



Carson Water Subconservancy District Board of Directors & Carson River Watershed Committee

NOTICE OF PUBLIC MEETING

*A healthy watershed
that meets the water
needs of all users*

DATE: January 19, 2022
TIME: 6:30 pm
LOCATION: Carson City Community Center, Bonanza Room
851 E. William Street, Carson City, NV 89701

Virtual attendance will be available via [Zoom](#). To phone in call (669)900-9128 and use Meeting ID: 849 1392 4359 and Passcode: 415912

NOTICE: Masks are required. The State of Nevada and Carson City are currently in a declared State of Emergency in response to the global pandemic caused by the coronavirus (COVID-19) infectious disease outbreak. In accordance with the applicable Directives issued under authority of the Governor's Declaration of Emergency, including Directive 045 and 047, and subject to any potential changes in state or federal mandates or guidelines, face coverings are required to be worn when attending this meeting in person.

AGENDA

Please Note: The Carson Water Subconservancy District (CWSD) Board may: 1) take agenda items out of order; 2) combine two or more items for consideration; and/or 3) remove an item from the agenda or delay discussion related to an item at any time. All votes will be conducted by CWSD Board of Directors. Reasonable efforts will be made to assist and accommodate individuals with limited ability to speak, write, or understand English and/or to those with disabilities who wish to join the meeting. Please contact Catrina Schambra at (775)887-7450 or email: catrina@cwsd.org at least two business days in advance so that arrangements can be made.

1. Call to Order the CWSD Board of Directors/Carson River Watershed Committee
2. Roll Call
3. Pledge of Allegiance
4. For Discussion Only: Public Comment - Action may not be taken on any matter brought up under public comment until scheduled on an agenda for action at a later meeting.
5. For Possible Action: Approval of Agenda
6. For Possible Action: Approval of the Board Meeting Minutes of Dec. 15, 2021

****CONSENT AGENDA****

Please Note: All matters listed under the consent agenda are considered routine and may be acted upon by the Board of Directors with one action and without an extensive hearing. Any member of the Board or any citizen may request that an item be taken from the consent agenda, discussed, and acted upon separately during this meeting.

7. For Possible Action: Approval of Treasurer's Report for December 2021

To promote cooperative actions with communities to protect the Carson River Watershed.

8. For Possible Action: Approval of Payment of Bills for December 2021
9. For Possible Action: Modify the Andy Aldax criteria to establish who is eligible for the award.
10. For Possible Action: Approval of Amended Agreement #2020-11 with Neon to extend timeline and add \$13,800.

****END OF CONSENT AGENDA****

11. For Discussion Only: Presentation of 2021 Andy Aldax Award to Bruce Scott & Alpine Watershed Group
12. For Discussion Only: Presentation by Geoff Brownell from Kimley-Horn regarding the Smelter Creek Flood Study
13. For Possible Action: Update on the Watershed Literacy Campaign
14. For Possible Action: Update on the USACE determination that the Carson River is a navigable water of the United States pursuant to the Rivers and Harbors Act
15. For Possible Action: Review of draft comments to the Proposed Interim Plan by the US Environmental Protection Agency (USEPA) for the Carson River Mercury Super Fund Site
16. For Discussion Only: Staff Reports
 - General Manager
 - Legal
 - Correspondence
17. For Discussion Only: Directors Reports
18. For Discussion Only: Update on activities in Alpine County
19. For Discussion Only: Update on activities in Storey County
20. For Discussion Only: Public Comment - Action may not be taken on any matter brought up under public comment until scheduled on an agenda for action at a later meeting.
21. For Possible Action: Adjournment

Supporting material for this meeting may be requested from Catrina Schambra at 775-887-7450 (catrina@cwdsd.org) and is available on the CWSD website at <https://www.cwdsd.org>

In accordance with NRS 241.020, this notice and agenda has been posted 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

CWSD website:
<https://www.cwsd.org>
State public meetings website:
<http://notice.nv.gov>

AFFIDAVIT OF POSTING

The undersigned affirms that on or before 9:00 am on January 13, 2022 he/she posted a copy of the *Notice of Public Meeting and Agenda* for the January 19, 2022, regular meeting of the Carson Water Subconservancy District Board of Directors, in accordance with NRS 241.020; said agenda was posted at the following location:

SIGNATURE

Name: _____

Title: _____

Date & Time of Posting: _____

AGENDA ITEM #6

MINUTES OF LAST BOARD MEETING

CARSON WATER SUBCONSERVANCY DISTRICT
BOARD OF DIRECTORS AND
CARSON RIVER WATERSHED COMMITTEE MEETING
December 15, 2021

Minutes

Chairman Giomi called the meeting of the Carson Water Subconservancy District (CWSD) to order at 6:31 pm in the Bonanza Room at the Carson City Community Center at 851 East William Street in Carson City. Roll call of the CWSD Board was taken, and a quorum was determined to be present.

CWSD Directors present:

Stacey Giomi
Ken Gray
Jim Hindle (*via Zoom*)
David Nelson (*via Zoom*)
Pete Olsen (*via Zoom*)
Lisa Schuette
Ernie Schank
Mike Workman

Directors Absent: John Engels, Mark Gardner, and Fred Stodieck

Roll call of the Carson River Watershed Committee included CWSD Directors and Committee Members present - David Griffith and January Riddle (*via Zoom*).

CWSD Staff & Guests present:

Shane Fryer, Watershed Program Specialist
Brenda Hunt, Watershed Program Manager
Edwin James, General Manager
Patrick King, CWSD Attorney
Debbie Neddenriep, Water Resources Specialist 2
Catrina Schambra, Administrative Assistant/Secretary to the Board

The Pledge of Allegiance was led by Director Gray.

Item #4 – Discussion Only: Public Comment

Debbie Neddenriep introduced new employee Holly Farnham, CWSD Senior Watershed Clerk.

Item #5 – For Possible Action: Approval of Agenda

(Note: Technical Error. Paused to correct meeting recording. Resumed at 6:40 pm.)

Chairman Giomi announced if there are no objections, the agenda will stand approved. There were no objections.

Item #6 – For Possible Action: Approval of the Board Meeting Minutes of Nov. 17, 2021

Director Gray made a motion to approve the Board Meeting Minutes of November 17, 2021, as presented. The motion was seconded by Committee Member Griffith and unanimously approved by the Board.

****CONSENT AGENDA****

Item #7 - For Possible Action: Approval of Treasurer's Report for November 2021

Item #8 - For Possible Action: Approval of Payment of Bills for November 2021

Item #9 - For Possible Action: Approval of Director Hindle (Storey County) Committee Assignments

Item #10 - For Possible Action: Approval of General Manager Contract

Director Workman made a motion to approve the Consent Agenda, excepting Item #11, which was pulled for further discussion. The motion was seconded by Director Gray and unanimously approved by the Board.

****END OF CONSENT AGENDA****

Item #11 - For Possible Action: Approval of a Mission and Vision Statement for CWSD

After robust discussion among those present, it was agreed the Mission Statement should be:

To promote cooperative action with communities to protect the Carson River Watershed.

Director Gray made a motion to approve the CWSD Mission Statement as: "To promote cooperative action with communities to protect the Carson River Watershed." The motion was seconded by Committee Member Griffith and unanimously approved by the Board.

Further discussion led to agreement, the Vision Statement should be:

A healthy watershed that meets the water needs of all users.

Director Schuette made a motion to approve the CWSD Vision Statement as: "A healthy watershed that meets the water needs of all users." The motion was seconded by Committee Member Griffith and unanimously approved by the Board.

Item #12 - For Possible Action: Select the Andy Aldax Award Recipient

Mr. James reported the CWSD Administrative Committee met on November 30, 2021 and recommends giving two awards in 2022: an individual award and an entity/group award. The recipients: Bruce Scott and Alpine Watershed Group. Mr. James gave a brief history of award and discussion followed. It was the consensus that nominations should dictate whether two awards would be given each year, but recognition to entities' contributions to the watershed

should be included in this annual award.

Director Schank made a motion to approve the Andy Aldax Award be given to both Bruce Scott and Alpine Watershed Group as presented and any needed edits to the award criteria be made at the January 2022 meeting. The motion was seconded by Committee Member Griffith and unanimously approved by the Board.

Item #13 – For Possible Action: Approval of the 2021 Activities & Accomplishments Annual Report

Mr. James introduced the report and consensus was that our new Mission & Vision statements should be added to the front page, as well as bulleted list of the information inside.

Director Gray made a motion to approve the 2021 Activities & Accomplishments Annual Report with the suggested edits. The motion was seconded by Committee Member Griffith and unanimously approved by the Board.

Item #14 – For Possible Action: Approval of Staff Salary Adjustment

At the November 30, 2021, meeting the Administrative Committee voted to recommend approval of a 5% salary adjustment starting January 1, 2022, with the stipulation that it be subject to budget impact information being made available for discussion during the final vote at the December Board meeting.

The impact to the FY 21/22 CWSD Salary budget for the 5% increase is \$10,560. The FY 21/22 Salary budget is \$422,280. The 5% increase would increase the salary budget by 2.5%. Approximately 50% of the salaries will be reimbursed via grants.

Director Gray reported that the actual COLA has been 6.1% since January 2021. He believes its good for CWSD to take care of its employees.

Director Gray made a motion to approve the one-time 5% salary adjustment effective January 1, 2022 as presented. The motion was seconded by Director Schank and unanimously approved by the Board.

Item #15– For Possible Action: Update on the USACE determination that the Carson River is a navigable water of the United States pursuant to the Rivers and Harbors Act

Mr. James reported the December 8, 2021 Permit Workshop was well attended with 44 participants. The next step is to engage the water purveyors to determine the required routine ongoing maintenance. The goal is to write an overarching 5-year general permit that will cover all the use of which we are aware. Staff will begin work on the language now. The group will meet again in January.

There was discussion including canal maintenance, clearing, and snagging and being specific regarding the methods used for these activities. Mr. James will visit all users to get a complete list of the activities that must be included in detail in the general permit language. Director Giomi suggested we not be specific, but general to not limit our activities. Ideas to include protecting property, livestock, and maintenance. Mr. James is hoping to have a list together by the end of the year.

No action was taken.

Item #16 – For Possible Action: Update on the Proposed Interim Plan by the US Environmental Protection Agency (USEPA) for the Carson River Mercury Superfund Site

Brenda Hunt reported the deadline for Public Comments has been extended by 90 days to February 14, 2022. The plan is to have a draft letter to present to the Board by the January Board meeting. Then it will be shared with counties for their use as a template.

Ms. Hunt reported the EPA has set the Public Meeting for January 31, 2022. Once the comment period closes on February 14, 2022, the EPA will have until December 2022 to respond to public comments and then the final decision should be out in March 2023.

Director Giomi suggests we reach out to elected leaders for letters of support.

No action was taken.

Item #17 – For Possible Action: 2022 Annual NWRA Convention

Mr. James said that he will be attending as well as serving as a panelist at the annual convention. The information was included in the Board package and up to three Board members may attend if they would like. He asked them to contact Catrina Schambra for further information if they wanted to attend.

No action was taken.

Item #18 – For Discussion Only: Staff Reports –

Mr. James reported the following:

- The 30-Year Drought grant (DEM/HMP) is looking promising. NDEM is using our application as a template for others in the state. There will also be another grant opportunity in February.
- Churchill County comments on the Water Marketing Plan are to be incorporated into the Regional Water Plan.

Mr. Fryer reported the following:

- The 2022 Watershed Forum will be a 2-day event and possibly virtual. It is still in the planning stages.

Ms. Hunt reported the following:

- The Bag It! video will launch in January and there will be one film per month premiering throughout 2022 for the I AM CARSON RIVER WATERSHED PSA campaign.

Ms. Neddenriep reported the following:

- The RFPs for FEMA MAS 12 projects resulted in contracts awarded to Kimley-Horn (SE Carson City project); Michael Baker, Inc. (East Carson City ADMP); and Lumos & Associates (Virginia City Six Mile ADMP). Selection for the Buckeye Basin Study is scheduled for tomorrow.

Legal – None

Correspondence – The Fallon Post article on the Churchill Flood Study presentation.

Item #19 – For Discussion Only: Director’s Reports –

Director Schank reported on the snowfall levels from the last storm. Lake Tahoe got 7.3 feet of snow!

Item #20– For Discussion Only: Update on activities in Alpine County –

- Committee Member Riddle reported the Markleeville Water Company donated \$5,000 for waddles and seeds to prevent slides in endangered creeks. The workday before Thanksgiving was well attended. The community really came together on short notice. On Saturday there were 30 volunteers and on Sunday 15. Five acres were covered. It was a great community event and three supervisors showed up to help.
- Committee Member Griffith reported that no seasonal storage is the problem. They need to determine how to drill more wells. The Tamarack Fire 2-year NEPA process before restoration has been shortened to having a plan by June 2022.

Item #21– For Discussion Only: Update on activities in Storey County – None

Item #22 – For Discussion Only: Public Comment – None

There being no further business to come before the Board, Chairman Giomi adjourned the meeting at 7:50 pm.

Respectfully submitted,

Catrina Schambra

Secretary to the Board

AGENDA ITEM #7

TREASURER'S REPORT

CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

01/07/22

Balance Sheet

Cash Basis

As of December 31, 2021

	<u>Dec 31, 21</u>
ASSETS	
Current Assets	
Checking/Savings	
1013-00 · Cash in Checking - U. S. Bank	17,619.72
1014-00 · Local Gov't Inv. Pool-Regular	925,290.64
1030-00 · Petty Cash	209.65
Total Checking/Savings	<u>943,120.01</u>
Other Current Assets	
1055-00 · Payroll Deposit - Carson City	500.00
Total Other Current Assets	<u>500.00</u>
Total Current Assets	<u>943,620.01</u>
TOTAL ASSETS	<u>943,620.01</u>
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Other Current Liabilities	
3360-00 · Accrued Vacation	24,979.38
3362-00 · Accrued sick leave	65,334.98
Total Other Current Liabilities	<u>90,314.36</u>
Total Current Liabilities	<u>90,314.36</u>
Total Liabilities	90,314.36
Equity	
4000-00 · Fund Balance	574,466.42
Net Income	278,839.23
Total Equity	<u>853,305.65</u>
TOTAL LIABILITIES & EQUITY	<u>943,620.01</u>

CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

01/07/22

Profit & Loss Budget vs. Actual

Cash Basis

July through December 2021

	Jul - Dec 21	Budget	\$ Over Budget	% of Budget
Ordinary Income/Expense				
Income				
5008-00 · Alpine Co. Joint Powers contrib	11,423.11	10,897.74	525.37	104.8%
5009-00 · Churchill County Ad Valorem	89,439.62	224,981.67	-135,542.05	39.8%
5010-00 · Lyon County Ad Valorem	82,132.79	200,242.41	-118,109.62	41.0%
5011-00 · Douglas County Ad Valorem	389,295.24	650,989.68	-261,694.44	59.8%
5012-00 · Carson City Ad Valorem	276,864.16	477,771.17	-200,907.01	57.9%
5022-00 · Water Lease - Mud Lake		55,500.00	-55,500.00	
5023-00 · Water Lease-Lost Lakes	642.00		642.00	100.0%
5031-00 · Interest Income-LGIP Reg.	467.34	2,025.41	-1,558.07	23.1%
5050-00 · Watershed Coordinator Grant				
5050-13 · NDEP-WS Coord IV 2019-2022	41,369.22	86,925.00	-45,555.78	47.6%
Total 5050-00 · Watershed Coordinator Grant	41,369.22	86,925.00	-45,555.78	47.6%
5060-00 · Misc. Income		6,000.00	-6,000.00	
5082-00 · Alpine Co.-CASGEM Grant		400.00	-400.00	
5083-00 · Al.Co.-Mesa GW Monitoring Grant		300.00	-300.00	
5101-00 · State Parks Aquatic Trail Grant		85,000.00	-85,000.00	
6005-00 · FEMA -MAS #10	70,606.68	85,486.00	-14,879.32	82.6%
6006-00 · FEMA-MAS #11	148,881.58	417,395.00	-268,513.42	35.7%
Total Income	1,111,121.74	2,303,914.08	-1,192,792.34	48.2%
Expense				
66900 · Reconciliation Discrepancies	-0.01		-0.01	100.0%
7015-00 · Salaries & Wages	211,148.38	422,280.00	-211,131.62	50.0%
7020-00 · Employee Benefits	83,994.93	179,170.00	-95,175.07	46.9%
7021-00 · Workers Comp Ins.	65.70	2,300.00	-2,234.30	2.9%
7101-00 · Director's Fees				
7101-01 · Director Benefits	72.68		72.68	100.0%
7101-02 · Director's Fees-Alpine Co.	1,121.81	1,920.00	-798.19	58.4%
7101-00 · Director's Fees - Other	4,725.15	14,080.00	-9,354.85	33.6%
Total 7101-00 · Director's Fees	5,919.64	16,000.00	-10,080.36	37.0%
7102-00 · Insurance	5,106.03	5,100.00	6.03	100.1%
7103-00 · Office Supplies	1,440.61	2,000.00	-559.39	72.0%
7104-00 · Postage	680.75	1,250.00	-569.25	54.5%
7105-00 · Rent	19,440.00	38,885.00	-19,445.00	50.0%
7106-00 · Telephone/Internet	3,487.20	6,400.00	-2,912.80	54.5%
7107-00 · Travel-transport/meals/lodging				
7107-02 Staff Indirect Mileage	18.64		18.64	100.0%
7107-01 · Car Allowance	3,000.00	6,500.00	-3,500.00	46.2%
7107-00 · Travel-transport/meals/lodging - Other	1,817.09	9,500.00	-7,682.91	19.1%
Total 7107-00 · Travel-transport/meals/lodging	4,835.73	16,000.00	-11,164.27	30.2%
7108-00 · Dues & Publications	519.00	1,400.00	-881.00	37.1%
7109-00 · Miscellaneous Expense		1,000.00	-1,000.00	
7110-00 · Seminars & Education	330.00	1,500.00	-1,170.00	22.0%
7111-00 · Office Equipment	2,472.31	3,000.00	-527.69	82.4%
7112-00 · Bank Charges	25.00	50.00	-25.00	50.0%
7114-00 · Outside Professional Services	6,742.52	30,000.00	-23,257.48	22.5%
7115-00 · Accounting	13,900.00	16,800.00	-2,900.00	82.7%
7116-00 · Legal	10,000.00	32,000.00	-22,000.00	31.3%
7117-00 · Lost Lakes Expenses	1,595.55	14,000.00	-12,404.45	11.4%
7118-00 · Mud Lake O & M		1,250.00	-1,250.00	
7120-00 · Integrated Watershed Programs				
7120-07 · Watershed Tour		6,000.00	-6,000.00	
7120-33 · Watershed Coord IV 2019-22				
7120-34 · WS Coord Grant MATCH 2019-21				
7120-35 · WS COORD MATCH - Travel	325.36		325.36	100.0%
7120-36 · WS COORD MATCH - Operations	217.00		217.00	100.0%

CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

01/07/22

Profit & Loss Budget vs. Actual

Cash Basis

July through December 2021

	Jul - Dec 21	Budget	\$ Over Budget	% of Budget
7120-34 · WS Coord Grant MATCH 2019-21 - Other		16,608.00	-16,608.00	
Total 7120-34 · WS Coord Grant MATCH 2019-21	542.36	16,608.00	-16,065.64	3.3%
7120-38 · WS COORD-REIMBURSABLE				
7120-39 · WS COORD REIMB - Travel	349.27		349.27	100.0%
7120-40 · WS COORD REIMB- Operations	240.87		240.87	100.0%
7120-43 · WS COORD REIMB- NEON	15,100.00		15,100.00	100.0%
Total 7120-38 · WS COORD-REIMBURSABLE	15,690.14		15,690.14	100.0%
7120-33 · Watershed Coord IV 2019-22 - Other	118.51	28,800.00	-28,681.49	0.4%
Total 7120-33 · Watershed Coord IV 2019-22	16,351.01	45,408.00	-29,056.99	36.0%
Total 7120-00 · Integrated Watershed Programs	16,351.01	51,408.00	-35,056.99	31.8%
7127-00 · State Parks Aquatic Trail 21-22		80,000.00	-80,000.00	
7215-00 · Sierra NV Journeys-Family Night				
7215-02 · SNJ 2021-22		3,279.00	-3,279.00	
Total 7215-00 · Sierra NV Journeys-Family Night		3,279.00	-3,279.00	
7217-00 · Alluvial Fan Study (match)	1.12		1.12	100.0%
7218-00 · Douglas Cty LID Project (match)	266.70		266.70	100.0%
7332-00 · Carson River Work Days				
7332-07 · CR Work Days 2021-22	9,312.45	36,000.00	-26,687.55	25.9%
Total 7332-00 · Carson River Work Days	9,312.45	36,000.00	-26,687.55	25.9%
7337-00 · Carson River Restoration				
7337-01 · Carson Valley Conserv District				
7337-27 · CVCD - Bio & Debris Remove 21-22	24,276.99	75,000.00	-50,723.01	32.4%
7337-28 · CVCD - West Fork Bank 2021-22	50,000.00	100,000.00	-50,000.00	50.0%
Total 7337-01 · Carson Valley Conserv District	74,276.99	175,000.00	-100,723.01	42.4%
7337-03 · Dayton Valley Conserv				
7337-37 · DVCD - Projects Inventory 21-22		100,000.00	-100,000.00	
Total 7337-03 · Dayton Valley Conserv		100,000.00	-100,000.00	
7337-04 · Lahontan Conserv.Dist				
7337-44 · LCD- Lower Carson Project 21-22		25,000.00	-25,000.00	
Total 7337-04 · Lahontan Conserv.Dist		25,000.00	-25,000.00	
Total 7337-00 · Carson River Restoration	74,276.99	300,000.00	-225,723.01	24.8%
7404-00 · Noxious Weeds Control-CR Wtrshd				
7404-01 · Noxious Weed Control-Alpine Co.		15,000.00	-15,000.00	
7404-02 · Noxious Weed Control-Douglas Co		15,000.00	-15,000.00	
7404-03 · Noxious Weed Control-CarsonCity		15,000.00	-15,000.00	
7404-04 · Noxious Weed Control-Lyon Co.		15,000.00	-15,000.00	
7404-05 · Noxious Weed Control-Churchill		15,000.00	-15,000.00	
Total 7404-00 · Noxious Weeds Control-CR Wtrshd		75,000.00	-75,000.00	
7439-00 · FEMA MAS #10				
7439-02 · West CC Study (Kimley-Horn)	169.57		169.57	100.0%
7439-05 · Ch Cty Flood Maps (HDR)	66,969.65		66,969.65	100.0%
7439-06 · FEMA Training & Conferences	350.00		350.00	100.0%
7439-07 · River Wranglers	3,225.80		3,225.80	100.0%
7439-00 · FEMA MAS #10 - Other	3,093.89	68,905.00	-65,811.11	4.5%
Total 7439-00 · FEMA MAS #10	73,808.91	68,905.00	4,903.91	107.1%
7440-00 · FEMA - MAS #11				
7440-21 · Ruhenstroth ADMP -JE Fuller	57,942.80		57,942.80	100.0%
7440-31 · Smelter Creek LOMR -Kimley Horn	34,896.00		34,896.00	100.0%
7440-51 · Clear Creek LOMR -Cardno	29,263.75		29,263.75	100.0%
7440-61 · CV Flood Forecast Model -HDR	10,020.40		10,020.40	100.0%

CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

01/07/22

Profit & Loss Budget vs. Actual

Cash Basis

July through December 2021

	Jul - Dec 21	Budget	\$ Over Budget	% of Budget
7440-71 · Web Access System-Michael Baker	38,423.69		38,423.69	100.0%
7440-00 · FEMA - MAS #11 - Other	51.02	384,995.00	-384,943.98	0.0%
Total 7440-00 · FEMA - MAS #11	170,597.66	384,995.00	-214,397.34	44.3%
7441-00 · FEMA - MAS #12				
7441-05 · Ramsey Cyn Flood Study-HMC	4,275.00		4,275.00	100.0%
7441-00 · FEMA - MAS #12 - Other	258.29		258.29	100.0%
Total 7441-00 · FEMA - MAS #12	4,533.29		4,533.29	100.0%
7500-00 · USGS Stream Gage Contract				
7500-04 · USGS Stream Flow Gauges 21-23	19,256.00	77,022.00	-57,766.00	25.0%
Total 7500-00 · USGS Stream Gage Contract	19,256.00	77,022.00	-57,766.00	25.0%
7508-00 · USGS Do.Co.WQ & GW Monitoring				
7508-04 · DoCo WQ/GW Mon. 2021-23	4,200.00	16,800.00	-12,600.00	25.0%
Total 7508-00 · USGS Do.Co.WQ & GW Monitoring	4,200.00	16,800.00	-12,600.00	25.0%
7524-00 · USGS-GW Lvl & WQ in Ch.Co.				
7524-02 · USGS-GW Lvl & WQ-ChCo 2018-22	692.50	5,930.00	-5,237.50	11.7%
Total 7524-00 · USGS-GW Lvl & WQ in Ch.Co.	692.50	5,930.00	-5,237.50	11.7%
7526-01 · USGS Middle Carson GW 2020-22	3,812.50	15,250.00	-11,437.50	25.0%
7600-00 · Alpine County Projects				
7600-09 · Al.Co.-CASGEM	2.84	5.00	-2.16	56.8%
7600-10 · Al.Co.-Mesa GW Monitoring	40.20	2.00	38.20	2,010.0%
7600-13 · AWG Programs 2021-22	12,500.00	25,000.00	-12,500.00	50.0%
Total 7600-00 · Alpine County Projects	12,543.04	25,007.00	-12,463.96	50.2%
7610-00 · Douglas County Projects				
7610-10 · Do.Co.Reg.Pipeline Debt Service	62,500.00	125,000.00	-62,500.00	50.0%
Total 7610-00 · Douglas County Projects	62,500.00	125,000.00	-62,500.00	50.0%
7620-00 · Carson City Projects				
7620-11 · CC Reg.Pipeline Debt Service		125,000.00	-125,000.00	
Total 7620-00 · Carson City Projects		125,000.00	-125,000.00	
7630-00 · Lyon County Projects				
7630-12 · HWY 50 Right-of-Way Project Exp	172.00		172.00	100.0%
Total 7630-00 · Lyon County Projects	172.00		172.00	100.0%
7640-00 · Churchill County Projects				
7640-09 · Lahontan Vly.Wtr.Lvl. 2018-21	4,080.00		4,080.00	100.0%
7640-18 · Dixie Vlt Wtr Lvl Meas 2019-22	4,175.00	23,000.00	-18,825.00	18.2%
7640-20 · Lahontan Vly.Wtr.Lvl. 2021-24		14,500.00	-14,500.00	
7640-21 · TCID-Diversion Dam 2021-22		50,000.00	-50,000.00	
Total 7640-00 · Churchill County Projects	8,255.00	87,500.00	-79,245.00	9.4%
Total Expense	832,282.51	2,267,481.00	-1,435,198.49	36.7%
Net Ordinary Income	278,839.23	36,433.08	242,406.15	765.3%
Other Income/Expense				
Other Income				
8005-00 · Beginning Equity		578,688.35	-578,688.35	
Total Other Income		578,688.35	-578,688.35	
Other Expense				
8002-00 · Transfer Out-Acq/Const Fund		105,000.00	-105,000.00	
8008-00 · Preliminary Planning		400,000.00	-400,000.00	
Total Other Expense		505,000.00	-505,000.00	

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Cash Basis

CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

Profit & Loss Budget vs. Actual

July through December 2021

	<u>Jul - Dec 21</u>	<u>Budget</u>	<u>\$ Over Budget</u>	<u>% of Budget</u>
Net Other Income		73,688.35	-73,688.35	
Net Income	<u>278,839.23</u>	<u>110,121.43</u>	<u>168,717.80</u>	<u>253.2%</u>

CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

01/07/22

Profit & Loss YTD Comparison

Cash Basis

December 2021

	Dec 21	Jul - Dec 21
Ordinary Income/Expense		
Income		
5007-00 · Storey County Contribution	-16,091.00	
5008-00 · Alpine Co. Joint Powers contrib		11,423.11
5009-00 · Churchill County Ad Valorem		89,439.62
5010-00 · Lyon County Ad Valorem		82,132.79
5011-00 · Douglas County Ad Valorem	13,823.16	389,295.24
5012-00 · Carson City Ad Valorem	5,595.77	276,864.16
5022-00 · Water Lease - Mud Lake		642.00
5023-00 · Water Lease-Lost Lakes		467.34
5031-00 · Interest Income-LGIP Reg.	99.46	
5050-00 · Watershed Coordinator Grant		
5050-13 · NDEP-WS Coord IV 2019-2022		41,369.22
Total 5050-00 · Watershed Coordinator Grant		41,369.22
6004-00 · BOR WaterSMART Grant		
6005-00 · FEMA -MAS #10	47,795.16	70,606.68
6006-00 · FEMA-MAS #11	37,474.53	148,881.58
Total Income	88,697.08	1,111,121.74
Expense		
66900 · Reconciliation Discrepancies		-0.01
7015-00 · Salaries & Wages	34,815.28	211,148.38
7020-00 · Employee Benefits	13,556.38	83,994.93
7021-00 · Workers Comp Ins.		65.70
7101-00 · Director's Fees		
7101-01 · Director Benefits	21.22	72.68
7101-02 · Director's Fees-Alpine Co.	320.00	1,121.81
7101-00 · Director's Fees - Other	1,339.23	4,725.15
Total 7101-00 · Director's Fees	1,680.45	5,919.64
7102-00 · Insurance		5,106.03
7103-00 · Office Supplies	314.48	1,440.61
7104-00 · Postage	204.45	680.75
7105-00 · Rent	3,240.00	19,440.00
7106-00 · Telephone/Internet	914.43	3,487.20
7107-00 · Travel-transport/meals/lodging		
7107-02 Staff Indirect Mileage	-38.54	18.64
7107-01 · Car Allowance	500.00	3,000.00
7107-00 · Travel-transport/meals/lodging - Other	331.13	1,817.09
Total 7107-00 · Travel-transport/meals/lodging	792.59	4,835.73
7108-00 · Dues & Publications	125.00	519.00
7110-00 · Seminars & Education	330.00	330.00
7111-00 · Office Equipment		2,472.31
7112-00 · Bank Charges		25.00
7114-00 · Outside Professional Services	345.00	6,742.52
7115-00 · Accounting		13,900.00
7116-00 · Legal	2,000.00	10,000.00
7117-00 · Lost Lakes Expenses		1,595.55
7120-00 · Integrated Watershed Programs		
7120-33 · Watershed Coord IV 2019-22		
7120-34 · WS Coord Grant MATCH 2019-21		
7120-35 · WS COORD MATCH - Travel	325.36	325.36
7120-36 · WS COORD MATCH - Operations		217.00
Total 7120-34 · WS Coord Grant MATCH 2019-21	325.36	542.36
7120-38 · WS COORD-REIMBURSABLE		
7120-39 · WS COORD REIMB - Travel	22.40	349.27
7120-40 · WS COORD REIMB- Operations		240.87
7120-43 · WS COORD REIMB- NEON	6,900.00	15,100.00
Total 7120-38 · WS COORD-REIMBURSABLE	6,922.40	15,690.14
7120-33 · Watershed Coord IV 2019-22 - Other	16.39	118.51
Total 7120-33 · Watershed Coord IV 2019-22	7,264.15	16,351.01
Total 7120-00 · Integrated Watershed Programs	7,264.15	16,351.01
7217-00 · Alluvial Fan Study (match)		1.12
7218-00 · Douglas Cty LID Project (match)		266.70
7332-00 · Carson River Work Days		

CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

01/07/22

Profit & Loss YTD Comparison

Cash Basis

December 2021

	Dec 21	Jul - Dec 21
7332-06 · CR Work Days 2020-21		
7332-07 · CR Work Days 2021-22	9,312.45	9,312.45
Total 7332-00 · Carson River Work Days	9,312.45	9,312.45
7337-00 · Carson River Restoration		
7337-01 · Carson Valley Conserv District		
7337-26 · CVCD - Westwood Channel 2020-21		
7337-27 · CVCD - Bio & Debris Remove 21-22	18,893.81	24,276.99
7337-28 · CVCD - West Fork Bank 2021-22	50,000.00	50,000.00
Total 7337-01 · Carson Valley Conserv District	68,893.81	74,276.99
7337-03 · Dayton Valley Conserv		
7337-34 · DVCD Bank Stab/Dayton Br (EXT)		
7337-36 · DVCD - Fort Churchill 2020-21		
Total 7337-03 · Dayton Valley Conserv		
Total 7337-00 · Carson River Restoration	68,893.81	74,276.99
7404-00 · Noxious Weeds Control-CR Wtrshd		
7404-01 · Noxious Weed Control-Alpine Co.		
7404-02 · Noxious Weed Control-Douglas Co		
7404-03 · Noxious Weed Control-CarsonCity		
7404-04 · Noxious Weed Control-Lyon Co.		
7404-05 · Noxious Weed Control-Churchill		
Total 7404-00 · Noxious Weeds Control-CR Wtrshd		
7438-00 · BOR WaterSMART Market Program		
7438-01 · Water Mktg Study-LUMOS 2019-21		
7438-02 · BOR WaterSmart-LUMOS MATCH		
7438-01 · Water Mktg Study-LUMOS 2019-21 - Other		
Total 7438-01 · Water Mktg Study-LUMOS 2019-21		
Total 7438-00 · BOR WaterSMART Market Program		
7439-00 · FEMA MAS #10		
7439-02 · West CC Study (Kimley-Horn)		169.57
7439-05 · Ch Cty Flood Maps (HDR)	12,551.91	66,969.65
7439-06 · FEMA Training & Conferences		350.00
7439-07 · River Wranglers		3,225.80
7439-00 · FEMA MAS #10 - Other	1,324.53	3,093.89
Total 7439-00 · FEMA MAS #10	13,876.44	73,808.91
7440-00 · FEMA - MAS #11		
7440-21 · Ruhenstroth ADMP -JE Fuller		57,942.80
7440-31 · Smelter Creek LOMR -Kimley Horn	8,729.50	34,896.00
7440-51 · Clear Creek LOMR -Cardno	6,635.00	29,263.75
7440-61 · CV Flood Forecast Model -HDR		10,020.40
7440-71 · Web Access System-Michael Baker	12,549.69	38,423.69
7440-00 · FEMA - MAS #11 - Other	15.21	51.02
Total 7440-00 · FEMA - MAS #11	27,929.40	170,597.66
7441-00 · FEMA - MAS #12		
7441-05 · Ramsey Cyn Flood Study-HMC	4,275.00	4,275.00
7441-00 · FEMA - MAS #12 - Other	-33.03	258.29
Total 7441-00 · FEMA - MAS #12	4,241.97	4,533.29
7500-00 · USGS Stream Gage Contract		
7500-03 · USGS Stream Flow Gauges 2019-21		
7500-04 · USGS Stream Flow Gauges 21-23		19,256.00
Total 7500-00 · USGS Stream Gage Contract		19,256.00
7508-00 · USGS Do.Co.WQ & GW Monitoring		
7508-03 · DoCo WQ/GW Mon. 2019-21		
7508-04 · DoCo WQ/GW Mon. 2021-23		4,200.00
Total 7508-00 · USGS Do.Co.WQ & GW Monitoring		4,200.00
7524-00 · USGS-GW Lvl & WQ in Ch.Co.		
7524-02 · USGS-GW Lvl & WQ-ChCo 2018-22	692.50	692.50
Total 7524-00 · USGS-GW Lvl & WQ in Ch.Co.	692.50	692.50
7526-01 · USGS Middle Carson GW 2020-22	3,812.50	3,812.50

CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

01/07/22

Profit & Loss YTD Comparison

Cash Basis

December 2021

	Dec 21	Jul - Dec 21
7600-00 · Alpine County Projects		
7600-09 · Al.Co.-CASGEM	2.84	2.84
7600-10 · Al.Co.-Mesa GW Monitoring	40.20	40.20
7600-13 · AWG Programs 2021-22	12,500.00	12,500.00
Total 7600-00 · Alpine County Projects	12,543.04	12,543.04
7610-00 · Douglas County Projects		
7610-10 · Do.Co.Reg.Pipeline Debt Service		62,500.00
Total 7610-00 · Douglas County Projects		62,500.00
7630-00 · Lyon County Projects		
7630-12 · HWY 50 Right-of-Way Project Exp		172.00
Total 7630-00 · Lyon County Projects		172.00
7640-00 · Churchill County Projects		
7640-09 · Lahontan Vly.Wtr.Lvl. 2018-21		4,080.00
7640-18 · Dixie Vlt Wtr Lvl Meas 2019-22		4,175.00
Total 7640-00 · Churchill County Projects		8,255.00
Total Expense	206,884.32	832,282.51
Net Ordinary Income	-118,187.24	278,839.23
Other Income/Expense		
Other Income		
8009-00 · Trans. In-Floodplain Mgmt. Fd.		
Total Other Income		
Net Other Income		
Net Income	-118,187.24	278,839.23

The Floodplain Management Fund and Acquisition/Construction financial statements through December 31,2021 will be included in February Board Package for approval.

AGENDA ITEM #8

PAYMENT OF BILLS

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CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

01/07/22

Transaction Detail by Account

Cash Basis

December 2021

Type	Date	Num	Name	Memo	Paid Amount	Balance
1013-00 · Cash in Checking - U. S. Bank						
Check	12/01/2021	10429	Euronev, Ltd.	#carwater DEC Rent	-3,240.00	-3,240.00
Deposit	12/01/2021			Deposit	85,269.69	82,029.69
Check	12/09/2021	10431	Catrina Schambra	reimbursement	-50.00	81,979.69
Check	12/09/2021	10432	David Griffith	AlCity Dir Fee-NOV 2021	-80.00	81,899.69
Check	12/09/2021	10433	January Riddle	AlCity Dir Fee-NOV 2021	-80.00	81,819.69
Check	12/09/2021	10434	King & Russo, Ltd.	Professional Services NOV 2021	-2,000.00	79,819.69
Check	12/09/2021	10435	Pacific Office Automation	Acct#710047	-178.06	79,641.63
Check	12/09/2021	10436	Nevada News Group	FAW Ads	-1,320.00	78,321.63
Check	12/09/2021	10437	Cardno, Inc.	INV#323692	-6,635.00	71,686.63
Check	12/09/2021	10438	Michael Baker International, Inc.	Inv#1133687	-12,549.69	59,136.94
Check	12/09/2021	10439	Carson City	CWSD Payroll #25	-25,939.38	33,197.56
Check	12/13/2021	10440	Kimley-Horn & Associates, Inc.	291417001-1121	-8,729.50	24,468.06
Check	12/13/2021	10441	Carson Valley Conservation District	Bio & River Project	-68,893.81	-44,425.75
Check	12/13/2021	10442	Local Government Investment Pool	FY 21/22 Storey Cty	-16,091.00	-60,516.75
Check	12/16/2021	10443	Edwin James	Holiday Dinner Reimbursement	-480.97	-60,997.72
Check	12/16/2021	10444	David Griffith	AlCity Dir Fee-DEC 2021	-80.00	-61,077.72
Check	12/16/2021	10445	January Riddle	AlCity Dir Fee-DEC 2021	-80.00	-61,157.72
Check	12/16/2021	10446	Nevada Water Resources Assn.	2022 NWRA Conf. & Dues	-455.00	-61,612.72
Check	12/20/2021	10447	Charter Communications	Acct#8354110010917880	-319.94	-61,932.66
Check	12/20/2021	10448	River Wranglers	CRWD Inv#1	-9,312.45	-71,245.11
Check	12/20/2021	10449	Office Depot Business Credit	Acct #6011 5685 11775 7761	-74.57	-71,319.68
Deposit	12/28/2021			Deposit	19,574.30	-51,745.38
Check	12/28/2021	10450	Carson City	CWSD Payroll #26	-24,292.73	-76,038.11
Check	12/28/2021	10451	NEON Agency	Inv#1434	-6,900.00	-82,938.11
Check	12/28/2021	10452	Alpine Watershed Group	Inv#2021-22-1 CWSD	-12,500.00	-95,438.11
Check	12/28/2021	10453	VOID			-95,438.11
Check	12/28/2021	10454	House Moran Consulting, Inc.	INV#1323	-4,275.00	-99,713.11
Check	12/28/2021	10455	Bank of America	Acct. #4024 4910 0003 3949	-1,282.41	-100,995.52
Check	12/29/2021	10456	HDR Engineering, Inc.	Inv. #1200398011	-12,551.91	-113,547.43
Deposit	12/29/2021			Deposit	69.42	-113,478.01
Check	12/30/2021	ACH	U.S. Geological Survey	Qtrly Pymt JFA #20ZJFA00128	-3,812.50	-117,290.51
Check	12/30/2021	ACH	U.S. Geological Survey	Qtrly Pymt JFA #18WSNV00134	-692.50	-117,983.01
Check	12/30/2021	10457	VOID			-117,983.01
Check	12/30/2021	10458	Kaylee Maples	4th Qtr Mileage Reimbursement	-22.40	-118,005.41
Check	12/30/2021	10459	Deborah Neddenriep	4th Qtr Mileage Reimbursement	-89.04	-118,094.45
Check	12/30/2021	10460	Catrina Schambra	4th Qtr Mileage Reimbursement	-15.74	-118,110.19
Check	12/30/2021	10461	Brenda Hunt	4th Qtr Mileage Reimbursement	-197.68	-118,307.87
Check	12/30/2021	10462	Shane Fryer	4th Qtr Mileage Reimbursement	-88.48	-118,396.35
Check	12/30/2021	10463	VOID	VOID		-118,396.35
Total 1013-00 · Cash in Checking - U. S. Bank					-118,396.35	-118,396.35
1014-00 · Local Gov't Inv. Pool-Regular						
Deposit	12/01/2021			Interest	99.46	99.46
Total 1014-00 · Local Gov't Inv. Pool-Regular					99.46	99.46
1030-00 · Petty Cash						
General Jo...	12/29/2021			Brenda Hunt - Copies	109.65	109.65
Total 1030-00 · Petty Cash					109.65	109.65
3307-00 · CC Payroll Due						
Check	12/09/2021	10439	Carson City	Payroll #25 (11/19/2021-12/2/2021)	25,939.38	25,939.38
General Jo...	12/09/2021			Payroll #25 (11/19/2021-12/2/2021)	-25,939.38	
General Jo...	12/28/2021			December Meals	228.47	228.47
General Jo...	12/28/2021			Payroll #26 (12/3/2021-12/16/2021)	-24,521.20	-24,292.73
Check	12/28/2021	10450	Carson City	Payroll #26 (12/3/2021-12/16/2021)	24,292.73	
Total 3307-00 · CC Payroll Due						
5007-00 · Storey County Contribution						
Check	12/13/2021	10442	Local Government Investment Pool	FY 21/22 Storey County Contribution tranferred to L...	16,091.00	16,091.00
Total 5007-00 · Storey County Contribution					16,091.00	16,091.00
5011-00 · Douglas County Ad Valorem						
Deposit	12/28/2021	724054	Douglas County Treasurer	November Ad Valorem Taxes	-13,823.16	-13,823.16
Total 5011-00 · Douglas County Ad Valorem					-13,823.16	-13,823.16
5012-00 · Carson City Ad Valorem						
Deposit	12/28/2021	90309...	Carson City	November Ad Valorem Taxes	-5,595.77	-5,595.77
Total 5012-00 · Carson City Ad Valorem					-5,595.77	-5,595.77
5031-00 · Interest Income-LGIP Reg.						
Deposit	12/01/2021			Interest	-99.46	-99.46

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Cash Basis

CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

Transaction Detail by Account
December 2021

Type	Date	Num	Name	Memo	Paid Amount	Balance
Total 5031-00 · Interest Income-LGIP Reg.					-99.46	-99.46
6005-00 · FEMA -MAS #10						
Deposit	12/01/2021	FEMA		Draw 23	-47,795.16	-47,795.16
Total 6005-00 · FEMA -MAS #10					-47,795.16	-47,795.16
6006-00 · FEMA-MAS #11						
Deposit	12/01/2021	FEMA		Draw 10	-37,474.53	-37,474.53
Total 6006-00 · FEMA-MAS #11					-37,474.53	-37,474.53
7015-00 · Salaries & Wages						
General Jo...	12/09/2021			Salary Payroll #25 Farnham	755.64	755.64
General Jo...	12/09/2021			Salary Payroll #25 Fryer	2,261.84	3,017.48
General Jo...	12/09/2021			Salary Payroll #25 Hunt (Inc. Longevity)	2,942.99	5,960.47
General Jo...	12/09/2021			Salary Payroll #25 James (Inc. Longevity)	6,692.50	12,652.97
General Jo...	12/09/2021			Salary Payroll #25 Neddenriep (Inc. Longevity)	2,724.27	15,377.24
General Jo...	12/09/2021			Salary Payroll #25 Schambra	2,568.31	17,945.55
General Jo...	12/28/2021			December Meals	-103.85	17,841.70
General Jo...	12/28/2021			Salary Payroll #26 Farnham	805.47	18,647.17
General Jo...	12/28/2021			Salary Payroll #26 Fryer	2,595.40	21,242.57
General Jo...	12/28/2021			Salary Payroll #26 Hunt	2,975.33	24,217.90
General Jo...	12/28/2021			Salary Payroll #26 James	5,763.27	29,981.17
General Jo...	12/28/2021			Salary Payroll #26 Neddenriep	2,245.03	32,226.20
General Jo...	12/28/2021			Salary Payroll #26 Schambra	2,589.08	34,815.28
Total 7015-00 · Salaries & Wages					34,815.28	34,815.28
7020-00 · Employee Benefits						
General Jo...	12/09/2021			Benies Payroll #25 Farnham	10.96	10.96
General Jo...	12/09/2021			Benies Payroll #25 Fryer	663.50	674.46
General Jo...	12/09/2021			Benies Payroll #25 Hunt	1,465.37	2,139.83
General Jo...	12/09/2021			Benies Payroll #25 James	2,658.69	4,798.52
General Jo...	12/09/2021			Benies Payroll #25 Neddenriep	1,230.32	6,028.84
General Jo...	12/09/2021			Benies Payroll #25 Schambra	984.55	7,013.39
General Jo...	12/28/2021			Benies Payroll #26 Farnham	11.68	7,025.07
General Jo...	12/28/2021			Benies Payroll #26 Fryer	761.39	7,786.46
General Jo...	12/28/2021			Benies Payroll #26 Hunt	1,347.87	9,134.33
General Jo...	12/28/2021			Benies Payroll #26 James	2,362.58	11,496.91
General Jo...	12/28/2021			Benies Payroll #26 Neddenriep	1,074.62	12,571.53
General Jo...	12/28/2021			Benies Payroll #26 Schambra	984.85	13,556.38
Total 7020-00 · Employee Benefits					13,556.38	13,556.38
7101-00 · Director's Fees						
7101-01 · Director Benefits						
General Jo...	12/09/2021			Director Benies Payroll #25 Gardner	1.16	1.16
General Jo...	12/09/2021			Director Benies Payroll #25 Giomi	1.16	2.32
General Jo...	12/09/2021			Director Benies Payroll #25 Gray	1.16	3.48
General Jo...	12/09/2021			Director Benies Payroll #25 Hindle	1.16	4.64
General Jo...	12/09/2021			Director Benies Payroll #25 Nelson	1.16	5.80
General Jo...	12/09/2021			Director Benies Payroll #25 Olsen	1.16	6.96
General Jo...	12/09/2021			Director Benies Payroll #25 Schank		6.96
General Jo...	12/09/2021			Director Benies Payroll #25 Schuette	1.16	8.12
General Jo...	12/09/2021			Director Benies Payroll #25 Stodieck	1.16	9.28
General Jo...	12/09/2021			Director Benies Payroll #25 Workman	1.16	10.44
General Jo...	12/28/2021			Director Benies Payroll #26 Gardner		10.44
General Jo...	12/28/2021			Director Benies Payroll #26 Giomi	1.46	11.90
General Jo...	12/28/2021			Director Benies Payroll #26 Gray	1.46	13.36
General Jo...	12/28/2021			Director Benies Payroll #26 Hindle	1.16	14.52
General Jo...	12/28/2021			Director Benies Payroll #26 Nelson	1.16	15.68
General Jo...	12/28/2021			Director Benies Payroll #26 Olsen	1.16	16.84
General Jo...	12/28/2021			Director Benies Payroll #26 Schank	1.46	18.30
General Jo...	12/28/2021			Director Benies Payroll #26 Schuette	1.46	19.76
General Jo...	12/28/2021			Director Benies Payroll #26 Stodieck		19.76
General Jo...	12/28/2021			Director Benies Payroll #26 Workman	1.46	21.22
Total 7101-01 · Director Benefits					21.22	21.22
7101-02 · Director's Fees-Alpine Co.						
Check	12/09/2021	10432	David Griffith	AlCty Dir Fee-NOV 2021	80.00	80.00
Check	12/09/2021	10433	January Riddle	AlCty Dir Fee-NOV 2021	80.00	160.00
Check	12/16/2021	10444	David Griffith	AlCty Dir Fee-DEC 2021	80.00	240.00
Check	12/16/2021	10445	January Riddle	AlCty Dir Fee-DEC 2021	80.00	320.00
Total 7101-02 · Director's Fees-Alpine Co.					320.00	320.00
7101-00 · Director's Fees - Other						
General Jo...	12/09/2021			Director Fee Payroll #25 Gardner	80.00	80.00
General Jo...	12/09/2021			Director Fee Payroll #25 Giomi	80.00	160.00

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CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

01/07/22

Transaction Detail by Account

Cash Basis

December 2021

Type	Date	Num	Name	Memo	Paid Amount	Balance
General Jo...	12/09/2021			Director Fee Payroll #25 Gray	80.00	240.00
General Jo...	12/09/2021			Director Fee Payroll #25 Hindle	80.00	320.00
General Jo...	12/09/2021			Director Fee Payroll #25 Nelson	80.00	400.00
General Jo...	12/09/2021			Director Fee Payroll #25 Olsen	80.00	480.00
General Jo...	12/09/2021			Director Fee Payroll #25 Schank		480.00
General Jo...	12/09/2021			Director Fee Payroll #25 Schuette	80.00	560.00
General Jo...	12/09/2021			Director Fee Payroll #25 Stodieck	80.00	640.00
General Jo...	12/09/2021			Director Fee Payroll #25 Workman	80.00	720.00
General Jo...	12/28/2021			December Meals	-124.62	595.38
General Jo...	12/28/2021			Director Fee Payroll #26 Gardner		595.38
General Jo...	12/28/2021			Director Fee Payroll #26 Giomi	100.77	696.15
General Jo...	12/28/2021			Director Fee Payroll #26 Gray	100.77	796.92
General Jo...	12/28/2021			Director Fee Payroll #26 Hindle	80.00	876.92
General Jo...	12/28/2021			Director Fee Payroll #26 Nelson	80.00	956.92
General Jo...	12/28/2021			Director Fee Payroll #26 Olsen	80.00	1,036.92
General Jo...	12/28/2021			Director Fee Payroll #26 Schank	100.77	1,137.69
General Jo...	12/28/2021			Director Fee Payroll #26 Schuette	100.77	1,238.46
General Jo...	12/28/2021			Director Fee Payroll #26 Stodieck		1,238.46
General Jo...	12/28/2021			Director Fee Payroll #26 Workman	100.77	1,339.23
Total 7101-00 · Director's Fees - Other					1,339.23	1,339.23
Total 7101-00 · Director's Fees					1,680.45	1,680.45
7103-00 · Office Supplies						
Check	12/09/2021	10431	Catrina Schambra	Reimbursement for Conference Room table	50.00	50.00
Check	12/09/2021	10435	Pacific Office Automation	October Copies	76.32	126.32
Check	12/09/2021	10435	Pacific Office Automation	November Copies	101.74	228.06
Check	12/20/2021	10449	Office Depot Business Credit	color copy paper and HDMI adapter for laptop	74.57	302.63
Deposit	12/28/2021	1409	River Wranglers	November Copies	-47.92	254.71
Check	12/28/2021	10455	Bank of America	microphone & computer cable	39.98	294.69
Check	12/28/2021	10455	Bank of America	Service Award pens	56.00	350.69
Check	12/28/2021	10455	Bank of America	Board Meeting Engraved Gavel & Block	41.94	392.63
General Jo...	12/29/2021			Brenda Hunt - Copies	-1.20	391.43
General Jo...	12/29/2021			Catrina Schambra - Dish Soap	3.07	394.50
General Jo...	12/30/2021			December Copies	-80.02	314.48
Total 7103-00 · Office Supplies					314.48	314.48
7104-00 · Postage						
Check	12/28/2021	10455	Bank of America	2 rolls stamps	118.00	118.00
Check	12/28/2021	10455	Bank of America	Postage	87.00	205.00
General Jo...	12/29/2021			Ed James - Stamp	-0.55	204.45
Total 7104-00 · Postage					204.45	204.45
7105-00 · Rent						
Check	12/01/2021	10429	Euronev, Ltd.	December 2021 Rent	3,240.00	3,240.00
Total 7105-00 · Rent					3,240.00	3,240.00
7106-00 · Telephone/Internet						
Check	12/20/2021	10447	Charter Communications	DEC Phone/Internet Svcs.	319.94	319.94
Check	12/28/2021	10455	Bank of America	NOV ZOOM.US	14.99	334.93
Check	12/28/2021	10455	Bank of America	NOV -Microsoft Internet	75.00	409.93
Check	12/28/2021	10455	Bank of America	NOV - Microsoft 365	5.00	414.93
Check	12/28/2021	10455	Bank of America	IDrive Backup (Annual Charge)	499.50	914.43
Total 7106-00 · Telephone/Internet					914.43	914.43
7107-00 · Travel-transport/meals/lodging						
7107-02 Staff Indirect Mileage						
General Jo...	12/29/2021			Ed James - Christmas Dinner	-61.00	-61.00
Check	12/30/2021	10459	Deborah Neddenriep	4th Qtr Mileage Reimbursement	4.48	-56.52
Check	12/30/2021	10460	Catrina Schambra	4th Qtr Mileage Reimbursement	15.74	-40.78
Check	12/30/2021	10462	Shane Fryer	4th Qtr Mileage Reimbursement	2.24	-38.54
Total 7107-02 Staff Indirect Mileage					-38.54	-38.54
7107-01 · Car Allowance						
General Jo...	12/09/2021			Car Allowance Payroll #25 James	250.00	250.00
General Jo...	12/28/2021			Car Allowance Payroll #26 James	250.00	500.00
Total 7107-01 · Car Allowance					500.00	500.00
7107-00 · Travel-transport/meals/lodging - Other						
Check	12/16/2021	10443	Edwin James	12/15/21 Annual Holiday Dinner	480.97	480.97
Deposit	12/28/2021	9989	Stacey Giomi	Christmas Dinner 12-15-21 reimbursement	-9.73	471.24
Deposit	12/28/2021	1940	Mike Workman	Christmas Dinner 12-15-21 reimbursement	-20.72	450.52
Deposit	12/29/2021	1537	Shane Fryer	Christmas Dinner 12-15-21 reimbursement	-57.26	393.26
Deposit	12/29/2021	1105	Catrina Schambra	Christmas Dinner 12-15-21 reimbursement	-12.16	381.10

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01/07/22
Cash Basis

CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

Transaction Detail by Account
December 2021

Type	Date	Num	Name	Memo	Paid Amount	Balance
General Jo...	12/29/2021			Brenda Hunt - Christmas Dinner	-14.60	366.50
General Jo...	12/29/2021			Debbie Neddenriep - Christmas Dinner	-35.37	331.13
Total 7107-00 · Travel-transport/meals/lodging - Other					331.13	331.13
Total 7107-00 · Travel-transport/meals/lodging					792.59	792.59
7108-00 · Dues & Publications						
Check	12/16/2021	10446	Nevada Water Resources Assn.	2022 NWRA Membership Dues - Ed James	125.00	125.00
Total 7108-00 · Dues & Publications					125.00	125.00
7110-00 · Seminars & Education						
Check	12/16/2021	10446	Nevada Water Resources Assn.	2022 NWRA Conference- Ed James (2/1/2022-2/3/...	330.00	330.00
Total 7110-00 · Seminars & Education					330.00	330.00
7114-00 · Outside Professional Services						
Check	12/28/2021	10455	Bank of America	Computer/Technical Services	345.00	345.00
Total 7114-00 · Outside Professional Services					345.00	345.00
7116-00 · Legal						
Check	12/09/2021	10434	King & Russo, Ltd.	Professional Services NOV 2021	2,000.00	2,000.00
Total 7116-00 · Legal					2,000.00	2,000.00
7120-00 · Integrated Watershed Programs						
7120-33 · Watershed Coord IV 2019-22						
7120-34 · WS Coord Grant MATCH 2019-21						
7120-35 · WS COORD MATCH - Travel						
Check	12/30/2021	10459	Deborah Neddenriep	4th Qtr Mileage Reimbursement	41.44	41.44
Check	12/30/2021	10461	Brenda Hunt	4th Qtr Mileage Reimbursement	197.68	239.12
Check	12/30/2021	10462	Shane Fryer	4th Qtr Mileage Reimbursement	86.24	325.36
Total 7120-35 · WS COORD MATCH - Travel					325.36	325.36
Total 7120-34 · WS Coord Grant MATCH 2019-21					325.36	325.36
7120-38 · WS COORD-REIMBURSABLE						
7120-39 · WS COORD REIMB - Travel						
Check	12/30/2021	10458	Kaylee Maples	4th Qtr Mileage Reimbursement	22.40	22.40
Total 7120-39 · WS COORD REIMB - Travel					22.40	22.40
7120-43 · WS COORD REIMB- NEON						
Check	12/28/2021	10451	NEON Agency	Wateshed Moments Series of I AM CARSON RIVE...	6,900.00	6,900.00
Total 7120-43 · WS COORD REIMB- NEON					6,900.00	6,900.00
Total 7120-38 · WS COORD-REIMBURSABLE					6,922.40	6,922.40
7120-33 · Watershed Coord IV 2019-22 - Other						
General Jo...	12/30/2021			December Copies	16.39	16.39
Total 7120-33 · Watershed Coord IV 2019-22 - Other					16.39	16.39
Total 7120-33 · Watershed Coord IV 2019-22					7,264.15	7,264.15
Total 7120-00 · Integrated Watershed Programs					7,264.15	7,264.15
7332-00 · Carson River Work Days						
7332-07 · CR Work Days 2021-22						
Check	12/20/2021	10448	River Wranglers	Carson River Workdays 7/1/21-9/30/21	9,312.45	9,312.45
Total 7332-07 · CR Work Days 2021-22					9,312.45	9,312.45
Total 7332-00 · Carson River Work Days					9,312.45	9,312.45
7337-00 · Carson River Restoration						
7337-01 · Carson Valley Conserv District						
7337-27 · CVCD - Bio & Debri Remove 21-22						
Check	12/13/2021	10441	Carson Valley Conservation District	INV#32 Bioengineering	18,893.81	18,893.81
Total 7337-27 · CVCD - Bio & Debri Remove 21-22					18,893.81	18,893.81
7337-28 · CVCD - West Fork Bank 2021-22						
Check	12/13/2021	10441	Carson Valley Conservation District	INV#32 West Fork Bank	50,000.00	50,000.00
Total 7337-28 · CVCD - West Fork Bank 2021-22					50,000.00	50,000.00
Total 7337-01 · Carson Valley Conserv District					68,893.81	68,893.81
Total 7337-00 · Carson River Restoration					68,893.81	68,893.81

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CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

Transaction Detail by Account
December 2021

Type	Date	Num	Name	Memo	Paid Amount	Balance
7439-00 · FEMA MAS #10						
7439-05 · Ch Cty Flood Maps (HDR)						
Check	12/29/2021	10456	HDR Engineering, Inc.	Ch Cty Flood Map Revision (11/21/21-12/25/21)	12,551.91	12,551.91
Total 7439-05 · Ch Cty Flood Maps (HDR)					12,551.91	12,551.91
7439-00 · FEMA MAS #10 - Other						
Check	12/09/2021	10436	Nevada News Group	Cust#2093 FAW Advertising 11/1/21-11/30/21	1,320.00	1,320.00
General Jo...	12/30/2021			December Copies	0.05	1,320.05
Check	12/30/2021	10459	Deborah Neddenriep	4th Qtr Mileage Reimbursement	4.48	1,324.53
Total 7439-00 · FEMA MAS #10 - Other					1,324.53	1,324.53
Total 7439-00 · FEMA MAS #10					13,876.44	13,876.44
7440-00 · FEMA - MAS #11						
7440-31 · Smelter Creek LOMR -Kimley Horn						
Check	12/13/2021	10440	Kimley-Horn & Associates, Inc.	Smelter Creek -Svcs thru November 30, 2021	8,729.50	8,729.50
Total 7440-31 · Smelter Creek LOMR -Kimley Horn					8,729.50	8,729.50
7440-51 · Clear Creek LOMR -Cardno						
Check	12/09/2021	10437	Cardno, Inc.	Inv#323692 thru 11/19/21	6,635.00	6,635.00
Total 7440-51 · Clear Creek LOMR -Cardno					6,635.00	6,635.00
7440-71 · Web Access System-Michael Baker						
Check	12/09/2021	10438	Michael Baker International, Inc.	Services thru 11/30/21	12,549.69	12,549.69
Total 7440-71 · Web Access System-Michael Baker					12,549.69	12,549.69
7440-00 · FEMA - MAS #11 - Other						
General Jo...	12/30/2021			December Copies	15.21	15.21
Total 7440-00 · FEMA - MAS #11 - Other					15.21	15.21
Total 7440-00 · FEMA - MAS #11					27,929.40	27,929.40
7441-00 · FEMA - MAS #12						
7441-05 · Ramsey Cyn Flood Study-HMC						
Check	12/28/2021	10454	House Moran Consulting, Inc.	Ramsey Canyon Flood Study Inv#1323	4,275.00	4,275.00
Total 7441-05 · Ramsey Cyn Flood Study-HMC					4,275.00	4,275.00
7441-00 · FEMA - MAS #12 - Other						
Deposit	12/28/2021	3808	Nevada News Group	Refund of check #10415 (duplicate payment)	-77.00	-77.00
General Jo...	12/30/2021			December Copies	43.97	-33.03
Total 7441-00 · FEMA - MAS #12 - Other					-33.03	-33.03
Total 7441-00 · FEMA - MAS #12					4,241.97	4,241.97
7524-00 · USGS-GW Lvl & WQ in Ch.Co.						
7524-02 · USGS-GW Lvl & WQ-ChCo 2018-22						
Check	12/30/2021	ACH	U.S. Geological Survey	Qtrly Pymt JFA #18WSNV00134 Ch Cty GW/WQ	692.50	692.50
Total 7524-02 · USGS-GW Lvl & WQ-ChCo 2018-22					692.50	692.50
Total 7524-00 · USGS-GW Lvl & WQ in Ch.Co.					692.50	692.50
7526-01 · USGS Middle Carson GW 2020-22						
Check	12/30/2021	ACH	U.S. Geological Survey	Qtrly Pymt JFA #20ZJJFA00128 Middle Carson GW	3,812.50	3,812.50
Total 7526-01 · USGS Middle Carson GW 2020-22					3,812.50	3,812.50
7600-00 · Alpine County Projects						
7600-09 · Al.Co.-CASGEM						
General Jo...	12/30/2021			December Copies	2.84	2.84
Total 7600-09 · Al.Co.-CASGEM					2.84	2.84
7600-10 · Al.Co.-Mesa GW Monitoring						
General Jo...	12/30/2021			December Copies	1.56	1.56
Check	12/30/2021	10459	Deborah Neddenriep	4th Qtr Mileage Reimbursement	38.64	40.20
Total 7600-10 · Al.Co.-Mesa GW Monitoring					40.20	40.20
7600-13 · AWG Programs 2021-22						
Check	12/28/2021	10452	Alpine Watershed Group	AWG 2021-7 Inv#1	12,500.00	12,500.00
Total 7600-13 · AWG Programs 2021-22					12,500.00	12,500.00
Total 7600-00 · Alpine County Projects					12,543.04	12,543.04

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Cash Basis

CARSON WATER SUBCONSERVANCY DISTRICT - GENERAL FUND

Transaction Detail by Account
December 2021

Type	Date	Num	Name	Memo	Paid Amount	Balance
TOTAL						

AGENDA ITEM #9

CARSON WATER SUBCONSERVANCY DISTRICT

TO: Board of Directors

FROM: Edwin James

DATE: November 17, 2021

SUBJECT: Agenda Item #9 – For Possible Action: Modify the Andy Aldax Award criteria to establish who is eligible for the award.

DISCUSSION: CWSD's board asked the criteria to be modified to include organizations to be able to receive the Andy Aldax award. Attached is the proposed language with the suggested changes.

STAFF RECOMMENDATION: Approve the updated Andy Aldax Award criteria as submitted.

Criteria for candidates of the Andy Aldax Award:

The criteria for consideration of this award is that the nominee:

1. has demonstrated a commitment to Carson River Watershed conservation activities for 10 years or more; and,
2. has produced accomplishments toward the goals outlined in the Carson River Watershed Vision Statement; and
3. can be a landowner, community member, or employee of a federal, state or local entity,
4. can be an organization.

AGENDA ITEM #10

CARSON WATER SUBCONSERVANCY DISTRICT

TO: BOARD OF DIRECTORS

FROM: EDWIN D. JAMES

DATE: January 19, 2022

SUBJECT: Agenda Item #10 – For Possible Action: Addendum to The Neon Agency Contract #2020-11 for Time Extension and Additional \$13,800

DISCUSSION: Contract #2020-11 with The Neon Agency (NDEP Watershed Coord IV) needs to be extended to December 31, 2022, to continue services through 2022 under new NDEP Watershed Coord V grant for the “I Am Carson River Watershed” Campaign Watershed Moments PSA series. The attached addendum to #2020-11 includes additional \$3,800 in CWSD match for a Spanish equivalent Splash Page and another \$10,000 reimbursable from the grant to continue traditional and social media releases for each launch.

STAFF RECOMMENDATION: Approve the Addendum to the Neon Agency Contract #2020-11 as presented.



DRAFT

CWSD Contractor Agreement #2020-11

**ADDENDUM TO CONTRACT #2020-11
AGREEMENT BETWEEN
CARSON WATER SUBCONSERVANCY DISTRICT AND
NEON AGENCY FOR PROFESSIONAL SERVICES**

WHEREAS, on January 19, 2022, the CARSON WATER SUBCONSERVANCY DISTRICT (hereinafter referred to "CWSD") and NEON AGENCY (hereinafter referred to as "NEON") entered into a Contractor Agreement (hereinafter "Contractor Agreement #2020-11") addressing funding from CWSD to NEON for services in connection with the project known as "I am Carson River Watershed" Campaign ("Project"); and

WHEREAS, CWSD has received additional funding from Federal Emergency Management Agency (FEMA) for "I am Carson River Watershed" Campaign; and

WHEREAS, CWSD has revised the budget for this project to provide NEON with additional funding for "I am Carson River Watershed" Campaign Project; and

WHEREAS, it has been determined that additional funds in the amount not to exceed \$13,800 be added to Contractor Agreement #2020-11 with NEON.

NOW, THEREFORE IT IS AGREED:

1. An additional amount not to exceed \$13,800 will be provided to Contractor Agreement #2020-11 with NEON.
2. Due to pandemic delays to project NEON Contract #2020-11 shall be extended and shall terminate December 31, 2022, with a carryover of unused funds from fiscal year 2020-21.
3. Additional tasks and revised timeline have been added as Exhibit A to this addendum.
4. All other terms of Contractor Agreement #2020-11 shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Addendum on the day and year written below.

DATE: _____

NEON AGENCY

DATE: _____

CARSON WATER
SUBCONSERVANCY DISTRICT

Agent

R. Stacie Giomi, Chairman

Exhibit A

NEON Additional Tasks

Neon will do the following additional tasks and provide the following deliverables:

- (a) Continue to implement I am Carson River Watershed Campaign using assets created over the past few years including stickers, splash page, short videos, and watershed moments. The watershed moments will continue to be released over traditional news and social media platforms over 2022 and will be housed on our splash page at iamcarsonriver.org. CWSD will work with Neon to release the remaining professionally created watershed moments via a large targeted social media campaign giving each “moment” time to resonate with the public.

Deliverables:

- (i) All traditional and social media documentation and analytics
- (b) CWSD and Neon will continue to encourage community commitment to campaign messaging by promoting the “Carson River Watershed Pledge” and by highlighting community created content. These include videos and pictures showing local people making personal changes and acting to protect the watershed as a part of the social media outreach. These community created videos will be vetted with NDEP and housed on our social media sites, the Splash Page, and CWSD’s Carson River Watershed YouTube site.

Deliverables:

- (i) Watershed Pledge
 - (ii) Community created content (videos, pictures, etc.)
- (c) Using the existing iamcarsonriver.org domain Neon will create a parallel Spanish translation of the site. The page will include the translation of text, wording on icons/graphics and close captions (CC)/subtitles or even full translations of watershed moment videos. Spanish versions of CWSD and Neon created content will be associated with the Creation of a Spanish Splash Page and incorporated into the broader targeted social media campaign.

Deliverables:

- (i) Spanish translated creative assets (videos, sound, scripts, icons, etc.) associated with the “Watershed Moments” created by NEON.
 - (ii) Updated Campaign Spanish Splash Page with edit access and access to all the “Watershed Moments.”
- (d) Create a targeted social media campaign designed to obtain additional community created “Watershed Moments” with the goal of reaching 15 community created vignettes/videos. Obtaining these community created vignettes will document actual actions being taken by residents in the watershed and is our updated form of our Stewardship Pledge outlined in Objective 6 above. Neon will provide their professional expertise in designing easy to follow steps for the public to create their own “Watershed Moments” and will work with CWSD and the CRC to determine the parameters.

Deliverables:

- (i) All “I Am Carson River” and “Watershed Moment” Campaign documentation and assets in an accessible file format, including editing access to iamcarsonriver.org Splash Page,
 - (ii) Placement of community created “Watershed Moments” on Campaign splash page,
 - (iii) Summary of tracking analytics and analysis.
- (e) Analyze “I AM CARSON RIVER WATERSHED” campaign 2021/2022 Social Media push to determine what worked well and what could be done differently in the future.

Deliverables:

- (i) Provide a written strategic feedback summary and outcomes to CWSD to assist with final reporting to NDEP and work on follow up campaigns. See Section 3.

Project Timeline:

- Send contract to Neon for review – January 6th 2022
- Send contract to CWSD Board Packet – January 12th 2022
- Contract approval – Board Meeting - January 12th 2022
- Send CWSD Board approved contract to Neon – January 13th 2022
- Continue to create up to 15 ‘Watershed Moments’ – January 2022-October 2022
- Develop ‘Watershed Moments’ stories / approve scripts + talent – January 2022-October 2022
- Begin ‘Watershed Moments’ campaign outreach planning – January 2022
- Deliver up to 15 ‘Watershed Moments’ films – January 2022 to October 2022
- Update splash page to host ‘Watershed Moments’ films – January 2022 to October 2022
- Update splash page with Spanish translations including text, icons and graphics to host ‘CC/subtitled/or translated Watershed Moment’ films – January 2022 to October 2022
- ‘Watershed Moments’ Campaign Launch and Push – January 2022 to December 2022
 - (i) Social media outreach (Facebook, Instagram, other platforms TBD)
 - (ii) Partner outreach (define as part of strategy)
 - (iii) Community outreach (the people in film + other community leaders)
 - (iv) Press release and campaign (list local press and social media engagement etc.)
- Community created ‘Watershed Moments’ reviewed and uploaded to Splash Page – October 2022
- Adaption of Floodplains as Community Assets with campaign logos – June 2022
- ‘Watershed Moments’ Campaign wrap up and review – December 2022
- Analyze “I AM CARSON RIVER WATERSHED” campaign 2021/2022 Social Media push – December 2022
- Provide Statistics and metrics for reporting – December 2022

AGENDA ITEM #11

CARSON WATER SUBCONSERVANCY DISTRICT

TO: Board of Directors

FROM: Edwin James

DATE: January 19, 2022

SUBJECT: Agenda Item #11 – For Discussion Only: Presentation of 2022 Andy Aldax Award to Bruce Scott & Alpine Watershed Group

DISCUSSION: CWSD will present the 2022 Andy Aldax to the following recipients:

- Bruce Scott
- Alpine Watershed Group.

STAFF RECOMMENDATION: Receive and file.

AGENDA ITEM #12

CARSON WATER SUBCONSERVANCY DISTRICT

TO: Board of Directors

FROM: Edwin James

DATE: January 19, 2022

SUBJECT: Agenda Item #12 – For Discussion Only: Presentation by Geoff Brownell from Kimley-Horn regarding the Smelter Creek Flood Study

DISCUSSION: Geoff Brownell from Kimley-Horn will give a presentation regarding the Smelter Creek Flood Study.

STAFF RECOMMENDATION: Receive and file.

AGENDA ITEM #13

CARSON WATER SUBCONSERVANCY DISTRICT

TO: BOARD OF DIRECTORS

FROM: EDWIN D. JAMES

DATE: JANUARY 19, 2022

SUBJECT: Agenda Item # 13 – For Discussion Only:
Update on Launch of Bag It Watershed Moment

DISCUSSION:

Staff will present the results of the traditional and social media blitz for the release of *Bag It* video. This video is the first PSA in our Watershed Moment 12-Month Series. This series continues CWSD's watershed-literacy campaign - "*I am Carson River Watershed*". Below please find links to the media garnered from our press and PSA release on Jan. 5, 2022.

- Carson Now article: "[Bag it" video addresses pet waste impact on Carson River's water quality](#)"
- Record Courier article: "[Carson River Watershed Video offers Scoop on Poop](#)"
- KOLO 8 ABC News Now "[Effort to Protect River Watershed Starts with Targeting Dog Poop](#)"
- All Healthy News "["Bag it" video addresses pet waste impact on Carson River's water quality | Carson City Nevada News](#)"
- Facebook, Instagram and YouTube reached over 20,500 people. We have been getting comments on social media and staff with discuss them during the meeting.
- [Watershed Connections Newsletter](#)

Staff will review highlights and present statistics on participation.

STAFF RECOMMENDATION: Receive and file.

AGENDA ITEM #%

CARSON WATER SUBCONSERVANCY DISTRICT

TO: Board of Directors

FROM: Edwin James

DATE: January 19, 2022

SUBJECT: Agenda Item #14 – For Possible Action: Update on the USACE determination that the Carson River is a navigable water of the United States pursuant to the Rivers and Harbors Act

DISCUSSION: Staff will give an update on actions to coordinate permit requirements and streamline the process. Staff is setting up a meeting with all the permitting agencies on January 28, 2022, to discuss the development of a general permit for the Carson River Watershed.

STAFF RECOMMENDATION: Provide direction on this issue.

AGENDA ITEM #15

CARSON WATER SUBCONSERVANCY DISTRICT

TO: Board of Directors

FROM: Edwin James

DATE: January 19, 2022

SUBJECT: Agenda Item #15 – For Possible Action: Update on CWSD draft comments to the Proposed Interim Plan by the US Environmental Protection Agency (USEPA) for the Carson River Mercury Super Fund Site

DISCUSSION: Staff will present CWSD's *draft* comment letter (Exhibit A) on the Proposed Interim Plan by the US Environmental Protection Agency (USEPA) for the Carson River Mercury Super Fund Site. Currently, the comment period ends on February 14, 2022. Staff recently had a phone meeting with Andrew Bain, USEPA. He mentioned that based on our request in our previous letter, they were now planning to conduct a virtual public meeting in early February 1-3. He suggested the comment period will be extended again to February 28, 2022, to allow concerned parties time to submit comments after the virtual public meeting.

Therefore, CWSD's letter is in draft form and staff is seeking direction on the contents from the board. The Interim Plan (Exhibit B) is attached for your review in conjunction with the *draft* comment letter. We will finalize the comment letter after the public meeting and bring the letter back to CWSD's February board meeting for final approval. We will submit the letter to USEPA by the proposed new deadline suggested by Mr. Bain.

STAFF RECOMMENDATION: Provide direction to CWSD staff regarding the draft comment letter on the Proposed Interim Plan for the Carson River Mercury Super Fund Site.

EXHIBIT A:

**CWSD *Draft* Comment Letter on the U.S. EPA's
Proposed Interim Plan for the Carson River Mercury
Superfund Site**

01/11/2022

Andrew Bain
Carson River Mercury Site, Remedial Project Manager
U.S. Environmental Protection Agency, Region 9 (SFD 8-2)
75 Hawthorne Street
San Francisco, CA 94105-3901
bain.andrew@epa.gov

RE: Draft CWSD Comment Letter on Carson River Mercury Superfund Site Proposed Interim Plan

Dear Mr. Bain:

Thank you for the opportunity to comment on the Carson River Mercury Superfund Site Proposed Interim Plan. In formulating our comments, Carson Water Subconservancy District (CWSD) has read the plan, attended the virtual public meetings (in Nov and Feb), and met with our Carson River Coalition partners. CWSD understands there is no responsible party here helping to fund clean-up efforts and pay the cost for this historical and large-scale mercury contamination. We also know this site doesn't fit the normal Superfund site mold therefore some outside the box thinking is required on the part of everyone involved to determine a final remedy.

We have put the comments in a logical order based on sections within the plan. When possible, we have specified the page numbers to assist with clarity. The following are our comments and concerns relating to the proposed *interim* plan:

Interim Remedy/Proposed Solution

1. Pages 1-3: Interim Remedy Discussion –

“When new technology and/or more extensive evaluation of Lahontan Reservoir and Washoe Lake is available, a final remedy can be determined (p. 1).” CWSD is concerned about the USEPA's and NDEP's decision to declare an interim remedy, that relies on future technologies to be invented, may just be “kicking the can down the road” for the future generation to figure out. CWSD understands that this interim step may be necessary to allow current human health risks to be remedied; however, CWSD would like to interim plan to contain the following:

- a. Clarity on the specific steps that will continue to be taken and a timeline for those steps needs to be included in this plan. This will help alleviate the concern that the interim nature of the plan is not just a means to tick the box for the federal government in the short and long term, but shows how this interim remedy fits into finding the final remedy. CWSD has concerns the site will fall from the USEPA's priority list and little action, or funding will be spent toward determining a final remedy as we are aware that true clean-up is highly unlikely at this large-scale site.
- b. Please specify the types of new technology that USEPA is hoping to have before willing to determine a final remedy for the Carson River Mercury Superfund Site? What is the more extensive evaluation that is needed for Lahontan Reservoir and Washoe Lake? What studies are unable to be completed now that require an interim plan instead of a final plan?

Background/Site Characteristics/Superfund Designation

2. The designation of the Carson River as a Superfund Site has been controversial to some and there are those in the community who wish the site had never been listed under CERCLA. Although this may not be a normal part of a proposed plan, addressing these concerns by providing critical information is important to understanding why the site was listed, how the listing is serving the communities, and the burdens the listing may impose on communities:
 - a. The mercury contamination in the Carson River is unprecedented in many ways and the science bears this out. Although the background sections and the Cleanup Framework, pages 3-6, discuss the science, a few key tables from the remedial investigation and feasibility studies would be helpful in relation to the amount of mercury in the water, the fish, the waterfowl and comparing the unique aspects of why the site was listed (even to other places in the world). USEPA staff who write these plans have the benefit of working with these issues everyday. Providing a comparison table that shows just how large, unique and complex the CRMS is in relation to other mercury contaminated areas, could be helpful.
 - b. Declaring an interim remedy with no end in sight for a final remedy leaves a big burden from the perspective of the counties and communities within the site. As the site is so large, doesn't fit the Superfund cleanup box, and as the interim plan suggests, there are no technologies to really clean it all up at present, then how is being listed as a USEPA Superfund site beneficial *or not beneficial*? Are there other administrative options to reaching a final remedy that could result in positive outcomes? Once listed, can the site be delisted despite not being cleaned up? CWSD is not suggesting that anyone wants to put their heads in the sand and ignore the complexities and science associated with the site, but there are concerns that being listed brings additional administrative burdens, especially when seeking federal funding for other types of projects in the area.

Specific issues relating to FEMA refusing to fund flood mitigation projects in the CR Mercury Site has yet to be resolved. CWSD has discussed this issue with both USEPA and NDEP, and FEMA and NV Dept of Emergency Management, and no progress has been made toward a solution. USEPA needs to resolve this issue through a potential cooperative agreement with all the other Federal Agencies who are involved or might

be involved with the CRMS. Not being able to obtain FEMA funding for flood mitigation, especially post flood disaster funding, when we know the mercury will move and infrastructure such as bridges and diversions may be lost or compromised, will be devastating to this area.

Is this just a FEMA Region 9 issue? Surely the East Coast Rivers have superfund sites where this issue has been worked through? Is this a FEMA HQ policy? If so, that is a critical flaw in this process and needs to be overcome. The alternatives did not address this, so it is a very important missing piece.

CWSD has concerns this is not just going to be a FEMA issue and may be the future stance of all Federal Agencies. What happens when funding is sought from the myriad of other federal agencies that work within the site. For instance, US Bureau of Reclamation (USBR) funding is sought for restoration and planting, or National Fish and Wildlife Federation (NFWF) for Invasive Species funding, or National Resource Conservation Service (NRCS) National Waters Quality Initiative (NWQI) for improved agricultural water quality practices, or even other EPA branches for funding to implement non point source water quality protection initiatives that would assist with holding the soil in place? Will CWSD and our partners be completely hamstrung from receiving funding to implement these types of programs that have multiple benefits to water quality, the environment and the economy? When the next flood comes (and it will), what happens then? Flooding is when the mercury will move....what then? Is this a Federal Government liability concern, or more about funding constraints/silos?

CWSD is a regional planning agency, we need to have answers to these questions to guide our planning and to work cooperatively with all of our partners in the Carson River Coalition. Although you are proposing an interim remedy, being listed as a Superfund site has costs, even before any actions are taken. We at USEPA and NDEP understand the gravity of this situation and that it's time to work on a Cooperative Agreement amongst the Federal, State and local agencies to ensure that not only the interim remedy is workable, but that the CRMS area will not lose out on funding opportunities because they are in a listed Superfund site. This issue with no responsible party makes it necessary to think outside the box, although I imagine that there are such cooperative agreements in other areas (Bunker Hill, ID). CWSD and our partners all want the best for this watershed, we know that EPA does too. Let's figure out a solution that will ensure the remedy is achievable and isn't going to actually have devastating consequences relating to loss of funding opportunities, and on ground solutions to the myriad of water quality and ecological issues facing the Carson River in this area.

Summary of Risks

3. Pages 6-8 Health Risks: EPA studied the probability of humans and/or the environment will be harmed from exposure to mercury.
 - a. *"The site risk assessments found human health risks could exceed acceptable levels in sensitive populations (Page 7)."* CWSD understands there is a need to act now on human health risks relating to mercury poisoning/contamination and its adverse effects on the

Carson River Watershed community. As stated in the interim plan, this is USEPA's responsibility under Superfund law. The plan should spell out EPA's jurisdictional authority in this matter. We are aware EPA has put up signage and has asked NDOW to curtail their commercial operations regarding Sacramento Blackfish from Lahontan Reservoir. Is this issue the main reason for the release of an interim plan rather than a final remedy? Will the final approval of this interim plan provide a clear legal determination on the matter moving forward?

- b. On Page 7 & 8 Table 1 and its summary. This table contains too much information and does not clarify the risks in a clear and concise manner. The Table and the narrative appear completely inconsistent. The summary (Page 8) is long and discusses unacceptable hazard quotients (HQs), yet the Table says none in a number of places and is confusing. Table 1 should contain the levels of HQ/HI per Receptor and type of exposure factor. We realize this is difficult information to convey, but perhaps breaking it into graphs (pie chart/histogram/colored graphics) per Receptor would yield more digestible/understandable results. A graphic using colors/shading/ that indicates the relative risk per receptor and subarea that highlights the HQ's or a range of HQ's may be a possible solution. CWSD would like to see Table 1 and summary changed to better convey the information USEPA hopes to share. The map showing the geographical areas associated with this Table and Summary needs to be located closer to the Table within the document, so the subareas are easily identified while looking at the Table or other graphical information. The map is too small and very hard to read. Labels should be larger and perhaps show overall map and then a blown-up version of each subarea.
- c. Page 7: The plan states the studies of impacts on birds that eat fish in Lahontan Reservoir were inconclusive and then states... *"Because significant ecological risks were not identified, EPA will not address them in this plan."* How would inconclusive results lead to identifying no risk? Please provide more details and whether this will be continued to be studied when determining the final remedy.

Remedial Action Objectives (RAOs):

4. Pages 9-10:

- a. The Remedial Action Objectives (RAOs) only discuss mercury contamination as it exists today, and/or is disturbed by construction activities. It does not address a known mover of mercury, high flows, spring runoff, and flooding which will always be an issue with this site. The Site Background and Characteristics specify that mercury trapped in miles of abandoned river channel is an ongoing source of contamination, entering the river during riverbank erosion and construction activities. As these abandoned river channels are located in the floodplain, flooding issues should also be listed here as a source of moving the mercury. Please identify what types of construction activities are being referred to here. Bank stabilization projects that focus on keeping the soil in place with roots and covered with vegetation should not be considered as a negative impact. This section needs to clarify what types of construction are potentially impactful vs. beneficial and how these types of beneficial construction will be administered by USEPA and NDEP. Are restoration type activities going to be negatively impacted by administrative requirements or expenses that will make it economically difficult to

complete these projects? How will flood mitigation be allowed to go forward? FEMA already will not assist with funding for projects that have multiple benefits, with the main goal is flood mitigation as they state they will not fund in a known Superfund site.

- b. Page 9 suggests that Final RAO's to protect human health and wildlife will be determined in the Final Record of Decision (ROD) at a later time. When will this Final ROD be moving forward, what is the potential timeframe? Will a new Remedial Investigation (RI) and feasibility study (FS) need to be completed then? Isn't there enough information to determine that the soil needs to be held in place through restorative means such as planting deep rooted natives, interim cover plants, etc. There will always be the issue of major flooding moving soil and therefore mercury, etc. What future technologies will be available that will ever clean this up without damaging the broader ecosystem? We have concerns any future technologies will likely be cost prohibitive and ecologically devastating. The river corridor is doing its best to get to equilibrium. Given the USEPA is a Federal Government Agency that is charged with the health of the air, land and water (see Mission below), have hot spots been identified within the river corridor that can be the focus of an alternative that not only focuses on human health, but the health of the river, the river corridor and the ecological integrity of the area? It is important to be assured that the interim nature of this plan is not going to leave this area in limbo, and CWSD would prefer an Alternative that seeks a more integrated approach to the complex issue, rather than waiting until such time as new technologies are available. That sounds like forever and a day.

US EPA Mission:

The mission of EPA is to protect human health and the environment.

EPA works to ensure that:

- *Americans have clean air, land and water;*
- *National efforts to reduce environmental risks are based on the best available scientific information;*
- *Federal laws protecting human health and the environment are administered and enforced fairly, effectively and as Congress intended;*
- *Environmental stewardship is integral to U.S. policies concerning natural resources, human health, economic growth, energy, transportation, agriculture, industry, and international trade, and these factors are similarly considered in establishing environmental policy;*
- *All parts of society--communities, individuals, businesses, and state, local and tribal governments--have access to accurate information sufficient to effectively participate in managing human health and environmental risks;*
- *Contaminated lands and toxic sites are cleaned up by potentially responsible parties and revitalized; and*
- *Chemicals in the marketplace are reviewed for safety.*

- c. Page 10: OU2 – Alternative 2 goals, Goal: Reduce Risk from Consuming Fish. Who or what agency will be addressing and administering compliance with this recommended

action level of 80 mg/kg total mercury? How is this included in the economics of the alternatives?

- d. Page 10 – Goal: Reduce Exposure as a Result of Soil/sediment. Is there a map of where the locations of soils at the action levels, or would any construction/soil disturbance require testing? Who would pay for that testing, and what is the timing on the testing? Is there a difference if the project is private or public? If the project is for stabilization, emergency bridge repair, etc?

Description of Remedial Alternatives:

- 5. Pages 11-14: USEPA has identified the preferred alternative is #2:

- a. Page 11: No Action – There is a cost to no action is not really true. No action means the status quo remains; however there are known human health risks, and we also know the Superfund Site designation has negatively impacted the area and access to FEMA funding for needed flood mitigation and repair projects along the river and its tributaries. No Action is not an acceptable alternative for these reasons.
- b. Page 12: Alternative 2: USEPA Preferred Alternative focuses mainly on human health and continues the Long-term Sampling and Response Plan (LTSRP) which includes annual monitoring of surface water, sediments, fish tissue, wild plants and waterfowl. This Alternative does not consider USEPA or NDEP funded efforts or solutions to limit the movement of mercury around the site during high flows and flooding and how this further contributes to continued contamination of sediment and bioaccumulation in fish, wild plants and waterfowl. However, the proposed Land Use Controls (LUCs) do state that USEPA and NDEP would provide guidance for soil and/or sediment sampling and management for future construction activities in the floodplain or active channels (performed by residential or non-residential) performed by landowners, or other government agencies. CWSD and our partners have concerns that permits and sampling costs and time could be impactful to these otherwise positive actions toward bank stabilization. Would the Geographic Information database and web mapping tool be created as sampling was conducted or has it already been created? Are the capital expenses during the first year to be used for the GIS mapping and signage? Additionally, it appears that this interim plan has a 30-year window given the cost estimate. Is 30 years standard and will this mean the future final remedy will be 30 years in the making? CWSD and our partners are hesitant about an interim plan being finalized and then the site being shelved, with lot of unanswered concerns and no recourse for finding solutions to the flood mitigation funding and other issues until some unspecified time in the future. The plan needs to discuss a timeline for taking additional actions, resolving some of the larger unanswered questions relating to funding for site remediation, potential delisting, etc. This Alternative may be the cheapest alternative as there is no responsible party; however it does not consider issues associated with the site being a listed as a Superfund Site and the ramifications for funding other types of projects within its project area. An example being that on two occasions, FEMA has pulled funding from flood mitigation projects citing that the funding was pulled because the project area is within a designated superfund site. What happens when the bridge in Dayton goes out due to flooding, or Weeks bridge on 95A?

- c. Page 13-14: Alternatives 3-4 are not being considered by USEPA but CWSD and our partners would like to see an integrated approach in this interim plan that does look at bank stabilization and restoration efforts that will hold soil in place during spring runoff and some flooding especially in old river channels and along the river corridor. Alt 2 may be a way to focus on the immediacy of human health issues faced due to issues associated with a commercial use and stocking of fish. However, Alternatives 3 & 4 better meet the mission of the USEPA from both a human health and an ecological/environmental standpoint. The funding required by Alts 3 & 4 is significantly higher; however, if USEPA could garner an integrated approach to funding by creating a multi-jurisdiction strategy that includes both Federal and State entities with a vested interest in the water quality and ecological issues in the area, perhaps the expenses could be shared. CWSD would like to see something similar to the National Fish and Wildlife Foundation approach or the Desert Terminal Lakes Fund as these seem like a very reasonable way to amass resources including the funding required. This integrated approach could include new State funding administered by NDEP and DCNR that would go toward projects that meet the mission of not only the USEPA and NDEP, but NV State Lands, Nevada Department of Wildlife, Nevada Department of Transportation, and Nevada Emergency Management Service (NVEMS). Other federal entities that should be involved, some of which own land within the site boundaries, include the Natural Resource Conservation Service (NRCS), specifically their National Water Quality Initiative, the United States Bureau of Land Management (USBLM), the US Bureau of Reclamation (USBR) and US Fish and Wildlife Service (USFWS), US Federal Highway Administration (FHWA) and Federal Emergency Management Agency (FEMA). An MOU agreement amongst these agencies, and a dedicated funding source could benefit and start to address the most egregious erosion areas that are otherwise impossible to fund. A sediment transport study and geomorphological assessment of the river that identified these egregious areas for erosion, mercury hot spots, etc. could be used as a baseline to prioritize where the funding would be spent.

Evaluation Criteria/Nine Criteria Analysis:

6. Pages 15-17

- i. Page 15: Alternative Evaluation Criteria: Reduction of Mobility, Toxicity or Volume by Treatment Evaluation Criteria: CWSD has concerns about the 'by treatment' portion of this evaluation criteria as any such treatment would have to be considered for its cumulative impacts, not just it's by treatment impacts. This is the case with all water quality improvements that are Nonpoint Source based. CWSD questions why stabilization of the soil to hold the mercury in place is considered to not even partially meet the criteria as in theory, if this method were to be practiced in the most egregious portions of the river, it would surely reduce the mobility of the mercury; on what scale and timeline is not clear at this time. Good results would depend on weather, runoff, and the capacity to complete large-scale projects that would have the opportunity to become rooted and stay in place over time. Stating this is an unknown especially in relation to the mobility, seems a more appropriate response to the criteria. Perhaps the preferred Alternative could be modified to include payment for the geomorphology and

sediment transport study for the CR Mercury site portion of the river that would also identify/prioritize project locations using best practices in floodplain protection and management, bank stabilization and restoration. The integrated Alternative could include pilot bank stabilization or old river channel restoration projects that could be measured over time. These types of projects could not only be a test of solutions for human health and ecological concerns, but also be a testing ground for a joint MOU and grant funding opportunities discussed above. This may only be a partial solution, but this could then be linked back into creating the final ROD. It would also show faith on the side of the USEPA that they plan to continue to do work toward a final remedy in a reasonable amount of time.

- ii. Page 16: Implementability: Alternatives 3 & 4 may not be as challenging as one would think if a Cooperative integrated MOU type agreement could be instigated. While costly, it may be that soils remain in place and restoration using planting and live roots will more successfully hold the soil in place. Yes, in large floods, this method may still fail in certain areas, but if the efforts are focused and prioritized as described above, in a 30-year lifespan of the plan, it is likely that there may be benefits even during a highly devastating flood and the integrated effort is worth the risk.
- iii. Page 17: Cost: please explain fully what the cost of O & M and NCP is for the State of Nevada and spell out what the acronym's are please, just so everyone knows.

Discussion of Evaluation of Alternatives

7. Pages 18-19

- a. EPA Prefers Alternative 2: Page 19 under CERCLA Section 121(b) discussion one of the requirements is that it be cost effective. Putting off the final remedy to the future does make the interim Alternative 2 plan more cost effective, but at what cost in the future? It seems that this site will always be contending with the mercury issue and figuring out how to work together with the issue, despite the issues and complications, needs to be addressed in this interim plan.

CWSD appreciates the opportunity to comment on the proposed interim plan and hopes the USEPA will act on some of our requests. We are all in this together and we all want the best solution for the Carson River Mercury Superfund site and the overall health of the Carson River Watershed.

Sincerely,

Ed James

General Manager, CWSD

EXHIBIT B:
**Proposed Interim Plan for the Carson River Mercury
Superfund Site**

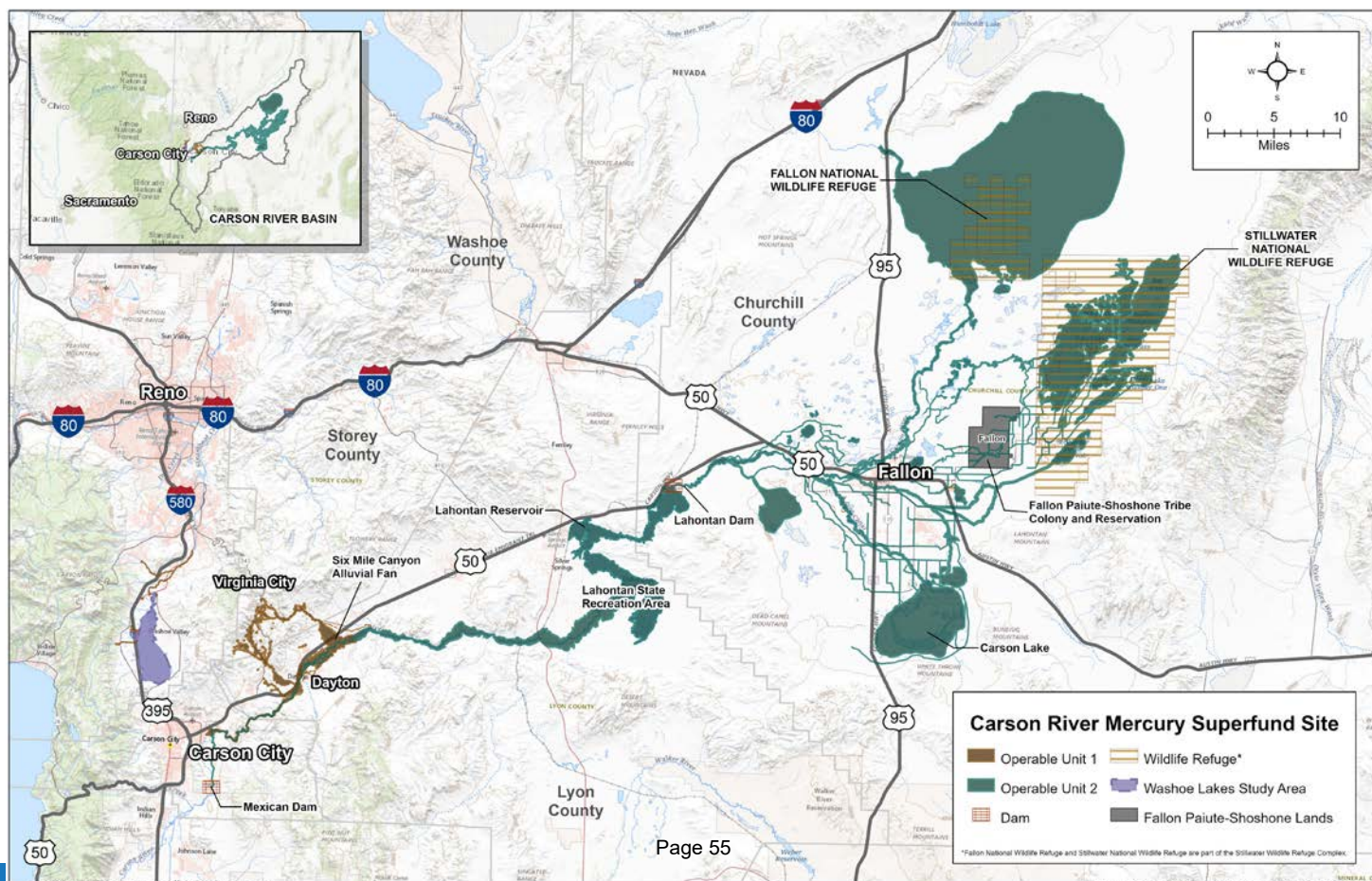


U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • September 2021

Proposed Plan for the Carson River Mercury Superfund Site Operable Unit 2

Working with the Nevada Division of Environmental Protection (NDEP), the U.S. Environmental Protection Agency (EPA) proposes to protect human health and the environment through an interim remedy for the Carson River Mercury Superfund Site (CRMS) Operable Unit 2 (OU2). NDEP and EPA will use an interim remedy to protect human health. When new technology and/or more extensive evaluation of Lahontan Reservoir and Washoe Lake is available, a final remedy can be determined. EPA has, administratively divided CRMS into two operable units (OUs): OU1 includes former mill sites near Carson City, Virginia City, and Dayton, Nevada.

OU2 includes soil and sediment in waterways from the mill sites extending more than 130 miles down the Carson River to the wetlands. As shown in Figure 1, this includes the Stillwater and Fallon Wildlife Refuges, Carson Sink and Carson Lake, among others. This Plan describes the remedial alternatives that we are considering and identifies our Preferred Alternative for implementation. We believe the Preferred Alternative will effectively address human exposure to mercury contamination. The public will have opportunities to learn about the Proposed Plan and send written comments about it during a minimum 30-day public comment period.





■ Proposed Plan at a Glance

Statement of the Problem

EPA is concerned about mercury at this site. During the Comstock mining era beginning in 1859, miners used mercury to separate gold and silver ore. They released these mercury-contaminated tailings into the river, which then got into the sediments where it continues to bioaccumulate in the food chain. The river carried the tailings downstream to the floodplain and the wetlands. Tribal members who practice a traditional way of life by eating game fish, wild plants and waterfowl have potentially elevated human health risks. Mercury contamination also poses health risks to adults and children who eat Sacramento blackfish, commercially harvested from Lahontan Reservoir and game fish from certain areas of the river and lakes.

Proposed Solution

EPA's Preferred Alternative is an interim approach using a combination of Land Use Controls (LUCs), compliance and monitoring to help prevent mercury exposure and keep contamination from spreading. This alternative reduces human health risk in the floodplain by discouraging people from eating contaminated fish, wild plants and waterfowl through a comprehensive communication and public education program. Environmental Covenants (ECs, a voluntary title notice) would be placed on properties to help prevent exposure to mercury-contaminated soils. The interim action includes several prioritized actions that will reduce human health risks. They are intended to be consistent with and support a final cleanup action that will be selected in the future. Working with state partners, EPA will use English and Spanish signs, annual surveys, community outreach and educational programs to discourage

fish, wild plant and waterfowl consumption. The Preferred Alternative also recommends against the current practice of stocking the Carson River or Washoe Lake with game fish other than trout, while a fish advisory is still in place to reduce people's exposure to mercury contamination. In addition, EPA recommends that the state no longer issue permits for the commercial harvest of Sacramento blackfish for human consumption. This alternative also expands upon the current Long-term Sampling and Response Plan (LTSRP) used in the OU1 area since the 1995 Record of Decision for this particular area. The LTSRP addresses construction in residential and non-residential properties in the floodplain and/or active channels. EPA and NDEP would oversee soil sampling and possible remediation by commercial and residential developers in areas where mercury contamination may require action (i.e., removal or containment) to prevent it from further spreading. The Preferred Alternative would initially require annual monitoring of surface water, sediments, wild plants, waterfowl and fish tissue. This approach uses the latest science and technology to address mercury contamination.

As long as monitoring results indicate mercury levels that pose human health risks or until a final remedy is implemented, EPA and NDEP will continue to require compliance with the LUCs.



Soil sampling in Six Mile Canyon with local, state and tribal partners (2017)

Cleanup Framework

The Proposed Plan fulfills the requirements of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA, also known as Superfund or Superfund Law) Section 117(a) and the National Contingency Plan (NCP) 40 CFR Section 300.430(f)(2). This plan highlights key information from the Remedial Investigation (RI) and Feasibility Study (FS) reports. The RI looks at where the mercury went, in what concentrations and the threats to human health and the environment if nothing is done to address it. This information then forms the basis of the cleanup alternatives found in the FS and evaluates the strengths and weaknesses of each. Interested readers can obtain copies of these documents, and other documents referenced and used by EPA in developing this plan, in the CRMS Administrative Record file, which is available online at epa.gov/superfund/carsonrivermercury and in the information repository locations listed on the last page below.

■ Site Background and Characteristics

In 1859, miners discovered large natural deposits of gold and silver, also known as the Comstock Lode, in Virginia City, Nevada. Miners used an estimated 14 million pounds of mercury to process gold and silver ore. In Gold Creek and Six Mile Canyon (Dayton area), milling operations were intense. About 236 mills processed the ore (including 13 at Washoe Lake). Over several decades, this milling process released mercury into the environment. The mills required access to water and extended operations to New Empire in Carson City and with a flume to Virginia City, Gold Hill, and from Six Mile Canyon to Dayton. Contaminated tailings accumulated at the mine and mill sites. Over time, these tailings eroded and are washed into the Carson River.

The site spans five counties in Western Nevada that are part of the Carson River and Steamboat Creek watershed basins. The Carson River basin portion alone, covers 318 square miles, extending more than 130 miles end to end. Operable Unit 2 begins on the main stem of the Carson River at the Mexican Dam, eventually branching to the Stillwater and Fallon National Wildlife Refuges, including miles of agricultural canals and drains. The site occupies land owned or managed by the State of Nevada, the U.S. Bureau of Land Management, the U.S. Bureau of Reclamation, the U.S. Fish and Wildlife Service, residential areas and commercial businesses.

Historic mill sites in Carson City, Virginia City, Dayton, Washoe Valley and Pleasant Valley are contaminated with mercury. Streams and creeks carried mercury contamination from the mill sites and spread it the entire length of the Carson River and adjacent floodplains. EPA's site investigation found mercury in soil, sediments (earthen materials that settle to the bottom of a water body), fish and waterfowl.

Scientists have concluded most of the contaminated soil and sediment probably entered the river during the mining period around 1860 through 1890. Mercury trapped in miles of abandoned river channels is also an ongoing source of contamination, entering the river during riverbank erosion or construction activities. Once in the river, contaminated sediment flows downstream.

Located about 30 miles downstream from Six Mile Canyon, the Lahontan Reservoir normally traps sand and silt and associated contamination. Before the dam holding the Lahontan Reservoir was completed in 1915, flooding transported contaminated sediment throughout the valley. This sediment traveled more than 130 miles downstream from the mills to as far as the Lahontan Valley wetlands. The dam reduced downstream flooding. At times, major floods like the one in January 1997, forced contaminated sediment and water downstream. During normal river flow, mercury and methylmercury (the highly toxic form in fish) attached to fine particles that were transported downriver beyond the dam.



Carson River below the Lahontan Dam spillway (2017)

Regulatory Actions to Define Superfund Operable Units

EPA divided the CRMS Project into two Operable Units. OU1 is the upland area along the river outside Carson City, stretching from New Empire, Virginia City and drainages to Dayton where the mills were located. These areas have surface soil with high mercury levels. After signing the Record of Decision in 1995, EPA began cleanup actions in OU1. OU2 includes mercury-contaminated areas in the Carson River system, including Lahontan Reservoir, Carson Lake, and Fallon and Stillwater National Wildlife Refuges.

EPA completed the Remedial Investigations (RIs) and Feasibility Studies (FS) for both OUs. The RI determines the nature and extent of mercury contamination and the risk to human health and the environment. The RI also informs the cleanup options EPA considers in the FS. OU2 is large and subject to changing environmental conditions along stretches of the Carson River. For the purpose of the RI and FS, OU2 was divided into subareas for investigation and evaluation. Because the actions for the subareas are similar in scope and design, EPA is treating OU2 as one area.

OU2 Site Characteristics

Operable Unit 2 covers two primary watersheds—Middle Carson Basin and the Carson Desert. These watersheds are very different. The river slope decreases dramatically from the Middle to Lower Basin after the steep-walled canyons in Brunswick Canyon, becoming less steep below Dayton, where the riverbanks and alluvial fans are longer and broader with more floodplains and low areas. In the Carson Desert, the valley floor opens to form a broad valley of floodplains and playa (dry lake beds). Mercury releases from the former mills in CRMS OU1 directly affect these areas.

Before completion of the dam at Lahontan Reservoir in 1915, Carson River flowed directly from the canyon areas into the Carson Desert. Here, the river separates into smaller channels feeding the ancient dry lakes: Carson Lake, Sheckler Reservoir, Indian Lakes, Stillwater and Fallon marshes and Carson Sink.

The reservoir stores water for irrigation of agricultural areas around Fallon. Carson Desert extends from the Lahontan Dam to the Carson Sink. The Newlands Project, with water from both Lahontan Reservoir and the Truckee River, provides surface water from

the river for irrigation water, and/or eventually makes its way to the Carson River wetlands.

Land use in OU2 consists primarily of tourism, residential, commercial, rural and agricultural uses, and includes recreational areas as well as wildlife habitat. The primary population centers are Carson City, Dayton, Silver Springs, Fallon, and Fallon Reservation. Residential tracts are being developed near several of the historic mill sites in the floodplain. Many of the former mill sites are located in the Virginia City National Historic Site and the Dayton area, scattered within the community. Some of the mill sites are in remote, upland areas surrounding the communities on BLM lands, and those mill sites are being addressed by the OU1 remedy.

Commercial and residential property development continues within the footprint of the CRMS. In addition, local, state, and other federal government agencies periodically perform activities that impact soils and sediments, such as construction and maintenance of bridges or utilities and mucking of waterways to remove accumulated sediments. Historically, some removed sediments have been placed along the banks of the waterway without soil testing.

Investigation Findings

Various agencies have studied mercury in the Carson River Basin since 1973, including U.S. Geological Survey, Nevada Data Research Institute, NDEP and EPA. In 1990, EPA placed the CRMS on the Superfund National Priorities List. Studies continued through 2019, spanning more than 40 years. As part of the Remedial Investigation/Feasibility Study (RI/FS) process, EPA evaluated OU2 mercury contamination from the previous investigations, as well as federal and state monitoring programs. EPA conducted supplemental investigations across the Basin in 2015, 2017 and 2019. Arsenic and lead was also released during ore processing at the CRMS and can be an issue in OU1 soils. However, evaluations during the RI/FS established that mercury compounds are the only contaminant of concern in OU2. The RI report identified locations of contamination and the FS developed recommendations for actions to reduce or mitigate

potential health and environmental risks associated with the mercury.

Most of the soil and sediment contamination in the Carson River is trapped in the banks and deep channels between Sixmile Canyon and the Lahontan Reservoir Dam. EPA evaluated the soil and sediment for various forms of mercury, including mercuric chloride, which is more easily absorbed into plants, to better estimate the potential risks.

Mercury found in surface water samples is primarily in the form of suspended sediments-- particles of soil moving freely in the water. Mercury accumulates as methylmercury in game fish tissues. Methylmercury in fish tissue can be toxic to humans who consume the fish. Mercury methylation (transformation into a form more readily absorbed in fish tissue) is occurring in Lahontan Reservoir and the other lakes in the Carson River Basin. It is transferred from the bottom sediment into the water of the reservoir. Methylmercury production in Lahontan Reservoir is linked to low levels of a form of oxygen, called dissolved oxygen, located in deep parts of the lake (typically during July and August) as well as with mercury associated with fine particles in sediment.

Mercury contamination in riverbanks upstream of Lahontan Reservoir will continue to erode and wash into Carson River. The 1997 flood severely eroded riverbanks, exposing buried mercury rich sediment which increased the amount of mercury flowing into to Lahontan Reservoir and Carson River. USGS studies found that Lahontan Reservoir traps up to 92 percent of the mercury entering the reservoir. Mercury in surface water and soil contamination decreases significantly below Lahontan Reservoir.

Summary of Site Risks

For EPA studies, “risk” is the probability humans and/or the environment will be harmed from exposure to contaminants. EPA evaluated the potential risk—both now and in the future—for humans in a Baseline Human Health Risk Assessment (HHRA) and for the environment in a Screening Level Ecological Risk Assessment (SLERA) as part of the RI/FS reports.

The results of the risk assessments are used to determine if site contamination poses an unacceptable risk to human health and the environment. This information is used to support an interim remedy (i.e., actions) to reduce exposure.

We evaluate the risks from exposure that can cause cancer, and risks that can cause other human health effects. Since there is no cancer risk due to mercury exposure, EPA calculated the non-cancer health effects using a hazard quotient (HQ) or hazard index (HI). If the HQ or HI is 1.0 or higher, it is possible that exposure to site contaminants could be a risk to human health. These effects include serious neurological damage, tremors and birth defects in babies.

As noted in Table 1, EPA found that mercury levels did not pose elevated health risks (i.e., HQs were

less than 1) for on-site adult and child residents, (*see footnote c in Table 1, below*) adult recreational users and agricultural workers exposed to mercury in all OU2 Subareas. The site risk assessments found that human health risks could exceed acceptable levels in sensitive populations. Based on the results, EPA developed remedial alternatives to reduce the risk. Under Superfund law, it is our responsibility to take actions to reduce non-cancer HQs to 1.0 or lower.

Based on a Screening Level Ecological Risk Assessment, EPA concluded that site contaminants posed insignificant risks to wildlife. Studies of impacts on birds that eat fish in Lahontan Reservoir were inconclusive. Because significant ecological risks were not identified, EPA will not address them in this plan.

HUMAN HEALTH RISKS

The Human Health Risk Assessment, completed as part of the RI Report, evaluated risk for two types of receptor populations (those potentially exposed to the mercury from the site) — “current receptors” and “future receptors.” Receptors include:

- residents (child and adult)
- recreational users (hunters and sports fishermen, an adult and accompanying child)
- agricultural adult workers including commercial/industrial staff who work in the river floodplain areas); and
- people practicing a traditional tribal lifestyle (child and adult for both on reservation members and off reservation exposure).

These receptors are shown in the accompanying table.

TABLE 1: CRMS OU2 Human Health Risk^a Identified for Each Subarea

Receptor	Subarea				Fallon Paiute Shoshone Tribe Reservation ^b
	OU2A	OU2B	OU2C	OU2D	
Traditional Tribal (adult and youth)	ingestion of wild plants and waterfowl	ingestion of wild plants, waterfowl, and game fish		ingestion of game fish	None (concentrations are below background)
Resident (adult and child)^c	None	ingestion of Sacramento blackfish from Lahontan Reservoir (adult and child) sold on Asian market	None	ingestion of Sacramento blackfish from Indian Lakes and sold on Asian market	None (only Traditional Tribal Receptors assumed)
Recreational User (adult and child)	None	ingestion of game fish (child only)	None	None	None (only Traditional Tribal Receptors assumed)
Agricultural Worker	None				None (only Traditional Tribal Receptors assumed)

^a Estimated mercury hazards above 1 for the listed exposure pathways.

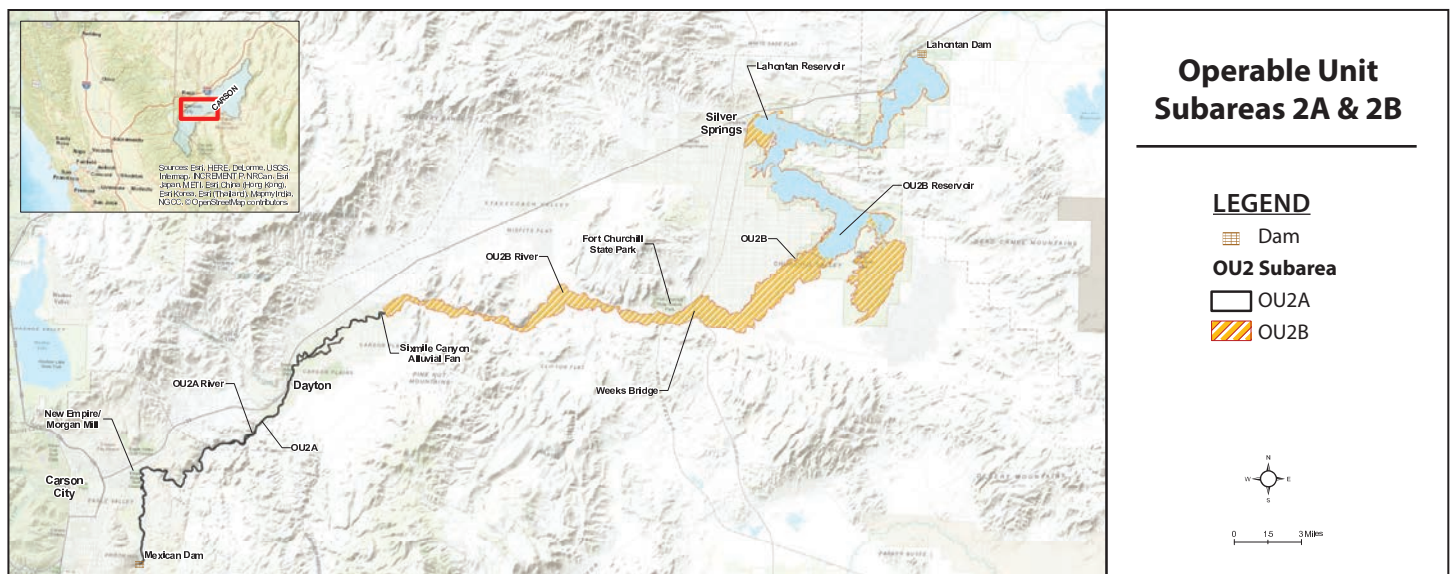
^b The Reservation is located within Subarea C (OU2C), but is listed separately herein because different exposure factors are used for on-reservation exposures compared with off-reservation exposures by Tribal members.

^c Residents of existing homes in the floodplain may be at risk in areas that have not been sampled for mercury. Future development (residential and commercial) in the floodplain is a potential future risk in areas that have not been sampled.

Table 1 summarizes the risks posed due to mercury contamination in the CRMS OU2. Based on fish consumption modeled on mercury uptake from surface water, EPA found unacceptable health risks for tribal members practicing a traditional tribal lifestyle outside the reservation area (HQs ranged from 8.5 to 15). However, mercury levels in reservation surface water were below background (i.e., naturally occurring). We found unacceptable risks for tribal members practicing a traditional tribal lifestyle who visit the other OU2 Subareas (hazard quotients ranged up to 12 for game fish consumption). In addition, EPA found unacceptable risks for children and adults who eat Sacramento Blackfish from the Lahontan Reservoir and Indian Lakes. These fish are primarily sold at markets in Asian-American neighborhoods as far away as San Francisco (HQs ranged from 2 to 4). We also found unacceptable risks for children (recreational user) eating any fish in and above Lahontan Reservoir (i.e., Subarea 2B; with an HQ of 3). Tribal members who practice a traditional tribal lifestyle would face elevated risk from consuming wild plants and waterfowl (based on soil and sediment mercury uptake) in Subareas OU2A, B and C (HQs ranged from 3 to 5), but risk on the reservation was not a concern. Mercury levels in reservation soil and sediment were below background and were not a concern in Subarea OU2D (HQs were less than 1).

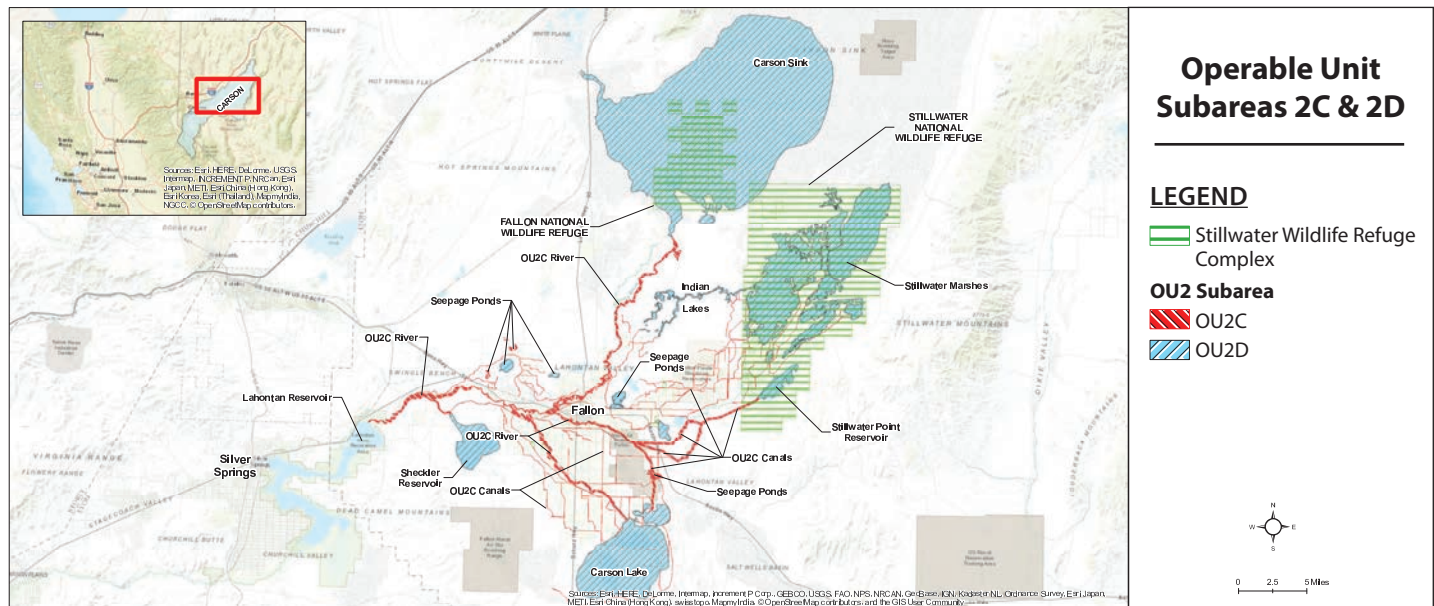
EPA based the risk assessment on the assumption that tribal residents live on the reservation and practice a subsistence way of life in which they would eat fish, wild plants, small game and waterfowl. The Fallon Paiute Shoshone tribal staff informed EPA that, generally, their members no longer ate cattails and fish from the river basin, because they were aware of and concerned about the associated health risks. They indicated, however, that they eat a significant amount of locally hunted waterfowl. We were informed that other tribes visiting the river basin likely practice traditional tribal lifestyles.

EPA also found no elevated health risks (HQs were below 1) for Lahontan Reservoir surface water used for irrigation around the city of Fallon and Churchill County, Nevada. Therefore, bioaccumulation (uptake) of mercury in agricultural plants, including fruits and vegetables, or as forage for cows (dairy) and steers/heifers (beef) does not appear to present an unacceptable risk.



Based on these Human Health Risk Assessment findings, EPA established the Remedial Action Objectives (RAOs), including Remedial Action Objectives for mercury. Remedial Action Objectives guide the design and selection of the alternatives evaluated in the FS.

Remedial Action Objectives



The interim remedy RAOs focus on reducing human exposure to mercury-contaminated waterfowl, wild plants and game fish that present a potential human health risk, as well as preventing human exposure to mercury-contaminated soil or sediments as a result of releases during construction activities. Final RAOs to protect human health and wildlife will be determined in a Final ROD, at a later time. The interim remedy RAOs are:

RAO 1

Reduce the risk to adults and children practicing the traditional tribal lifestyle from consuming mercury-contaminated waterfowl and wild plants. Under this RAO, EPA's goal is to reduce the consumption of waterfowl and wild plants containing concentrations of mercuric chloride above 3.3 mg/kg and 0.067 mg/kg, respectively.

RAO 2

Reduce human health risks from consumption of mercury-contaminated game fish. Under this RAO, EPA's goal is to reduce game fish consumption levels to the EPA and FDA advisory of 0.46 mg/kg for total mercury by the following exposure pathways:

- the consumption of fish by tribal adults and children (off-reservation);
- the consumption of Sacramento blackfish (adults and children), commercially harvested from Lahontan Reservoir and Indian Lakes, sold at markets in Asian-American communities in California; and
- the consumption of fish locally by a child recreational user.

RAO 3

Reduce future exposure to mercury contaminated soil in existing and future residential developments to a level of 80 milligrams per kilogram (mg/kg) for total mercury for soil and sediment.

This value is consistent with the level used in the CRMS OU1.

RAO 4

Reduce the potential of future exposure as a result of sediment and soil disturbance from residential, commercial development and local/state/federal activities within the CRMS footprint to concentrations below 80 milligrams per kilogram (mg/kg) for total mercury for sediment and soil.

EPA developed preliminary remediation goals based on site-specific risks identified in the remedial investigation and feasibility study. EPA also considered activities performed by tribal members and other populations active at the site. We also considered OU1 cleanup levels. The FS and this Proposed Plan use an action level of 80 milligrams per kilogram (mg/kg) for total mercury for soil and sediment. The FS also estimated a risk-based level of 7.8 mg/kg total mercury using conservative estimates of bioaccumulation (build-up of mercury as it moves through the food chain). However, in this Proposed Plan, EPA proposes to use the higher concentration of 80 mg/kg, because the Fallon Paiute Shoshone Tribal staff stated that they are not aware of members who consume fish and wild plants harvested beyond the reservation. The relationship between preliminary remediation goals and action levels for the RAOs are:



Fish advisory signs at Lahontan Reservoir, Washoe Lakes and river access points (2013)

Reduce risk from consuming waterfowl and wild plants

Under the Superfund law, EPA is managing mercury levels at 80 mg/kg for soils and sediments to protect human health. Although this level of mercury-contaminated soil and sediments does not pose significant human health risks through direct human contact, it is likely to accumulate in wild plants and waterfowl, which are documented traditional foods of local tribes. Consequently, this level of mercury-contaminated soil could pose human health risks for tribal members as it accumulates through the food chain.

Reduce risk from consuming fish

In addition, research strongly suggests mercury in fish results from the transfer of mercury-contaminated sediment to the water column and then to the fish. This is especially relevant to the Carson River, which is on the List of Impaired Waters (Clean Water Act 303[d]). For sediment and soil, EPA recommended an action level of 80 mg/kg total mercury, based on uncertainties of the different forms of mercury, such as the conversion process to methylmercury, how it spreads and how people are exposed to it. For game fish, our goal is to reduce consumption where the mercury levels in fish exceed EPA and FDA advisory levels.

Reduce residential exposure

This 80 mg/kg action level applies to soil or sediment that may be addressed by active soil management (i.e., sampling and mitigation) or impacted by activities performed by others within the CRMS river and floodplain. This approach is consistent with soil cleanup actions in Operable Unit 1 (OU1).

Reduce exposure as a result of soil/sediment disturbance

Active remediation or cleanup actions are included as two of the remedial alternatives considered in the FS. However, EPA's preferred alternative consists of LUCs, compliance and monitoring. Under the preferred alternative, EPA or NDEP do not perform active remediation (cleanup) of soils or sediments. Instead, the agencies would perform oversight for any construction activities that impact soils and sediment with concentrations of mercury at or above the action level of 80 mg/kg, which could result in potential releases of and exposure through the food chain.

Description of Remedial Alternatives

EPA is proposing a preferred alternative from one of the four remedial alternatives or options evaluated in the FS. See description below:

Alternative 1	No Further Action
Alternative 2	Land Use Controls (LUCs) and Monitoring
Alternative 3	Limited Areas of Riverbank Stabilization with Sediment Excavation and Disposal, LUCs and Monitoring
Alternative 4	Limited Areas of Riverbank and Riverbed Removal and Disposal, Riverbank Stabilization LUCs and Monitoring

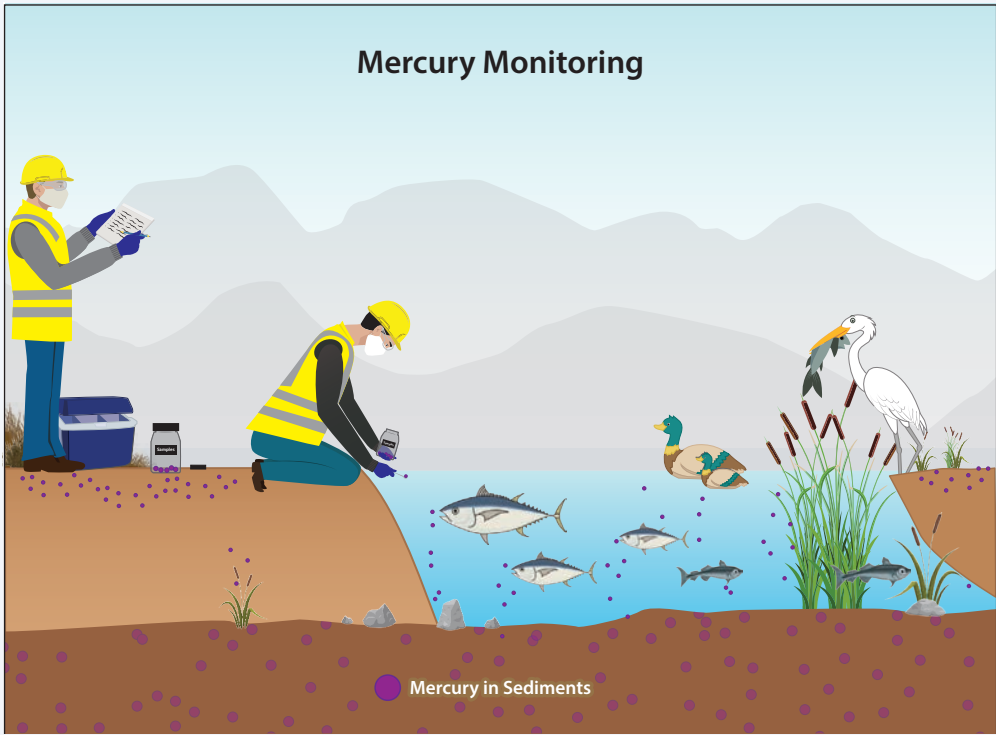
Net Present Value (NPV):

Net Present Value (NPV) is the cost in today's dollars of a project's total costs, including post-construction operations and maintenance activities, taking into account the time value of money.

Alternative 1: No Action

Alternative 1, No Action, assumes that no remedial actions, including LUCs or monitoring are implemented. It is included for reference as a baseline alternative for comparing other alternatives as required under CERCLA. This is not considered an acceptable alternative, as the site currently presents unacceptable human health risks. There are no costs associated with this alternative.

Alternative 2: LUCs, Compliance and Monitoring



Alternative 2 combines LUCs and monitoring to address any concerns that are identified. LUCs help to minimize the potential for exposure to contamination. They are designed to limit land and/or resource use by providing information that helps modify or guide people's behavior at a site. EPA would design and the State of Nevada would expand upon the existing framework of resources to educate the public about the risks associated with eating fish, wild plants and waterfowl. This alternative

Alternative 2: LUCs, Compliance and Monitoring (Continue)

builds upon current LUCs by expanding the network of fish consumption advisories, including bilingual signage and postings along waterways and in public buildings. It also informs the public about health risks of mercury and gets their input through annual surveys, enhanced outreach and education. This alternative recommends that the State of Nevada discontinue permitting the commercial harvest of Sacramento blackfish for human consumption or modify the existing permit to restrict human consumption. It also recommends that the state either discontinue stocking game fish in the river and in the Lahontan Reservoir, or stock with alternative fish that do not uptake or absorb mercury in high levels. Additionally, this alternative would require NDEP to monitor annually the surface water, sediments, fish tissue, wild plants, and waterfowl to determine if these resources continue to be impacted. This research would help EPA provide additional information for development and the selection of a final remedy.

As commercial and residential development continues along the Carson River, this alternative provides agency oversight for any development on both residential and non-residential properties. EPA and NDEP would provide guidance for soil and/or sediment sampling and management for future construction activities in the floodplain or active channels (residential and non-residential) performed by landowners, or other government agencies. The purpose of this oversight is to ensure active management of contaminated soils and sediments with concentrations at or above

80 mg/kg to reduce exposure to risks. Currently, this approach is successfully used for construction activities at existing residential properties at OU1. It can be implemented together with the construction permitting process and Environmental Covenants on construction where there are risks of mercury exposure. A Geographic Information System (GIS) database and web mapping tools would be used to share real time information with the public, government agencies and commercial interests for identification and Institutional Controls (ICs) tracking purposes.

The total 30-year NPV cost of Alternative 2 is \$23,629,000. This total cost includes \$376,000 for capital expenses spent in the first year. The remaining \$23,253,000 is expended over a 30-year period for annual operation and maintenance costs, including monitoring. Costs for addressing residential and non-residential property development are not included. Typical costs for these activities are provided in *Technical Memorandum- Supplement to the Final Feasibility Study Carson River Mercury Site Operable Unit 2 Carson City, Nevada (APTIM, June 2020)*.



Monitoring soils and Land Use Controls activities

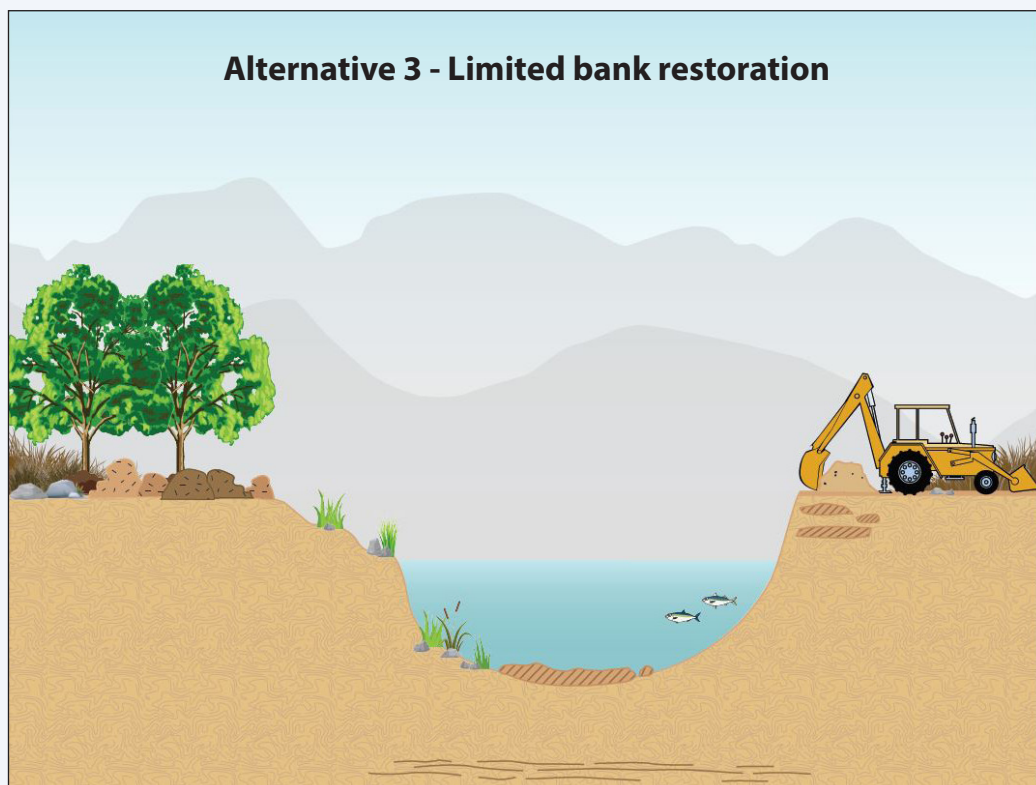
Alternative 3: Limited Areas of Riverbank Stabilization with Sediment Excavation and Disposal, LUCs and Monitoring (Riverbank stabilization does not apply to the terminal wetlands-OU2D)

Alternative 3 includes the LUCs and monitoring described in Alternative 2. In addition, Alternative 3 also addresses riverbank sediments/soil that may be a source of downstream sediment and surface water contamination over time. Although it is known that sediments and soil in the riverbanks provide an ongoing source of contamination, these areas have not been completely delineated. EPA would use Adaptive Management (iterative modification of the remedial action as new data is evaluated), to help prioritize and implement this remedial alternative, because it is not possible for physical, biological, and chemical conditions to be fully defined for this large and complex river system.

Under Alternative 3, annual inspections are used to identify new erosion areas from major flood events or high flow conditions. The riverbank would be sampled to determine if concentrations exceed the Remedial Action Objectives, and if so, stabilized. EPA would stabilize areas of erosion along the riverbank by excavating or removing sediment to contour the surface and then placing erosion resistant stone or planting vegetation to cover it. EPA would limit excavation to

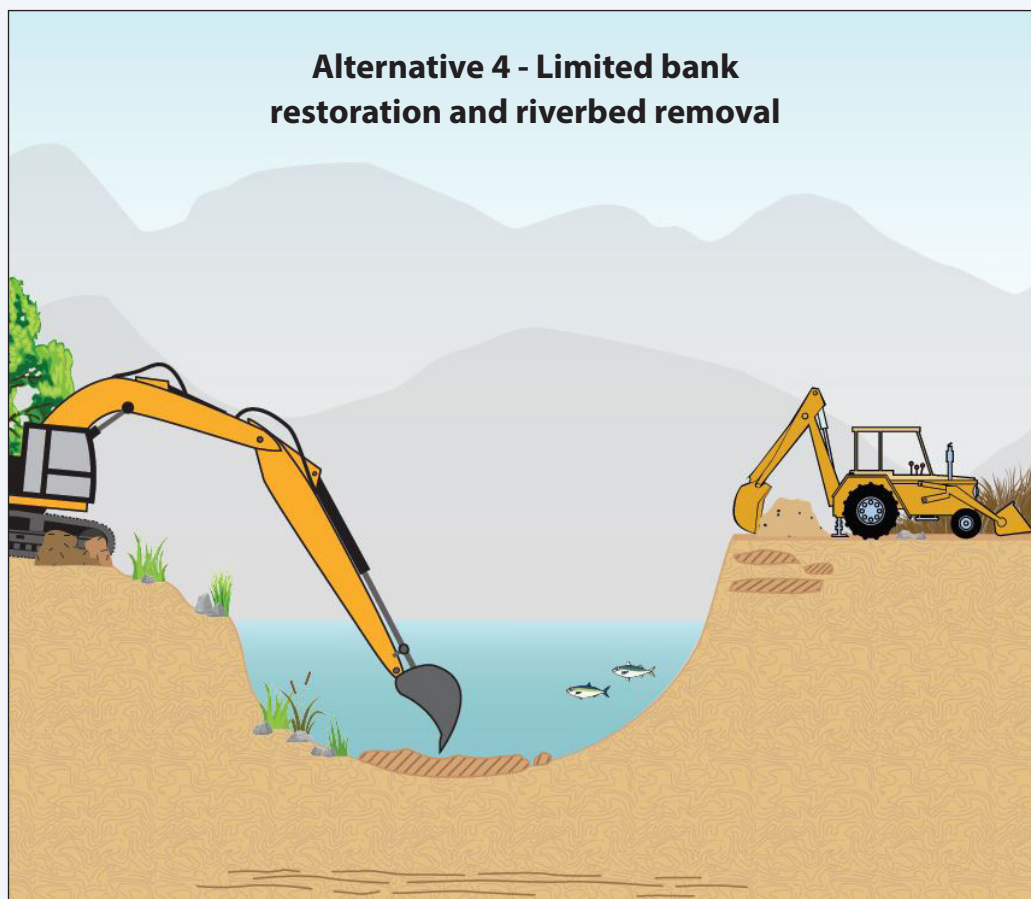
areas where placement of erosion resistant stones are necessary and promote vegetative growth. After excavation, the sediments would be dewatered, then trucked to an off site permitted landfill for disposal or, if appropriate, retained as beneficial reuse fill at locations near the site. The total 30-year NPV cost of Alternative 3 is \$162,774,000. This total cost includes \$376,000 for capital expenses spent in the first year. Periodic construction costs for Alternative 3 included limited stabilization of portions of the riverbank. For estimating this alternative, it was assumed these activities would occur over a 30-year period at approximately 5-year intervals and are included under the operation and maintenance cost.

The remaining \$162,398,000 is expended over a 30-year period for annual operation and maintenance costs, including monitoring.



Alternative 4: Limited Areas of Riverbank and Riverbed Removal and Disposal, Riverbank Stabilization LUCs and Monitoring (Riverbank and Riverbed Removal and Disposal, Riverbank Stabilization does not apply to the terminal wetlands-OU2D)

Alternative 4 includes the LUCs and monitoring, as described in Alternative 2 and stabilization of riverbanks as described in Alternative 3. In addition, Adaptive Management is used to address limited areas of riverbed sediments. Although it is known that sediments and soil in the riverbanks and riverbeds are an ongoing source of contamination, they have not been fully defined in the Carson River drainage, associated wetlands, and canals in OU2. As in Alternative 3, Adaptive Management would help prioritize and implement this remedial alternative.



Areas for removal would be based on identification of depositional areas (where sediment builds up such as sand bars) during routine inspections. Sediments would be sampled to determine if concentrations exceed the RAOs, and if so, removed. After removal of the riverbed sediments, the material would be dewatered and trucked to an off site permitted landfill for disposal or considered for beneficial reuse. The total 30-year NPV cost of Alternative 4 is \$212,566,000. This total cost includes \$376,000 for capital expenses spent in the first year. Periodic construction costs for Alternative 4 included limited stabilization of portions of the riverbank and limited riverbed sediment removal. For estimating this alternative, it was assumed these activities would occur over a 30-year period at approximately 5-year intervals and are included under the operation and maintenance cost.

The remaining \$212,190,000 is expended over a 30-year period for annual operation and maintenance costs, including monitoring.

The 50-year NPV cost of Alternative 4 is approximately \$86.4 million (after discounting). The estimated costs are broken down into \$47.5 million for capital expenses, \$11.7 million in periodic expenses (monitoring well installation and five-year reviews), and \$2.0 million per year for average annual Operations & Maintenance (O&M) expenses.

Evaluation Criteria

EPA uses nine CERCLA Evaluation Criteria, referred to as threshold criteria, primary balancing criteria, and modifying criteria, to determine the best alternatives to address risks from mercury at the site. A summary of the evaluation of alternatives according to the nine CERCLA criteria is provided below and in Table 2.

Nine criteria analysis

Alternative Evaluation Table for Carson River OU2

NINE CRITERIA ANALYSIS	Alternative 1	Alternative 2	Alternative 3	Alternative 4
THRESHOLD CRITERIA				
Overall Protectiveness	○	◐	◐	◐
Compliance with State & Federal Requirements (ARARs)	○	●	●	●
BALANCING CRITERIA				
Long-term Effectiveness	○	◐	◐	◐
Implementability	○	◐	◐	◐
Short-term Effectiveness	○	●	◐	◐
Reduction of Mobility, Toxicity or Volume by Treatment	○	○	○	○
Estimated Project Cost	\$0	\$23,629,000	\$162,774,000	\$212,566,000
MODIFYING CRITERIA				
Tribal & State Acceptance	We value the input of our tribal and state partners.			
Community Acceptance	EPA may change its Proposed Plan based on public feedback.			

● = Fully meets criterion ◐ = Mostly meets criterion ◐ = Partially meets criterion ○ = Does not meet criterion

Alternative 1, the No Action alternative, would not provide overall protection of human health and the environment and would not achieve the Interim Remedy RAOs. Therefore, it does not meet the first threshold criterion. This alternative does not prevent further migration or movement of contaminated media (material, i.e., soil or water), or reduce contaminant mobility, volume, or toxicity through treatment. Therefore, it is not considered a feasible remedial alternative.

Evaluating Alternatives

Overall Protection of Human Health and the Environment

Alternative 2, 3 and 4 will meet the Interim Remedy RAOs through the use of LUCs, compliance and monitoring. They will be consistent with the final remedy which will provide overall protection of human health and the environment. Alternative 3 also includes limited riverbank stabilization, while Alternative 4 adds limited riverbed sediment removal to provide additional risk reduction. Overall protection of human health and the environment would be challenging to achieve with existing technology. This is further complicated by the large area impacted, the random occurrence of elevated mercury concentration and the reliance on compliance with LUCs. However, the implementation of each alternative as an interim action will reduce exposure until a final remedy is determined.

ARARs

Alternatives 2, 3, and 4 can be designed and implemented to meet Applicable or Relevant and Appropriate Requirements (ARARs, i.e., local, state and federal ordinances, regulations and/or laws).

Long-term Effectiveness

The land use control program provided in Alternatives 2, 3, and 4 will reduce the long-term risk through comprehensive risk communication and a public education program, compliance, and monitoring. Advisories are implemented through warning signs and social and educational programs. Advisories are only effective if they are clearly communicated and followed. The Carson River continues to be stocked with game fish. Discontinuing the practice of stocking the Carson River with fish or stocking it with alternative species may reduce the exposure to people because fewer game fish would be caught. Fish tissue samples will continue to be monitored to confirm that stocking with alternative species has reduced the concentration of mercury in fish tissue. Discontinuing the permitting of the commercial harvest of Sacramento blackfish for sale in markets from Lahontan Reservoir will also reduce this exposure pathway. Each of these actions contribute to long-term effectiveness.

Alternatives 2, 3 and 4 also include EPA and/or NDEP oversight for any commercial or residential development and other construction activities such as utility installation and maintenance, bridge construction and maintenance; and mucking (dredging) of canals performed by local, state or other government agencies. Under agency oversight, any necessary soil and/or sediment characterization and management will be performed in accordance with the Long-term Sampling Response Plan by the property owners and/or land managers. Monitoring mercury levels in soil, sediments and water will help protect the environment and human health by limiting exposure to contamination to acceptable risk-based levels.

Under Alternatives 3 and 4, annual inspections are performed as part of the long-term monitoring program, including identification of areas of new erosion from major flood events or high flow conditions. Using information from annual surveys, these alternatives apply the data to perform riverbank stabilization in limited areas (both Alternative 3 and Alternative 4) and removal of contaminated riverbed sediments in limited areas (only Alternative 4). Although these actions contribute to the long-term effectiveness, neither of these alternatives prevent ongoing transport of mercury already in the system.

Implementability

The technical feasibility of implementing Alternative 2 is high, as there is a similar existing land-use control and monitoring program at OU1, which can be utilized in OU2. Local, state, and federal agencies can perform the short and long term monitoring requirements using standard practices, technologies, and monitoring activities. Alternatives 3 and 4 are more difficult to implement than Alternative 2 because removal of contaminated sediments in the river and wetlands can be challenging and costly.

Short-term Effectiveness

Alternative 2 would pose little short term risk to the community and a slight risk to workers due to the usual physical hazards from working on steep slopes and on a boat during sampling and monitoring. No short term environmental impacts are expected from the implementation of Alternative 2. There are some short-term impacts to the river in the form of bank disturbance for Alternatives 3 and 4 and riverbed disturbance under Alternative 4. There is also a short-term risk to workers and the public related to potential air pollution and transportation. These risks can be managed using routine industry standard practices. Off-site landfill capacity may be an issue over time.

Reduction of toxicity, mobility, or volume through treatment

The alternatives do not reduce the toxicity, mobility, or volume of contamination through treatment. The science for treatment of mercury compounds, specifically methylmercury, is still evolving and has not reached a point to prevent mercury uptake in the food chain. Any form of treatment would be difficult to implement in a large, complex system such as the Carson River and its associated water bodies, due to both the scale needed and the changing flow and chemical conditions observed. Treatment may be incorporated in a future final remedy if a promising technique is identified.

Cost

The estimated cost of Alternative 3 is about seven times the cost of Alternative 2, and Alternative 4 is about nine times the cost of Alternative 2. Alternatives 2, 3 and 4 would require the State of Nevada to take full financial responsibility for O&M, as is required by CERCLA law and the NCP in the case of this fund-lead site.



Applying rapid-sampling research techniques at several mill sites in Six Mile Canyon with our NDEP partners (2019)

■ Discussion of the Evaluation of Alternatives

Common factors

Alternatives 2, 3, and 4 all include LUCs (comprehensive risk communication and a public education program, compliance, and monitoring) and modifications to the Nevada Department of Wildlife (NDOW) program that currently stocks gamefish and permits the commercial harvest of Sacramento blackfish. These alternatives also include EPA and NDEP oversight of any commercial or residential development and other construction activities, such as utility installation and maintenance, bridge construction and maintenance, and mucking of canals performed by local, state or other government agencies, so that impacted media impacted is properly handled. Similar ICs programs have been successfully implemented at OU1. Implementation will focus on the strengths and weaknesses of the existing fishing advisories and the addition of wild plant and waterfowl advisories, when conducting annual stakeholder surveys to be responsive to changes in risk behaviors. Monitoring programs in each alternative will also be used to document remedy performance.

Differences

Alternatives 3 and 4 provide for riverbank stabilization (Alternative 3) and riverbank stabilization/riverbed removal (Alternative 4); however, the scope of this active remediation is limited, and costs are significantly higher to implement. Neither will eliminate the ongoing release of mercury downstream, as these approaches will only address contamination hotspots.

Other Factors

Given the size of the area, the technical limitations to address mercury, and the random occurrence of elevated mercury concentrations in OU2, it would be challenging to completely protect human health and achieve long-term effectiveness. The primary exposure pathway is the consumption of fish. Multiple communities are present along 130 miles of the Carson River and associated waterbodies. Based on discussions with community leaders, the river is

used primarily for recreational fishing; there is no evidence of current subsistence fishing. A second exposure pathway is the consumption of wild plants and waterfowl by those living a subsistence way of life. Communications with tribal representatives indicate that these resources are only partially utilized within the Fallon Paiute Shoshone Reservation, where mercury concentrations are below background levels (naturally occurring). Annual surveys and performance monitoring will be used to determine the success of land use control programs and will continue until a final remedy is in place.

■ EPA Prefers Alternative 2

EPA believes that the existing threats to human health are significant and do not represent an acceptable condition or are likely to change appreciably in the near term. Based on the evaluation presented in this plan, Alternative 2, which consists of LUCs, compliance, and monitoring is the Preferred Alternative to address human health risks.

This is the Preferred Alternative because it provides the most reasonable approach, meeting threshold criteria and balancing factors of cost and benefits. Alternative 2 will meet the Interim Remedy RAOs by building on the success of the current approach at OU1. OU1 combines LUCs with oversight of construction activities to address impacted non-residential and residential development. For successful implementation, local, state, or federal agencies performing new construction or maintenance activities will need to continue to coordinate efforts with EPA or NDEP. This alternative is the least disruptive, provides the lowest cost, and protects the community.

Based on information currently available, EPA believes the Preferred Alternative best meets the threshold criteria and provides the most reasonable tradeoffs among the other alternatives with respect to the balancing criteria. EPA expects the Preferred Alternative to satisfy the following statutory

requirements of CERCLA §121(b): 1) will meet the Interim Remedy RAOs through the use of LUCs, compliance and monitoring; and are anticipated to be consistent with the final remedy that will provide overall protection of human health and the environment; 2) comply with ARARs; and 3) be cost-effective. However, this remedy does not utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable; or satisfy the preference for treatment as a principal element. These statutory requirements will be addressed in the final remedy.

The Preferred Alternative will be implemented as an interim remedy. Any final remedial action implemented for OU2 will require substantial time to implement. The LUCs and monitoring will be needed to:

- control consumption of impacted fish, waterfowl and wild plants
- monitor the performance of the remedy; and
- document when RAOs are achieved.

This interim remedy can be incorporated into the final remedy, and is flexible, so that the LUCs and monitoring can be modified as needed.



Collecting sediment to assess contamination in the Lahontan Reservoir during drought (2015)

Information Repositories

U.S. Environmental Protection Agency

Region 9 Superfund Regional Records Center (third floor)
75 Hawthorne Street
San Francisco, CA 94105
r9records@epa.gov | (415) 947 – 8717
Monday – Friday: 8 a.m. – 5 p.m.

Nevada State Library and Archives

100 N. Stewart Street
Carson City, NV 89701

Churchill County Library

553 S. Maine Street
Fallon, NV 89406

Dayton Valley Library

321 Old Dayton Valley Road
Dayton, NV 89403

Silver-Stage Library

P.O. Box 310
3905 Hwy 50 W
Silver Springs, NV 89429





Carson River Mercury Superfund Site

Public Participation and Solicitation of Comments

The EPA will accept public comments for 30 days — October 15 through November 15, 2021. This public comment period is an opportunity to comment on the Preferred Alternative and other alternatives EPA considered. EPA relied on the Administrative Record to produce the Proposed Plan.

The Preferred Alternative can change in response to public comment or new information.

Comments will be accepted by mail or email. Due to Covid-19, EPA staff are unable to travel to the CRMS communities for an in-person public meeting and will use a recorded presentation on this website instead to summarize the Proposed Plan (see epa.gov/superfund/carsonrivermercury). Please reference the “Carson River Mercury Superfund Site, Operable Unit 2, Proposed Plan” in your submitted comments. Send written comments by email to: bain.andrew@epa.gov or mail, **postmarked no later than November 15, 2021**, to the address below, or comment orally by leaving a voicemail at the toll-free number below:

Andrew Bain

Carson River Mercury Site, Remedial Project Manager
U.S. Environmental Protection Agency, Region 9 (SFD 8-2)
75 Hawthorne Street, San Francisco, CA 94105 – 3901
(800) 231 – 3075 | bain.andrew@epa.gov

Para ver la presentación resumida del plan propuesto con subtítulos en español, visite nuestra página web: epa.gov/superfund/carsonrivermercury

United States Environmental Protection Agency, Region 9
75 Hawthorne Street (SFD-6-3)
San Francisco, CA 94105
Attn: Andrew Bain (Carson River 9/2021)

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STAFF REPORTS

CARSON WATER SUBCONSERVANCY DISTRICT

TO: BOARD OF DIRECTORS

FROM: EDWIN D. JAMES

DATE: January 19, 2022

SUBJECT: Agenda Item #16 - For Information Only: Staff Report

DISCUSSION: The following is a list of meetings/activities (mostly virtual) attended by Ed James and staff since the last Board meeting on December 15, 2021:

- 12/16/21 – Ed & Debbie met with Douglas County staff to select contractor for Buckeye Creek Design project.
- 12/16/21 –Kaylee attended Soil Health & Water Quality online series hosted by Chuck Schembre of Nevada Division of Environmental Protection (NDEP)
- 12/16/21 – Ed & Debbie met with Douglas County & HDR staff to discuss the Carson River physical map revision & reviewed floodway maps in North Carson Valley.
- 12/17/21 – Ed & Debbie attended meeting re: Web Access project
- 12/17/21 - Ed, Brenda, & Shane attended 208 Planning Meeting with NDEP representative to discuss he next round of project funding.
- 12/17/21 – Ed & Shane met with State Parks representative about Recreational Trails Program (RTP) to resolve compliance contract issues.
- 1/3/22 – Brenda met with Neon regarding launch of *Bag It* video.
- 1/4/22 – Ed & Holly hosted kickoff meeting for Project Management Team (PMT) meeting for the Buckeye Design project.
- 1/5/22 – Ed & Debbie hosted kickoff meeting for Project Management Team (PMT) meeting for the Virginia City/ Six Mile Area Drainage Master Plan project.
- 1/6/22 – Ed attended Perennial Yield Panel Discussion meeting in preparation for the Nevada Water Resources Association (NWRA) Conference in February
- 1/6/22 – Ed & Debbie hosted kickoff meeting for Project Management Team (PMT) meeting for the East Carson City Area Drainage Master Plan (ADMP) project.
- 1/6/22 – Ed & Debbie hosted kickoff meeting for Project Management Team (PMT) Southeast Area Drainage Master Plan (ADMP) project.
- 1/6/22 – Brenda attended American Planners Association Southern Section Monthly meeting
- 1/10/22 – Winter 2021 Watershed Connections Newsletter released
- 1/10/22 – Launch of first Watershed Moment video *Bag It*
- 1/13/22 – Debbie attended Nevada Flood Awareness Week Debrief Meeting

- 1/13/22 – Brenda & Kaylee met with Dave Simpson, Mary Siders & Birgit Widegren, Nevada Division of Environmental Protection (NDEP) and Jim Gifford, Natural Resources Conservation Service (NRCS) to discuss NRCS' National Water Quality Initiative (NWQI) as it relates to NDEP's Carson Valley Vision Project and Carson River Adaptive Stewardship Plan (CRASP)
- 1/18/22 – Ed met with Rob Fellows & Mark Gookin review request for proposals.
- 1/18/22 Brenda attended Alpine Watershed Group (AWG) meeting
- 1/18/22 – Shane & Kaylee participated in Sierra Nevada Journeys (SNJ) Watershed STEM Night at Gardnerville Elementary School
- 1/19/22 – Ed & Catrina attended POOL/PACT Special Districts Round Table meeting
- 1/19/22 – Brenda attended Partners for Sustainable Nevada Midterm Meeting hosted by NDEP

STAFF RECOMMENDATION: Receive and file.

NO CORRESPONDENCE