

October 4, 2024

Karen Pecheny  
District Administrator  
Sweetwater County Conservation District  
550 Uinta Drive Suite E  
Green River, WY 82935

**Re: 2024 WWC Bitter Creek Site Visits and Semiannual Sampling**

Karen,

This memorandum provides an overview of 2024 Bitter Creek watershed field observations and semiannual sampling conducted by WWC Engineering for the SWCCD.

Site observation visits were made to several SWCCD monitoring sites on May 1, 2024, by Jason Herden and May 13, 2024, by Russ Hamilton and monitoring visits were made to the planned semiannual project sampling sites or backup sites on May 15, 2024, and September 11, 2024, by Troy Summers and Jason Herden. Field chemistry data and inorganic and *E. coli* water quality samples were collected during monitoring visits. BC-5 was too dry to sample in September and a sample was collected at alternate site BC-10 instead.

Sites visited included:

- DM-1 (historic) May 13
- TM-1 (historic) May 13
- BC-6 (planned) May 1, May 15 (sampled), September 11 (sampled)
- BC-11 (historic) May 13
- BC-10 (alternate) May 13, September 11 (sampled)
- SWC-1 (historic) May 13
- BC-5 (planned) May 1, May 15 (sampled), September 11 (dry)
- KC-2 (planned) May 1, May 15 (sampled), September 11 (sampled)
- KC-5 (planned) May 1, May 15 (sampled), September 11 (sampled)
- KC-1 (planned) May 1, May 15 (sampled), September 11 (sampled)
- BC-4 (planned) May 1, May 15 (sampled), September 11 (sampled)
- BC-3 (planned) May 15 (sampled), September 11 (sampled)
- BC-3A (planned) May 15 (sampled), September 11 (sampled)
- BC-2 (planned) May 1, May 15 (sampled), September 11 (sampled)

Inorganic samples were delivered to Wyoming Department of Agriculture Analytical Services in Laramie for analysis of chloride and the project inorganic sampling suite. Bacteria samples

were delivered to Wyoming Analytical Laboratories in Rock Springs (in May) and to the Sweetwater County Health Lab (in September), for analysis of Total coliform and *E. coli*.

Monitoring site location maps are attached as Figures 1 and 2. No significant changes were observed at the sampling sites between visits. Representative photos and descriptions from the site visits are attached. *E. coli* and chloride sample results and measured flows are provided for initial review in Table 1; more detailed review of the sample results in the context of historic data will be presented in the SWCCD Bitter Creek Watershed Project Annual Report in early 2025.

**Table 1 - 2024 Semiannual Monitoring *E. coli*, Chloride, and Flow Results**

Site	Date	<i>E. coli</i> (MPN/100 mL)	Chloride (mg/L)	Flow (cfs)
BC-2	5/15/2024	28.1	1,268.86	9.268
BC-2	9/11/2024	25.9	1,101.67	4.470
BC-3	5/15/2024	189.2	1,175.94	4.659
BC-3	9/11/2024	51.2	1,710.46	1.053
BC-3A	5/15/2024	4.1	735.33	0.030
BC-3A	9/11/2024	11.6	1,015.32	0.010
BC-4	5/15/2024	65.7	553.53	5.048
BC-4	9/11/2024	209.8	451.31	0.097
BC-5	5/15/2024	172.3	254.13	4.392
BC-10	9/11/2024	158.5	386.32	0.061
BC-6	5/15/2024	191.8	113.17	4.624
BC-6	9/11/2024	214.3	90.61	0.441
KC-1	5/15/2024	17.5	7,770.05	0.346
KC-1	9/11/2024	>2,419.6	8,393.40	0.078
KC-2	5/15/2024	30.9	571.50	0.104
KC-2	9/11/2024	238.2	216.38	0.005
KC-5	5/15/2024	4.1	5,334.28	0.072
KC-5	9/11/2024	>2,419.6	8,072.88	0.005

Please contact WWC with any questions or if additional information is needed.

Respectfully,



Russell Hamilton, P.E.  
Project Manager

Attachments: Site Photos, Figures 1 and 2

DM-1 Upstream (5/13/2024)



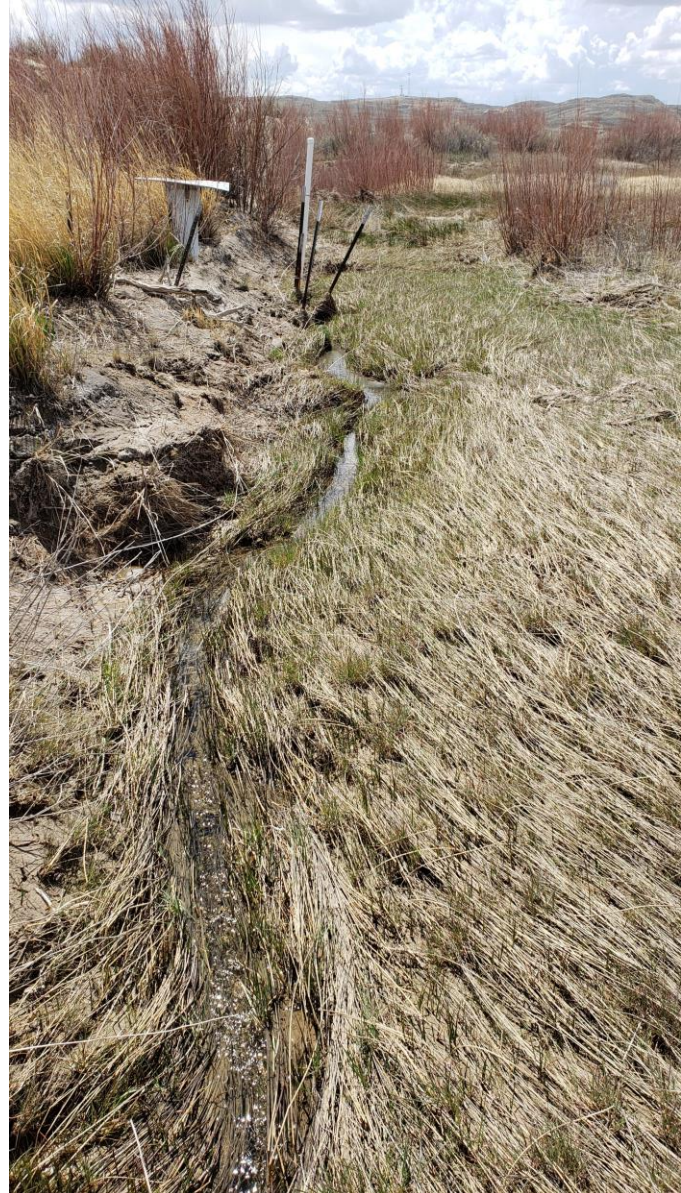
DM-1 Downstream (5/13/2024)



TM-1 Upstream (5/13/2024)



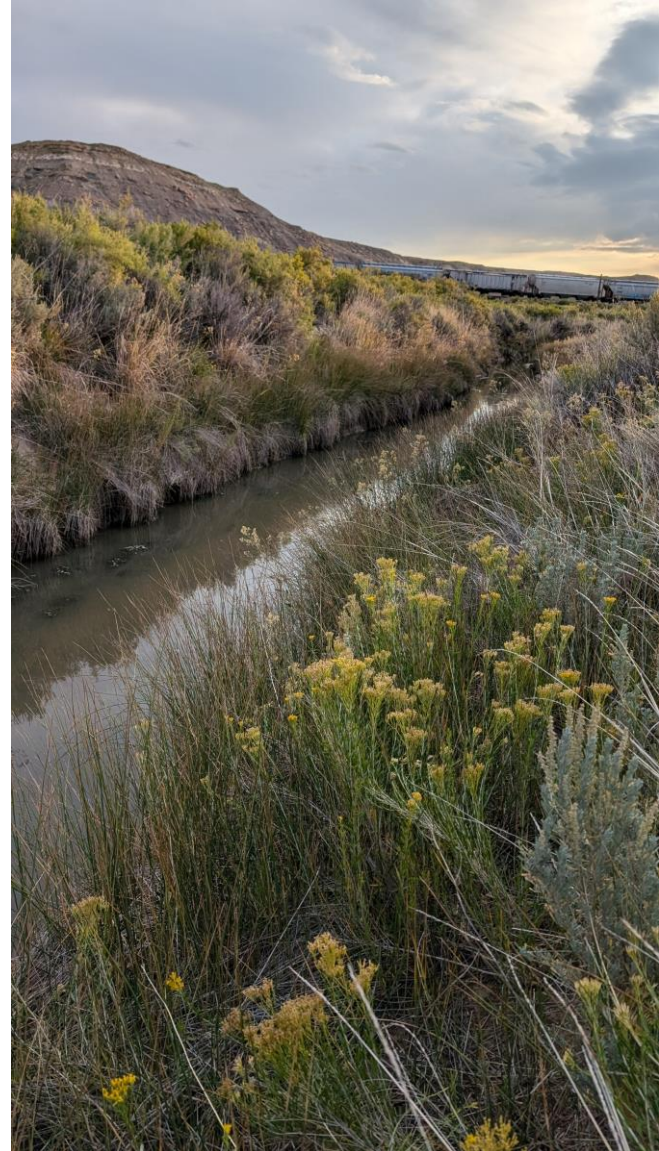
TM-1 Downstream (5/13/2024)



BC-6 Upstream (5/15/2024)



BC-6 Upstream (9/11/2024)



BC-11 Upstream (5/13/2024)



BC-10 Upstream (5/13/2024)



BC-10 Upstream (9/11/2024)



SWC-1 Upstream (5/13/2024)





BC-5 Upstream (5/15/2024)



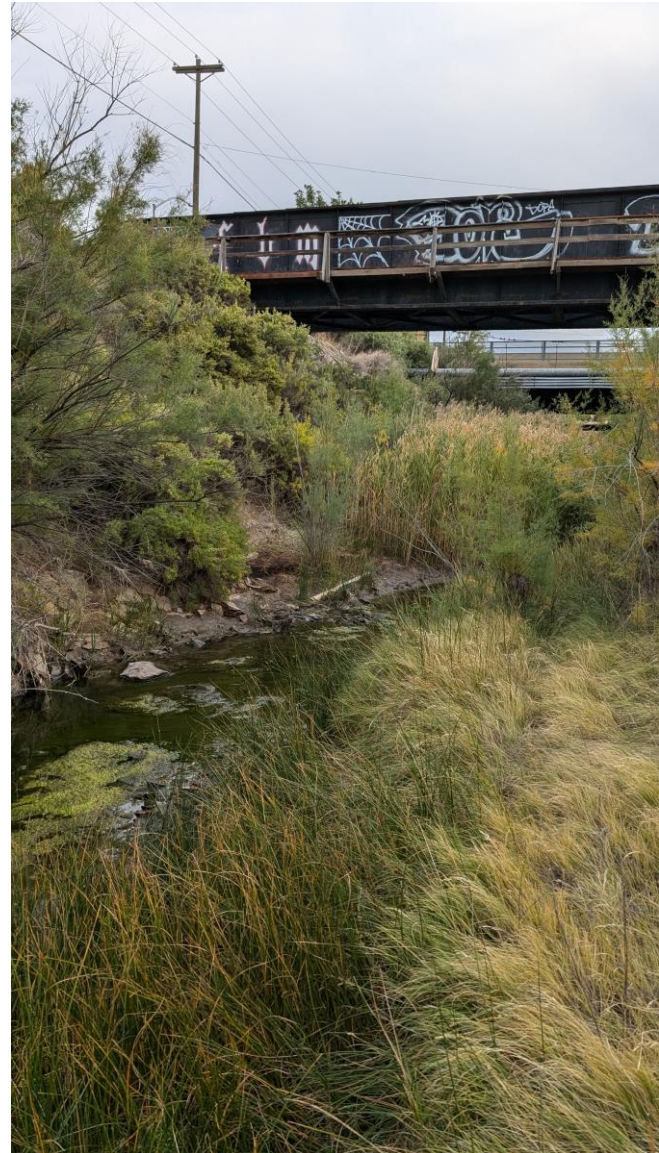
BC-5 Upstream (9/11/2024)



BC-4 Upstream (5/15/2024)



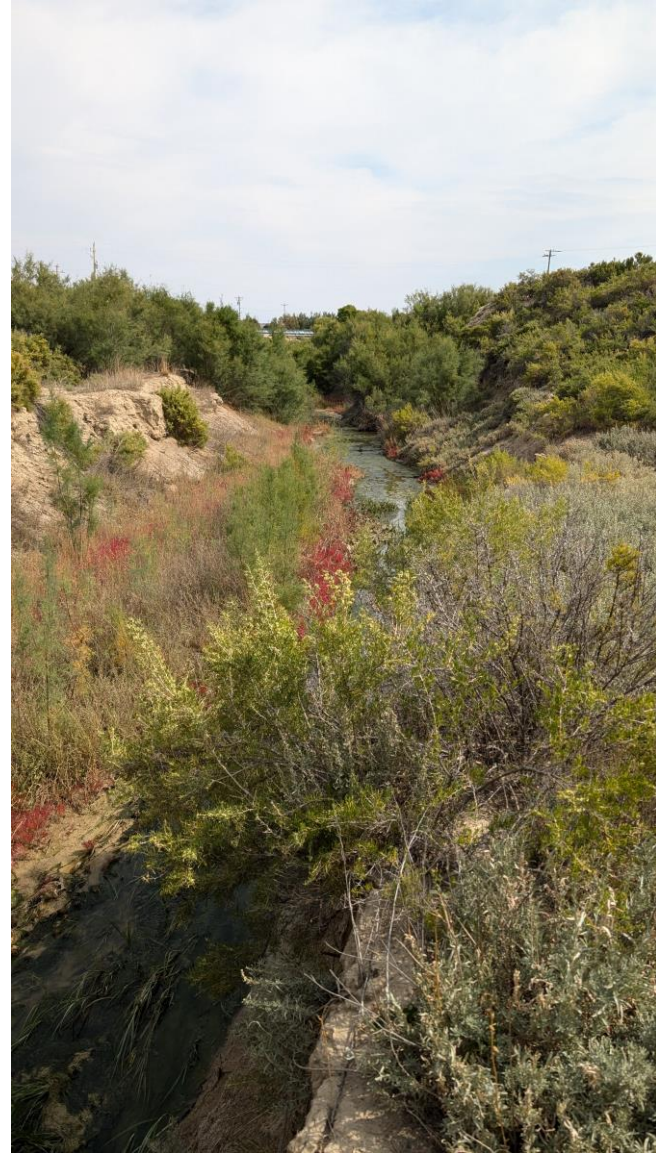
BC-4 Upstream (9/11/2024)



KC-2 Upstream (5/15/2024)



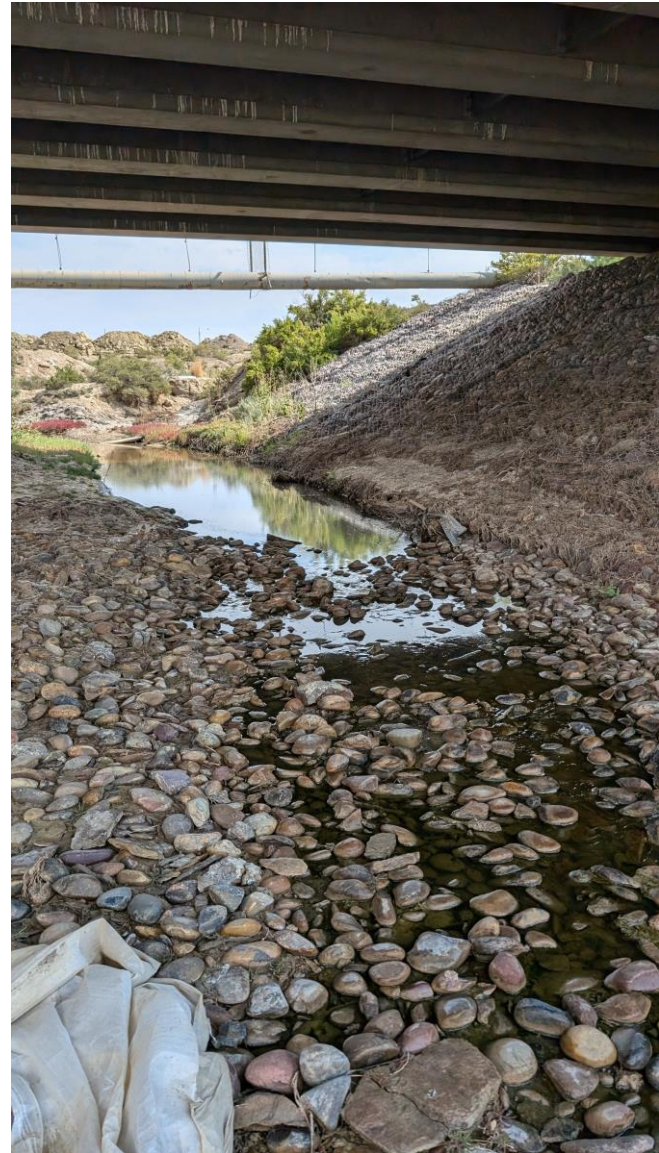
KC-2 Upstream (9/11/2024)



KC-5 Upstream (5/15/2024)



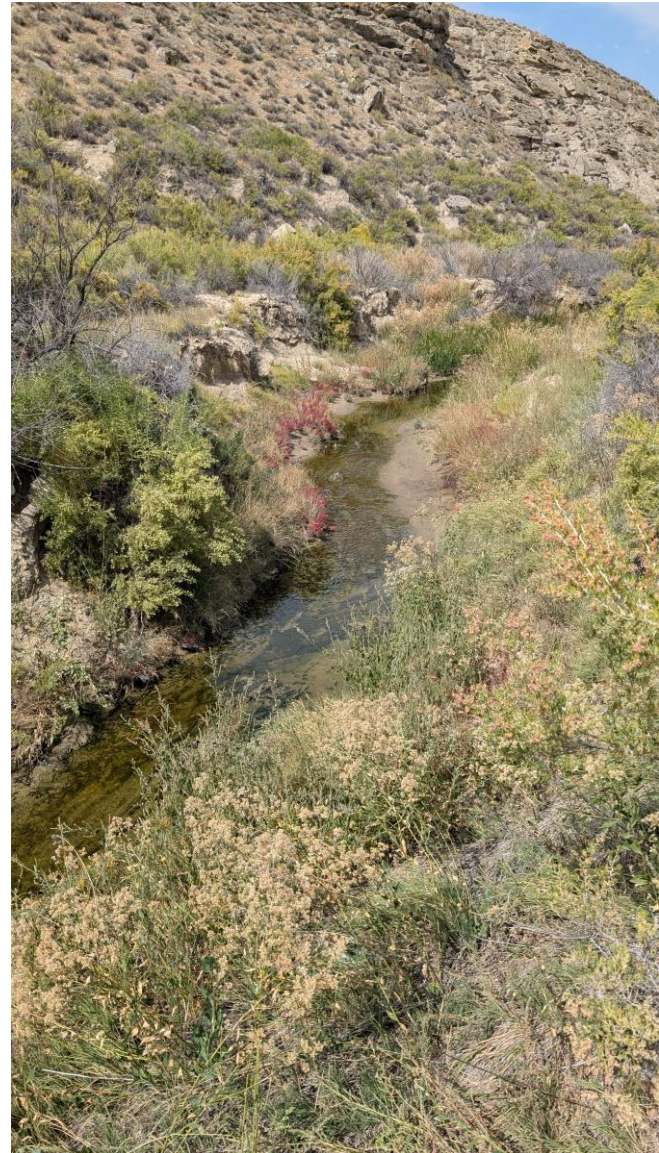
KC-5 Upstream (9/11/2024)



KC-1 Upstream (5/15/2024)



KC-1 Upstream (9/11/2024)



BC-3 Upstream (5/15/2024)



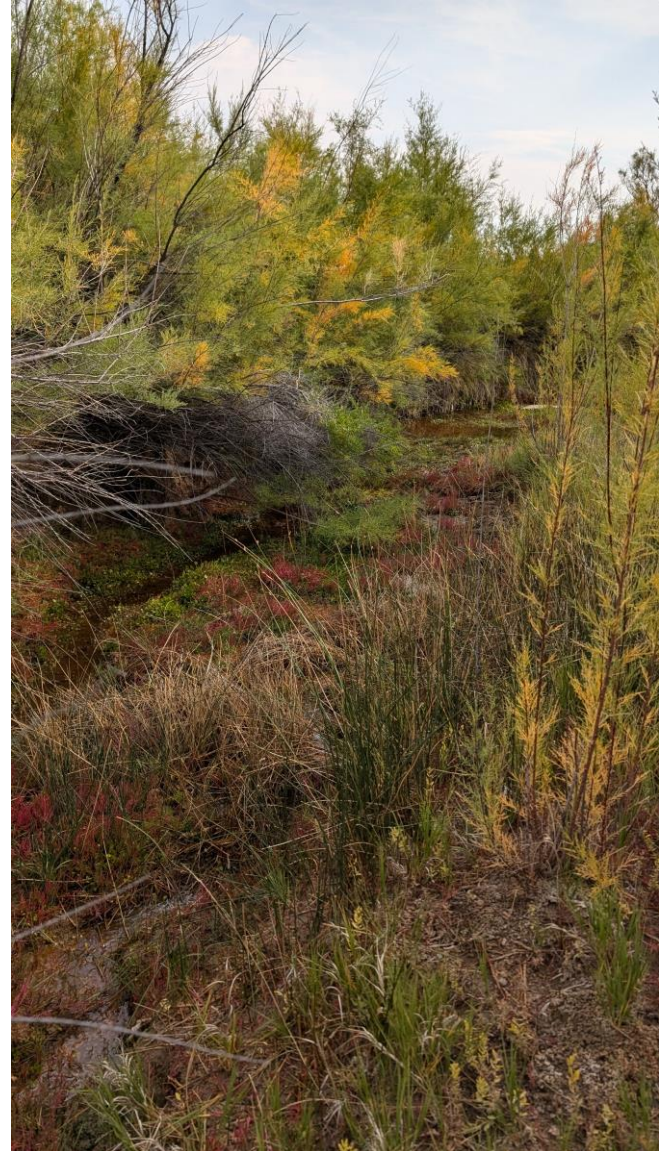
BC-3 Upstream (9/11/2024)



BC-3A Upstream (5/15/2024)



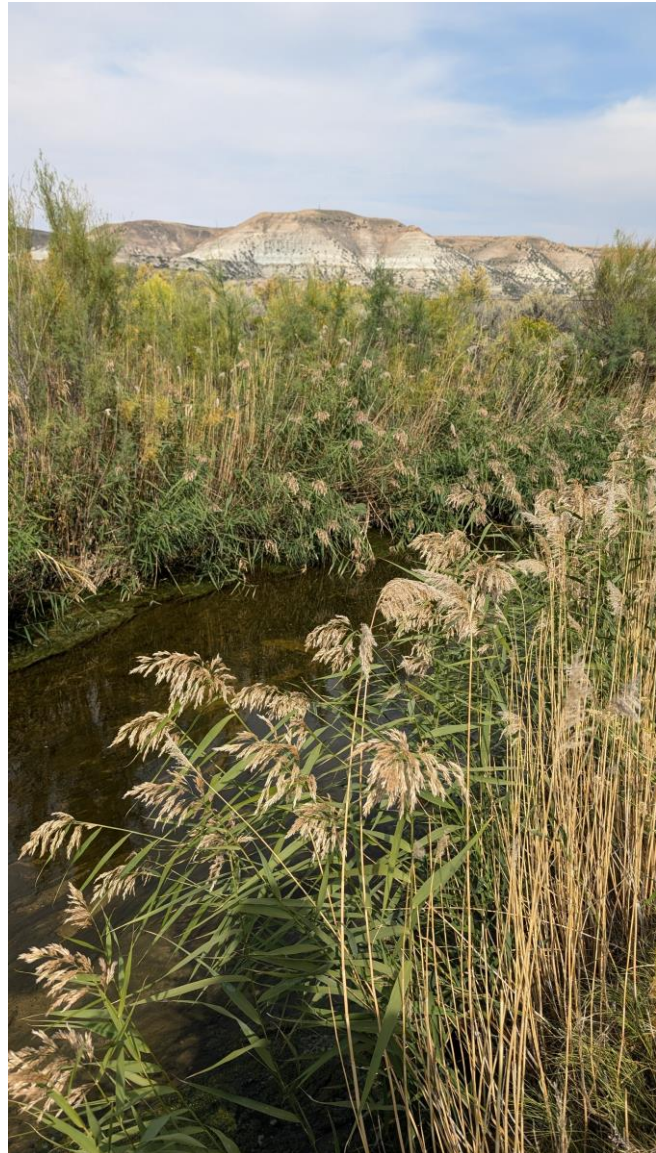
BC-3A Upstream (9/11/2024)



BC-2 Upstream (5/15/2024)

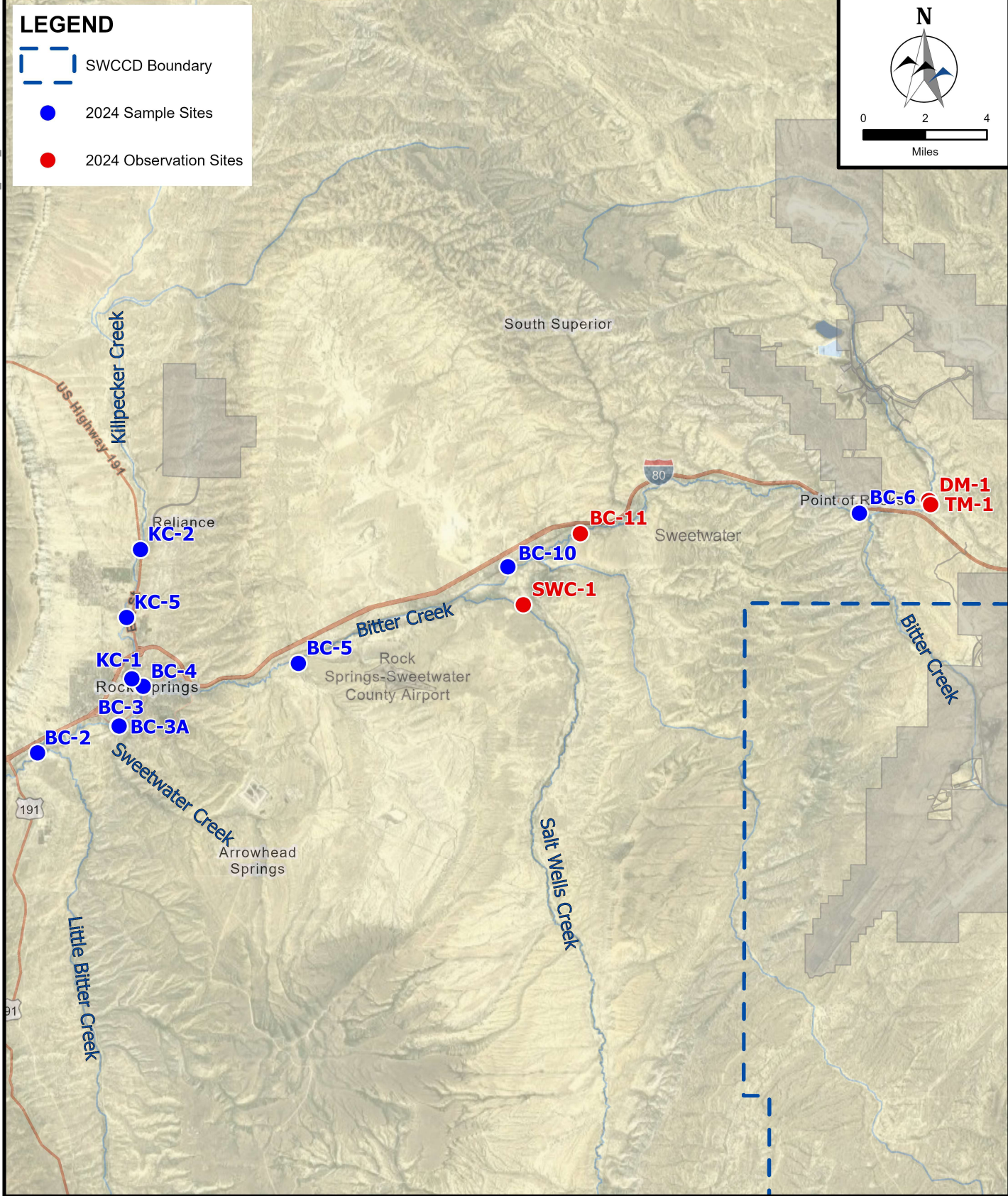


BC-2 Upstream (9/11/2024)



<K:\Sheridan\Sweetwater County Conservation District\2024299 Bitter Creek Project 2024-2025\08Reports\2024 Bitter Creek Monitoring.docx>





**LEGEND**

- SWCCD Boundary
- 2024 Sample Sites
- 2024 Observation Sites

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Miles

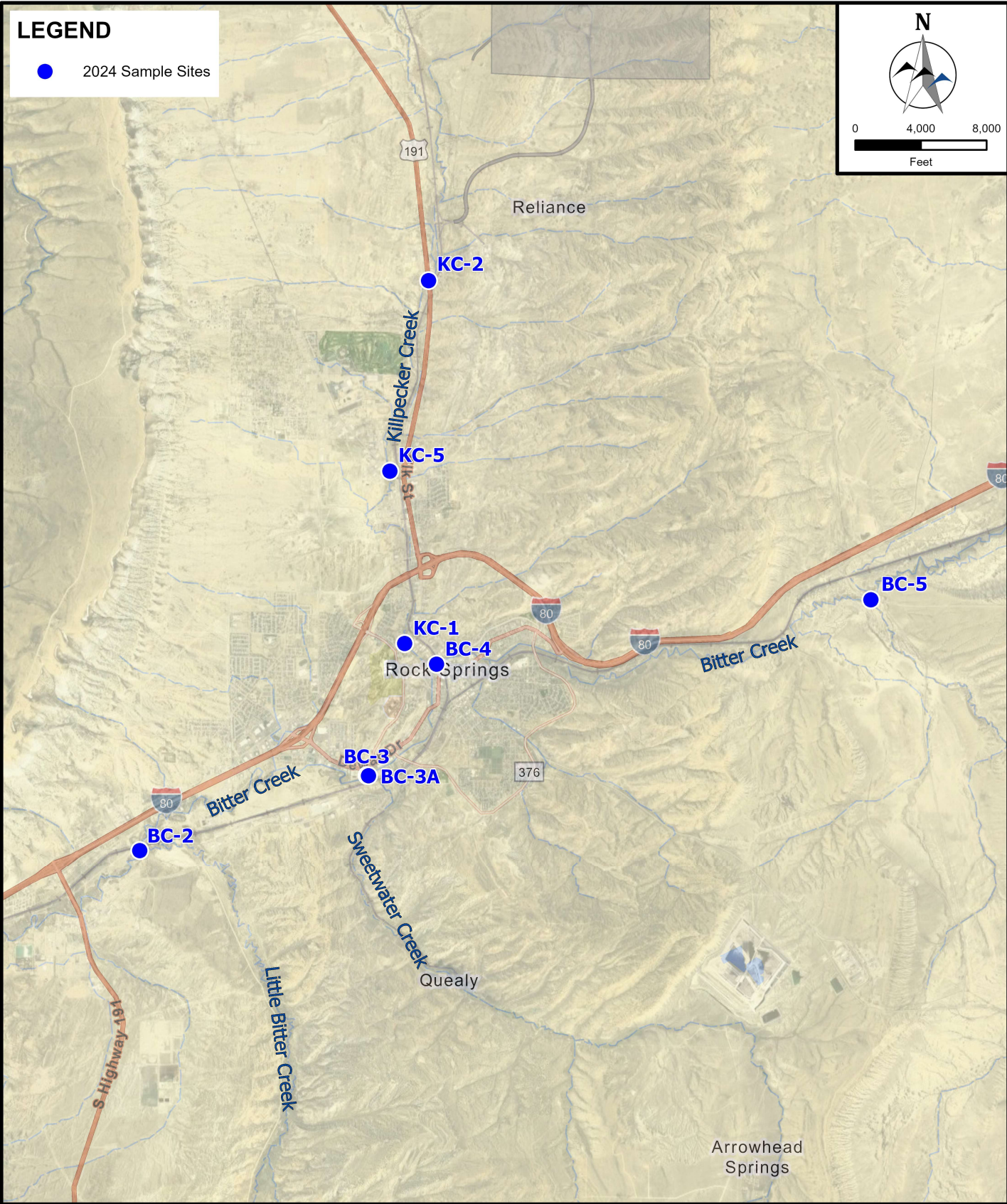
NO.	REVISION	BY	DATE
4	---	---	---
3	---	---	---
2	---	---	---
1	---	---	---
0	---	---	---

WWC ENGINEERING

DRAWN BY: WWC  
 CHECKED BY: RWH  
 APPROVED BY: RWH  
 DATE: 10/02/24

**SWCCD 2024 MONITORING LOCATIONS**

**FIGURE 1**



NO.	REVISION	BY	DATE
4	---	---	---
3	---	---	---
2	---	---	---
1	---	---	---
0	---	---	---



**SWCCD 2024 MONITORING LOCATIONS  
ROCK SPRINGS AREA**

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 APPROVED BY: RWH  
 DATE: 10/02/24

**FIGURE  
2**