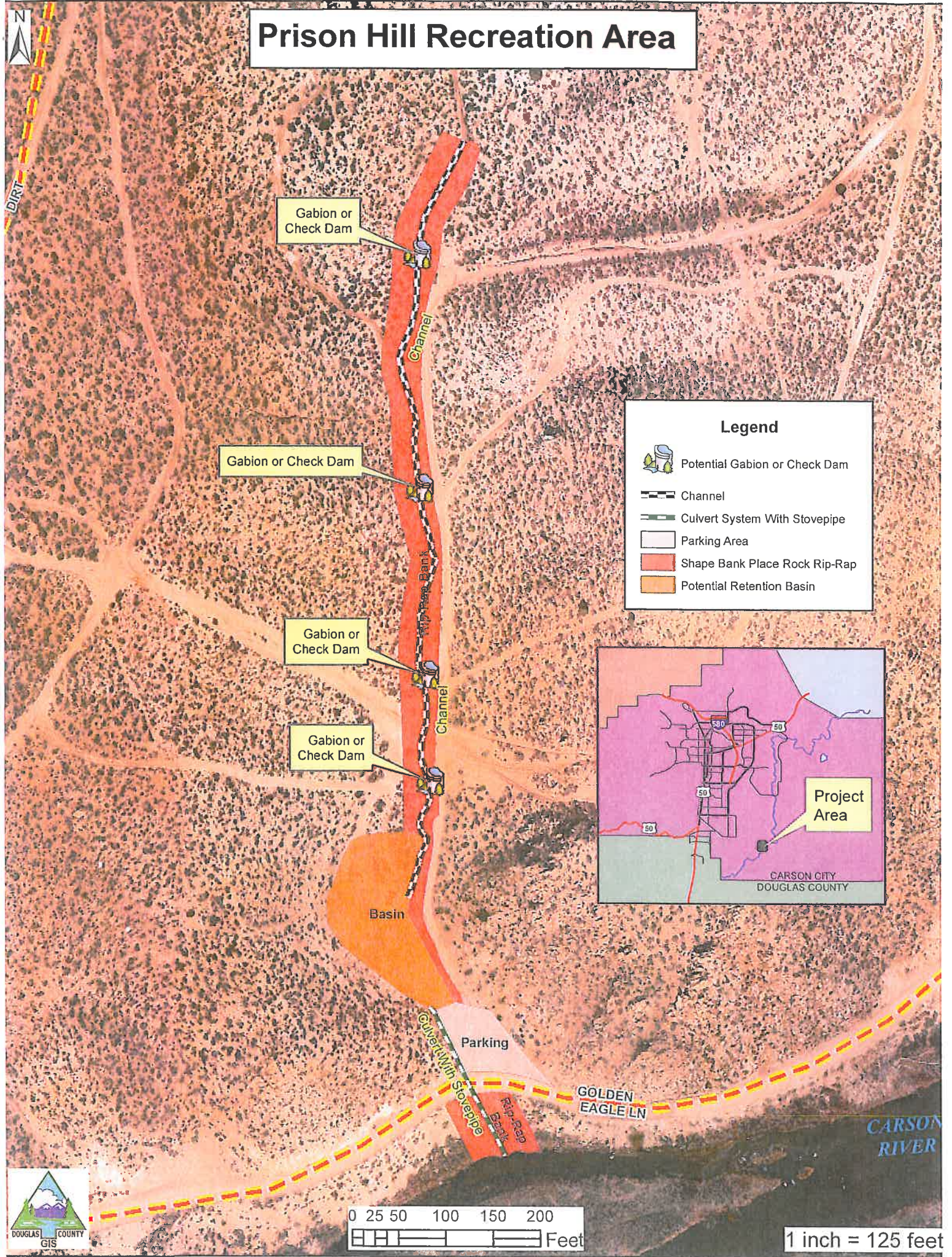


View from above looking at erosion and impacts to existing trail.

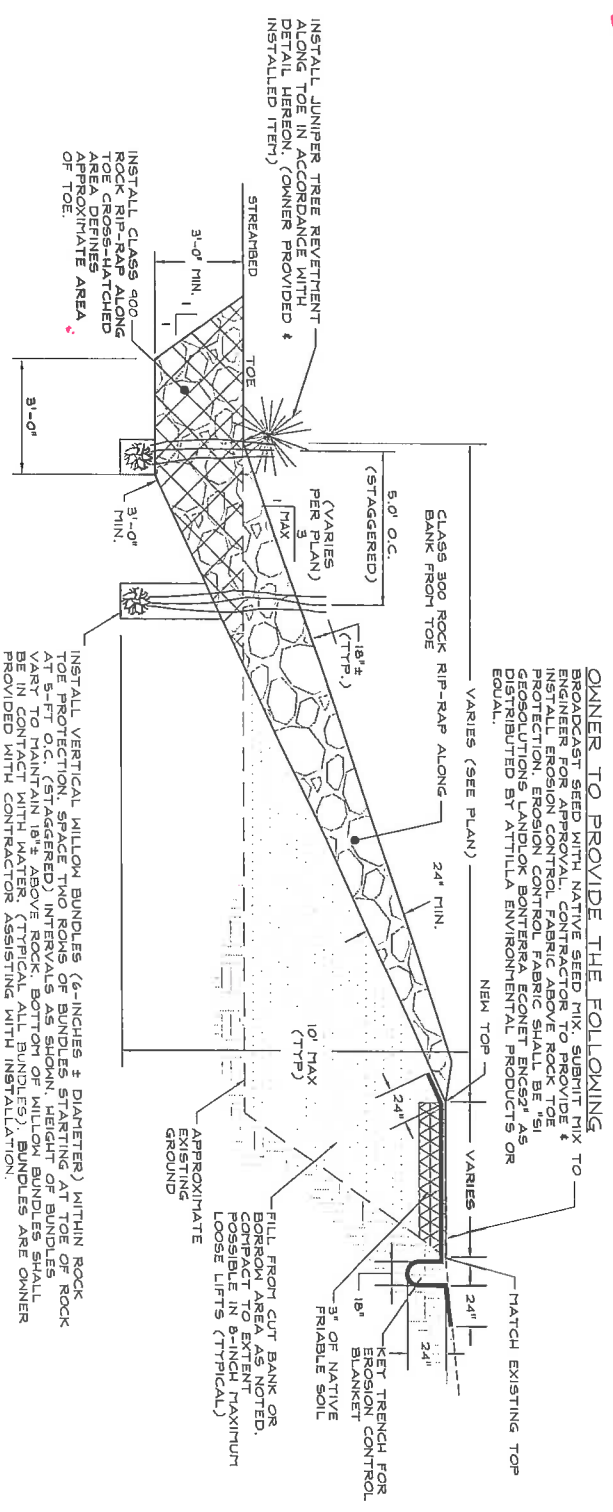


Some social trails are adding to erosion problem might put some non-sustainable trails to rest.

Prison Hill Recreation Area



* Typical bank stabilization



ROCK TOE & SLOPE PROTECTION

TABLE 200.07.04-1

Percentage by Mass Passing Sieve	Sieve Size (Inches)				
	Class 150	Class 300	Class 400	Class 550	Class 700
100	10	20	30	40	48
70 - 85	9	18	27	36	45
30 - 50	6	12	18	24	30
5 - 15	2	5	7	12	18
0	1	2	3	6	8
D50(1)	6	12	16	22	28

1. MEAN STONE SIZE.

TABLE 200.07.04-2

Test	Test Method	Requirements
Resistance to Wear (percent)	ASTM C 535 (1)	45 Maximum
Absorption (percent)	ASTM C 127	4.2 Maximum
Apparent Specific Gravity	ASTM C 97	2.5 Minimum (2)
Durability	ASTM D 3744	52 Minimum

- 1. 500 REVOLUTIONS
- 2. RIP-RAP WITH A SPECIFIC GRAVITY OF LESS THAN 2.5 WILL NOT BE ALLOWED.
- 3. RIP-RAP SHALL BE CARRIED WITH FRACTURED FACES.
- 4. RIP-RAP SHALL HAVE AN EARTH TONE WHICH BLENDS WITH SURROUNDING ENVIRONMENT.

ROCK RIP-RAP SPECIFICATIONS

NO SCALE



RETRACT EXISTING ROAD SURFACE WITH 6" TYPE II AGGREGATE BASE COMPACTED TO 98% RELATIVE DENSITY. THIS IS AN OPTIONAL COMPONENT OF THE CONTRACT, REFER TO BID DOCUMENTS AND SPECIFICATIONS.



[illegible]



Dayton Valley Conservation District
P.O. Box 1807
Dayton, Nevada 89403

February 7, 2016

Mr. Ed James, General Manager
Carson Water Subconservancy District
777 East Williams Street #110a
Carson City, Nevada 89701

Re: Formal request to extend FY 2015/16 funds into 2016/17

Dear Ed,

I would like to formally request the extension of fiscal year 2015 funds into 2016. Specifically, the amount of \$56,909.04 that has been slated for channel/project maintenance, and the amount of \$46,047.72, which is the balance of the amount slated for expenditure during FY 15 on projects MCR 048 and MCR 049. Recent bids for projects MCR 048 and 049 have come in significantly over the amount budgeted. Dayton Valley Conservation District wishes to apply the aforesaid amounts (totaling \$102,956.76) towards the completion of those projects in FY 2016. The CWSD funds will be coupled with additional funding from the Department of Conservation and Natural Resources, Division of Water Resources and Division of State Parks, Lyon County, as well as CWSD. Together, these funds will enable DVCD to proceed with the projects, with construction to begin in August of 2016.

The primary focus of the projects is to perform critical stream bank stabilization on the north bank of the Carson River near Fort Churchill State Park (project MCR 049). This project will prevent erosion that currently poses an imminent threat to the Buckland Ditch, as well as Fort Churchill Road.

Dayton Valley Conservation District, the Nevada Division of Environmental Protection, the Nevada Division of State Parks, Lyon County, and Carson Water Subconservancy District have been working together for several years to fund and complete this project. The requested extension will be necessary in order to see this project to fruition during the upcoming year.

Thank you for your consideration of this matter and please contact me if you need additional information regarding this issue.

Respectfully,


Rob Holley
District Manager
Dayton Valley Conservation District



Dayton Valley Conservation District
P.O. Box 1807
Dayton, NV 89403
(775) 246-1999

February 15, 2016

Board of Directors
Carson Water Sub-conservancy District
777 E. Williams Street Suite 110A
Carson City, Nevada 89701

Dear Board of Directors:

The Dayton Valley Conservation District (DVCD) would like to formally request from the Carson Water Sub-conservancy District (CWSD) \$90,000 of funding for the fiscal year 2016. The district will be using the \$90,000 for district and contractor operating expenses towards the completion of two critical river restoration projects.

Identified project sites: Middle Carson River (MCR) 048 and 049 have been identified as high priorities for completion during fiscal year 2016/17. Project 048, a small project (525'), is located on the Minor Ranch. Project 049 (1100'), is located near Fort Churchill State Park. The engineering has been completed on both projects, and construction bids have been received.

The Dayton Valley Conservation District is a Political Subdivision of the State of Nevada bound by N.R.S. 548 which makes us an eligible candidate for funding. With the support of many project stakeholders DVCD has completed over 50 river restoration projects. The district has been a strong partner with CWSD since our establishment in March of 1999 and we look forward to our continued work with Carson Water Subconservancy District

Funds received from CWSD enable Dayton Valley Conservation District to leverage other funds for conservation work within Dayton Valley and the affected watershed. These funds came from federal, state, and local sources, including this request to the CWSD. The District is requesting this year's funding from the CWSD to continue our on the ground efforts and build on older projects. This funding has enabled the district to provide as much as a 7.5 to 1 match to CWSD funds in previous fiscal years.

Please contact me at (775) 246-1999 or rholley.dvcd@yahoo.com if you have any further questions, or if you would like any additional information from the district.

On behalf of the board of supervisors to the Dayton Valley Conservation District, I would like to thank you for your time and consideration.

Respectfully,

Rob Holley
District Manager
Dayton Valley Conservation District

Project Name: Middle Carson River (MCR) 048 and 049

Project Location: Minor Ranch, Dayton Nevada (MCR 048) and Fort Churchill, Weeks, NV (MCR 049)

Project Description: DVCD has listed two (2) areas that are in need of immediate restoration within the Middle Carson River. The total lengths of these projects are approximately 1,625 linear feet of riverbank. These areas have vertical cut banks which are failing, even during low flow scenarios. The district will utilize designs that have been proven successful in stabilizing the riverbanks by minimizing erosion, improving water quality, and re-establishing native vegetation along the Carson River. The design will include rock rip-rap, bio-engineering, shaping the banks to a 3:1 slope ratio and re-planting native vegetation to improve overall stability within the river channel.

Project Benefits: The benefits would include; improving wildlife habitat, improving of water quality by minimizing erosion, stabilizing the riverbank and protect agricultural lands and the vital cottonwood gallery along Middle Carson River, the re-establishment of native vegetation, and entrapment of in-stream sediment. Additionally, **MCR 049 provides critical protection of infrastructure, including Fort Churchill Road and the Buckland ditch, which supplies irrigation water to over 2000 acres of agricultural land near Fort Churchill.**

Estimated Date for Project to Begin: Pending the approval of remaining funding, the project is slated to begin in August, 2016.

Estimated Date for Project to End: December 31, 2016 (Approximate)

Required Approvals (all licenses, permits, and approvals required): **Status:**

U.S. Army Corp of Engineers Nationwide Permit	Application submitted, awaiting approval
Nevada Division of Environmental Protection 401 W.Q. Cert.	Approved
Nevada Division of Environmental Protection Temp Roll Stock	Approved MCR 048, Pending MCR 049
Nevada Division of State Lands Authorization Right of Entry	Application submitted, awaiting approval
Landowner Right of Entry	Pending

Estimated Total Cost of Project: \$536,950.00

Amount Requested from CWSD: \$90,000.00

Carson Water Subconservancy District
Request for funding FY 2016

February 15, 2016

APPLICANT: Dayton Valley Conservation District
P.O. Box 1807
Dayton, Lyon, Nevada 89403

APPLICANTS AGENT: Rob Holley
#34 Lakes Blvd.
Dayton, Lyon, Nevada 89403

PROJECT NAME: Middle Carson River Streambank Stabilization Projects MCR 048, 049

PROJECT LOCATIONS: Fort Churchill State Historic Park/Minor Ranch. (Map Attached)

PROJECT DESCRIPTION: See Attached letter describing the need for the completion of these projects.

PROJECT BENEFITS: See Attached letter describing the benefits of completing these projects.

TOTAL AMOUNT OF PROJECTS: \$536,950.00

AMOUNT REQUESTED FROM CWSD: \$90,000.00

MATCH RATIO: 3 TO 1

ESTIMATED DATE OF PROJECT TO BEGIN: Permitting is estimated 90% complete. Engineering and construction documents are completed. Bidding has been completed, and awarding of bid awaits approval of funding balance. Construction is planned to begin in August, 2016.

ESTIMATED DATE OF PROJECT COMPLETION: Construction should be complete by December, 2016 and final reporting March, 2016.

ADDITIONAL INFORMATION: See attached letter with additional project information.

<u>PROJECT PARTNERS:</u>	Carson Water Subconservancy District (CWSD)	\$90,000 Pending
	Lyon County	\$50,000 Pending
	Nevada Department of Environmental Protection	\$133,275 Approved
	CWSD	\$56,909 (Approved, extension pending)
	CWSD	\$46,047 (Approved, extension pending)
	Nevada Division of State Parks	\$25,000 Approved
	Nevada Division of State Parks	\$18,719 Pending
	Truckee Carson Water Conservancy District	\$15,000 Pending
	DVCD Landowners (In-kind) Supplies	\$50,000 Approved
	Nevada Division of Water Resources	\$52,000 Approved
	<u>Totals:</u>	<u>\$536,950.00</u>

Potential Sources of additional funding FY 2016:

State, Local and Federal Funding

Budget Amount

River Wranglers Vegetation Management Workdays	\$4,500	Approved
Lyon County, Nevada	\$7,500	Approved
Lyon County, Nevada	\$50,000	Pending
Division of Conservation Districts- Grants to Districts	\$4,100	Approved
Carson Water Sub-Conservancy District (River)	\$90,000	Pending
CWSD carryover funds	\$102,956	Approved, pending extension
CWSD (Weeds)	\$15,000	Approved
CWSD (NFWF Weeds)	\$15,000	Approved
DVCD/Landowners/Materials (In-Kind)	\$50,000	Approved
National Fish and Wildlife Foundation	\$180,000	Approved
Nevada Department of Agriculture (Weeds)	\$15,000	Pending
Nevada Dream Tag (bi-state sage grouse/Pinenut Range)	\$22,000	Pending
US BLM (bi-state sage grouse/Pinenut Range)	\$50,000	Pending
Nevada Division of State Parks (River)	\$25,000	Approved
Nevada Division of State Parks (River)	\$18,719	Approved
Nevada Division of Water Resources	\$52,000	Approved
Nevada Division of Water Resources	\$20,000	Approved
Carson Truckee Water Conservancy District (River)	\$15,000	Pending
Totals: \$736,775.00		

Other Information:

This project proposal is part of a larger county-wide effort to improve conditions along the Middle Carson River. These projects attempt to build upon and support existing. These projects will be conducted using Best Management Practices that have been employed by DVCD over the past seventeen years. The District will be using bio-engineering treatment strategies whenever possible in order to achieve the best possible outcome. The DVCD incorporates the Carson River Stewardship plan and the Carson River Floodplain Management plan into our management strategy for the Middle Carson River.

Since 1996, DVCD has received over 4.5 million dollars in funding to support locally-led resource management projects in Lyon County. The District will continue to work closely with local, state and federal agencies to ensure that resource management concerns are being addressed. With the assistance of the Carson Water Sub-Conservancy District, our District has established one of the most successful locally-driven conservation efforts in the State of Nevada. We look forward to continuing our relationship with CWSD on these future projects.

Respectfully,



Rob Holley
District Manager
Dayton Valley Conservation District

Proposed Projects

MCR 048, 049

Site problems

- IMMEDIATE threat to infrastructure
- Vertical cut banks 5 feet to 25 feet high
- Little or no native vegetation
- Poor wildlife habitat
- Accelerated erosion
- Poor water quality
- Invasive weed infestation

Project Goals

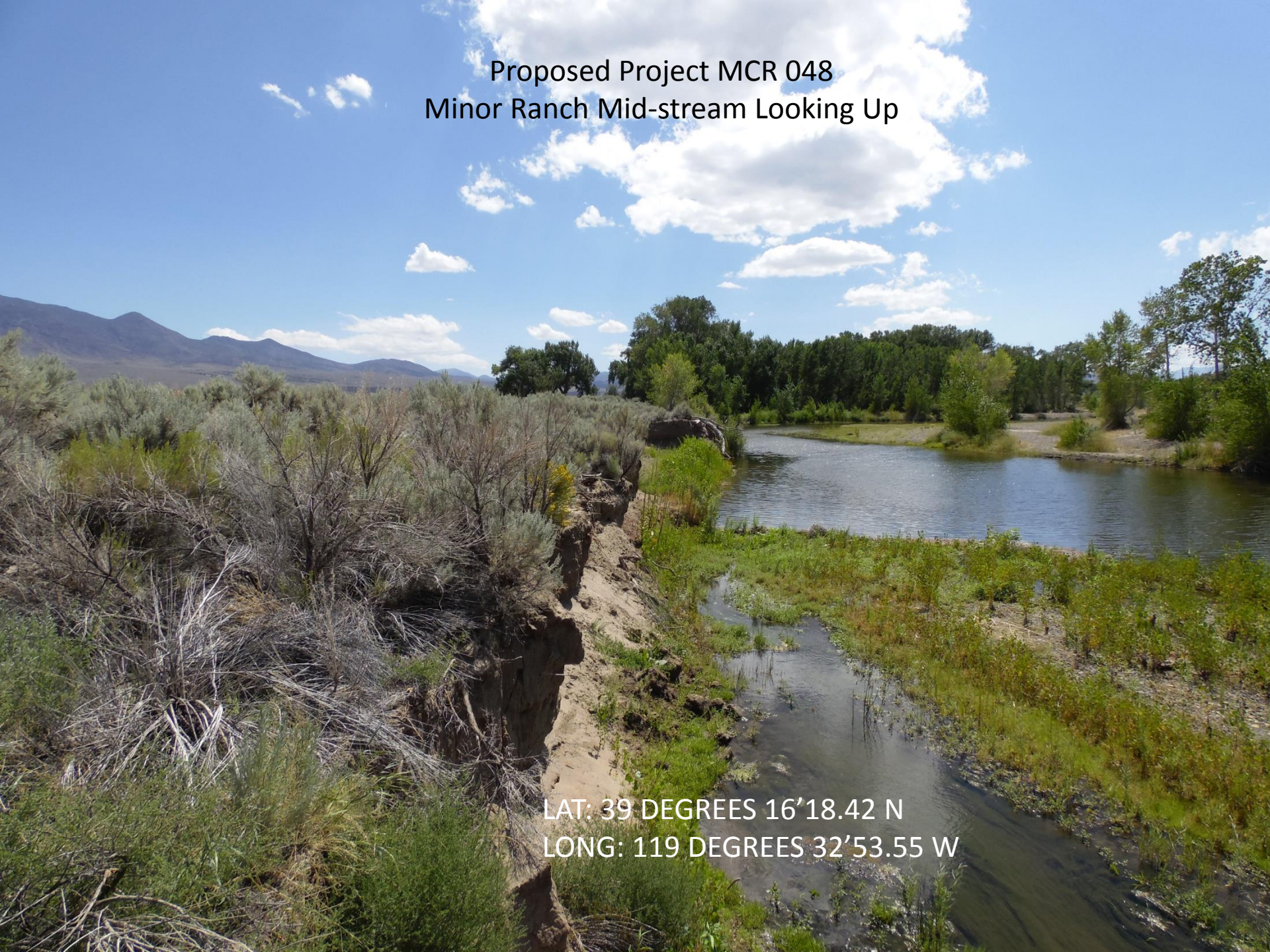
- Protection of Buckland ditch, county roadway
- Promote Physical Stability within Project Reach
- Stabilize Eroding cut banks
- Minimize accelerated rates of erosion
- Re-establish native and desirable vegetation
- Improve water quality



MCR 049

Lat: $39^{\circ} 16' 18.42'' N$
Long: $119^{\circ} 32' 53.55'' W$

Proposed Project MCR 048
Minor Ranch Mid-stream Looking Up

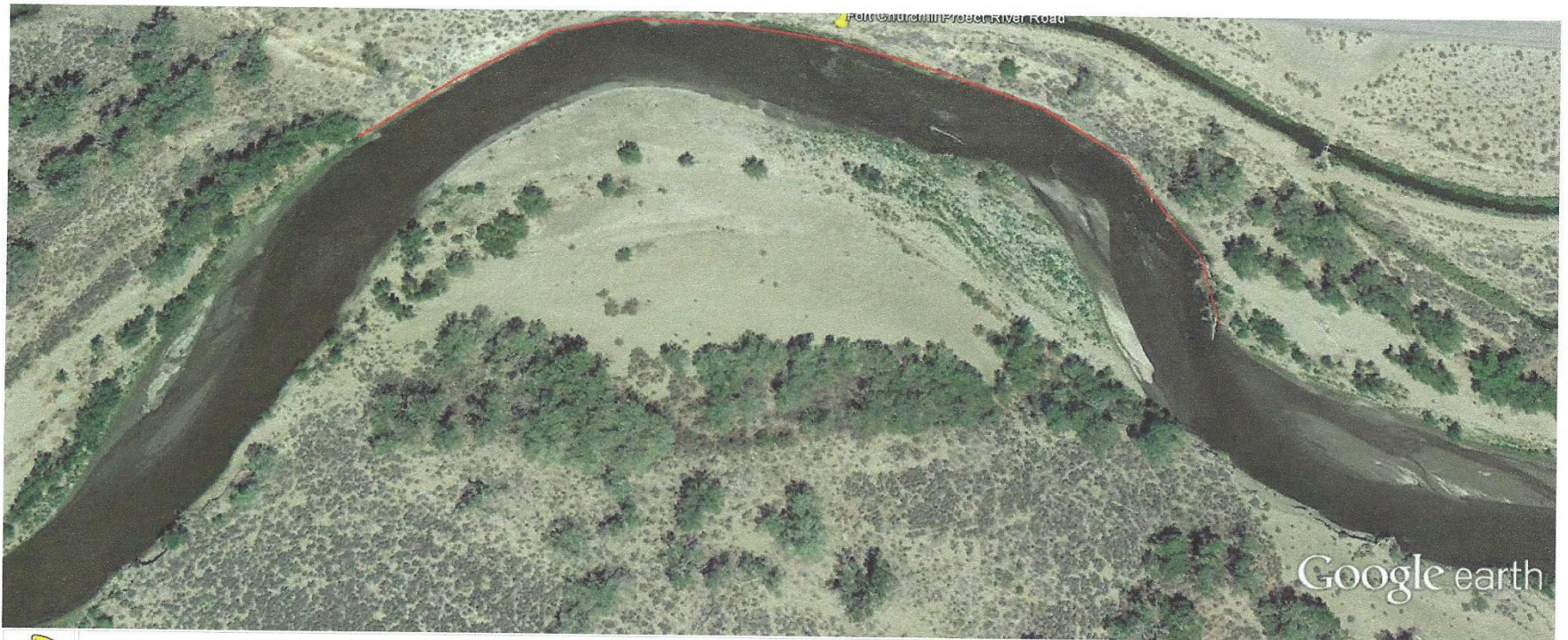


LAT: 39 DEGREES 16'18.42 N

LONG: 119 DEGREES 32'53.55 W

MCR 048-Rock & Bioengineering Minor Ranch

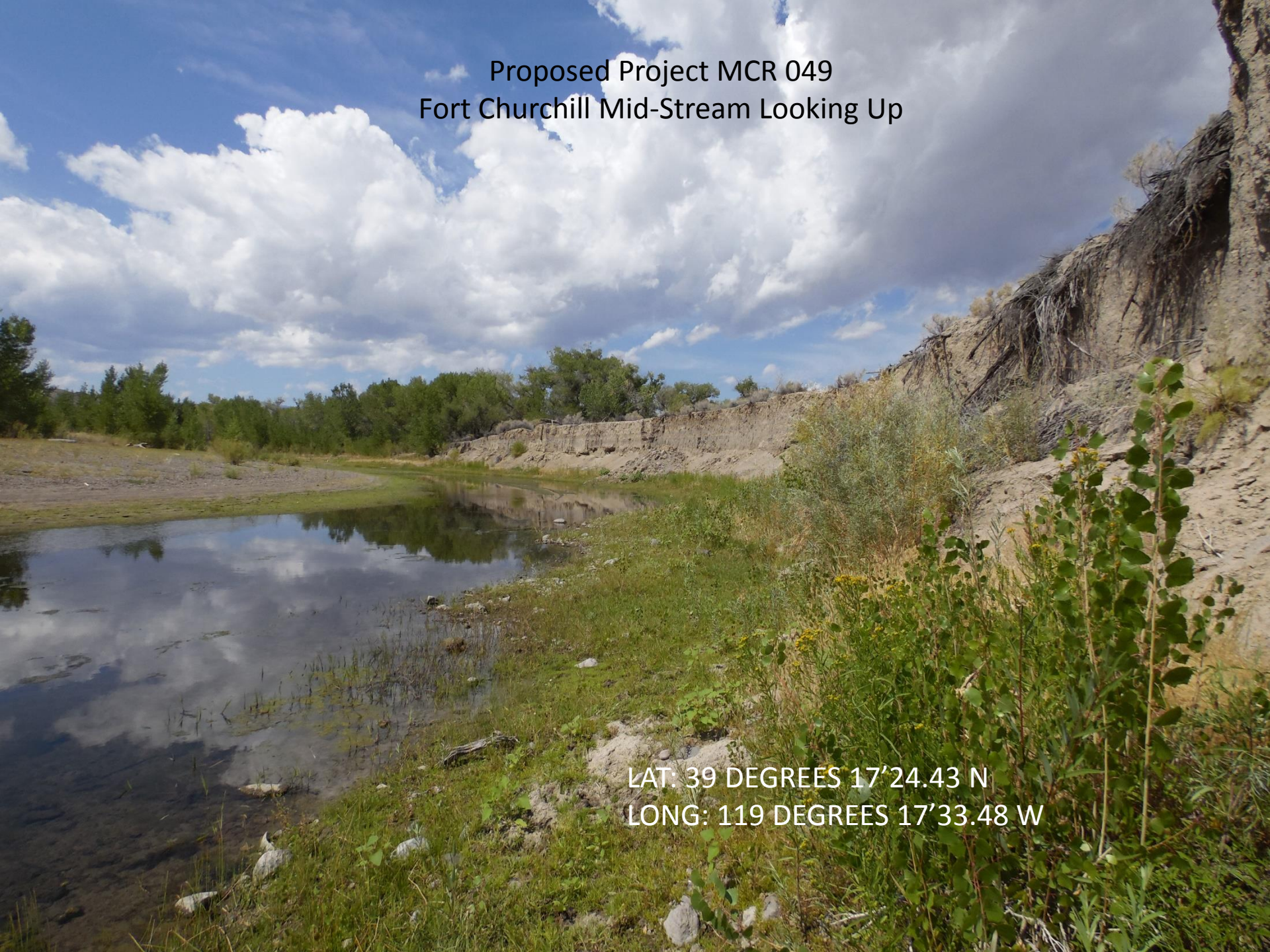
- Length: 525'
- Height: 12'
- Scope:
 - 3 to 1 Slope Cut/Fill
 - Willow Bundles: This technique will help stabilize the bank.
 - Erosion Fabric: This technique will re-establish native and desirable vegetation, as well as, minimize or stop scour and erosion.
 - Rock Rip Rap: This technique will improve water quality and help provide some protection to infrastructure.
 - Stream barbs: This technique will be used after the removal of large woody debris.
- Problems:
 - Lack of native vegetation & desirable vegetation
 - Continues to scour & erode & impair water quality
 - Invasive weeds present
 - Existing project area continues to dump sediment into system
 - Large woody debris accelerated scour & erosion



Fort Churchill Project River Road

Lat: $39^{\circ} 17' 24.43 \text{ N}$
Long: $119^{\circ} 17' 33.48 \text{ W}$

Proposed Project MCR 049
Fort Churchill Mid-Stream Looking Up



LAT: 39 DEGREES 17'24.43 N
LONG: 119 DEGREES 17'33.48 W

MCR 049- Rock & Bioengineering

Fort Churchill State Park

- Length: 1100'
- Height: up to 12'
- Scope:
 - 3 to 1 Slope Cut/Fill
 - Willow Bundles: This technique will help stabilize the bank.
 - Erosion Fabric: This technique will re-establish native and desirable vegetation, as well as, minimize or stop scour and erosion.
 - Rock Rip Rap: This technique will improve water quality and help provide some protection to infrastructure.
 - Stream barbs: This technique will be used after the removal of large woody debris.
- Problems:
 - IMMINENT threat to infrastructure
 - Lack of native vegetation & desirable vegetation
 - Continues to scour & erode & impair water quality
 - Invasive weeds present
 - Vertical cut banks up to 12'
 - Large woody debris accelerated scour & erosion

Proposed Project MCR 049
Fort Churchill Mid Stream Looking Down



LAT: 39 DEGREES 17'24.43 N
LONG: 119 DEGREES 17'33.48 W

Panorama of MCR 049 at Fort Churchill. Upstream on left, total distance of bank is 1,100 feet, with the vertical bank up to 12' in height.



MCR 049 Proximity to Buckland Ditch (20')



Project partners

- Lyon County
- Nevada Division of State Parks
- Carson Water Subconservancy District
- Carson Truckee Water Conservancy District
- Dayton Valley Conservation District
- Nevada Division of Water Resources
- RO Anderson Engineering Inc.
- Dayton Valley Property Owners
- Nevada Department of Environmental Protection