9-ELEMENT WATERSHED-BASED PLAN

2024 ANNUAL REPORT

PUEBLO AREA COUNCIL OF GOVERNMENTS (PACOG)

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RESPEC

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PROGRESS SUMMARY

On December 29, 2022, the State of Colorado extended FEGA Contract #202200002051 with the Pueblo Area Council of Governments (PACOG) which was originally intended to support 208 Water Quality Management Plan implementation within Pueblo County using 604 (b) funding. Several contract extensions and additional cash infusions have occurred since then in Watershed Planning funding to assist PACOG with the development of an EPA 9-Element Watershed Plan through Colorado Water Resources and Power Development Authority. The focus of the funding was to help develop the planned EPA 9-Element Watershed Plan as identified through the pre-planning process completed in 2022. The stakeholder survey and evaluation completed by RESPEC and PACOG in 2022 assisted in identifying the watershed basin and constituents of concern of most interest to Pueblo County environmental stakeholders. The 2022 annual report identified the St. Charles River watershed basin as the location of most concern to Pueblo County participants and onsite wastewater treatment system (OWTS) failure and agricultural runoff as the non-point sources of most interest to evaluate. The 2023 annual report discussed existing water quality data, the final draft of the Sampling and Analysis Plan (SAP), and general progress of the 9-Element Watershed Plan. The 2024 Statement of Work (SOW) stated:

2024 STATEMENT OF WORK - PRIMARY ACTIVITY #1

1. Define priority basin, constituents, and nonpoint sources to evaluate in 9-Element Watershed Plan.
2. Gather existing water quality data as available on data sharing networks.
3. Characterize watershed conditions in priority areas.
4. Assess priority watershed conditions to determine whether specific waterbodies are impacted by nonpoint source pollution.
5. Identify water quality data gaps.
6. Finalize existing SAP to support sampling needs for the selected watershed basin and sources of pollution evaluation.
7. Identify existing sampling locations.
8. Upload existing water quality data to WQX (Water Quality Exchange).
9. Upload new water sampling data to WQX.
10. Estimate potential load reductions for targeted pollutants.
11. Identify priority areas for BMP project implementation.
12. Identify nonpoint source BMPs suitable for E. coli, nitrogen, phosphorus, iron, or manganese load reduction.
13. Keep a record of participants at:
    a. Stakeholder meetings
    b. Technical advisory team meetings
    c. Volunteer events

2024 ACTIVITIES

PRIMARY ACTIVITY #1– DEVELOP EPA 9-ELEMENT WATERSHED BASED PLAN

PART 1. DEFINE PRIORITY BASIN, CONSTITUENTS, AND NONPOINT SOURCES TO EVALUATE IN 9-ELEMENT WATERSHED PLAN

The identification of the priority basin was completed in 2022 and documented in Section 2, Part 6 of the 2022 Annual Report, which was identified as the St. Charles River. Priority nonpoint sources were also identified in the 2022 Annual Report, those being failed OWTS impacts on surface water and surface water runoff from agricultural sites (i.e. irrigation and feed lots). Also included in Section 2, Part 6 of the 2022 Annual report was a preliminary list of constituents of concern which RESPEC identified as potential indicators of OWTS and agricultural surface runoff contamination. However, this list has grown considerably from the one which RESPEC included in the final SAP. This list is included in Table 16 of the final SAP, and presented in **Table 1** below. The most current version of the SAP is included in **Appendix A**. These items are explored in Chapters 1 through 4 of the draft 9-Element Watershed Plan included in **Appendix J**.

Table 1. NPS Pollutants of concern and respective analysis entity.

RESPEC In-Field	COL - Analytical	UC-CEMS		
		Pollutants Screening Method [1]		Low-Level Method
Conductivity	Aluminum (T)	1, 7-dimethylxanthine	Imazapyr	2,4-D
Dissolved Oxygen	Ammonia (T)	10-Hydroxy-carbamazepine	Imidacloprid	Atenolol
pH	Arsenic (T)	4-methyl-benzotriazole	Iopromide	Atrazine
Temperature	Cadmium (D)	5-methyl-benzotriazole	Iprodione	Bupropion
	Chromium VI (T)	Acetaminophen	Isoproturon	Carbamazepine
	Copper (D)	Acetamiprid	Isoxaben	Clarithromycin
	E. Coli	Acetochlor	Isoxaflutole	Cotinine
	Hardness	Alachlor	Lamotrigine Glucuronide	DEET
	Iron (T)	Albuterol	Malathion	Dextrorphan
	Lead (D)	Amphetamine	Melamine	Diazinon
	Manganese (D)	Atorvastatin	Meprobamate	Diltiazem
	Molybdenum (T)	Azithromycin	Metalaxyl	Diphenhydramine
	Nickel (D)	Azoxystrobin	Metformin	Diuron
	Nitrate	Benzothiazole	Methadone	EDDP
	Nitrite (T)	Benzotriazole	Methidathion	Erythromycin
	Nitrogen (T)	Bromuconazole	Methiocarb	Fexofenadine
	Orthophosphate (D)	Buprofezin	Methiocarb sulfone	Fluridone
	Phosphorus (T)	Caffeine	Methomyl	Gemfibrozil
	Selenium (D)	Carbaryl	Metolachlor	Imazamox
	Selenium (T)	Carbendazim	Metribuzin	Lamotrigine
	Silver (D)	Carbofuran	Miconazole	Metoprolol
	Sulfate (T)	Cannabidiol	Naproxen	Penoxsulam
	Zinc (D)		Nicosulfuron	Propranolol

[1] Presence of such analytes/pollutants indicates evidence of NPS pollution from Agricultural Runoff and/or OWTS failure (See SAP Appendix A).

RESPEC In-Field	COL - Analytical	UC-CEMS		
		Chlorpyrifos methyl	Oxycodone	Sulfamethoxazole
		Cimetidine	Oxyfluorfen	Topramezone
		Codeine	Parathion-methyl	Tramadol
		Cyproconazole	Pendimethalin	Triclopyr
		Cyromazine	Phosmet	Triclosan
		Deethylatrazine	Piperonyl butoxide	Trimethoprim
		Dehydronifedipine	Profenofos	Venlafaxine
		Deisopropylatrazine	Prometon	
		Desmethyl-tramadol	Propazine	
		Desmethyl-venlafaxine	Propiconazole	
		Dextromethorphan	Propoxur	
		Diazepam	Prosulfuron	
		Dichlorvos	Ranitidine	
		Diclofenac	Simazine	
		Difenoconazole	Spinosyn A	
		Diflubenzuron	Spinosyn D	
		Dihydrocodeine	Sucralose	
		Dimethenamide	Sulfadimethoxine	
		Dimethoate	Tebuconazole	
		Dimethomorph	Tebufenozide	
		Erythrohydrobupropion	Terbuthylazine	
		Erythromycin Anhydrate	THC	
		Ethoprop	Thiabendazole	
		Fentanyl	Thiacloprid	
		Flufenacet	Thiophanate-methyl	
		Fluoxetine	Tributyl phosphate	
		Fluroxypyr	Triclocarban	
		Gabapentin	Triflumizole	
		Hydrocodone	Triphenyl phosphate	
		Hydroxyatrazine	Tris(2-chloroethyl) phosphate	
		Ibuprofen	Warfarin	

All constituents included in this list are significant indicators of potential OWTS contamination of surface water or impacts from agricultural surface runoff. Especially in the form of pesticides, fertilizers, or cattle feed lot impacts. All potential contaminants contained on this list were recommended by either Kenan Diker of CDPHE, Micheal Bartolo with Colorado State University, or Dr. Micheal Thurman and Dr. Imma Ferrer with the Center for Environmental Mass Spectrometry at the University of Colorado.

PART 2. GATHER EXISTING WATER QUALITY DATA AS AVAILABLE ON DATA SHARING NETWORKS.

As shown in **Appendix B**, RESPEC and PACOG have identified all existing surface water sampling locations on the St. Charles River. RESPEC has downloaded all available raw data from these sites.

PART 3. CHARACTERIZE WATERSHED CONDITIONS IN PRIORITY AREAS

RESPEC has begun to obtain information on the existing St. Charles River Basin watershed using the eRAMS tool. RESPEC will continue to analyze the available watershed characterization data in 2025. Chapter 2 of the draft 9-Element Watershed Plan (**Appendix J**) characterizes the priority basin.

PART 4. ASSESS PRIORITY WATERSHED CONDITIONS TO DETERMINE WHETHER SPECIFIC WATERBODIES ARE IMPACTED BY NONPOINT SOURCE POLLUTION

RESPEC and PACOG will analyze the existing conditions of the St. Charles River Basin watershed while obtaining additional data on existing and new constituents. The analysis is anticipated to continue into 2025 as additional data continues to be acquired by RESPEC and PACOG. Initially, however, preliminary evaluation of obtained data does appear to indicate contamination from OWTS failure as a nonpoint source contributor. **Appendix C** includes summaries of quarterly sample visits. **Appendix D** is all available data collected in 2024.

PART 5. IDENTIFY WATER QUALITY DATA GAPS

As RESPEC continues to collect existing water quality data and new water quality data from its surface water sampling effort, it will identify if there are any gaps in available and new surface water quality data. This effort will run into 2025. Some gaps were identified in 2024; CDPHE previously performed sampling and analysis of several constituents at the lower St. Charles River sampling site. CDPHE has since ceased this effort. RESPEC added these constituents to the SAP and is analyzing for these missing constituents quarterly. All data downloaded from all available sources is included in **Appendix E.**

PART 6. FINALIZE EXISTING SAP TO SUPPORT SAMPLING NEEDS FOR THE SELECTED WATERSHED BASIN AND SOURCES OF POLLUTION EVALUATION

As mentioned above in Part 1, the finalized SAP has been prepared and approved, and is included in **Appendix A** of this report.

PART 7. IDENTIFY EXISTING SAMPLING LOCATIONS

Applicable existing sampling locations are identified in the SAP and shown on maps in **Appendix B.**

PART 8. UPLOAD EXISTING WATER QUALITY DATA TO WQX

PACOG does not have water quality data prior to 2024 to upload to WQX. RESPEC did not find any public data sources that were not already available on WQX or AWQMS (Ambient Water Quality Management System).

PART 9. UPLOAD NEW WATER SAMPLING DATA TO WQX

RESPEC has successfully set up WQX organization account on behalf of PACOG under the name PACOG_WQX. RESPEC has uploaded all 2024 water quality data. Confirmation of upload can be found in **Appendix F.**

PART 10. ESTIMATE POTENTIAL LOAD REDUCTIONS FOR TARGETED POLLUTANTS

RESPEC and PACOG intend to complete this task following the acquisition and analysis of all water quality sampling obtained from existing and new sites as detailed in the SAP. Data collection will occur over 2 years. Final estimate of potential load reductions for targeted pollutants is anticipated in 2026.

The 9-Element Watershed Plan will use EPA's Pollutant Load Estimating Tool (PLET) model to estimate current loads and load reductions.

PART 11. IDENTIFY PRIORITY AREAS FOR BMP PROJECT IMPLEMENTATION

RESPEC and PACOG began inventorying the St. Charles River Basin for priority areas for BMP project implementation in 2024. RESPEC has mapped areas of heavy OWTS usage, and substantial work in the St. Charles Mesa area has already occurred through the efforts of Micheal Bartolo and Karl Mauch. It is anticipated that surface water quality sampling and analysis may indicate areas which are experiencing significant impacts from OWTS failures. Areas served by municipal wastewater service and OWTSs are mapped in **Appendix G.**

Identification of priority areas for BMP project implementation will be a priority for evaluation in 2025 for RESPEC and PACOG.

PART 12. IDENTIFY NONPOINT SOURCE BMPS SUITABLE FOR E. COLI, NITROGEN, PHOSPHORUS, IRON, OR MANGANESE LOAD REDUCTION

Like Part 11 above, RESPEC and PACOG began to inventory the St. Charles River Basin for priority areas for potential BMP project implementation in 2024. While priority areas such as locations adjacent to heavy OWTS presence may be easy to identify through mapping, identifying feasible candidates for BMP implementation is more challenging. These constituents are more commonly present in areas that are susceptible to surface water runoff from agricultural areas and cattle feed lots. These constituents, along with others identified in **Table 1**, help identify these priority nonpoint source areas. RESPEC will continue water quality sampling in 2025.

RESPEC and PACOG are working with CAWAG to identify OWTS consolidation opportunities within the St. Charles Mesa area as part of PACOG 604 (b) funding efforts. These efforts will be separate from current 9-Element Watershed Plan efforts.

Chapter 7 and Chapter 9 of the 9-Element Watershed Plan will identify types and locations of nonpoint source BMPs, which are currently being drafted.

PART 13. KEEP A RECORD OF PARTICIPANTS

RESPEC and PACOG kept a record of attendees at watershed related events in 2024.

There were two stakeholder meetings held with PACOG on January 15, 2024 and May 23, 2024. Minutes from these meetings are included in **Appendix H.**

Technical advisory team meetings were held with the Environmental Policy Advisory Committee (EPAC) on: February 1, 2024; April 4, 2024; June 6, 2024; and August 1, 2024. The scheduled October 3, 2024 meeting was canceled because a quorum was not available. The final technical advisory team meeting is planned for December 5, 2024. Minutes from each of these meetings is included in **Appendix I**.

No volunteer events were held in 2024.

RESPEC

APPENDIX A

ST. CHARLES RIVER SAMPLING AND ANALYSIS PLAN

EXTERNAL MEMORANDUM

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kate.macdonald@state.co.us

cc: Project Central File W0275.23008 – PACOG 2023 Watershed Planning

From: Natalie Acosta
Environmental Regulatory Specialist
RESPEC
5540 Tech Center Drive, Suite 100
Colorado Springs, CO 80919

Date: May 31, 2024

Subject: Sampling and Analysis Plan (version 6)

Table 1. Version history.

Version	Date	Revisions/ Notes
1	March 7, 2022	Original Sampling and Analysis Plan (SAP) submittal to CDPHE.
2	July 31, 2023	Update to reflect support of selected 9-Element Watershed Plan for St. Charles River Basin and incorporate previous comments from CDPHE following submittal of the SAP on March 7, 2023.
3	December 5, 2023	Update SAP to incorporate CDPHE comments dated August 22, 2023.
4	March 25, 2024	Updates made to the following tables: Table 16.NPS pollutants of concern and respective analysis entity. Table 20. Col – Analytical sample containers and preservation.
5	May 2, 2024	Update SAP to incorporate CDPHE comments dated April 24, 2024.
6	May 31, 2024	The following updates were made to Table 16 NPS pollutants of concern and respective analysis entity: Removed the separate constituent listings to represent that all listed constituents are to be sampled at both the Upper (Beulah) and Lower (Santa Fe) locations. Removed flow measurements from in-field sampling as PACOG intends to utilize USGS National Water Dashboard for measured flow data. Other updates made within the document to further describe the use of USGS National Water Dashboard to collect surface water flow data see section Surface Water Field Measurements.

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Table 2. Approval signatures.

Approved by:	Signature	Approval Date
CDPHE Restoration and Protection Unit - Watershed Section		
PACOG – Executive Director		

Table 3. Members and contacts.

Member	Contact	Email	Phone	Address
Colorado Department of Public Health and Environment (CDPHE)	Kate MacDonald Tamara Allen	kate.macdonald@state.co.us Tammy.allen@state.co.us	303-692-2887 303-692-3554	4300 Cherry Creek Drive South, Denver, CO 80246
Pueblo Area Council of Governments	Carmen Howard	howardca@pueblocounty.us	719-583-6100	229 West 12th Street Pueblo, CO 81003-2810
City of Pueblo Wastewater	Andra Ahrens	wastewater@pueblo.us	719-553-2898	1300 South Queens Ave, Pueblo, CO 81001
Pueblo West Metro. District	George Reichert	greichert@pwmd-co.us	719-547-5000	20 W Palmer Lake Pueblo West, CO 81007
Colorado City Metro. District	Jim Eccher	colocitymanager@ghvalley.net	719-676-3396	4497 Bent Brothers Blvd., Colorado City, Colorado
Environmental Policy Advisory Committee (EPAC)	Ted Lopez	tlopezcoyotenet@outlook.com	719-542-2500	Pueblo County, Colorado 229 West 12th Street Pueblo, CO 81003
Arkansas Basin Roundtable	Gracy Goodwin	arkbasinrt@gmai	-719-539-5425	-Colorado Water Conservation Boad 1313 Sherman Street Denver, CO 80203
Town of Boone	Forrest Prater	townofboone@yahoo.com	719-947-3311	-
Town of Avondale	Darrell Contreras	avondalewater@aol.com	719-947-3186	-
Town of Fowler	Brent Bitter	townoffowlerpublicworks@gmail.com	719-568-0659	114 E Cranston Ave. Fowler, CO 81039
Colorado Analytical	-	info@coloradolab.com	303-659-2313	10411 Heinz Way Commerce City CO 80640
Center for Environmental Mass Spectrometry University of Colorado (UC – CEMS)	Dr. Michael Thurman Dr. Imma Ferrer	michael.thurman@colorado.edu imma.ferrer@colorado.edu	303-735-6819	4001 Discovery Drive, 607 UCB Boulder, CO 80309

CONTENTS

OBJECTIVE AND PURPOSE

The objective of the sampling and analysis plan (SAP) is to provide the Pueblo Area Council of Governments (PACOG) guidance on the direct stream sampling of the St. Charles River.

The purpose of direct stream sampling the St. Charles River is to characterize the St. Charles River Outlet Watershed as a basis for developing effective management strategies to meet water quality goals.

WATER QUALITY AND LOAD REDUCTION

WATER QUALITY

In seeking to establish the suitable load reduction targets and other objectives (such as recreational, economic, ecological, etc.) within the St. Charles River Watershed, PACOG aims to explore the following questions through the sampling and analysis of the watershed.

1. What is the water quality status of the St. Charles River Watershed?
2. What are the causes of water quality impairment within the St. Charles River Watershed?
3. What are the indicators associated with Nonpoint Sources (NPS) of pollution?
4. What are the indicators associated with Point Sources (PS) of Pollution
5. How much of the water quality impairment (pollutant loading) is due to PSs of pollution within the St. Charles River Watershed?
6. How much of the water quality impairment (pollutant loading) is due to NPSs of pollution within the St. Charles River Watershed?
7. How are the NPS of pollution affecting water quality, aquatic life, recreational use and human health?
8. Are there locations that exhibit higher pollutant levels than other locations?
9. Are onsite wastewater treatment systems (OWTS) and Agricultural Runoff contributing to chronic or acute pollution levels, pollution hotspots?
10. Are there other potential NPS of pollution identified during the sampling events?
11. How much reduction in NPS pollutant loading is necessary to achieve attainment water quality status for the St. Charles River Watershed?
12. What measures or best management practices (BMPs) may be proposed/implemented to reduce such NPS pollutant loading?

DECISION CRITERIA

In the pursuit of defining appropriate load reduction objectives and other goals, PACOG plans to employ the subsequent decision criteria. These criteria will assist in evaluating the strategies necessary to attain the desired water quality in the St. Charles River Watershed.

Table 4. Decision Criteria

Decision Criteria	Description
Water Quality Standards	Assess the specific water quality standards set by regulatory bodies, such as the CDPHE, for the St. Charles River Watershed. Determine the acceptable pollutant levels for parameters such as dissolved oxygen, nutrients, sediment, and other pollutants.
Environmental Impacts	Evaluate the potential environmental impacts of current pollutant levels on aquatic life, ecosystems, and human health. Consider the adverse effects of pollutants on the St. Charles River Watershed health and the surrounding environment.

Decision Criteria	Description
Feasibility	Assess the feasibility of implementing measures to reduce pollutant loading to meet the required water quality standards. Consider available technologies, best management practices, and their effectiveness in reducing pollutants.
Compliance	Consider compliance with federal, state, and local regulations regarding water quality standards and pollutant limits. Determine the legal requirements and permissible pollutant levels for the river to achieve attainment status.
Cost	Evaluate the costs associated with implementing measures to reduce pollutant loading against the anticipated benefits. Consider the economic implications of different approaches to achieve attainment status.
Stakeholder Input	Consider input from stakeholders, including environmental groups, local communities, industries, and governmental agencies, regarding their perspectives on pollutant reduction strategies. Assess potential social, economic, and cultural impacts of the chosen measures.
Long-term Monitoring	Establish a plan for ongoing monitoring of water quality parameters to assess the effectiveness of implemented measures. Incorporate adaptive management strategies to adjust based on monitoring data and changing conditions.

OUTCOMES

The direct outcomes associated with completing the sampling and analysis activities presented in this document include the following.

1. Determine the baseline pollutant loading within the St. Charles River Watershed.
2. Identify sources of NPS of pollutant loading within the St. Charles River Watershed.
3. Identify appropriate best management practices targeting the NPS of pollution within the St. Charles River Watershed.
4. Collaborate with PACOG stakeholders to determine the most appropriate best management practices, using the decision criteria presented in Table 4. Decision Criteria , and establish pollutant loading reduction goals.
5. Implement best management practices.
6. Monitor and assess how pollutant loading changes over time with the implementation of best management practices.
7. Determine if best management practices are effective in meeting the pollutant reduction goals and re-strategize as necessary.
8. Achieve desired pollutant load reductions within the St. Charles River Watershed.

The overall outcomes associated with achieving the desired pollutant load reduction within the St. Charles River Watershed include the following.

Table 5. Overall outcomes of pollution reduction within the St. Charles River Watershed.

Outcomes	Description
Improved Water Quality	Better water clarity, reduced pollutant loading, and improved aquatic habitat.
Environmental Health and Biodiversity	Restoration and preservation of the St. Charles River Watershed ecosystem. Promoting healthier aquatic life, and other wildlife dependent on the river ecosystem.
Compliance and Regulatory Achievements	Meeting water quality standards and achieving attainment demonstrates compliance with environmental regulations and successful efforts in maintaining or restoring St. Charles River Watershed health.
Public Health Benefits	Providing safer water resources for recreational activities, drinking water, and agricultural uses thereby reducing health risks associated with contaminated water.

Outcomes	Description
Economic Benefits	Enhancing recreational opportunities, property values, and supporting industries reliant on clean water resources such as agriculture.
Stakeholder Satisfaction and Engagement	Increase fostering collaborative efforts for continued environmental stewardship
Long-term Sustainability	Implementing strategies and management practices to reduce pollutant loading contributes to the long-term sustainability of the river ecosystem. Ongoing monitoring and adaptive management further support sustainable management practices and continual improvement in water quality.

ROLES AND RESPONSIBILITIES

The roles and responsibilities associated with the sampling and analysis of the St. Charles River Outlet Watershed are as listed in Table 6. Roles and responsibilities.

Table 6. Roles and responsibilities

Role	Responsibility
Professional Engineer	Coordination of environmental data collection and upload data to the Ambient Water Quality Management System (AWQMS) websites. Coordinate with jurisdiction personnel to ensure consistent timing of sample collections.
Environmental Regulatory Compliance Specialist	Collection and transportation of direct water quality samples to Colorado Analytical Laboratory and the Center for Environmental Mass Spectrometry at the University of Colorado.
Analyze analytes and pollutants	Col-Analytical will determine the presence of analytes found in the St. Charles River samples1.
Analyze analytes and pollutants	UC-CEMS will determine the presence of analytes found in the St. Charles River samples.

ST. CHARLES RIVER WATERSHED

BACKGROUND

Historically, the St. Charles River Outlet Watershed was an area primarily used for agriculture and cattle grazing. The St. Charles Mesa, directly west of the St. Charles River Outlet Watershed, is recharged by the Bessemer ditch. The Bessemer Ditch has supplied irrigation water to farms and gardens within the St. Charles Mesa area since it was established, over 100 years ago. The headwaters of the St. Charles River are southwest of the St. Charles Mesa.

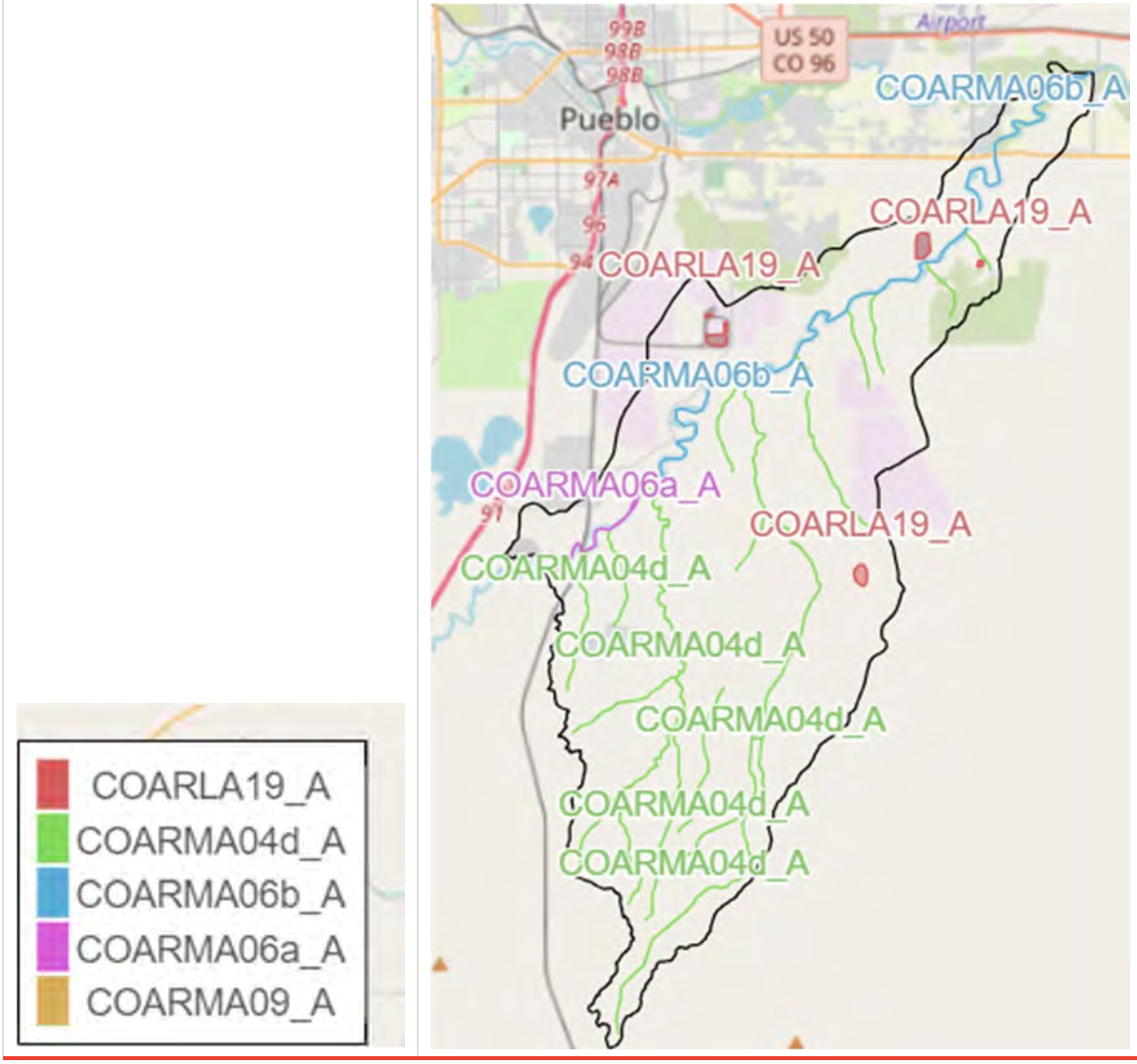
Table 7. St. Charles River Watershed relevant description.

Type	Value
Stream Segment Identification:	COARMA06b_A
Stream Segment Description:	Mainstem of the Saint Charles River from the confluence with Edson Arroyo to the confluence with the Arkansas River.

[1] See Table 16.NPS pollutants of concern and respective analysis entity.

Type	Value
Hydrological Unit Code (HUC):	110200021201
HUC Name:	Outlet St. Charles River (referred to as St. Charles River Outlet Watershed)
HUC Area, square miles:	58.04

Figure 1. Stream segments of the St. Charles River Outlet.



In the State of Colorado, there are several identified sources of NPS pollution. Such NPS of pollution have been listed in the Colorado's Nonpoint Source Program: 2022 Annual Report (Table 8. Colorado's Non-Point Source Program: 2022 Annual Report - NPS of pollution.).

Table 8. Colorado's Non-Point Source Program: 2022 Annual Report - NPS of pollution.

NPS of pollution
Abandoned Mine Lands
Agriculture

NPS of pollution
Atmospheric Deposition
Forestry
Hydromodification and Habitat Alteration
Urbanization

In 2022, PACOG stakeholders identified two major NPS pollution of concern for the St. Charles River Outlet Watershed including the following.

- Fertilizers, herbicides, insecticides, and salt from irrigation practices and other agricultural processes.
- Bacteria and nutrients from livestock, pet wastes and faulty septic systems (Onsite Water Treatment Systems, OWTS).

The PACOG St. Charles River direct stream sampling intends to determine if and how these NPS of pollution affect the water quality of the St. Charles River Outlet Watershed.

WATERBODY CONDITIONS

PROTECTED USES IN COLORADO

The Colorado Water Quality Commission has adopted five different categories of classified waterbody uses (Table 9. Colorado protected uses

Table 9. Colorado protected uses

Colorado Protected Uses	St. Charles River protected uses
Agriculture	✓
Aquatic Life	✓
Domestic Water Supply	✓
Recreation	✓
Wetlands	

REGULATION 63 – STREAM CLASSIFICATIONS AND WATER QUALITY STANDARDS

The Colorado Water Quality Commission has implemented the stream classifications and water quality standards for the St. Charles River Outlet presented in Figure 2. 5 CCR 1002-32 Regulation 32 Stream classifications and water quality standards.

Figure 2. 5 CCR 1002-32 Regulation 32 Stream classifications and water quality standards.

6b. Mainstem of the Saint Charles River from the confluence with Edson Arroyo to the confluence with the Arkansas River.

COARMA06B	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply
Qualifiers:	

Other:

*Selenium(acute) = See selenium assessment location at 32.6(4).
*Selenium(chronic) = See selenium assessment location at 32.6(4).
*Uranium(acute) = See 32.5(3) for details.
*Uranium(chronic) = See 32.5(3) for details.
*Temperature =
DM=32.6 and MWAT=WS-II from 3/1-11/30
DM=WS-II and MWAT=WS-II from 12/1-2/29

Physical and Biological	DM	MWAT
Temperature °C	varies*	varies*
	acute	chronic
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m²)	---	TVS
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	---	0.05
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Arsenic	340	---
Arsenic(T)	---	0.02-10 [A]
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	173*	50*
Silver	TVS	TVS
Uranium	varies*	varies*
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for further details on applied standards.

INTEGRATED WATER QUALITY MONIORING AND ASSESSMENT REPORT (305(B) REPORT)

As required by Section 303(d) of the Clean Water Act, the State of Colorado has prepared the 2022 Integrated Water Quality Monitoring and Assessment Report in which Colorado reported lists of waterbodies that do not meet water quality standards. In the 2022 Integrated Water Quality Monitoring and Assessment Report, the Saint Charles River received designations as presented in Table 10. Relevant St. Charles River 2022 Integrated Water Quality Monitoring and Assessment Report designation.

Table 10. Relevant St. Charles River 2022 Integrated Water Quality Monitoring and Assessment Report designation.

Stream Segment	IR Category	Aquatic Life Tier	Recreational Tier	Miles	Aquatic Life Use	Recreational Use	Agricultural Use	Water Supply Use
COARMA06b_A	303(d) list	Class 2 Warm Water Aquatic Life	Existing Use	15.5	Fully supporting	Fully supporting	Fully supporting	Not supported

STATE IMPAIRED WATER LISTING 303(D)

As required by the Section 303(d) of the Clean Water Act, the State of Colorado, within the Colorado Code of Regulations (CCR), has established 5 CCR 1002-93 (Regulation No. 93 – Colorado's Section 303(D) List of Impaired Waters and Monitoring and Evaluation List, Regulation #93). This regulation establishes the following.

- Water quality limited segments requiring Total Maximum Daily Loads (TMDLs) (5 CCR 93.2 (1)).
- Colorado's Monitoring and Evaluation List (5 CCR 93.2 (2)).

- Waterbodies where at least one classified use is not being supported but a TMDL is not needed because either a TMDL or a 4b plan has already been developed (5 CCR 93.2 (3)).

The listed impaired portion of the St Charles River is the mainstem from the confluence with Edson Arroyo to the confluence with the Arkansas River and has the following Regulation #93 designation.

Table 11. St. Charles River Outlet impairment listing (303(d)).

HUC	Waterbody Identification	Affected Use	Pollutant	EPA Category	Cycle Fist Listed
110200 021201	COARMA06b_A	Water Supply Use	Chromium VI (Total)	5.-303(d) List – Impaired without a TMDL completed	2024
			Manganese (dissolved)		2016

SAMPLING

DIRECT STREAM SAMPLING LOCATIONS

To understand the St. Charles River Outlet Watershed pollutant loading, PACOG has identified the following locations, also presented in
Figure 5. PACOG St. Charles River direct stream sampling locations. to perform direct stream sampling.

Table 12. PACOG St. Charles River direct stream sampling locations.

Name	Description	Latitude/ Longitude
Upper (Beulah)	South of Beulah, County Road 230 S crossing of the St. Charles River.	38.03110813389672, -104.9438017935073
Lower (Santa Fe)	Santa Fe Drive crossing of the St. Charles River (St. Charles River at Business Route 50)	38.245759, -104.489434

Figures 3 and 4. St. Charles River upstream sampling location, South of Beulah.

Figures 4 and 6. St Charles River at Santa Fe (Business Route 50), West of St. Charles Mesa.

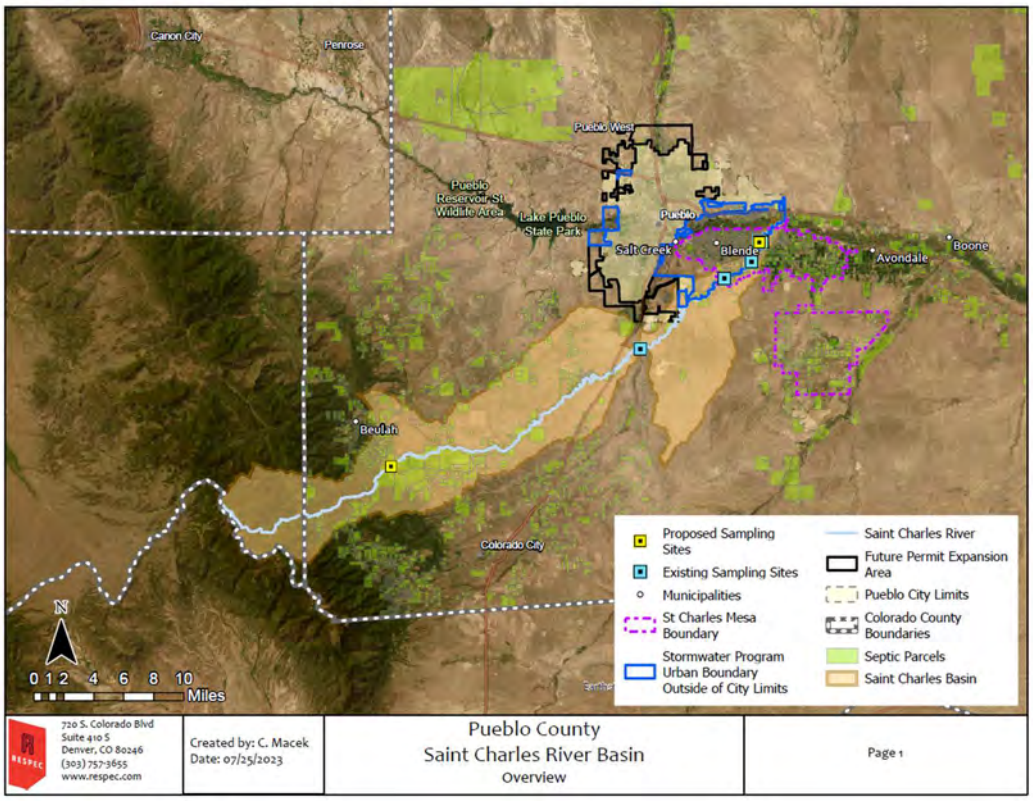
EXISTING WATER QUALITY MONITORING ON THE ST. CHARLES RIVER

It is anticipated that PACOG may compare sampling results from this study to historical and ongoing (existing) monitoring performed and/or data managed by entities such as the US. Geological Survey (USGS), CDPHE – Water Quality Control Division (WQCD) AWQMS, and the Colorado Department of Agriculture (CDA). The following monitoring locations are as presented in Table 13. Existing monitoring sites on the St. Charles River.

Table 13. Existing monitoring sites on the St. Charles River.

Site Description	Site Identification	Latitude	Longitude	Entity
St. Charles River at Business Route 50	21COL001_WQX-7503	38.245517	104.489515	CDPHE-WQCD
St. Charles River at S Road	21COL001_WQX-7503A	38.2266480000	-104.4995180000	CDPHE-WQCD
St. Charles River South of Baxter	21COL001_WQX-000086	38.245442	-104.48946	CDPHE-WQCD
St. Charles River at Vineland, CO.	07108900	38.24555835	-104.4863597	USGS
St. Charles River above 27th Lane Bridge	21COL001_WQX-7289 C	38.2107400000	-104.5330610000	CDPHE-WQCD

Figure 5. PACOG St. Charles River direct stream sampling locations.



SCHEDULE

DIRECT STREAM SAMPLING SCHEDULE

In 2024-2025, PACOG intends to perform direct stream sampling on the St. Charles River according to the schedule presented in Table 14. PACOG 2024 – 2025 direct streams sampling collection schedule.

Table 14. PACOG 2024 – 2025 direct streams sampling collection schedule.

Quarter	Months	Number of Sampling Events	Flow Regime	Media
1st	January - March	1	Winter – Low flow	Surface Water
2nd	April – June	1	Spring - Runoff	Surface Water

Quarter	Months	Number of Sampling Events	Flow Regime	Media
3rd	July - September	1	Summer - Base flow	Surface Water
4th	October - December	1	Fall – Low Flow	Surface Water

DIRECT STREAM PROJECT SCHEDULE

PACOG intends to follow the sampling schedule presented in Table 15. PACOG St. Charles direct stream sampling project schedule.

Table 15. PACOG St. Charles direct stream sampling project schedule.

Activity	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026
Direct Sampling Events	■	■	■	■	■	■	■	■		
Submittal of WQ Samples to Laboratories	■	■	■	■	■	■	■	■		
Data Verification and Validation		■	■	■	■	■	■	■	■	
Upload Data to AWQMS database			■	■	■	■	■	■	■	■

PARAMETERS

The NPS pollutants of concern and parameters PACOG intends to study during the 2024-2025 direct sampling of the St. Charles River are presented in Table 16.NPS pollutants of concern and respective analysis entity.

Table 16.NPS pollutants of concern and respective analysis entity.

RESPEC In-Field	COL - Analytical	UC-CEMS		
		Pollutants Screening Method [2]		Low-Level Method*
Conductivity	Aluminum (T)	1, 7-dimethylxanthine	Imazapyr	2,4-D
Dissolved Oxygen	Ammonia (T)	10-Hydroxy-carbamazepine	Imidacloprid	Atenolol
pH	Arsenic (T)	4-methyl-benzotriazole	Iopromide	Atrazine
Temperature	Cadmium (D)	5-methyl-benzotriazole	Iprodione	Bupropion
	Chromium-VI (T)	Acetaminophen	Isoproturon	Carbamazepine
	Copper (D)	Acetamiprid	Isoxaben	Clarithromycin
	Dissolved Oxygen	Acetochlor	Isoxaflutole	Cotinine
	E. coli		Lamotrigine Glucuronide	DEET
	Hardness			

[2] Presence of such analytes/pollutants indicates evidence of NPS pollution from Agricultural Runoff and/or OWTS failure (See Appendix A).

RESPEC In-Field	COL - Analytical	UC-CEMS		
	Iron (T)	Alachlor	Malathion	Dextrorphan
	Lead (D)	Albuterol	Melamine	Diazinon
	Manganese (D)	Amphetamine	Meprobamate	Diltiazem
	Molybdenum (T)	Atorvastatin	Metalaxyl	Diphenhydramine
	Nickel (D)	Azithromycin	Metformin	Diuron
	Nitrate	Azoxystrobin	Methadone	EDDP
	Nitrite (T)	Benzothiazole	Methidathion	Erythromycin
	Nitrogen (T)	Benzotriazole	Methiocarb	Fexofenadine
	Orthophosphate (D)	Bromuconazole	Methiocarb sulfone	Fluridone
	Phosphorus (T)	Buprofezin	Methomyl	Gemfibrozil
	Selenium (D)	Caffeine	Metolachlor	Imazamox
	Selenium (T)	Carbaryl	Metribuzin	Lamotrigine
	Silver (D)	Carbendazim	Miconazole	Metoprolol
	Sulfate (T)	Carbofuran	Naproxen	Penoxsulam
	Zinc (D)	Cannabidiol	Nicosulfuron	Propranolol
		Chlorpyrifos methyl	Oxycodone	Sulfamethoxazole
		Cimetidine	Oxyfluorfen	Topramezone
		Codeine	Parathion-methyl	Tramadol
		Cyproconazole	Pendimethalin	Triclopyr
		Cyromazine	Phosmet	Triclosan
		Deethylatrazine	Piperonyl butoxide	Trimethoprim
		Dehydronifedipine	Profenofos	Venlafaxine
		Deisopropylatrazine	Prometon	
		Desmethyl-tramadol	Propazine	
		Desmethyl-venlafaxine	Propiconazole	
		Dextromethorphan	Propoxur	
		Diazepam	Prosulfuron	
		Dichlorvos	Ranitidine	
		Diclofenac	Simazine	
		Difenoconazole	Spinosyn A	
		Diflubenzuron	Spinosyn D	
		Dihydrocodeine	Sucralose	
		Dimethenamide	Sulfadimethoxine	
		Dimethoate	Tebuconazole	
		Dimethomorph	Tebufenozide	
		Erythrohydrobupropion	Terbuthylazine	
		Erythromycin Anhydrate	THC	
		Ethoprop	Thiabendazole	
		Fentanyl	Thiacloprid	
		Flufenacet	Thiophanate-methyl	
		Fluoxetine	Tributyl phosphate	

RESPEC In-Field	COL - Analytical	UC-CEMS		
		Fluroxypyr Gabapentin Hydrocodone Hydroxyatrazine Ibuprofen	Triclocarban Triflumizole Triphenyl phosphate Tris(2-chloroethyl) phosphate Warfarin	

EQUIPMENT

The following sections detail the field equipment that will be necessary to execute this SAP and calibration of equipment, as applicable, to ensure collection of defensible data.

EQUIPMENT LIST

The following field equipment is needed to complete the sampling and analysis program:

Table 17. Equipment list.

Equipment		
/ Multi-sensor sonde and handheld device with GPS receiver. / 47 mm Swinnex filter holder. / 47 mm and 0.45 µM pore size cellulose acetate membrane filters. / 47 mm and #28 pore size glass fiber "roughing" pre-filters.	/ Sterile plastic syringe. / Coolers and cubed ice preservative. / Dry ice, if applicable. / Bucket/rope. / Plastic forceps. / Calibration cups or sleeves / Nitrile gloves. / Indelible markers and pencils.	/ Bottle Labels / De-ionized laboratory water (D.I.). / Field notebooks or electronic forms stored on handhelds. / Laboratory chain-of-custody (COC) forms. / Personal Protection Equipment. / Sample containers.

FIELD INSTRUMENT CALIBRATION

All monitoring equipment used in the field will be maintained according to the manufacturer's recommendations. Meters should be calibrated before use each day, and per instructions in the operations manual. Personnel using field instruments are expected to read and be thoroughly familiar with all procedures detailed in SOPs and instruction manuals for all field instruments.

SAMPLING PROCEDURES

SURFACE WATER SAMPLE COLLECTION

Stream samples are collected as "grab" samples. The grab sample is collected by filling each sample bottle directly from the stream. Alternatively, a sampling container could be used to collect a large enough volume of water to fill all sample bottles. The grab sample should be collected from the main channel thalweg (the line of fastest flow in the stream channel and often the deepest), just below the water surface. If stream conditions are unsafe for the sampler to wade into the thalweg, the grab sample may be made from the stream bank where active flow occurs or where stream flow is directed along the bank, or from a bridge using a thoroughly rinsed bucket.

SURFACE WATER FIELD MEASUREMENTS

Field measurements for pH, temperature, dissolved oxygen, and specific conductance will be made at the same time when water chemistry samples are collected. These measurements can be made in situ (directly from the stream), or from a discrete sample collected in a container (bucket). These measurements shall be recorded using the field equipment identified in this SAP.

PACOG intends on seeking a reliable means to measure flow data in-field, until such time, PACOG will gather surface water flow data from the USGS National Water Dashboard (USGS | National Water Dashboard). PACOG has selected USGS monitoring site location USGS 07108900, St. Charles River at Vineland, CO to gather surface water flow data. USGS monitoring location USGS 07108900 was selected as it is in close proximity to the Santa Fe sampling location data and will reflect conditions of those for each sampling event. The USGS National Water Dashboard maintains an inventory of readily available historical flow data. After sampling has occurred and within a reasonable amount of time, the USGS Station Summary for site USGS 07108900 will be reviewed and the surface water flow rate will be recorded in sampling records.

SAMPLE CONTAINERS AND PRESERVATION

To determine the pollutant loadings within the St. Charles River Watershed, personnel will collect water quality samples to be analyzed by the selected laboratories using the collection techniques in the following tables. Most samples will be placed in a cooler and stored on cubed ice to 4 degrees Celsius immediately after collection for transport to the appropriate laboratory or other sub-contracted laboratories.

Table 18. RESPEC in-field assessment.

Analyte/ Parameter/ Pollutant	Upper (Beulah)	Lower (Santa Fe)	Analysis Method
Conductivity	Yes	Yes	Probe
Dissolved Oxygen	Yes	Yes	Probe
pH	Yes	Yes	Probe
Temperature	Yes	Yes	Probe

Table 19. UC - CEMS sample containers and preservation.

Analyte/ Parameter/ Pollutant	Upper (Beulah)	Lower (Santa Fe)	Analysis Method	Bottle Type/ Size	Field Preservative	Holding Time	Laboratory
Low Level and Screening Method[3]	Yes	Yes	EPA Method 1694	Amber Glass/ Sufficient Volume	Cool to 4°C	48 Hours	UC - CEMS

Table 20. Col – Analytical sample containers and preservation.

Analyte/ Parameter/ Pollutant	Upper (Beulah)	Lower (Santa Fe)	Analysis Method	Bottle Type/ Size	Field Preservative	Holding Time	Laboratory
Aluminum	Yes	Yes	EPA 200.7	Amber Glass/ Sufficient Volume	Cool to 4°C	14 DAYS	COL-ANALYTICAL

[3] See Table 16.NPS pollutants of concern and respective analysis entity.

Analyte/ Parameter/ Pollutant	Upper (Beulah)	Lower (Santa Fe)	Analysis Method	Bottle Type/ Size	Field Preservative	Holding Time	Laboratory
Ammonia	Yes	Yes	SM 4500-NH3-G	Plastic or Glass/ Sufficient Volume	Cool to 4°C	28 DAYS	COL-ANALYTICAL
Arsenic	Yes	Yes	EPA 200.7	Amber Glass/ Sufficient Volume	Cool to 4°C	14 DAYS	COL-ANALYTICAL
Cadmium	Yes	No	EPA 200.7	Amber Glass/ Sufficient Volume	Cool to 4°C	14 DAYS	COL-ANALYTICAL
Chromium VI	Yes	Yes	EPA 200.7	Amber Glass/ Sufficient Volume	Cool to 4°C	14 DAYS	COL-ANALYTICAL
Copper	Yes	Yes	EPA 200.7	Amber Glass/ Sufficient Volume	Cool to 4°C	14 DAYS	COL-ANALYTICAL
E. coli	Yes	Yes	Colilert	IDEXX bottles/ 120 ml	Cool to 4°C	6 hours	COL-ANALYTICAL
Hardness	Yes	No	EPA 130.1	Amber Glass/ Sufficient Volume	4°C, HN03 to pH < 2.	14 DAYS	TBD
Iron	Yes	Yes	EPA 200.7	Amber Glass/ Sufficient Volume	Cool to 4°C	14 DAYS	COL-ANALYTICAL
Lead	Yes	Yes	EPA 200.7	Amber Glass/ Sufficient Volume	Cool to 4°C	14 DAYS	COL-ANALYTICAL
Manganese	Yes	Yes	EPA 200.7	Amber Glass/ Sufficient Volume	Cool to 4°C	14 DAYS	COL-ANALYTICAL
Molybdenum	Yes	No	EPA 200.7	Amber Glass/ Sufficient Volume	Cool to 4°C	14 DAYS	COL-ANALYTICAL
Nickel	Yes	Yes	EPA 200.7	Amber Glass/ Sufficient Volume	Cool to 4°C	14 DAYS	COL-ANALYTICAL
Nitrate	Yes	Yes	EPA 300.0	Glass or Polyethylene/ Sufficient Volume	Cool to 4°C	48 HOURS	COL-ANALYTICAL
Nitrite	Yes	Yes	EPA 300.0	Glass or Polyethylene/ Sufficient Volume	Cool to 4°C	48 HOURS	COL-ANALYTICAL
Nitrogen	Yes	Yes	EPA 300.0	Glass or Polyethylene/ Sufficient Volume	H 2SO4 to a pH <2 and cooled to 4°C	28 DAYS	COL-ANALYTICAL
Orthophosphate	Yes	Yes	EPA 300.0	Glass or Polyethylene/ Sufficient Volume	Cool to 4°C	48 HOURS	COL-ANALYTICAL
Phosphorus	Yes	Yes	EPA 365.1	Plastic or Glass/ Sufficient Volume	H 2SO4 to a pH <2 and cooled to 4°C	28 DAYS	COL-ANALYTICAL
Selenium	Yes	Yes	EPA 200.7	Amber Glass/ Sufficient Volume	Cool to 4°C	14 DAYS	COL-ANALYTICAL

Analyte/ Parameter/ Pollutant	Upper (Beulah)	Lower (Santa Fe)	Analysis Method	Bottle Type/ Size	Field Preservative	Holding Time	Laboratory
Silver	Yes	Yes	EPA 200.7	Amber Glass/ Sufficient Volume	Cool to 4°C	14 DAYS	COL-ANALYTICAL
Sulfate	Yes	Yes	EPA 300.0	Glass or Polyethylene/ Sufficient Volume	Cool to 4°C	28 DAYS	COL-ANALYTICAL
Zinc	Yes	No	EPA 200.7	Amber Glass/ Sufficient Volume	Cool to 4°C	14 DAYS	COL-ANALYTICAL

SAMPLE DOCUMENTATION AND HANDLING

The following sections describe the documentation of field activities and documentation and handling of samples.

FIELD DOCUMENTATION

Field notebooks, including daily field forms and photographs will be used to document field activities.

FIELD LOG NOTEBOOK AND FIELD FORMS

Personnel shall document all monitoring activities using standard field log notebooks, which contain pre-printed field log forms on Rite-in-the-Rain waterproof paper. Each sampling event will have its own log entry, with all pertinent data requested on the field log form provided. Each log entry will include at least the following; sample date and sample ID number, site number and description, sample collector's name, site latitude and longitude and associated GPS documenting data, start/sample/end times, how and where the sample was collected, whether samples were collected directly into the sample container or poured out of a bucket, all field measurements and how the measurements were taken (e.g. directly out of the stream, out of a bucket), sample filtering information, observations and comments, and summary of QA activity, if any.

All documentation will be done at the time of sampling using the preprinted and formatted "Monitoring Field Log" notebooks. Only field personnel may be in custody of the notebooks during field activities. Field log entries must be dated, legible, preferably made in black indelible ink, and contain accurate documentation. Corrections to erroneous data will be made by crossing through the entry and entering the correct information. The person making the correction must initial and date where the error occurred.

PHOTOGRAPHS

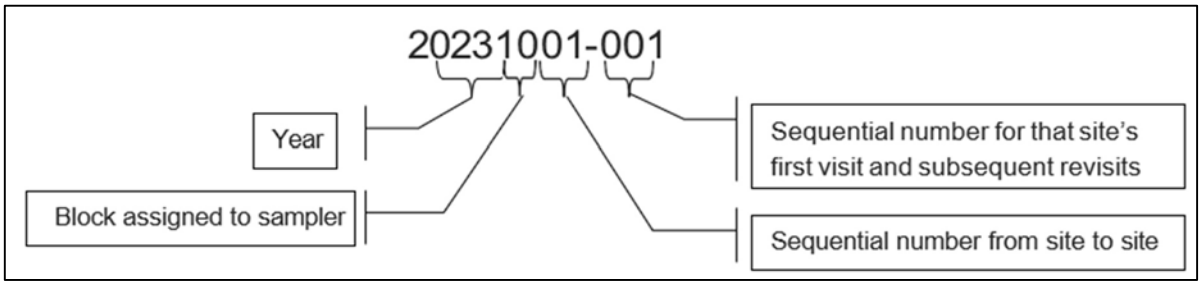
Photographs shall be taken at each new site and include an upstream, downstream and benchmark snapshot. Photographs shall be downloaded, re-titled to identify the location identification, waterbody and snapshot location (e.g., upstream); and stored.

SAMPLE LABELING

Every sample will have a unique barcode identification number. Each sample shall have a barcode generated, printed on weatherproof address labels, and affixed to the exterior of each bottle set prior to a given sample trip. Each "set" shares the same barcode.

This unique barcode identification number is an eleven-digit number that is bracketed by (*) asterisks. The * character is the start and stop reading character for the barcode reader. The first four numbers of the barcode are the four-digit fiscal year. The fifth number denotes the block assigned to the sampler or specific program. The remaining six numbers in the bar code are sequential numbers based on sites and site revisits within a year. Each sampler shall be responsible for making sure that each number used in their block is unique. See example below for further details.

Figure 6. Direct sample bottle labeling example.



CHAIN OF CUSTODY

All samples will be submitted along with an official Chain-of-Custody. The chain of custody form shall be completed according to the instructions for completing the form. All requested information shall be provided. Samples are to be immediately placed in a cooler, preserved with cubed ice, and delivered to the appropriate laboratory, see Table 9. Sample holding times shall be accounted for when a schedule is projected, and samples delivered to meet all holding times. If samples are delivered on a Friday, samples should be to the lab no later than the time specified by the appropriate laboratory to ensure proper relinquishing of samples to laboratory staff.

LABORATORIES

PACOG intends to use the laboratories presented in Table 3. Members and contacts. to analyzing the direct surface water samples.

QUALITY ASSURANCE AND QUALITY CONTROL

Quality assurance (QA) is a set of operating principles that, if strictly followed during sample collection and analysis, will produce data of known and defensible quality. This will ensure that the accuracy of the data can be stated with a high level of confidence.

Assuring the quality of surface water data is accomplished by following standard operating procedures (e.g., observing proper sample collection techniques, proper maintenance and calibration of field meters), collecting

quality control (QC) samples, reviewing and analyzing QA/QC data, and making appropriate adjustments to surface water quality data collection procedures on the basis of the results of QA/QC procedures. QA/QC procedures may be divided into three categories:

- Field procedures quality control.
- Data quality control.
- Laboratory quality control.

FIELD QUALITY CONTROL

Standard operating procedures will be utilized as a primary tool to ensure field procedure quality control. Staff performing field activities for the Program will receive the training necessary to ensure that all SOPs are fully and properly used when completing field-monitoring activity. Each project-specific SOP will describe and or reference all specific quality assurance/quality control methods to be followed. At a minimum, the following water chemistry quality control samples will be taken:

- Field duplicates
- Field blanks (“Trip blanks”)

FIELD DUPLICATES

Field duplicates will be field sample replicates and will be used to determine field precision. Duplicate samples, including duplicate field measurements, are a set of similar samples collected from the same site, at about the same time, and analyzed in the same manner. Duplicate samples may be equated to “fraternal twins” in that they originate from one source but each sample may contain a slightly different chemical composition. Duplicate sample results must be compared to assure reasonable agreement. In general, the acceptable results from duplicates are a 30% difference for cations, anions, and nutrients. For total and dissolved metals, particularly when concentrations are near detection levels, a difference up to 50% may be allowed, based on best professional judgment by the RESPEC Project Manager.

Duplicate samples shall be taken and analyzed from a minimum of 10% of the total number of samples collected during the implementation of this SAP.

TRIP BLANKS

Trip blanks, or also known as field blanks, help to ensure that sampling equipment, sampling containers, and de- ionized rinse water is effectively cleaned and/or free from contaminants that may be introduced into a sample via the equipment or rinse water. Field or Trip blanks, also referred to as equipment blanks, are blank solutions (solutions of D.I. water) that are processed through the equipment used for collecting and processing an environmental sample. Four types of surface water quality sampling equipment have blank samples taken from them:

- DI water container
- Sample container
- Filter apparatus
- Sample collection device (bucket)

All results from equipment blank samples shall be at or near the minimum reporting level (or non-detect level). Any detection of contaminants in equipment blanks shall be addressed by the RESPEC Project Manager and may entail modified cleaning or decontamination procedures.

Blanks shall be taken and analyzed once per field visit that results in <15 routine samples. Since the intent is to ensure that equipment decontamination procedures are followed to exact specifications, the trip blank shall be collected even if the field visit trip only includes 1 routine sample.

For field trips that result in ≥15 routine samples then one trip blank shall be collected at the start of the visit and a second trip blank shall be collected at the end of the week to ensure that equipment decontamination procedures are followed to exact specifications during trips of heavy usage.

DATA QUALITY CONTROL

Data quality control procedures and measures are grouped into four categories to be reviewed:

- Steps for measuring compliance with WQCD procedures.
- Laboratory issues.
- Bias and errors.
- Additional considerations.

All QC data shall be reviewed following completion of this SAP. If all data-acceptance criteria in the SAP are met, then the analytical data are acceptable.

LABORATORY QUALITY CONTROL

PACOG will utilize the laboratories listed in Table 3. Members and contacts. as the primary sources of analytical services for water samples during the implementation of this SAP. The following items will be reviewed, at a minimum, to verify laboratory QA/QC:

- Verifying QA/QC with Laboratory personnel.
- Method Detection Limits and Method Reporting Limits.
- PQL issues.
- Duplicates and blanks.
- Contamination issues.
- Post-sample submittal filtering and preservation.

If analytical services are provided by a laboratory other than the laboratories listed in Table 3. Members and contacts., the same steps will be taken, as outlined above, to verify acceptable laboratory quality control.

DATABASE MANAGEMENT

Water chemistry samples are collected along with field data and visual observations per instructions in the Surface Water Field Measurements and Sample Containers and Preservation sections of this SAP. Field measurements are recorded onto a Microsoft Excel workbook upon completion of the sample trip. Sample sets are delivered to the appropriate laboratory for laboratory analysis. When samples are collected in remote locations, occasionally microbiological samples may be delivered to sub- contracted laboratories to facilitate quicker analysis. Field data and observations are downloaded into a Microsoft Excel workbook by the RESPEC representative. The laboratory returns water chemistry data via Microsoft Excel CSV spreadsheets known collectively as "laboratory extracts".

Field data and observations along with microbiological data received from off-site laboratories are transferred into a format to be joined with the water chemistry data by the RESPEC staff. Field, chemistry, and microbiological data coalesce and are analyzed for quality control before the data is uploaded to the AWQMS database. Once in the AWQMS, the data will be available to all interested parties.

REFERENCES

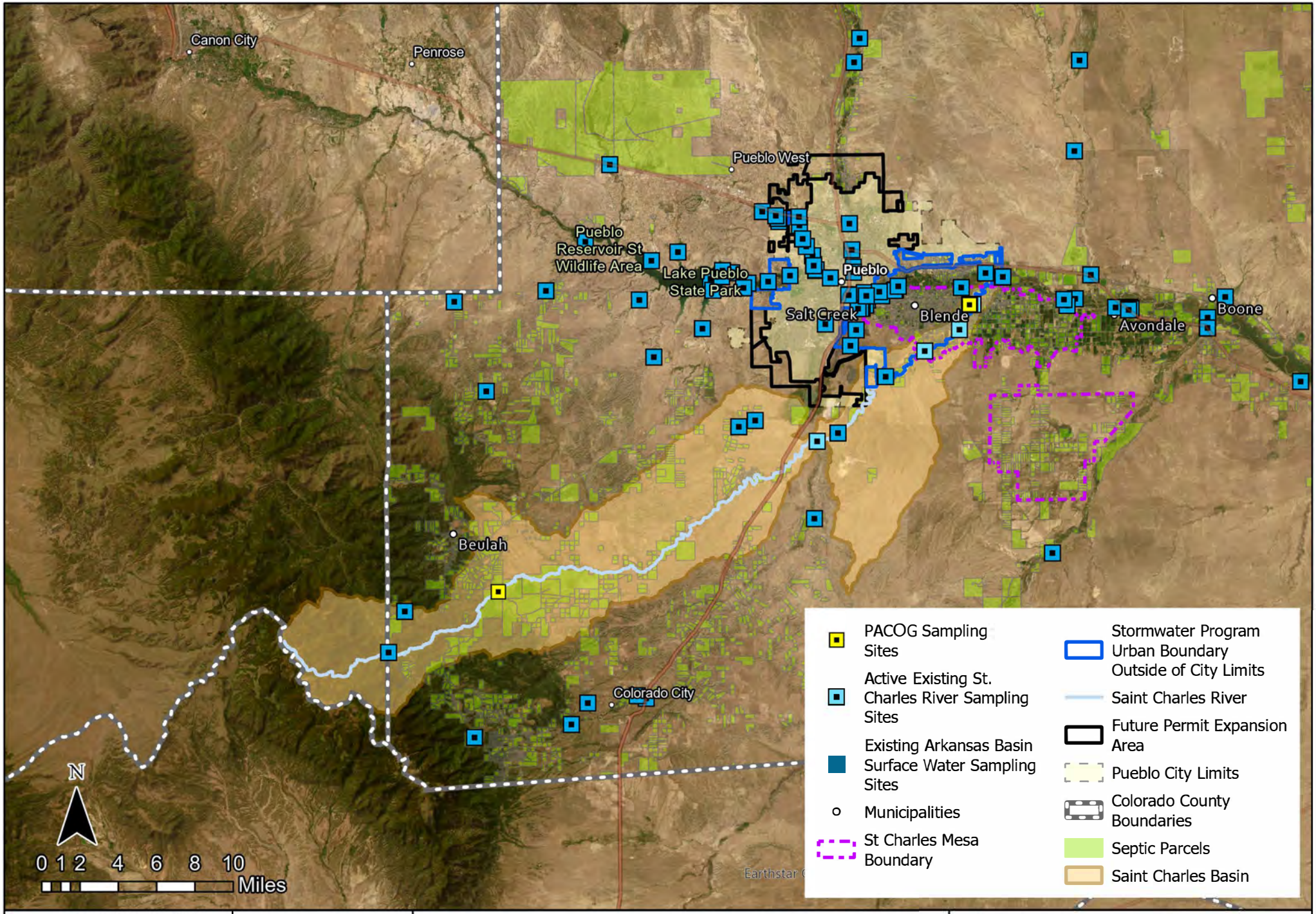
- Beutel MW, H. T. (2021). A Review of Environmental Pollution from the Use and Disposal of Cigarettes and Electronic Cigarettes: Contaminants, Sources, and Impacts. Sustainability, 12994.
- Center for Scientific Evidence in Public Issues. (2022, July). EPI Center. Retrieved from Fact Sheet: What we Know: Per- and polyfluoroalkyl substances: https://www.aaas.org/epi-center/pfas#:~:text=PFAS%2C%20often%20referred%20to%20as,using%20conventional%20water%20treatment%20processes.
- Centers for Disease Control and Prevention. (2021). One Health. Retrieved from Understanding Antibiotic Resistance in Water: A One Health Approach: https://www.cdc.gov/onehealth/in-action/understanding-antibiotic-resistance-in-water.html#print
- Colorado Department of Public Health and Environment. (2022, July 1). Sampling Analysis Plan for Streams and Lakes Water Quality Monitoring - FY 2023. Denver, CO, USA.
- Ferrera, I., Zweigenbaum, Jerry A., & Thurman, E. Michael (2010). Analysis of 70 Environmental Protection Agency priority pharmaceuticals in water by EPA Method 1694, Journal of Chromatography A, 5674-5686.
- Grandcoin, A. P. (2017). AminoMethylPhosphonic acid (AMPA)in natural waters: Its sources, behavior and environmental fate. Water research, 187-197.
- Ignaz J. Buerge*, M. K.-R. (2008). Nicotine Derivatives in Wastewater and Surface Waters: Application as Chemical Markers for Domestic Wastewater. Environmental Science and Technology, 6354-6360.
- L. W. B. Olaniyan, c. a. (2016). Triclosan in water, implications for human and environmental health. Springerplus, 1639.
- Laura Medalie, N. T. (2020). Influence of land use and region on glyphosate and aminomethylphosphonic acid in streams in the USA. *Science of The Total Environment*, 136008.
- Li, S. W. (2020). Occurrence of caffeine in the freshwater environment: Implications for ecopharmacovigilance. . Environmental pollution, 114371.
- Mousavi, S. A. (2019). Effects of detergents on natural ecosystems and wastewater treatment processes: a review. Environmental science and pollution research international, 26439– 26448.
- Muhammad Syafrudin, 1. R.-o.-M. (2021). Pesticides in Drinking Water—A Review. Int J Environ Res Public Health, 468.
- Phong Vo, H. N. (2019). Acetaminophen micropollutant: Historical and current occurrences, toxicity, removal strategies and transformation pathways in different environments. Chemosphere, 236, 124391.

/ Tang, Z. L. (2021). A review of 17α-ethynylestradiol (EE2) in surface water across 32 countries: Sources, concentrations, and potential estrogenic effects. Journal of environmental management, 112804.

/ Transformation Products of Emerging Contaminants in the Environment: Analysis, Processes, Occurrence, Effects and Risks, edited by Dimitra A. Lambropoulou, and Leo M. L. Nollet, John Wiley & Sons, Incorporated, 2014. ProQuest Ebook Central, http://ebookcentral.proquest.com/lib/ucb/detail.action?docID=Created from ucb on 2018-12-28 15:04:16.

RESPEC

APPENDIX B
EXISTING SAMPLE SITES



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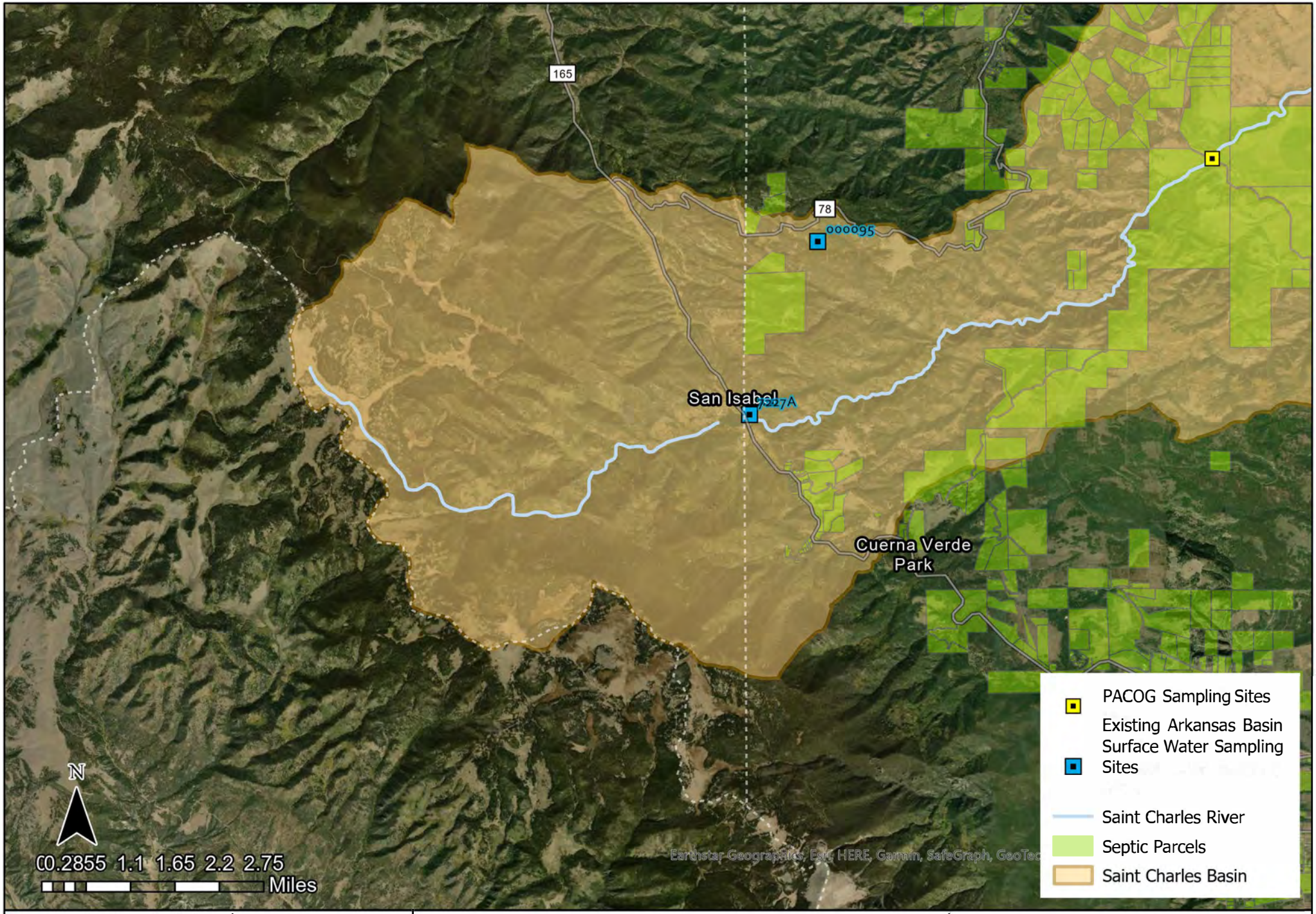
Pueblo County
Saint Charles River Basin
Overview



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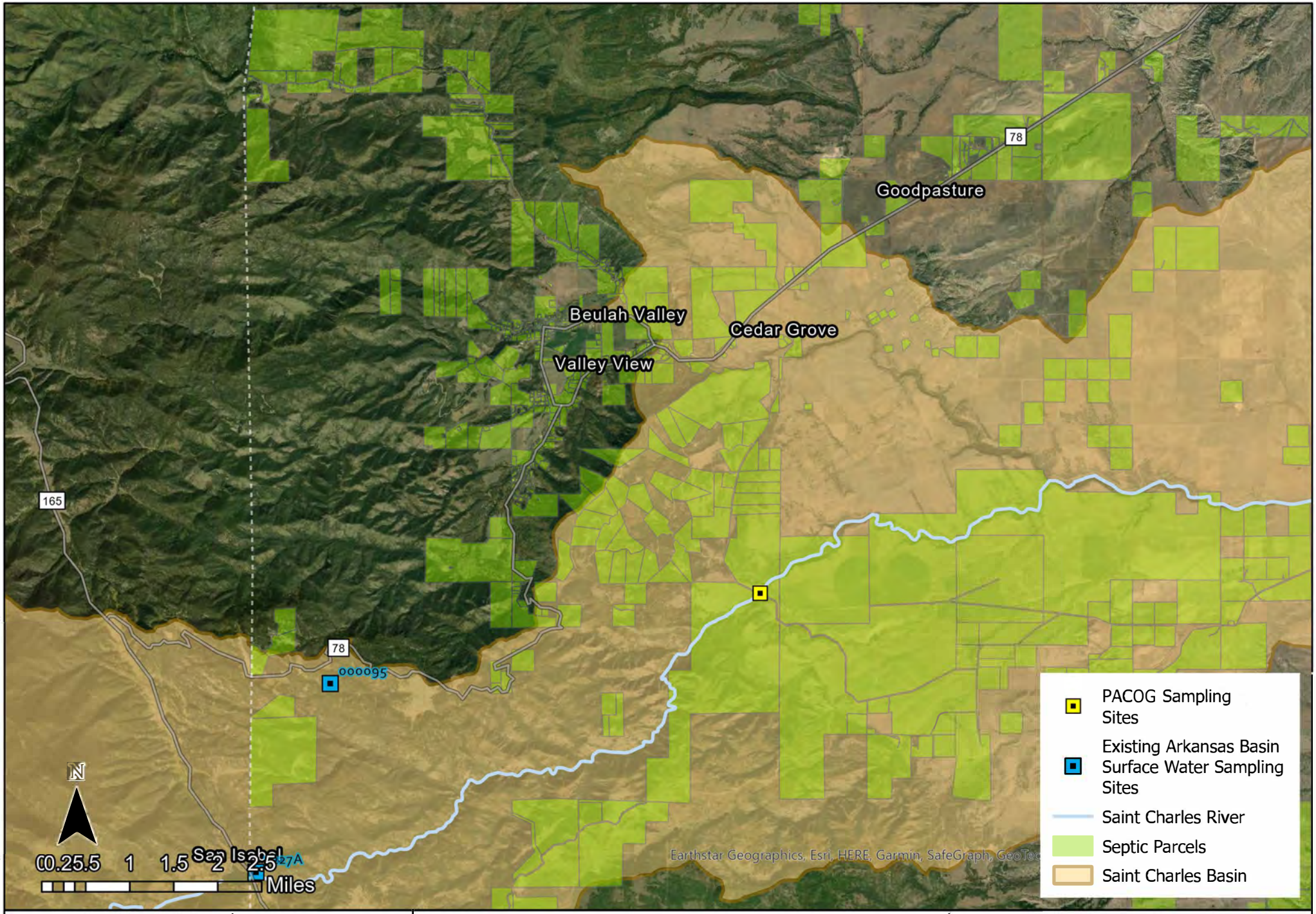
Saint Charles River Basin
San Isabel and Cuerna Verde Park



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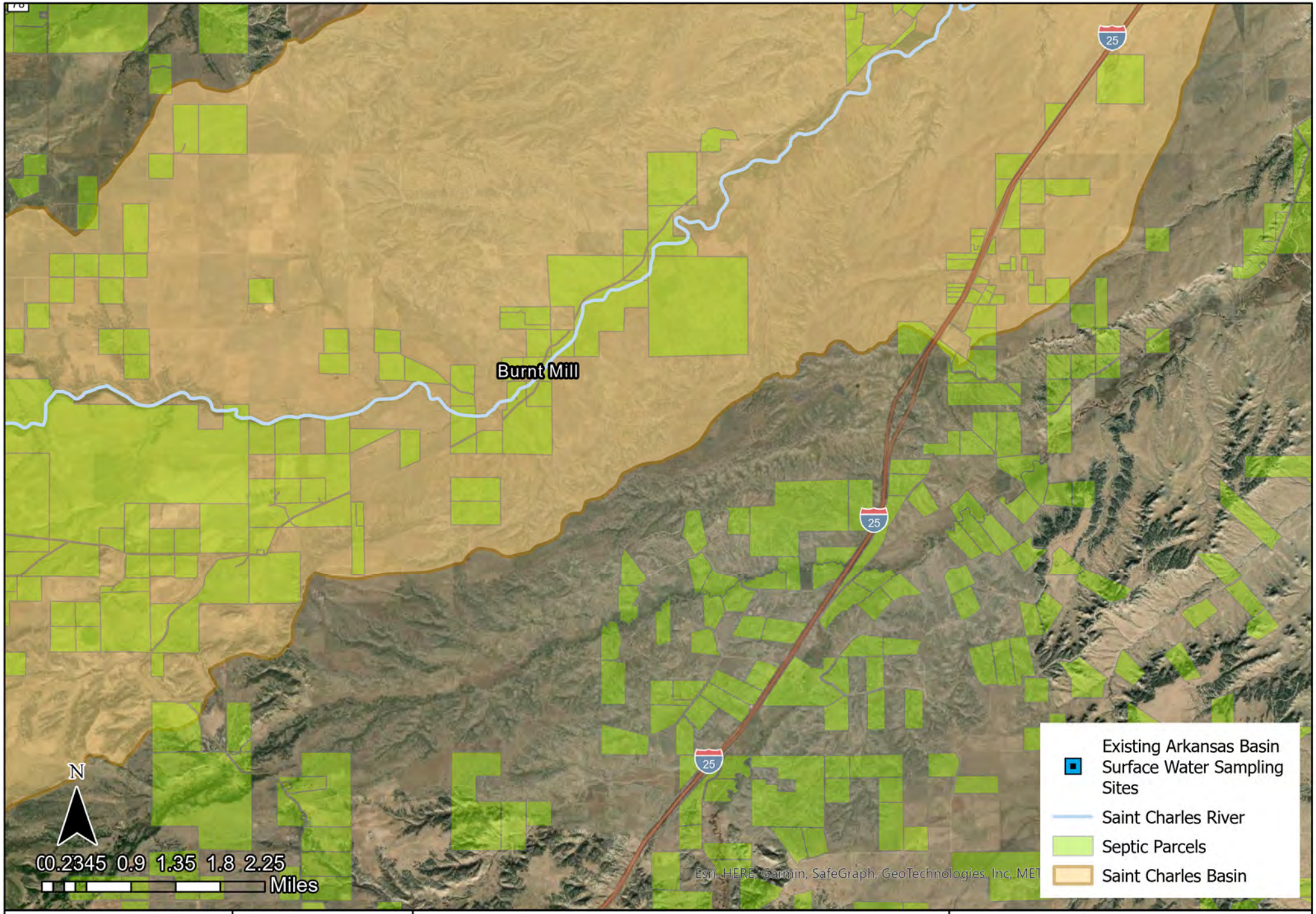
Beulah and Cedar Grove



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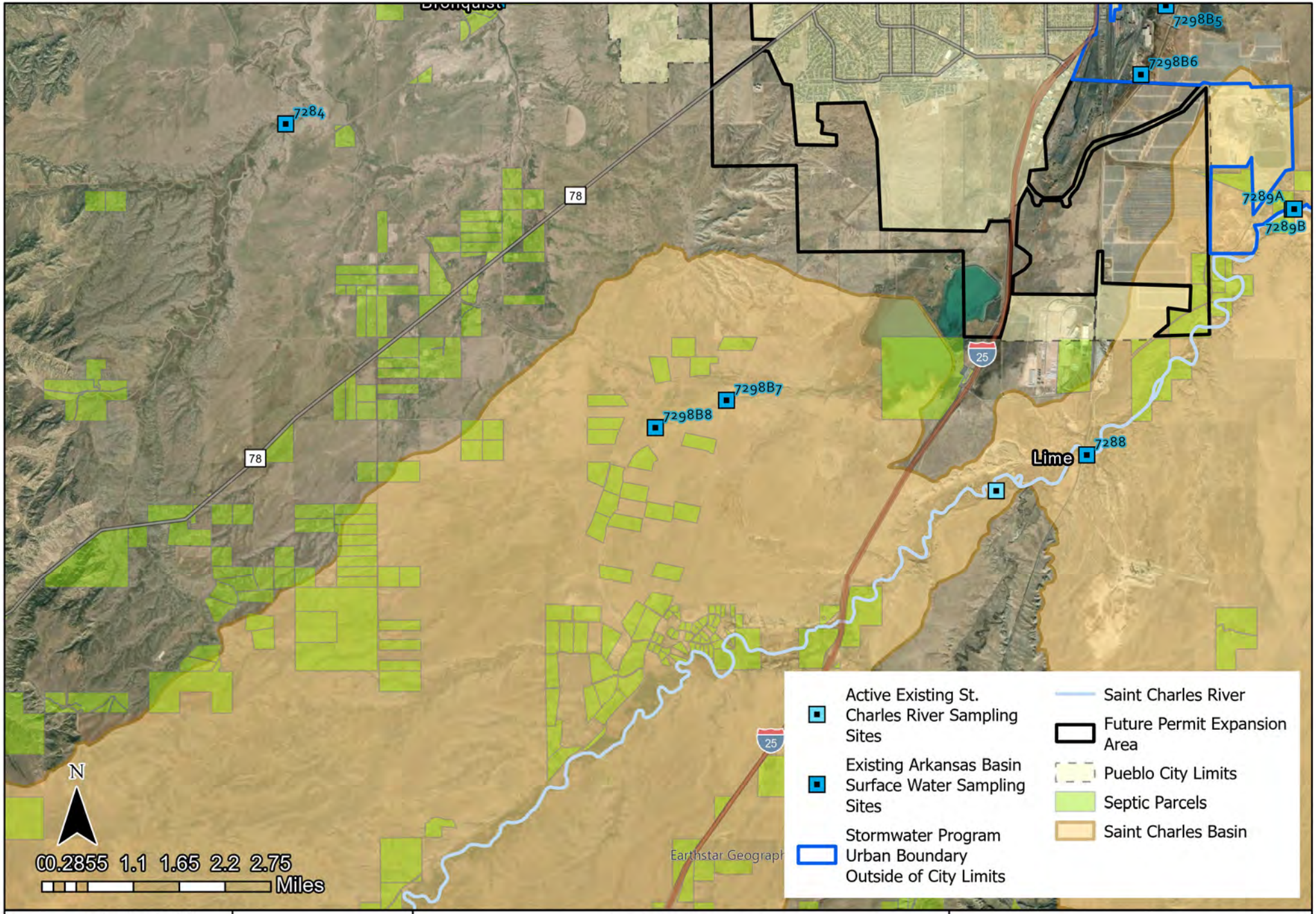
Burnt Mill



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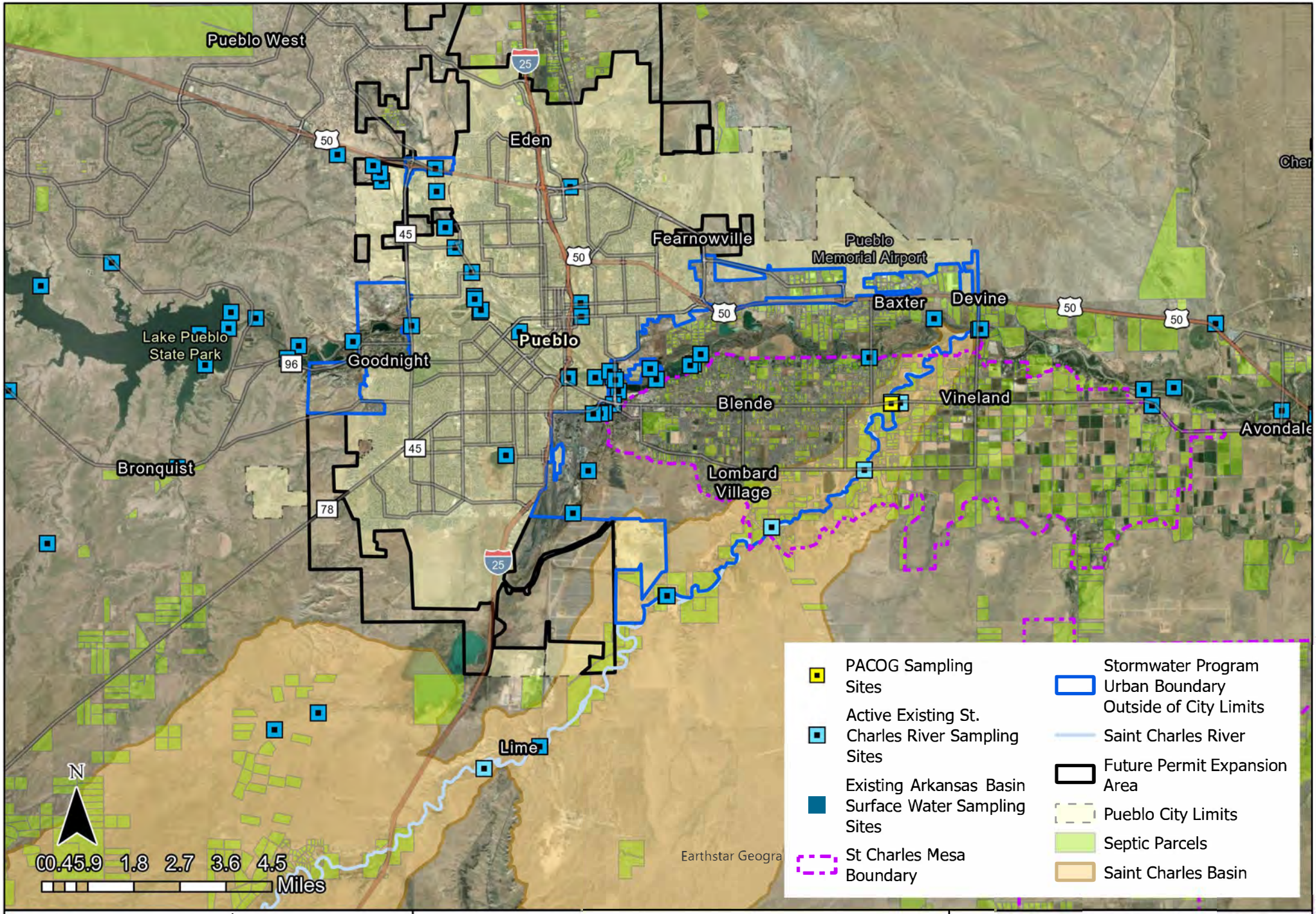
Lime



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Pueblo County
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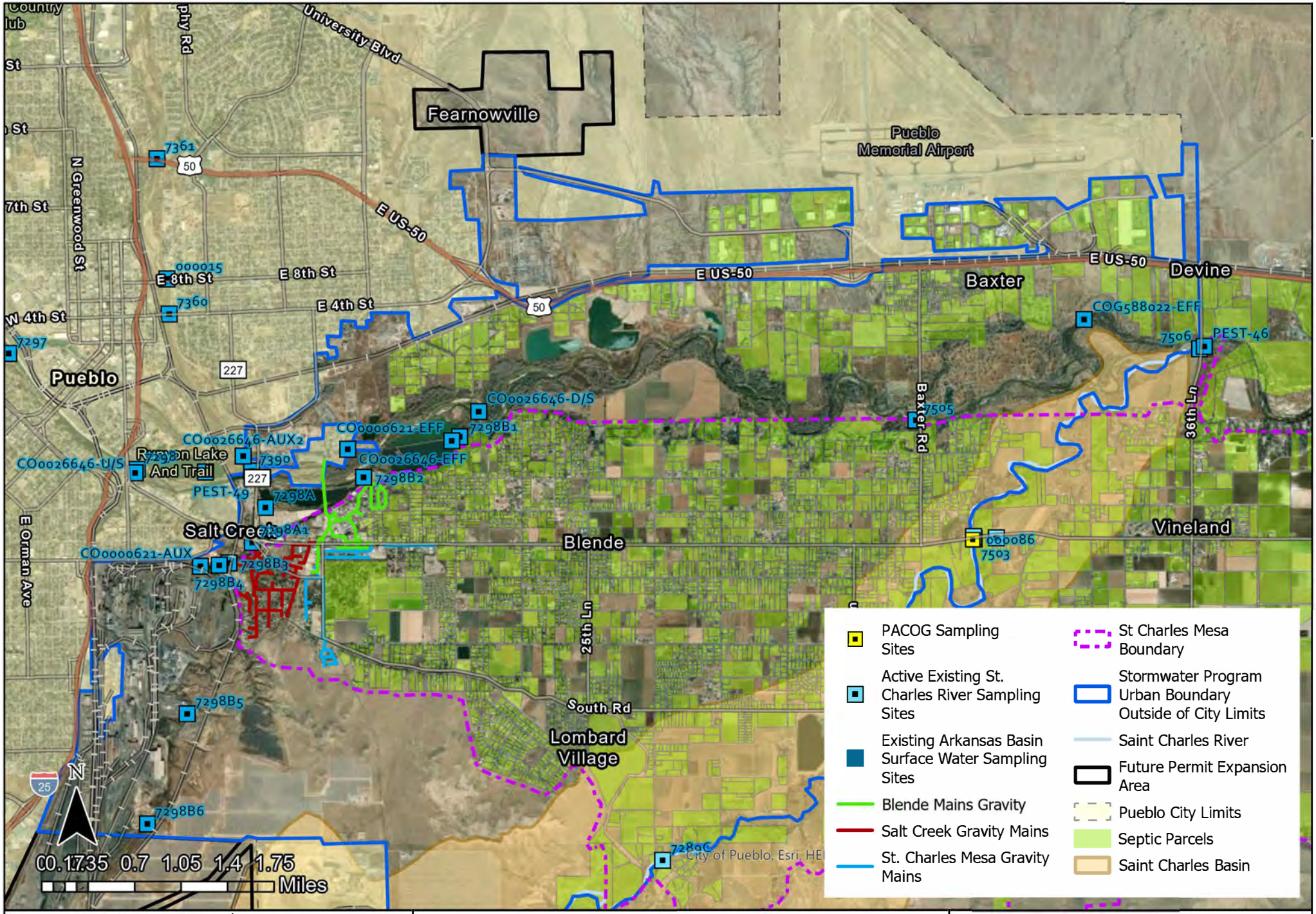
MS4 Areas



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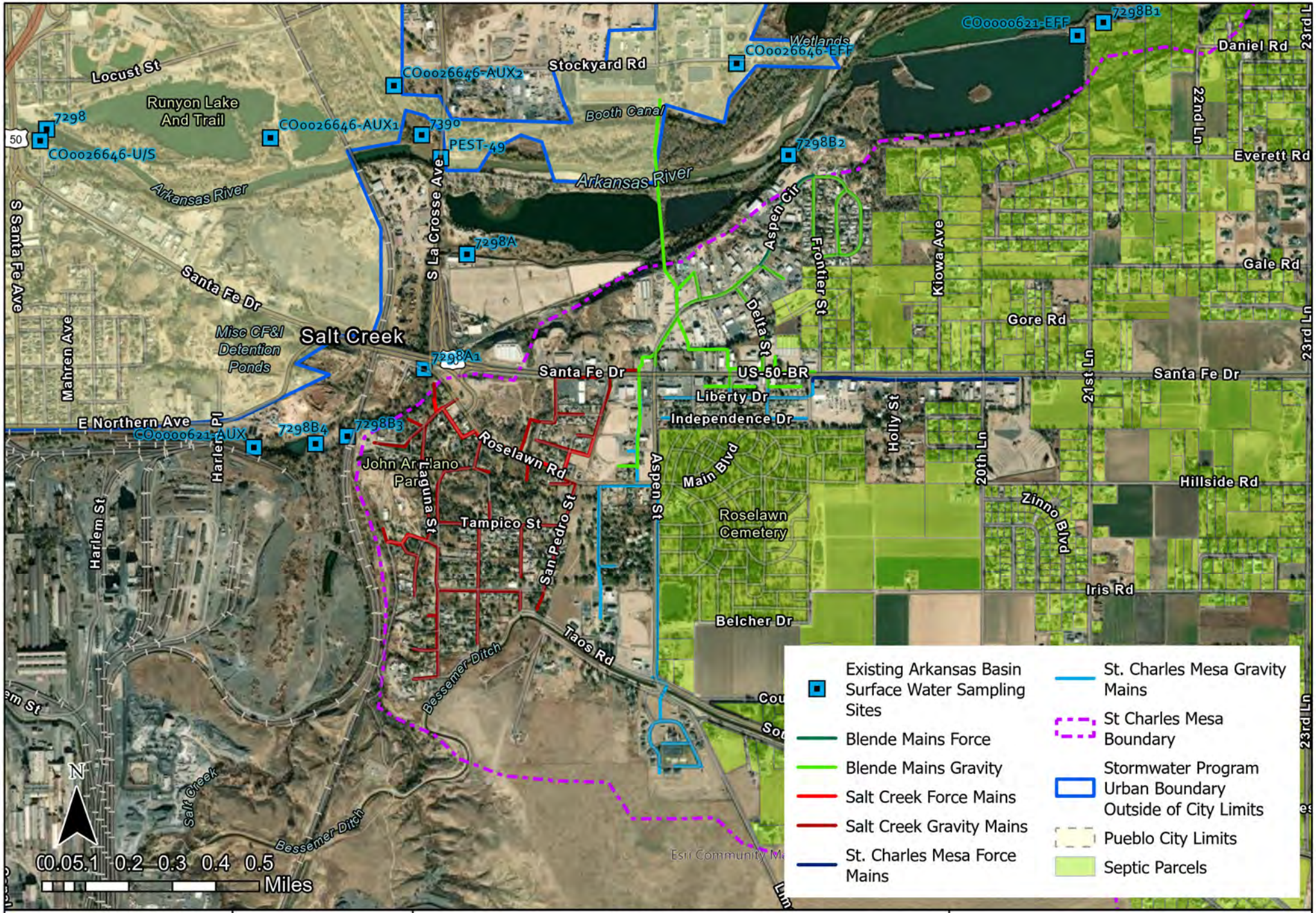
Pueblo County
Saint Charles River Basin
MS4 Areas and Local Collection Systems



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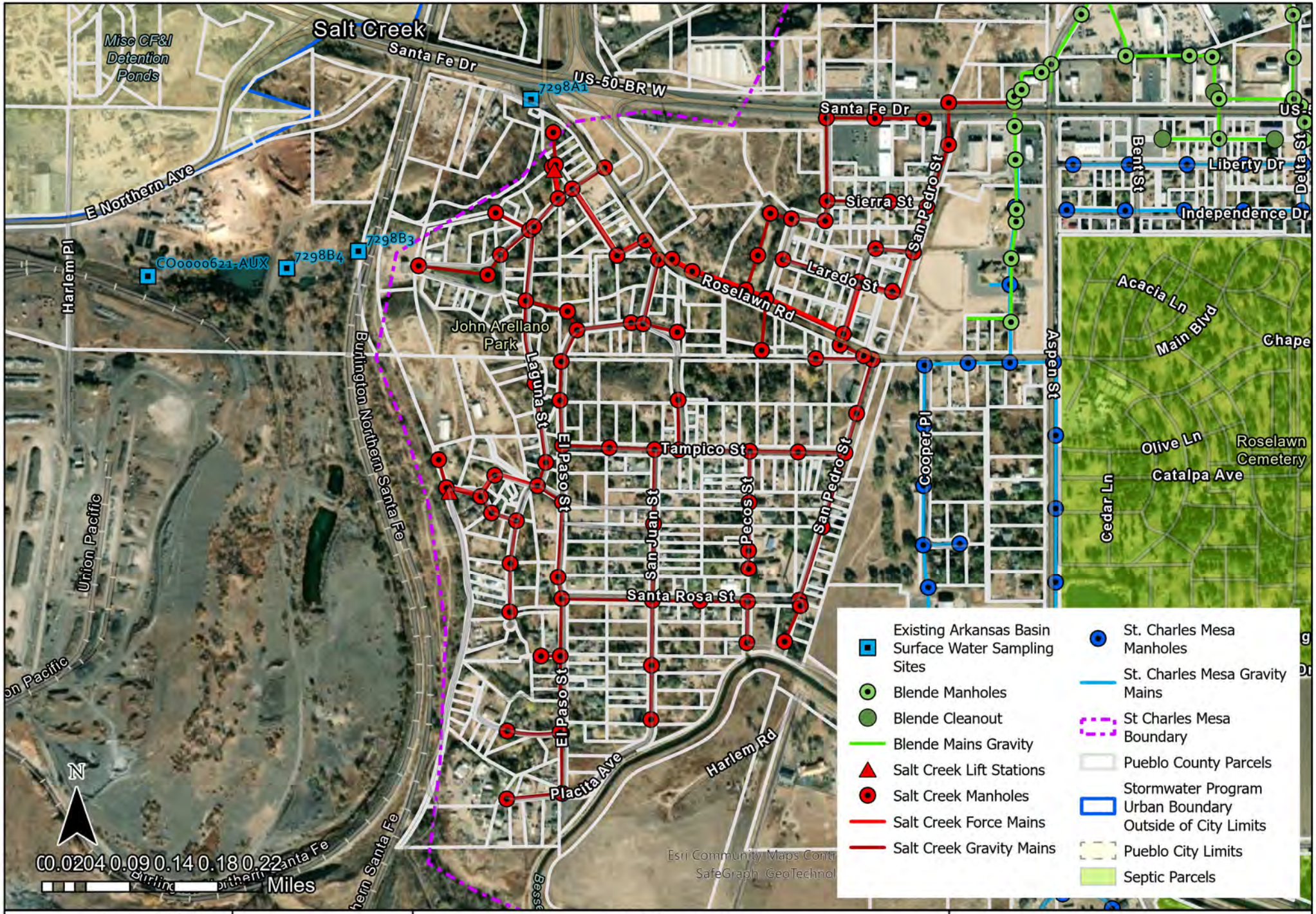
Pueblo County
Saint Charles River Basin
Local Collection System Overview



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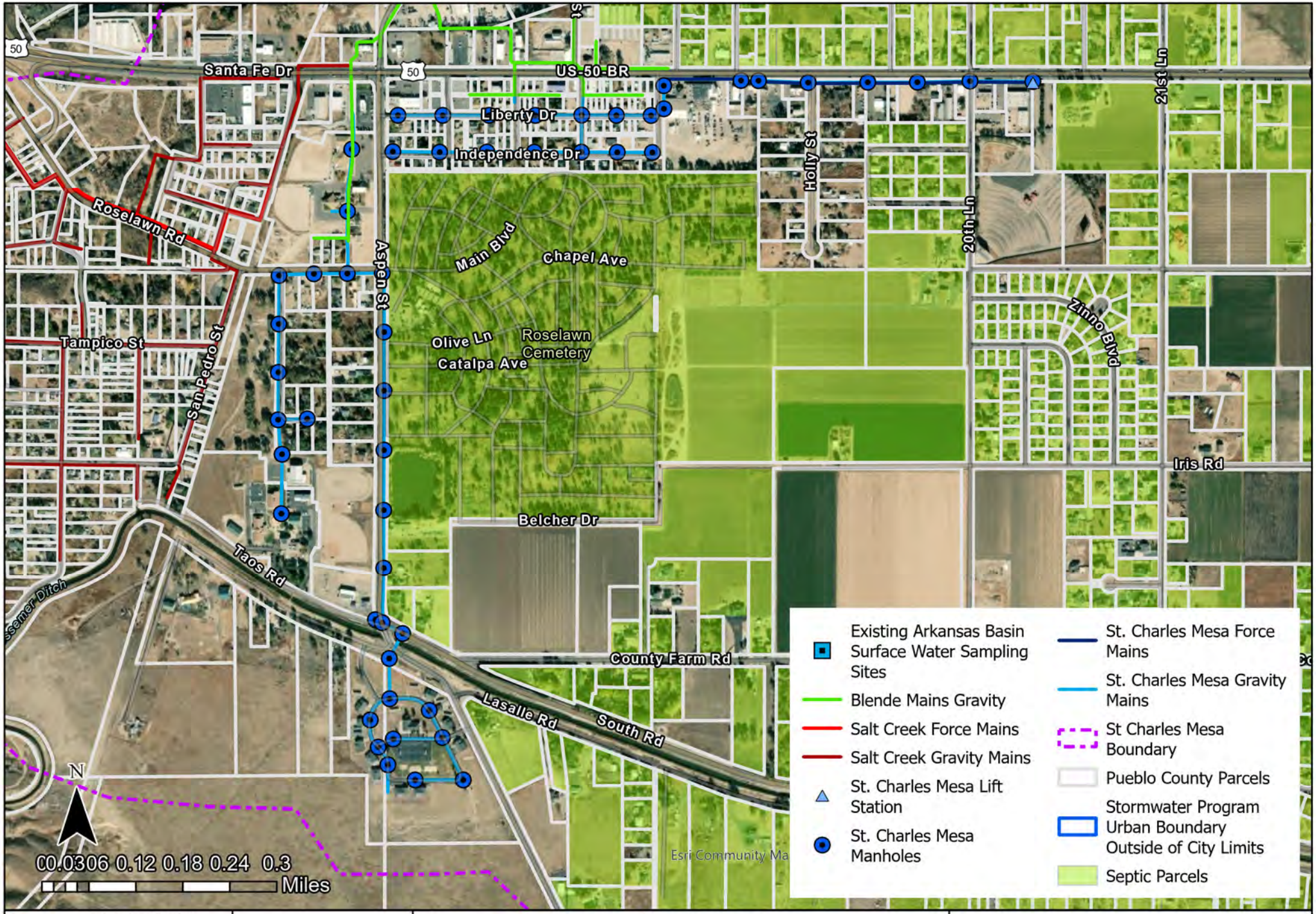
Salt Creek Collection System



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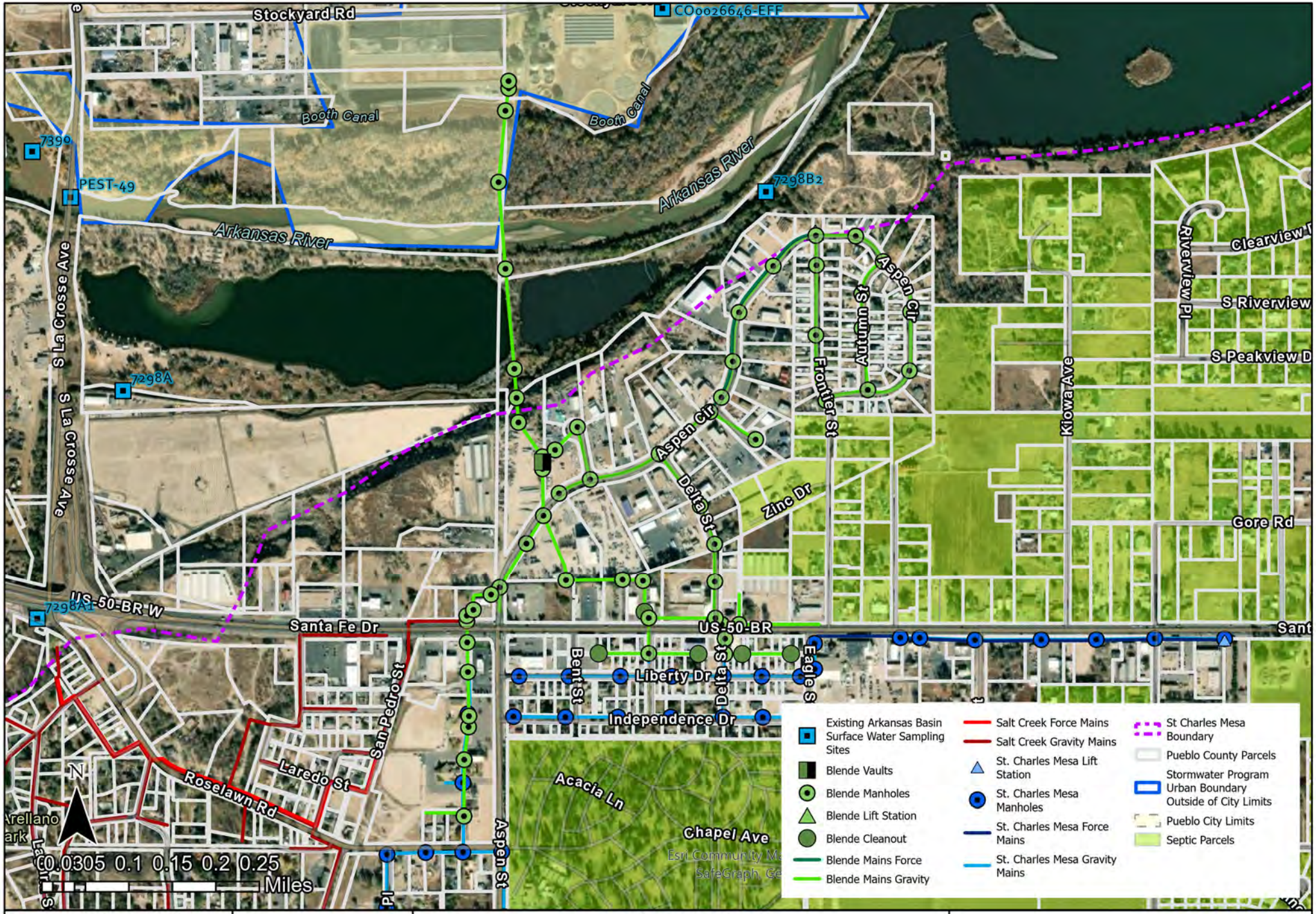
Saint Charles Mesa Collection System



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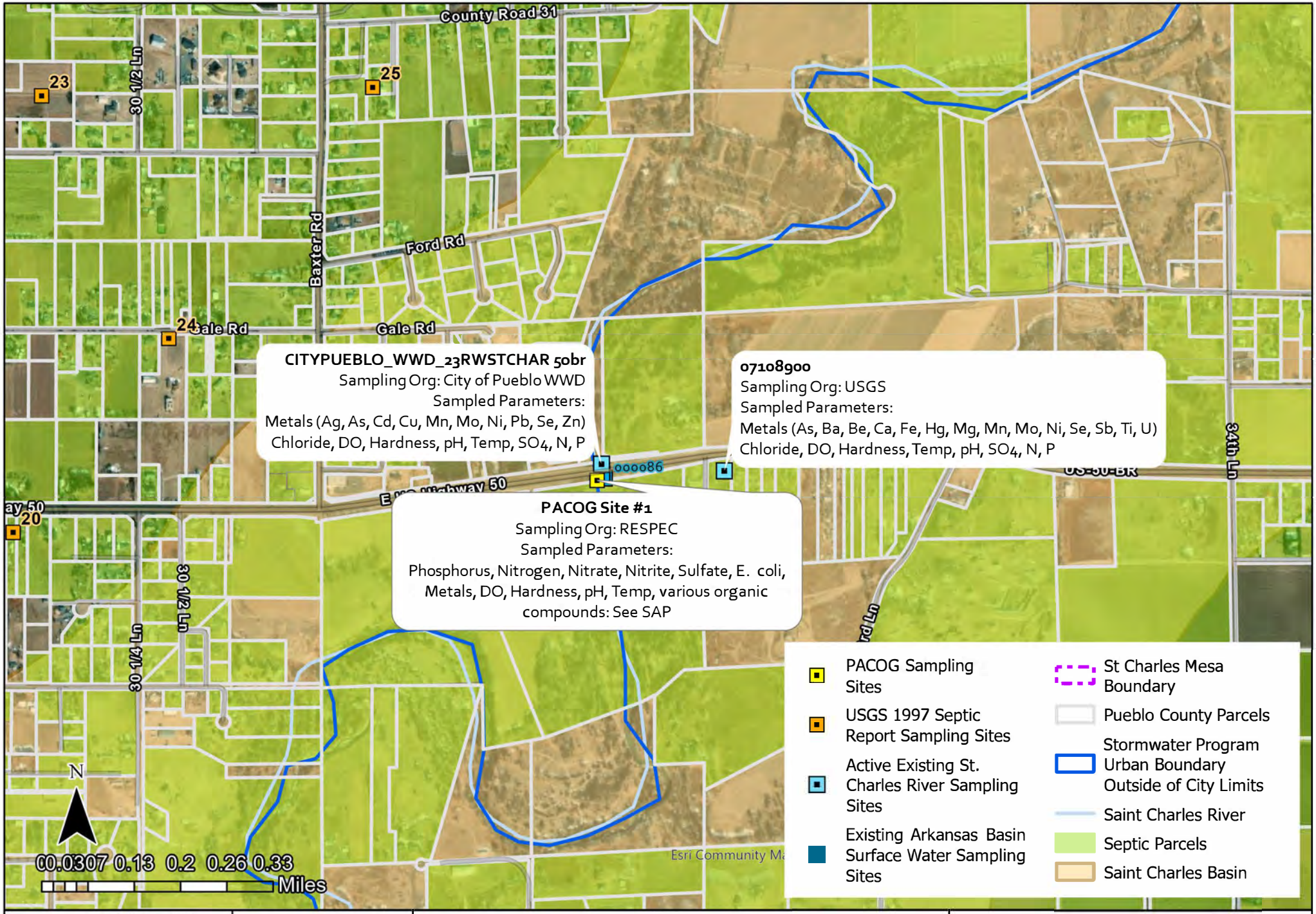
Saint Charles River Basin
Blende Collection System



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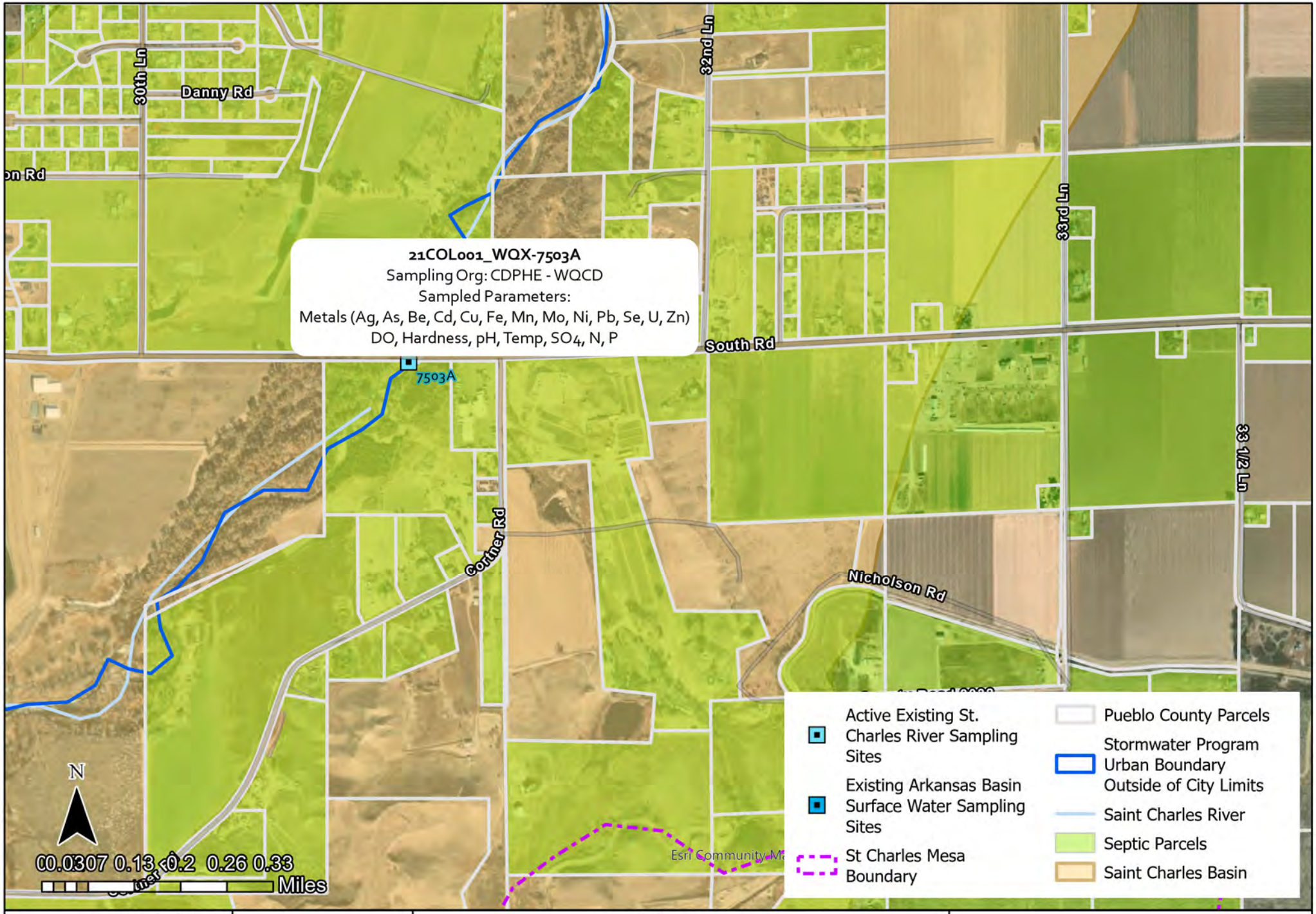
Pueblo County
Saint Charles River Basin
Water Quality Sampling Stations-- Hwy 50



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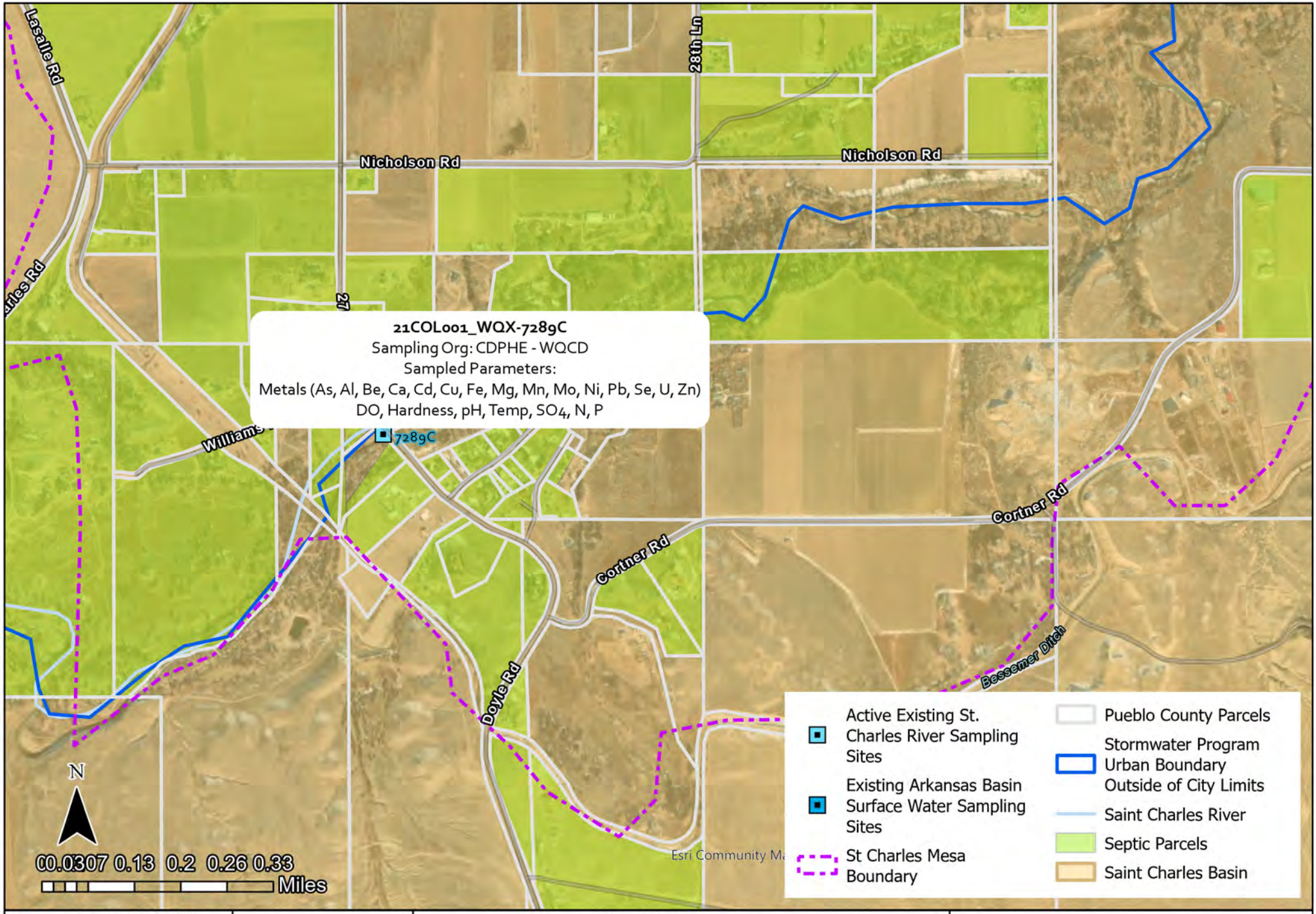
Water Quality Sampling Stations-- South Rd



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Water Quality Sampling Stations-- S Lombard Village

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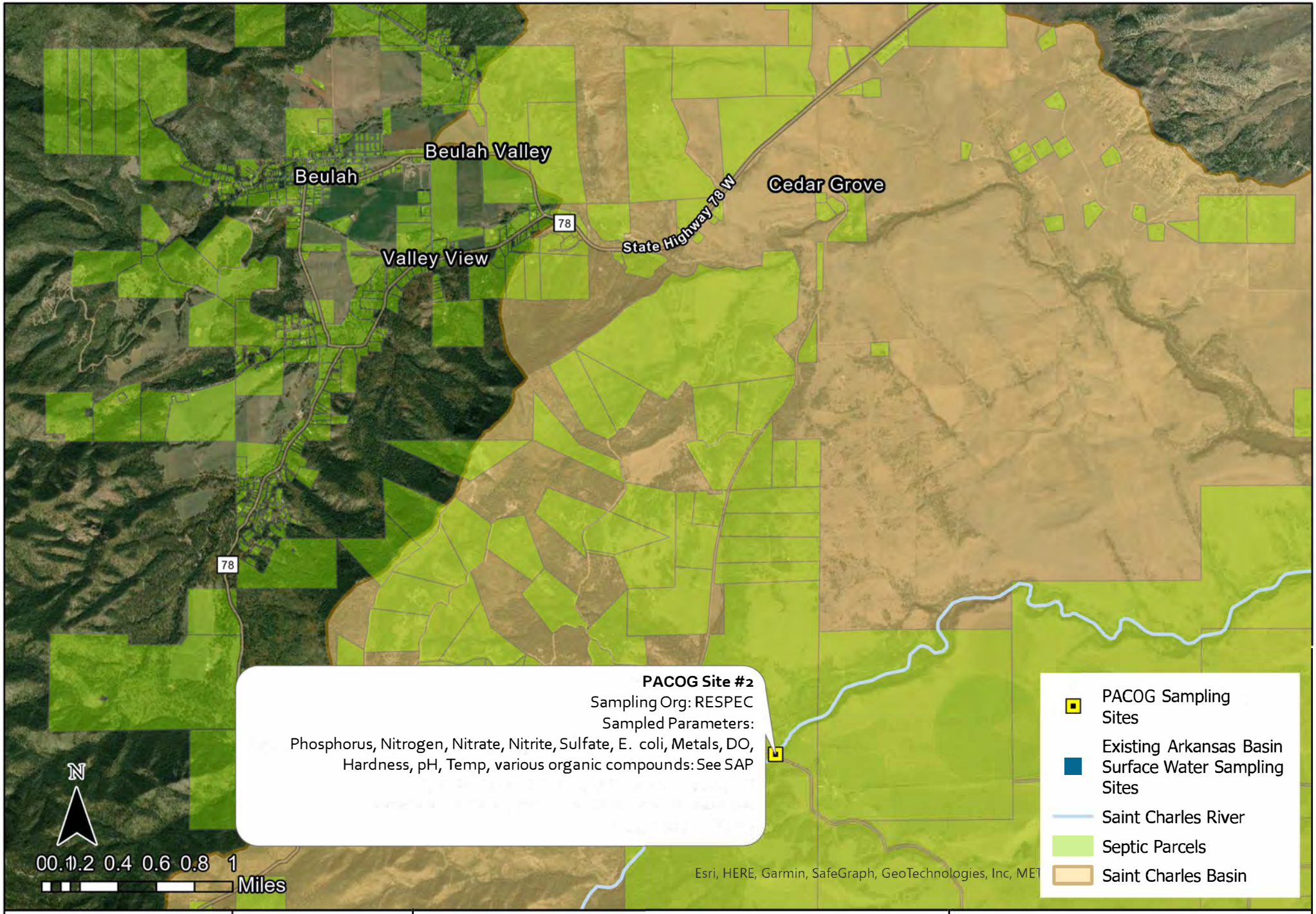
Saint Charles River Basin
Water Quality Sampling Stations-- Lime



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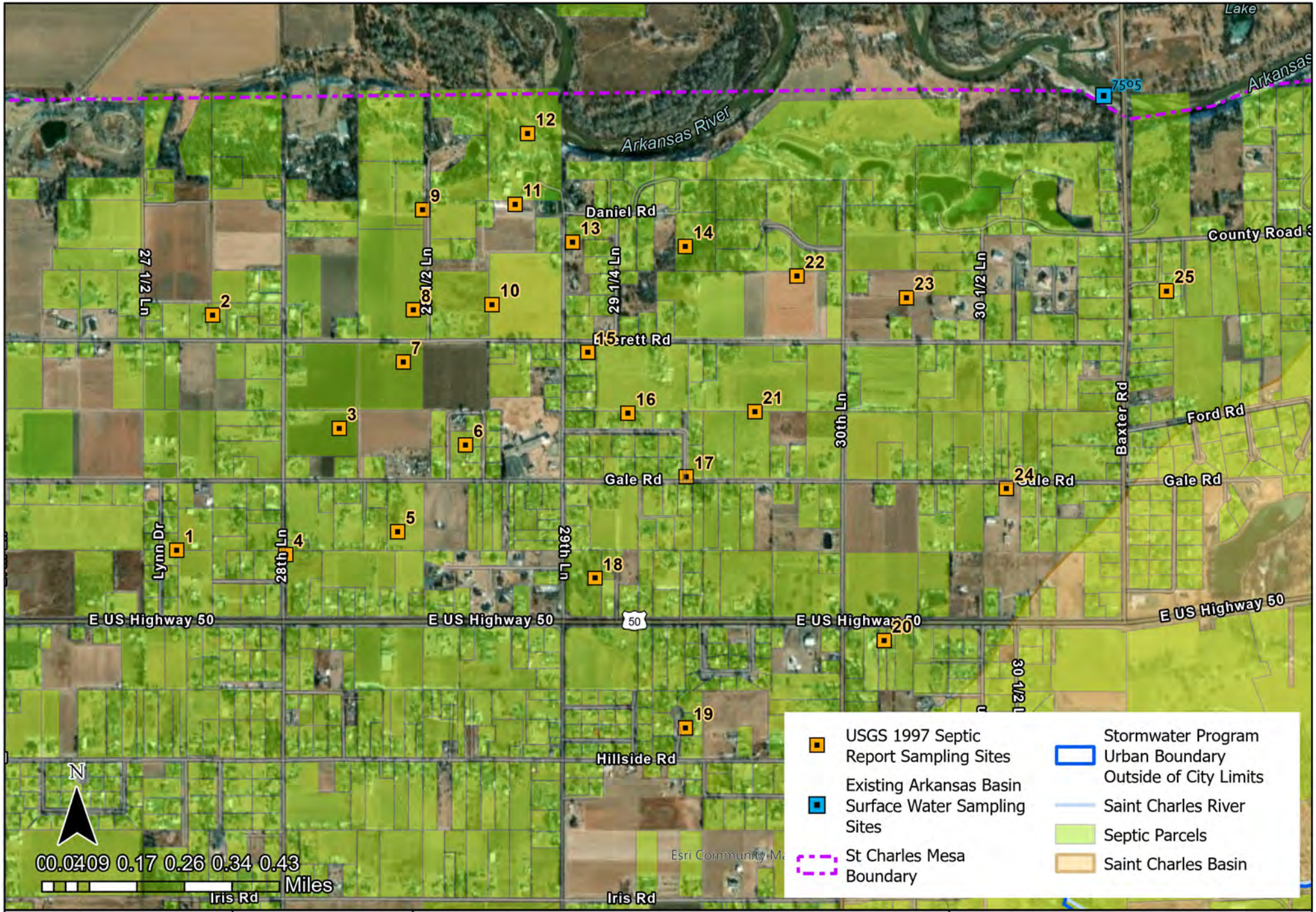
Water Quality Sampling Stations -- Proposed Site #2



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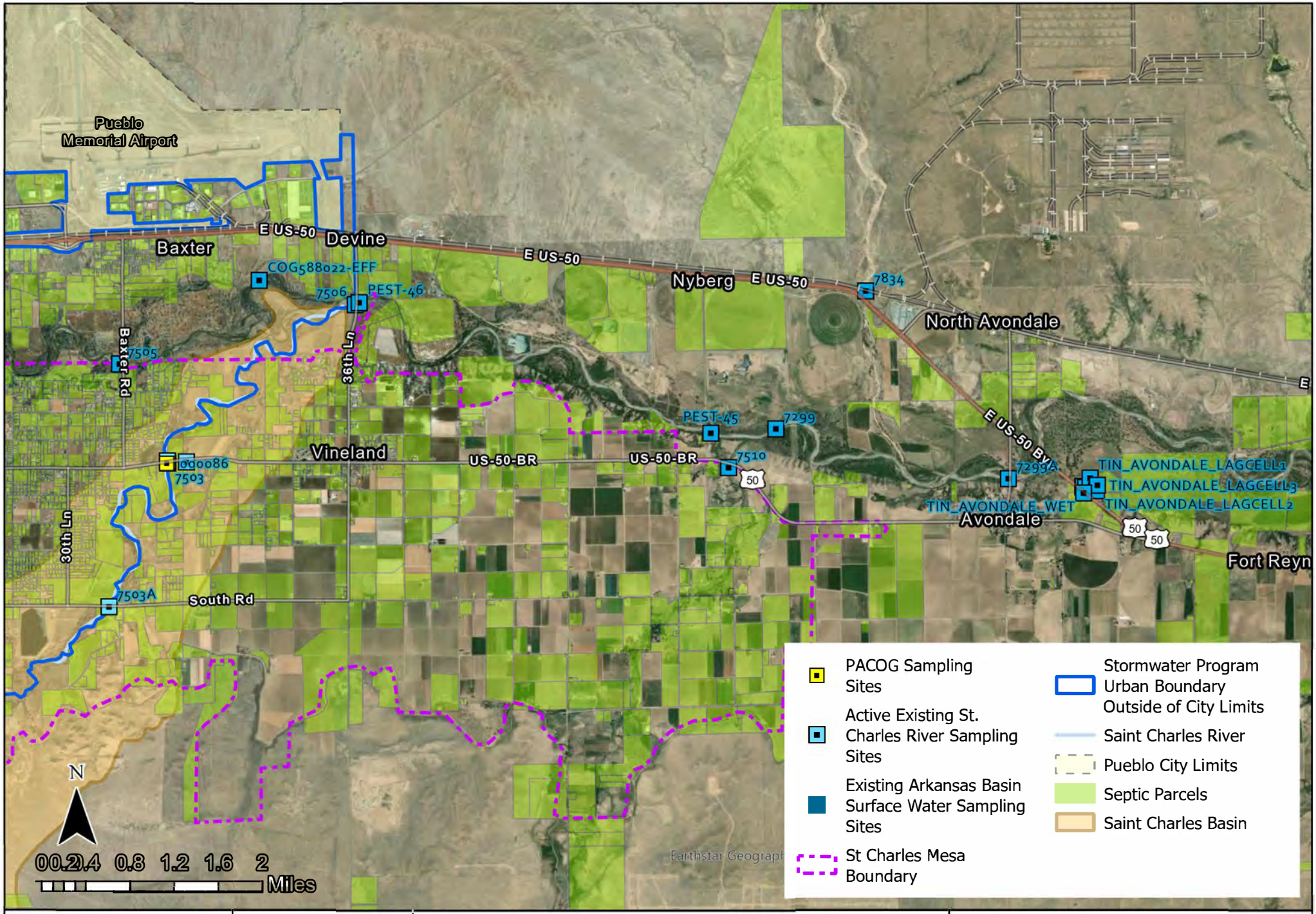
Pueblo County
Saint Charles River Basin
1997 USGS Septic Report Study Area



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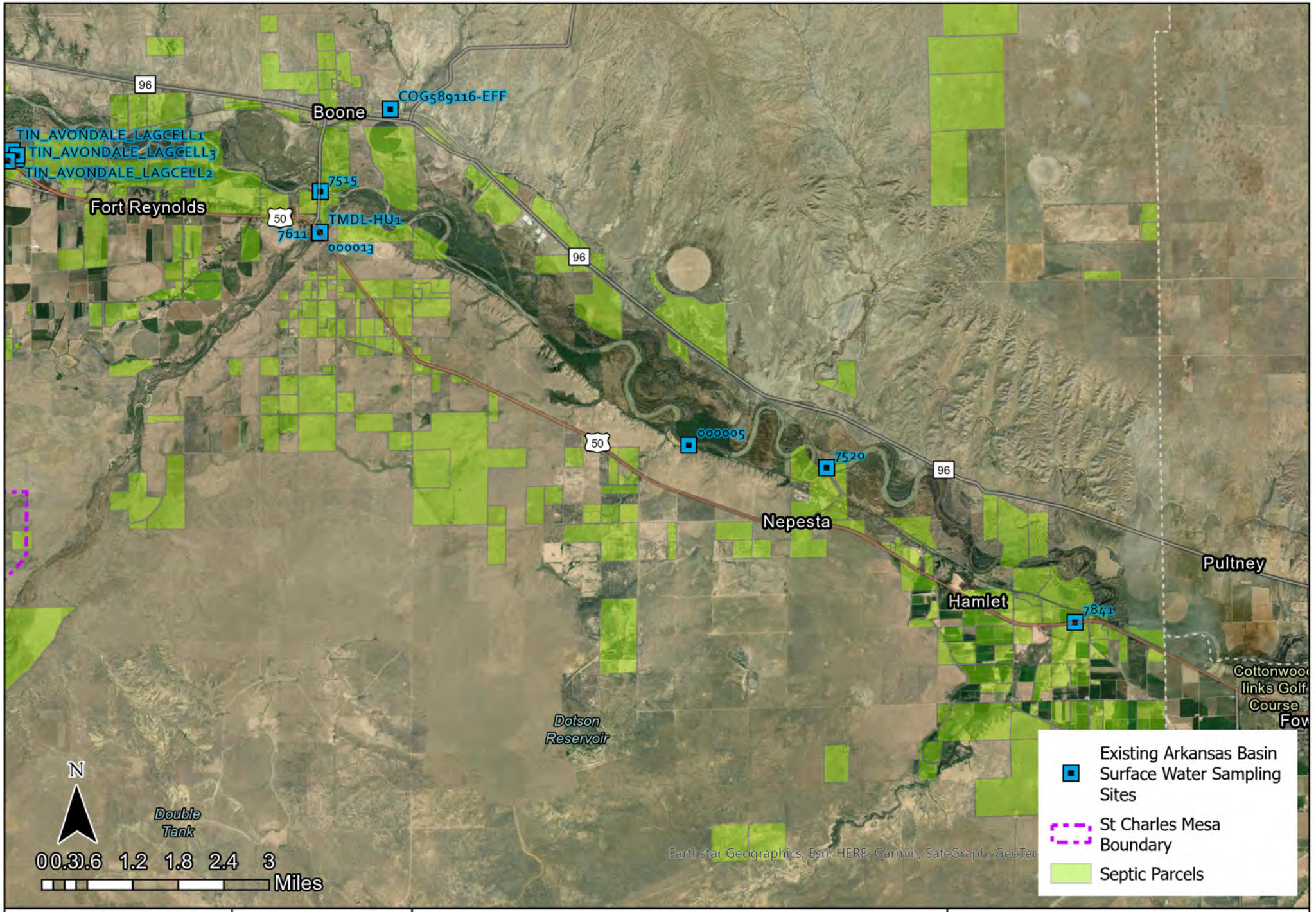
Water Quality Sampling Stations-- Vineland & Avondale



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Saint Charles River Basin
Water Quality Sampling Stations-- Boone & Hamlet

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APPENDIX C

EPAC SAMPLE SUMMARIES

2024 To-Date Sample Results

St. Charles River

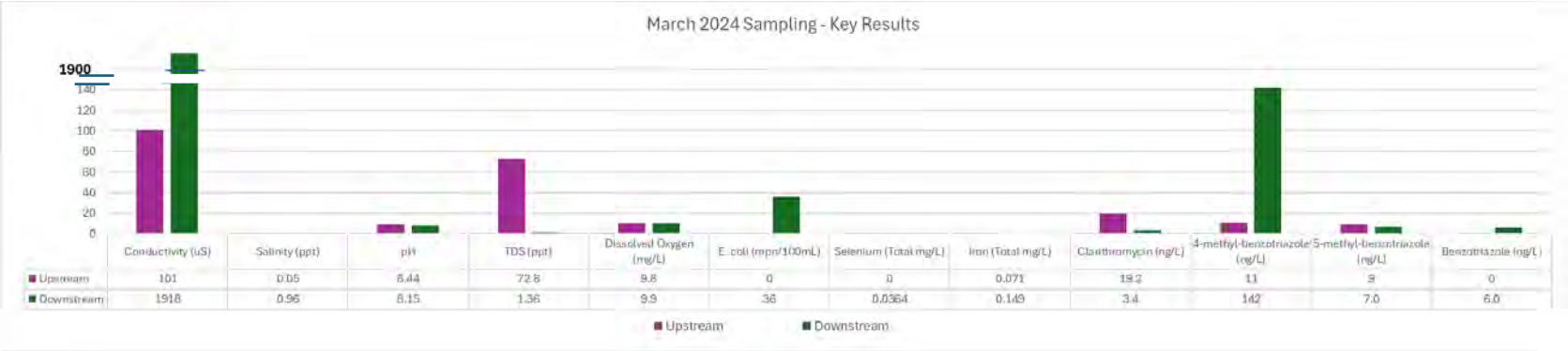
Q1 Key Findings

- Most sample results were extremely low or not detected, which demonstrates the water was conducive to a healthy river for constituents tested.
- One result of note was conductivity at the Downstream site. The result of 1918 uS/cm was checked twice. The reason for this higher result is unknown. No other constituents sampled indicated the reason for the rise in *conductivity* from the Upstream site to the Downstream. Salinity and TDS were calculated based on conductivity.
- pH was stable across the sites. It is within the acceptable range for healthy rivers.
- DO levels are very good for supporting fish populations.
- E. coli was not detected at the Upstream site but was measured in low quantities at the Downstream site. This is well under the safe limit for swimming.
- Clarithromycin was present in higher concentration at the Upstream site than the Downstream. This is an antibiotic used in humans and animals and was likely being administered to nearby cattle at the time of sampling. This low concentration is not a cause for concern.
- 4- and 5-methyl-benzotriazole and benzotriazole are in the same family of chemicals and could be coming from the same source. These chemicals are anticorrosive and have many uses. They can be present in car tires and are often used in dishwashing pods. They could also be coming from nearby industry or septic fields. 4- and 5-methyl-benzotriazole are usually present in equal concentrations, so it possible that:
  1) only 4-methyl is being used at a nearby factory
  2) the compound has been in the water for some time from failed septic fields and the 5-methyl is mostly degraded since it degrades faster than 4-methyl. If the 4-methyl-benzotriazole is detected at similar concentrations in future samples, further investigation should be conducted to trace the source.
- Chromium VI, phosphorus, and nitrogen and nitrogen species were not detected at the Upstream site.
- *Total* Selenium was detected at the Downstream site at a concentration of .0364 mg/L. The *Dissolved* Selenium Regulation 32 acute threshold is .0184 mg/L. Dissolved selenium was not measured.
- Other compounds in low concentrations:
  - Prometon, detected at the Downstream site, is an herbicide that is only used under asphalt road construction. This was detected at a low concentration and is not a cause for concern.
  - Diphenhydramine was detected only at the Upstream site. This drug has animal uses and adsorbs well to soil. It is possible that it has been present for some time.

Q2 Key Findings

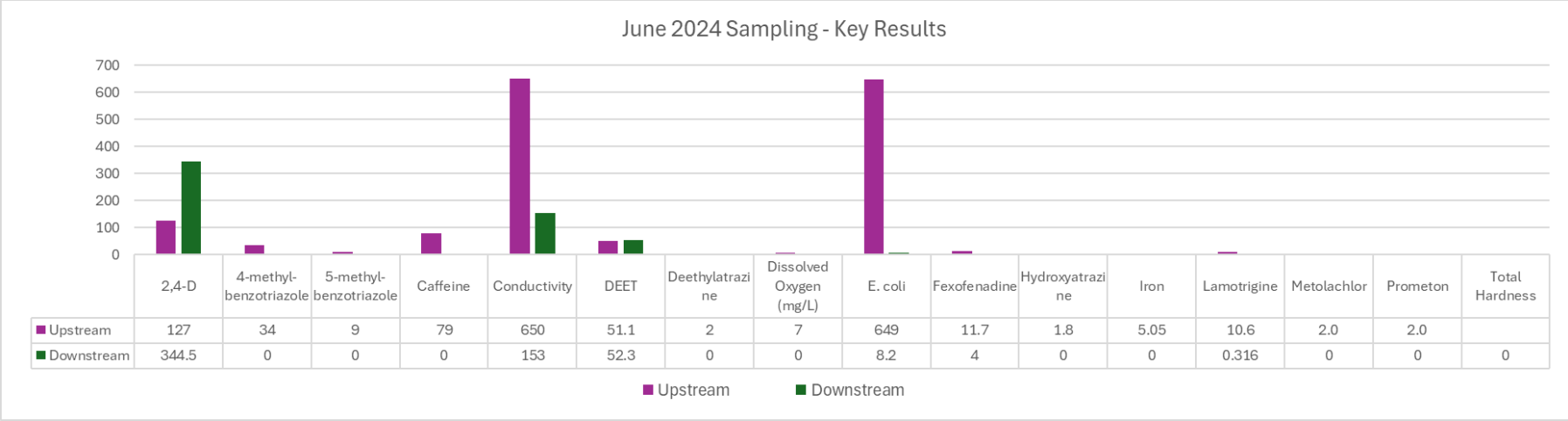
- Quarter 2 results were more in line with what is generally expected from an upstream "control" site and a downstream site. Where detected, most constituents were present in higher concentrations at the Downstream site.
- Most sample results were extremely low or not detected, which demonstrates the water was conducive to a healthy river for constituents tested.
- Two exceedances of the Regulation 32 occurred.
    - E. coli was 649 mpn/100 mL at the Downstream site. This exceeds the acute standard.
    - Total iron concentration was 5.05 mg/L. This exceeds the chronic standard of 1 mg/L. Note that a chronic exceedance means that the concentration remains above the standard for all samples within a 30-day period. This exceedance is a single point in time.
- Conductivity readings at both the Upstream and Downstream sites were within the healthy range.
- pH was stable and within the healthy range across both sites.
- Clarithromycin was not detected in Q2.
- 4- and 5-methyl -benzotriazole and benzotriazole were not detected at the Upstream site. They were still present at the Downstream site, though generally in lower concentrations. PACOG should consider investigating the source of these constituents as part of the 9-Element Watershed Plan analysis.
- Chromium VI was not detected.
- Dissolved selenium was detected in low concentration at the Downstream site.
- Caffeine was detected at levels typical of surface waters Downstream of wastewater plant discharge per a 2015 study: Detection of Caffeine in the Streams and Rivers within the San Diego Region . Because this was also present at the Upstream location, this may be indicative of failed OWTS's.
- Other compounds in low concentrations:
    - Prometon (herbicide under roadways)
    - 2,4-D (common herbicide)
    - Atrazine (agricultural herbicide)
    - Carbamazepine
    - DEET (herbicide)
    - Fexofenadine (pharmaceutical)
    - Lamotrigine (pharmaceutical)
    - Deethylatrazine (metabolite of atrazine)
    - Hydroxyatrazine (metabolite of atrazine)
    - Metolachlor (herbicide)

Figure 1. March 2024 Sampling – Key Results



	Conductivity (uS)	Salinity (ppt)	pH	TDS (ppt)	Dissolved Oxygen (mg/L)	E. coli (mpn/100mL)	Selenium (Total mg/L)	Iron (Total mg/L)	Clarithromycin (ng/L)	4-methyl-benzotriazole (ng/L)	5-methyl-benzotriazole (ng/L)	Benzotriazole (ng/L)
Upstream	101	0.05	6.44	72.8	9.8	0	0	0.071	19.2	11	9	0
Downstream	1918	0.96	8.15	1.36	9.9	36	0.0364	0.149	3.4	142	7.0	6.0

Figure 2. June 2024 Sampling – Key Results

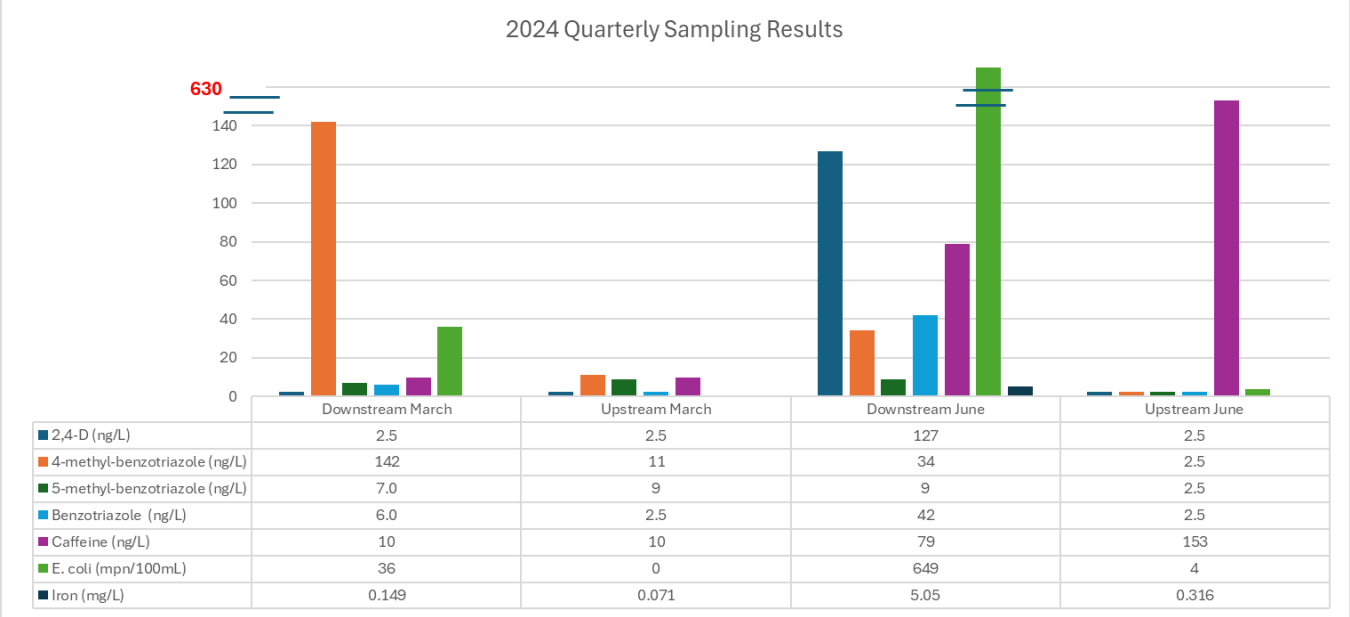


	2,4-D	4-methyl-benzotriazole	5-methyl-benzotriazole	Caffeine	Conductivity	DEET	Deethylatrazine	Dissolved Oxygen (mg/L)	E. coli	Fexofenadine	Hydroxyatrazine	Iron	Lamotrigine	Metolachlor	Prometon	Total Hardness
Upstream	127	34	9	79	650	51.1	2	7	649	11.7	1.8	5.05	10.6	2.0	2.0	
Downstream	344.5	0	0	0	153	52.3	0	0	8.2	4	0	0	0.316	0	0	0

Q1 & Q2 Key Findings

- Both Q1 and Q2 results indicate relative good water quality in the St. Charles River.
- The Q1 sample event occurred while significant snow melt was impacting the river's water quality. Snow melt dillutes pollutants and impact sample results. Many constituents were not detected.
- Q2 results were closer to a base flow condition, but may still have included some snow melt. Q2 results were more typical; the Downstream results were generally higher than the Upstream results. Many constituents were still below the detection limit, but a few more were measureable than in Q1.
- Conductivity
    - Q1 results showed an abnormally high value at the Downstream site. Q2 results did not replicate this oddity. Both sites in Q2 were in a healthy range.
- Caffeine
    - Caffeine was not detected in Q1, but was present in Q2. The Q2 results may indicate failed OWTS's.
- E. coli
    - E. coli was present in low quantities at the Downstream site in Q1. E. coli was present in both locations in Q2 and exceeded the Regulation 32 acute standard at the Downstream site.
- Benzotriazoles
    - Benzotriazole, 4-methyl-benzotriazole, and 5-methyl-benzotriazole were present at both sites in Q1 and Q2. RESPEC suspects an industrial source or potentially failed OWTS impacts. PACOG should consider source tracking.
- Clarithromycin was detected in Q1, but not in Q2. It is likely that it was being administered to nearby cattle shortly before the Q1 sample day.
- Selenium has been present in the Q1 and Q2 Downstream samples in low concentrations.
- Chromium VI has not been detected in either sample event.
- Iron exceeded the Regulation 32 chronic level at the Downstream site in Q2, but was present in low concentrations in Q1 and at the Upstream site in Q2.

Figure 3. March and June 2024 Sampling - Key Results



	Downstream March	Upstream March	Downstream June	Upstream June
2,4-D (ng/L)	2.5	2.5	127	2.5
4-methyl-benzotriazole (ng/L)	142	11	34	2.5
5-methyl-benzotriazole (ng/L)	7.0	9	9	2.5
Benzotriazole (ng/L)	6.0	2.5	42	2.5
Caffeine (ng/L)	10	10	79	153
E. coli (mpn/100mL)	36	0	649	4
Iron (mg/L)	0.149	0.071	5.05	0.316

Q3 Key Findings

- Three Regulation 32 exceedances occurred in Q3.
    - The Upstream and Downstream sites exceeded the E. coli chronic standard of 126 mpn/100 mL.
        - The Upstream (control) site was 1203 mpn/100 mL. During the sample visit, cattle were observed defecating in the river. The cattle use this portion of the St. Charles River as a water source and occasional spikes in E. coli are expected.
        - The Downstream site result was 160 mpn/100mL. This is lower than the June results, but still exceeds the standard. Agricultural and wastewater impacts are presumed.
    - The Downstream site sulfate result was 964 mg/L. This exceeds the chronic standard of 250 mg/L.
    - The Downstream site dissolved selenium result was 20.1 ug/L. This exceeds the acute standard of 18.4 ug/L.
- Benzotriazoles (4-methyl-, 5-methyl-, and benzotriazole) were similar to June results and lower than March results.
- 2,4-D was low or undetectable.
- Caffeine was not detectable at either sample site.
- Specific conductivity was very similar to March results; the Downstream site was 1919 uS/cm and the Upstream site 88.9 uS/cm. This is most likely due to groundwater impacts during low flows.
- Dissolved oxygen has remained in a healthy river range throughout the year.

Figure 4. Q1-Q3 Water Quality Exceedances

Site	Date	Time	Analyte	Result	Units	Speciation	Sample Fracti	Method	RL	MDL
Downstream	3/7/2024	11:30	Selenium (Total mg/L)	0.0364	mg/L		Total	EPA 200.8	0.0008	0.00008
Downstream	6/12/2024	11:30	E. coli	649	mpn/100mL			Colilert	1	1
Downstream	6/12/2024	11:30	Aluminum	4.26	mg/L		Total	EPA 200.8	0.001	0.00003
Downstream	6/12/2024	11:30	Iron	5.05	mg/L		Total	EPA 200.7	0.005	0.0005
Upstream	6/12/2024	10:20	Aluminum	0.199	mg/L		Total	EPA 200.8	0.001	0.00003
Upstream	9/16/2024	11:00	E. coli	1203	mpn/100mL			Colilert	1	1
Downstream	9/16/2024	13:00	E. coli	160	mpn/100mL			Colilert	1	1
Downstream	9/16/2024	13:00	Sulfate	964	mg/l			EPA 300.0	1	0.012
Downstream	9/16/2024	13:00	Selenium	0.0201	mg/l		Dissolved	EPA 200.8	0.0008	0.00008

Orange=Chronic standard exceedance; Red=Acute standard exceedance

Note: Chronic standard exceedances only count when the threshold is exceeded for 30 days or more. None of our samples exceeded the chronic standard at two consecutive sample visits.

Figure 5. March-September Sulfate

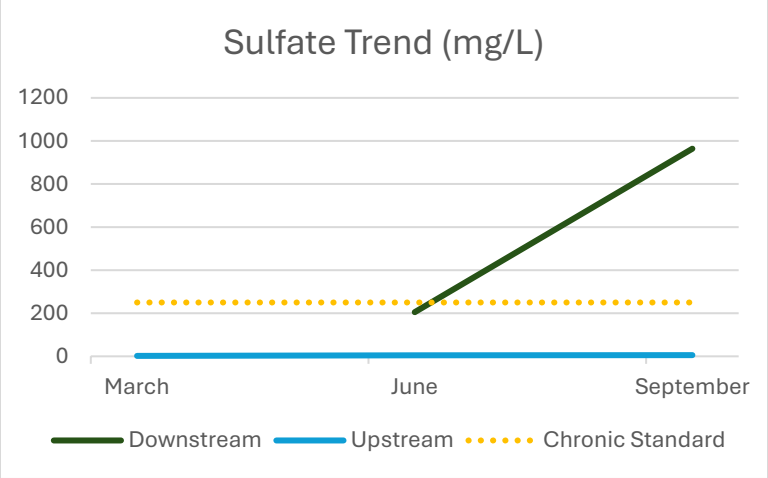


Figure 6. March-September Dissolved Selenium

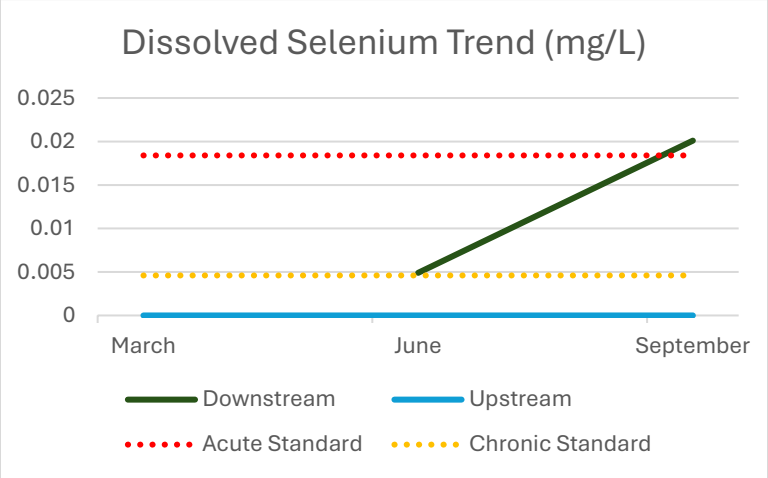


Figure 7. March-September Total Iron

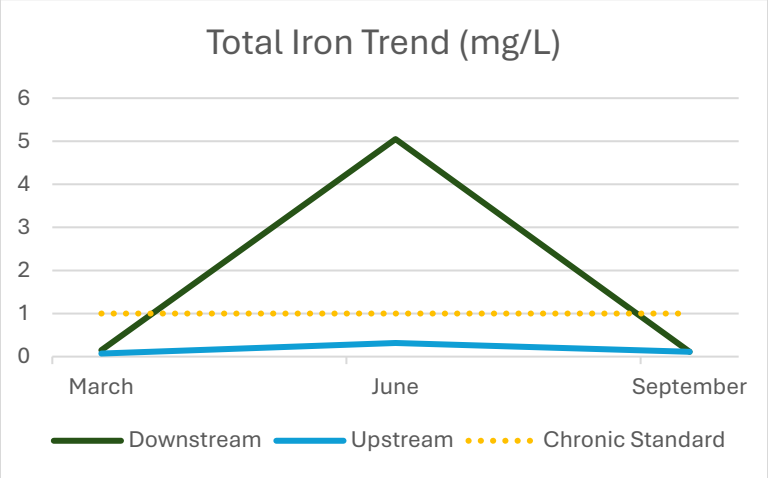


Figure 8. March-September Total Aluminum

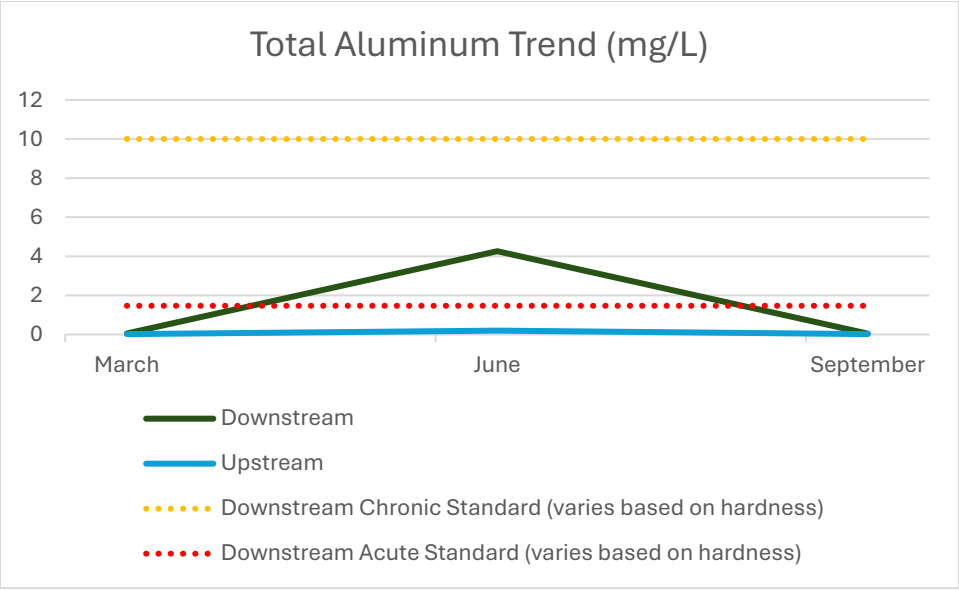


Figure 9. March-September E. coli

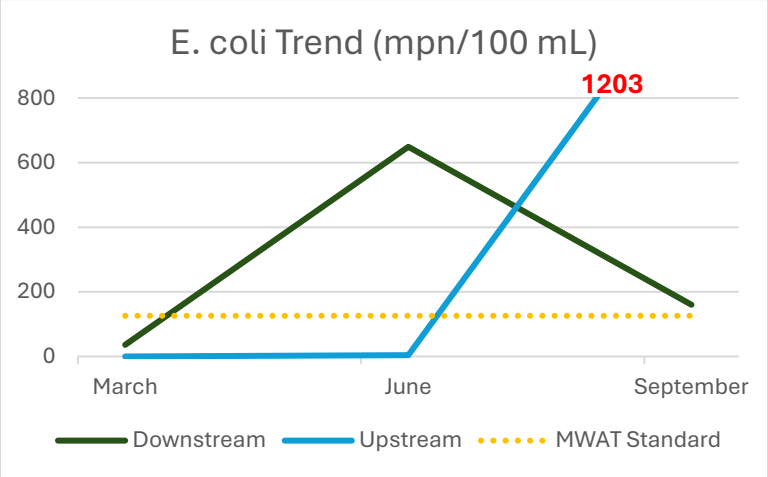


Figure 10. March-September 2,4-D

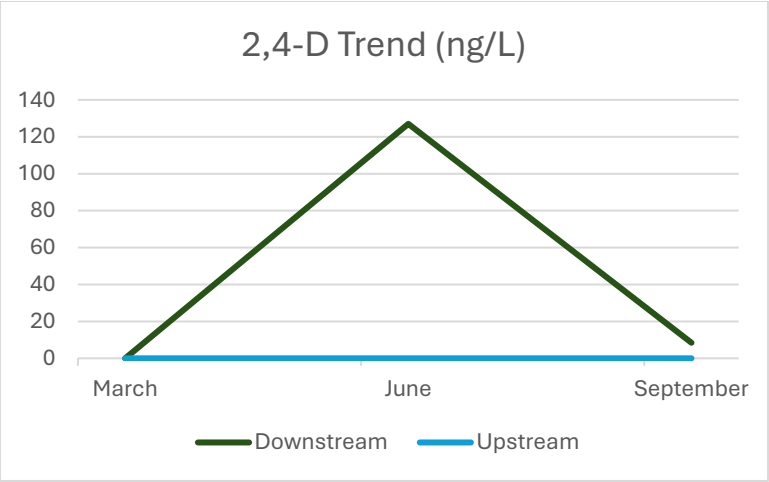


Figure 11. March-September Benzotriazoles

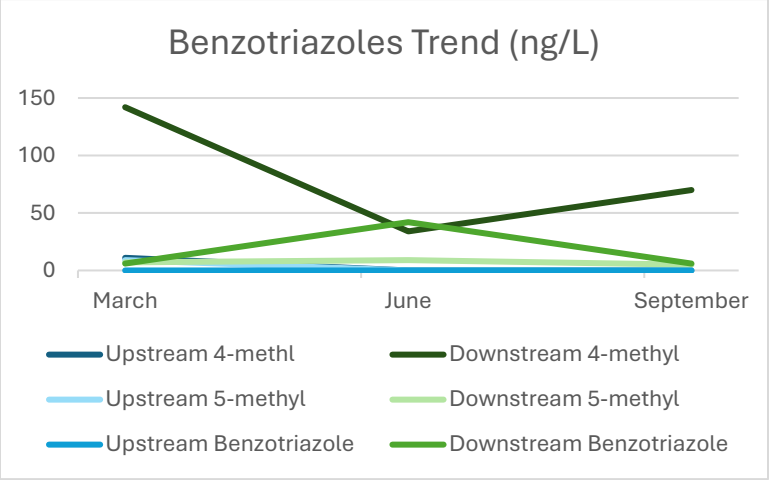


Figure 12. March-September Caffeine

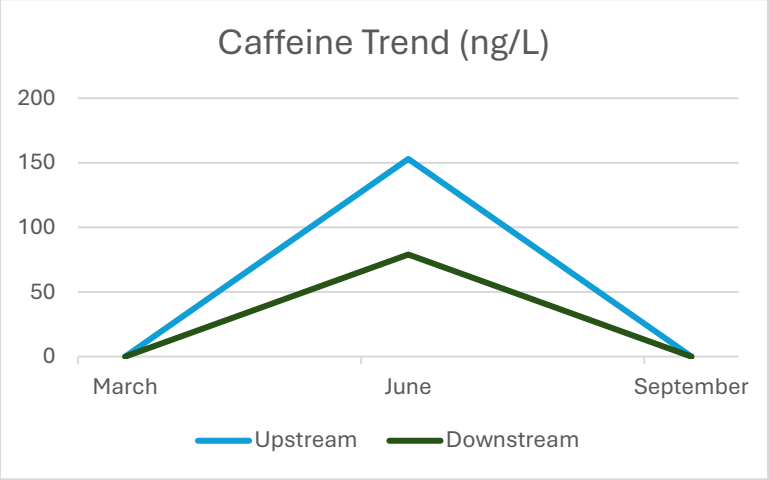


Figure 13. March-September Specific Conductivity

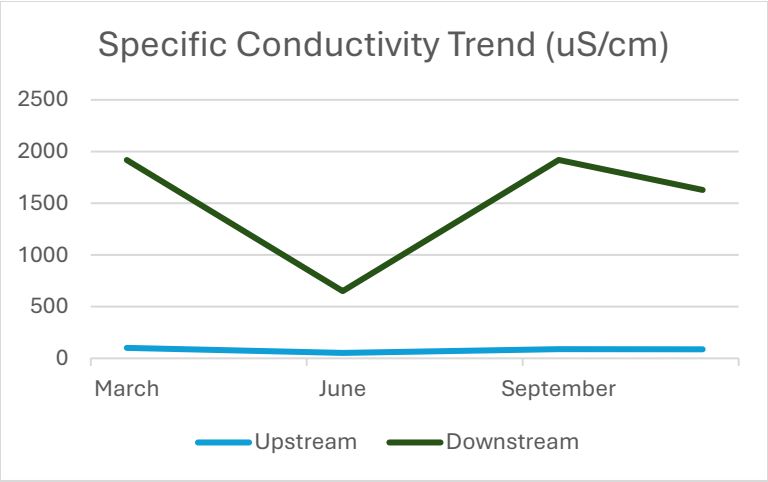
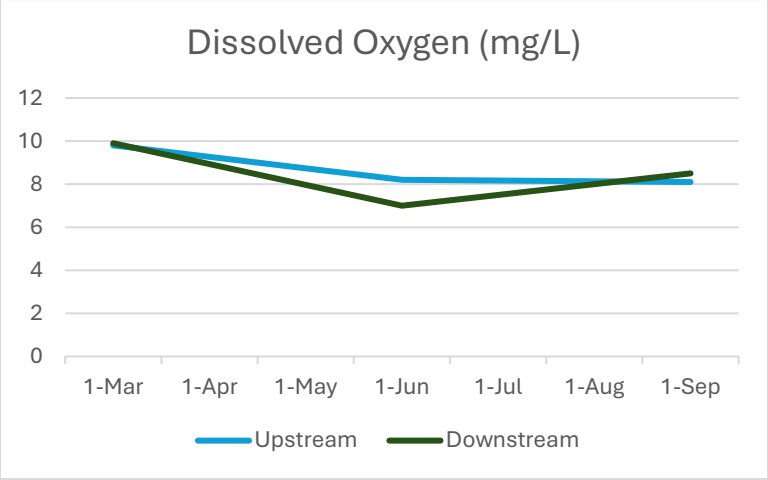


Figure 14. March-September Dissolved Oxygen



Q4 Key Findings

- Quarter 4 samples were collected on November 18th in an effort to include all 2024 results in the 9-Element Watershed Plan Annual Report to CDPHE and to be available to report to EPAC at the December meeting.
- At this time, probe results and Colorado Analytical lab results are available for reporting.
    - The CU Boulder Environmental Mass Spectrometry Laboratory has experienced a technical issue with the mass spectrometer and results are expected in late December. The samples are frozen until the mass spectrometer is functional.
- Sulfate exceeded the Chronic standard for the second sample visit in a row at the Downstream site. This may be indicative of a true chronic exceedance. More frequent sample analysis is needed.
- Dissolved selenium exceeded the acute standard at the Downstream site for the second sample visit in a row.
- Total aluminum and total iron were low at both sites.
- As temperatures drop, E. coli levels dropped significantly. However, there is still a MWAT exceedance occurring at the Downstream site for three sample visits in a row.
- Dissolved oxygen levels are excellent at both sites.
- Specific Conductivity was 1628 uS/cm at the Downstream site. This indicates continued impact from groundwater infiltration.

Figure 15. 2024 Sulfate

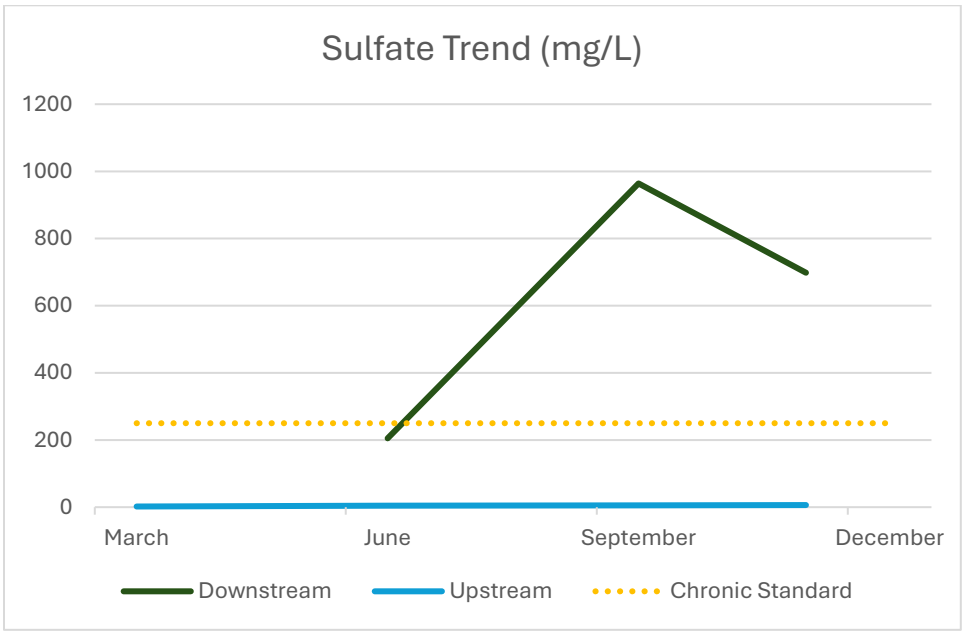


Figure 16. 2024 Dissolved Selenium

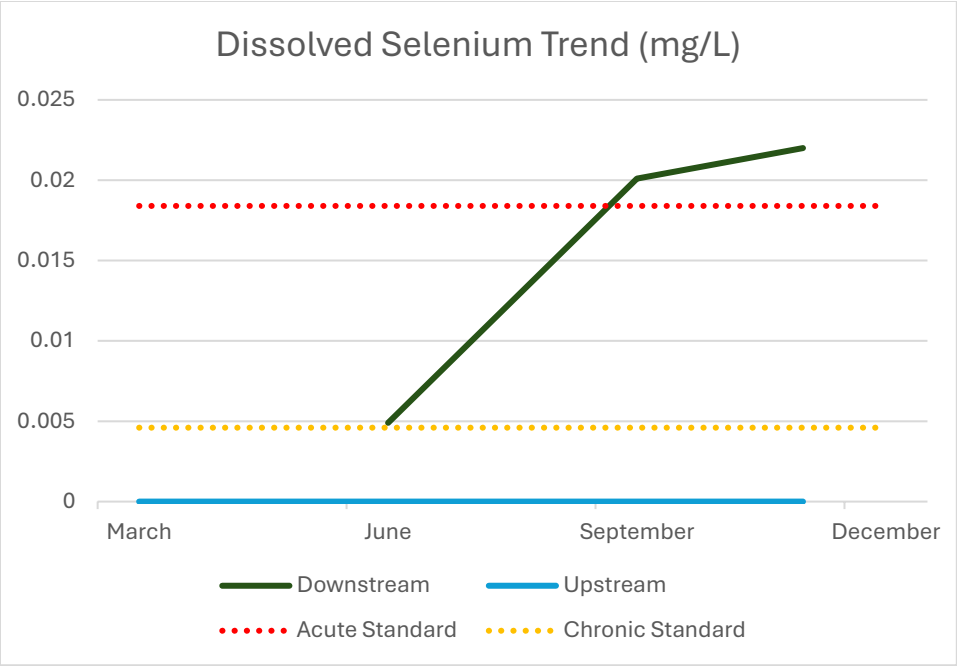


Figure 17. 2024 Total Aluminum

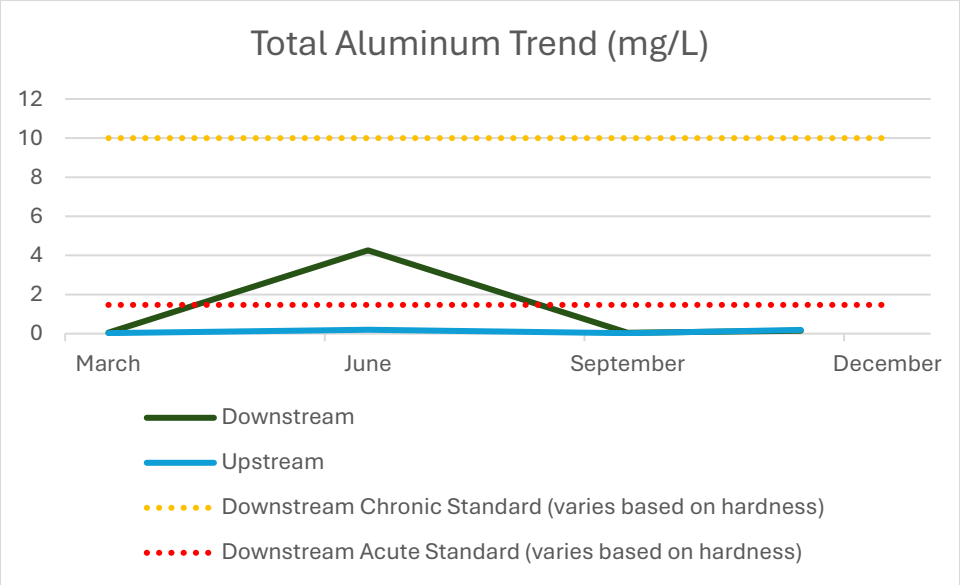


Figure 18. 2024 Total Iron

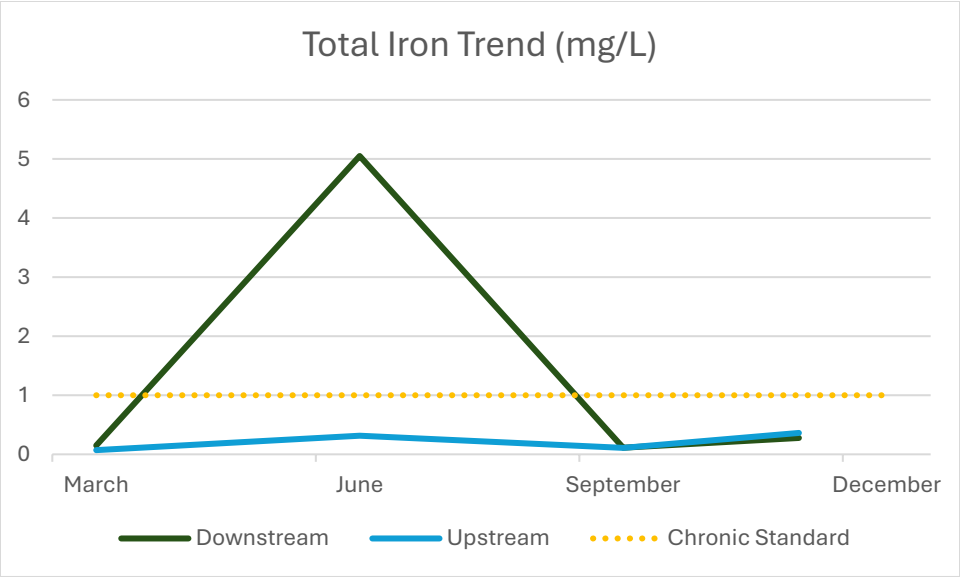


Figure 19. 2024 E. coli

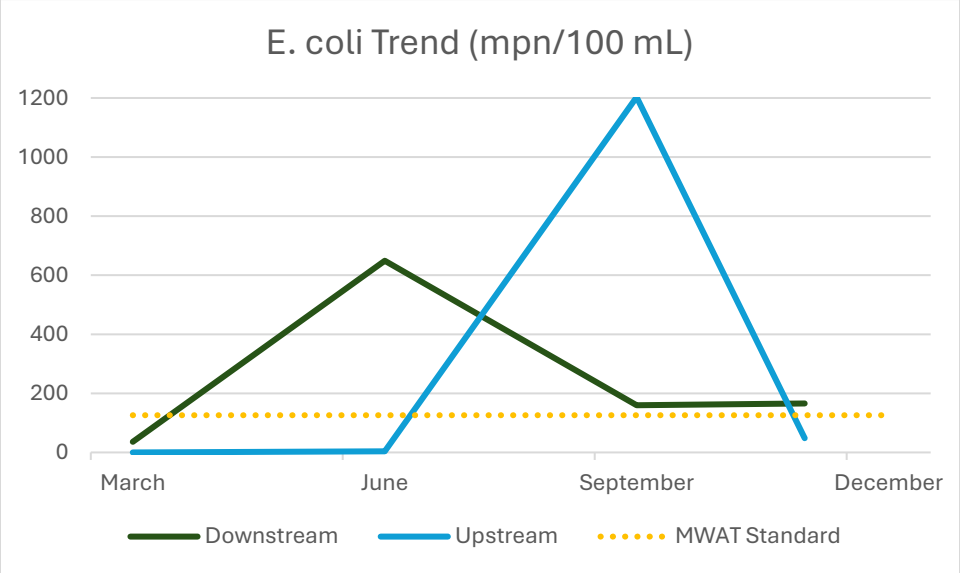


Figure 20. 2024 Dissolved Oxygen

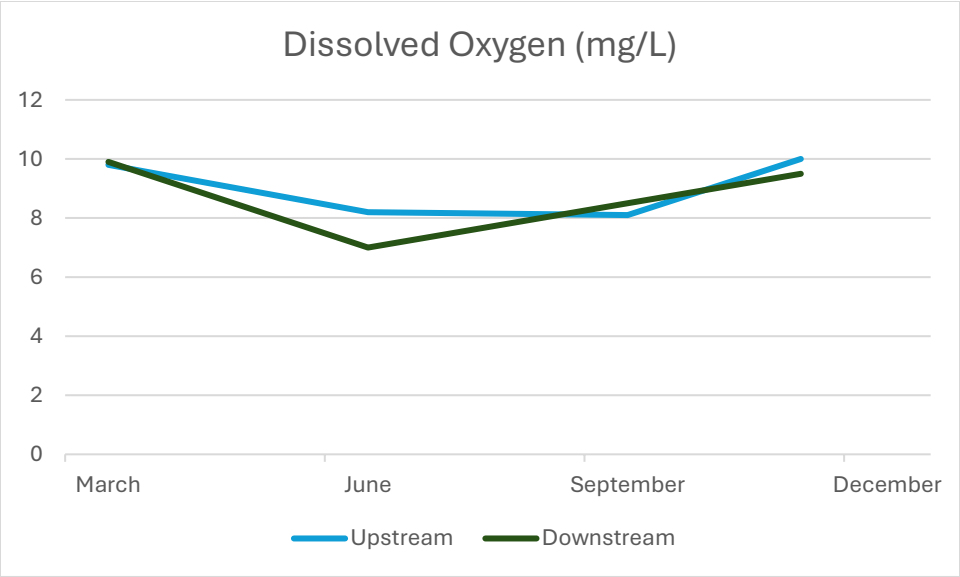
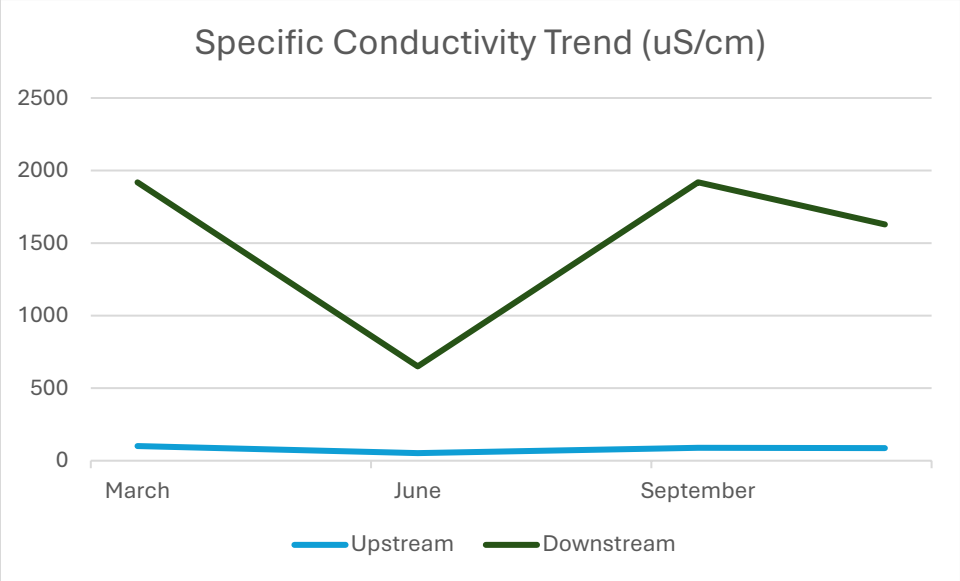


Figure 21. 2024 Specific Conductivity



APPENDIX D

ST. CHARLES RIVER MASTER DATA SHEET – 3.7.2024-11.18.24

Pueblo Area Council of Governments

9 Element Watershed Plan

Quarterly Sampling

Chronic level exceeded

Acute level exceeded

Site	Date	Time	Analyte	Result	Units	Speciation	Sample Fraction	Method	RL	MDL	Date Analy
Downstream	3/7/2024	11:30	1, 7-dimethylxanthine	n.d.	ng/L			Screening Method	100		7-Mar
Upstream	3/7/2024	13:00	1, 7-dimethylxanthine	n.d.	ng/L			Screening Method	100		7-Mar
Downstream	6/12/2024	11:30	1, 7-dimethylxanthine	n.d.	ng/L			Screening Method	100		12-Jun
Upstream	6/12/2024	10:20	1, 7-dimethylxanthine	n.d.	ng/L			Screening Method	100		12-Jun
Downstream	9/16/2024	13:00	1, 7-dimethylxanthine	n.d.	ng/l			Screening Method	100		18-Sep
Upstream	9/16/2024	11:00	1, 7-dimethylxanthine	n.d.	ng/l			Screening Method	100		20-Sep
Downstream	3/7/2024	11:30	10-Hydroxy-carbamazepine	n.d.	ng/L			Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	10-Hydroxy-carbamazepine	n.d.	ng/L			Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	10-Hydroxy-carbamazepine	n.d.	ng/L			Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	10-Hydroxy-carbamazepine	n.d.	ng/L			Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	10-Hydroxy-carbamazepine	n.d.	ng/l			Screening Method		5	18-Sep
Upstream	9/16/2024	11:00	10-Hydroxy-carbamazepine	n.d.	ng/l			Screening Method		5	20-Sep
Downstream	3/7/2024	11:30	2,4-D	<5	ng/L			Low Level Method	5		8-Mar
Upstream	3/7/2024	13:00	2,4-D	<5	ng/L			Low Level Method	5		8-Mar
Downstream	6/12/2024	11:30	2,4-D	127	ng/L			Low Level Method		5	19-Jun
Upstream	6/12/2024	10:20	2,4-D	<5	ng/L			Low Level Method		5	19-Jun
Downstream	9/16/2024	13:00	2,4-D	8.4	ng/l			Low Level Method		5	20-Sep
Upstream	9/16/2024	11:00	2,4-D	<5	ng/l			Low Level Method		5	20-Sep
Downstream	6/12/2024	11:30	4-methyl-benzotriazole	34	ng/L			Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	4-methyl-benzotriazole	n.d.	ng/L			Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	4-methyl-benzotriazole	70	ng/l			Screening Method		5	18-Sep
Upstream	9/16/2024	11:00	4-methyl-benzotriazole	n.d.	ng/l			Screening Method		5	20-Sep
Downstream	3/7/2024	11:30	4-methyl-benzotriazole (ng/L)	142	ng/L			Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	4-methyl-benzotriazole (ng/L)	11	ng/L			Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	5-methyl-benzotriazole	9	ng/L			Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	5-methyl-benzotriazole	n.d.	ng/L			Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	5-methyl-benzotriazole	5.0	ng/l			Screening Method		5	18-Sep
Upstream	9/16/2024	11:00	5-methyl-benzotriazole	n.d.	ng/l			Screening Method		5	20-Sep
Downstream	3/7/2024	11:30	5-methyl-benzotriazole (ng/L)	7.0	ng/L			Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	5-methyl-benzotriazole (ng/L)	9	ng/L			Screening Method	5		7-Mar
Downstream	3/7/2024	11:30	Acetaminophen	n.d.	ng/L			Screening Method	50		7-Mar
Upstream	3/7/2024	13:00	Acetaminophen	n.d.	ng/L			Screening Method	50		7-Mar
Downstream	6/12/2024	11:30	Acetaminophen	n.d.	ng/L			Screening Method	50		12-Jun
Upstream	6/12/2024	10:20	Acetaminophen	n.d.	ng/L			Screening Method	50		12-Jun
Downstream	9/16/2024	13:00	Acetaminophen	n.d.	ng/l			Screening Method		50	18-Sep
Upstream	9/16/2024	11:00	Acetaminophen	n.d.	ng/l			Screening Method		50	20-Sep
Downstream	3/7/2024	11:30	Acetamiprid	n.d.	ng/L			Screening Method	3		7-Mar
Upstream	3/7/2024	13:00	Acetamiprid	n.d.	ng/L			Screening Method	3		7-Mar
Downstream	6/12/2024	11:30	Acetamiprid	n.d.	ng/L			Screening Method	3		12-Jun
Upstream	6/12/2024	10:20	Acetamiprid	n.d.	ng/L			Screening Method	3		12-Jun
Downstream	9/16/2024	13:00	Acetamiprid	n.d.	ng/l			Screening Method		3	18-Sep
Upstream	9/16/2024	11:00	Acetamiprid	n.d.	ng/l			Screening Method		3	20-Sep
Downstream	3/7/2024	11:30	Acetochlor	n.d.	ng/L			Screening Method	2		7-Mar
Upstream	3/7/2024	13:00	Acetochlor	n.d.	ng/L			Screening Method	2		7-Mar
Downstream	6/12/2024	11:30	Acetochlor	n.d.	ng/L			Screening Method	2		12-Jun
Upstream	6/12/2024	10:20	Acetochlor	n.d.	ng/L			Screening Method	2		12-Jun
Downstream	9/16/2024	13:00	Acetochlor	n.d.	ng/l			Screening Method		2	18-Sep
Upstream	9/16/2024	11:00	Acetochlor	n.d.	ng/l			Screening Method		2	20-Sep
Downstream	3/7/2024	11:30	Alachlor	n.d.	ng/L			Screening Method	3		7-Mar
Upstream	3/7/2024	13:00	Alachlor	n.d.	ng/L			Screening Method	3		7-Mar
Downstream	6/12/2024	11:30	Alachlor	n.d.	ng/L			Screening Method	3		12-Jun
Upstream	6/12/2024	10:20	Alachlor	n.d.	ng/L			Screening Method	3		12-Jun
Downstream	9/16/2024	13:00	Alachlor	n.d.	ng/l			Screening Method		3	18-Sep
Upstream	9/16/2024	11:00	Alachlor	n.d.	ng/l			Screening Method		3	20-Sep
Downstream	3/7/2024	11:30	Albuterol	n.d.	ng/L			Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Albuterol	n.d.	ng/L			Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Albuterol	n.d.	ng/L			Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Albuterol	n.d.	ng/L			Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Albuterol	n.d.	ng/l			Screening Method	10		18-Sep
Upstream	9/16/2024	11:00	Albuterol	n.d.	ng/l			Screening Method	10		20-Sep
Downstream	3/7/2024	11:30	Aluminum	0.054	mg/L		Total	EPA 200.8	0.001	0.00003	14-Mar
Upstream	3/7/2024	13:00	Aluminum	0.024	mg/L		Total	EPA 200.8	0.001	0.00003	14-Mar
Downstream	6/12/2024	11:30	Aluminum	4.26	mg/L		Total	EPA 200.8	0.001	0.00003	14-Jun
Upstream	6/12/2024	10:20	Aluminum	0.199	mg/L		Total	EPA 200.8	0.001	0.00003	14-Jun
Downstream	9/16/2024	13:00	Aluminum	0.045	mg/l		Total	EPA 200.8	0.001	0.00003	20-Sep
Upstream	9/16/2024	11:00	Aluminum	0.022	mg/l		Total	EPA 200.8	0.001	0.00003	20-Sep
Downstream	11/18/2024	12:20	Aluminum	0.147	mg/l		Total	EPA 200.8	0.001	0.00003	22-Nov
Upstream	11/18/2024	10:50	Aluminum	0.188	mg/l		Total	EPA 200.8	0.001	0.00003	22-Nov
Upstream	3/7/2024	13:00	Ammonia Nitrogen	ND	mg/L	Nitrogen		SM 4500-NH3-G	0.03	0.007	13-Mar
Downstream	6/12/2024	11:30	Ammonia Nitrogen	ND	mg/L	Nitrogen		SM 4500-NH3-G	0.03	0.007	14-Jun
Upstream	6/12/2024	10:20	Ammonia Nitrogen	ND	mg/L	Nitrogen		SM 4500-NH3-G	0.03	0.007	14-Jun
Downstream	9/16/2024	13:00	Ammonia Nitrogen	ND	mg/l	Nitrogen		SM 4500-NH3-G	0.03	0.007	18-Sep
Upstream	9/16/2024	11:00	Ammonia Nitrogen	ND	mg/l	Nitrogen		SM 4500-NH3-G	0.03	0.007	18-Sep
Downstream	11/18/2024	12:20	Ammonia Nitrogen	ND	mg/l	as N		SM 4500-NH3-G	0.03	0.007	20-Nov
Upstream	11/18/2024	10:50	Ammonia Nitrogen	ND	mg/l	as N		SM 4500-NH3-G	0.03	0.007	20-Nov
Downstream	3/7/2024	11:30	Amphetamine	n.d.	ng/L			Screening Method	50		7-Mar
Upstream	3/7/2024	13:00	Amphetamine	n.d.	ng/L			Screening Method	50		7-Mar
Downstream	6/12/2024	11:30	Amphetamine	n.d.	ng/L			Screening Method	50		12-Jun
Upstream	6/12/2024	10:20	Amphetamine	n.d.	ng/L			Screening Method	50		12-Jun
Downstream	9/16/2024	13:00	Amphetamine	n.d.	ng/l			Screening Method	50		18-Sep
Upstream	9/16/2024	11:00	Amphetamine	n.d.	ng/l			Screening Method	50		20-Sep
Upstream	3/7/2024	13:00	Arsenic	ND	mg/L		Total	EPA 200.8	0.0006	0.00006	14-Mar
Downstream	6/12/2024	11:30	Arsenic	0.0031	mg/L		Total	EPA 200.8	0.0006	0.00006	14-Jun
Upstream	6/12/2024	10:20	Arsenic	ND	mg/L		Total	EPA 200.8	0.0006	0.00006	14-Jun
Downstream	9/16/2024	13:00	Arsenic	0.0011	mg/l		Total	EPA 200.8	0.0006	0.00006	20-Sep
Upstream	9/16/2024	11:00	Arsenic	ND	mg/l		Total	EPA 200.8	0.0006	0.00006	20-Sep
Downstream	11/18/2024	12:20	Arsenic	0.001	mg/l		Total	EPA 200.8	0.0006	0.00006	22-Nov
Upstream	11/18/2024	10:50	Arsenic	ND	mg/l		Total	EPA 200.8	0.0006	0.00006	22-Nov
Downstream	3/7/2024	11:30	Atenolol	<5	ng/L			Low Level Method	5		7-Mar
Upstream	3/7/2024	13:00	Atenolol	<5	ng/L			Low Level Method	5		7-Mar
Downstream	6/12/2024	11:30	Atenolol	<5	ng/L			Low Level Method	5		12-Jun
Upstream	6/12/2024	10:20	Atenolol	<5	ng/L			Low Level Method	5		12-Jun
Downstream	9/16/2024	13:00	Atenolol	<5	ng/l			Low Level Method	5		18-Sep
Upstream	9/16/2024	11:00	Atenolol	<5	ng/l			Low Level Method	5		18-Sep
Downstream	3/7/2024	11:30	Atorvastatin	n.d.	ng/L			Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Atorvastatin	n.d.	ng/L			Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Atorvastatin	n.d.	ng/L			Screening Method	10		12-Jun

Upstream	6/12/2024	10:20	Atorvastatin	n.d.	ng/L		Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Atorvastatin	n.d.	ng/l		Screening Method		10	18-Sep
Upstream	9/16/2024	11:00	Atorvastatin	n.d.	ng/l		Screening Method		10	20-Sep
Downstream	3/7/2024	11:30	Atrazine	<5	ng/L		Low Level Method		5	7-Mar
Upstream	3/7/2024	13:00	Atrazine	<5	ng/L		Low Level Method		5	7-Mar
Downstream	6/12/2024	11:30	Atrazine	9.7	ng/L		Low Level Method		5	12-Jun
Upstream	6/12/2024	10:20	Atrazine	<5	ng/L		Low Level Method		5	12-Jun
Downstream	9/16/2024	13:00	Atrazine	<5	ng/l		Low Level Method		5	18-Sep
Upstream	9/16/2024	11:00	Atrazine	<5	ng/l		Low Level Method		5	18-Sep
Downstream	3/7/2024	11:30	Azithromycin	n.d.	ng/L		Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Azithromycin	n.d.	ng/L		Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Azithromycin	n.d.	ng/L		Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Azithromycin	n.d.	ng/L		Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Azithromycin	n.d.	ng/l		Screening Method		10	18-Sep
Upstream	9/16/2024	11:00	Azithromycin	n.d.	ng/l		Screening Method		10	20-Sep
Downstream	3/7/2024	11:30	Azoxystrobin	n.d.	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Azoxystrobin	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Azoxystrobin	n.d.	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Azoxystrobin	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Azoxystrobin	5.0	ng/l		Screening Method		1	18-Sep
Upstream	9/16/2024	11:00	Azoxystrobin	n.d.	ng/l		Screening Method		1	20-Sep
Downstream	3/7/2024	11:30	Benzothiazole	n.d.	ng/L		Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Benzothiazole	n.d.	ng/L		Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Benzothiazole	n.d.	ng/L		Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Benzothiazole	n.d.	ng/L		Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Benzothiazole	n.d.	ng/l		Screening Method		10	18-Sep
Upstream	9/16/2024	11:00	Benzothiazole	n.d.	ng/l		Screening Method		10	20-Sep
Downstream	6/12/2024	11:30	Benzotriazole	42	ng/L		Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Benzotriazole	n.d.	ng/L		Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Benzotriazole	6.0	ng/l		Screening Method		5	18-Sep
Upstream	9/16/2024	11:00	Benzotriazole	n.d.	ng/l		Screening Method		5	20-Sep
Downstream	3/7/2024	11:30	Benzotriazole (ng/L)	6.0	ng/L		Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Benzotriazole (ng/L)	n.d.	ng/L		Screening Method	5		7-Mar
Downstream	3/7/2024	11:30	Bisphenol A	<5	ng/L		Low Level Method		20	8-Mar
Upstream	3/7/2024	13:00	Bisphenol A	<5	ng/L		Low Level Method		20	8-Mar
Downstream	6/12/2024	11:30	Bisphenol A	<5	ng/L		Low Level Method		20	19-Jun
Upstream	6/12/2024	10:20	Bisphenol A	<5	ng/L		Low Level Method		20	19-Jun
Downstream	3/7/2024	11:30	Bromuconazole	n.d.	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Bromuconazole	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Bromuconazole	n.d.	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Bromuconazole	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Bromuconazole	n.d.	ng/l		Screening Method		1	18-Sep
Upstream	9/16/2024	11:00	Bromuconazole	n.d.	ng/l		Screening Method		1	20-Sep
Downstream	3/7/2024	11:30	Buprofezin	n.d.	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Buprofezin	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Buprofezin	n.d.	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Buprofezin	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Buprofezin	n.d.	ng/l		Screening Method		1	18-Sep
Upstream	9/16/2024	11:00	Buprofezin	n.d.	ng/l		Screening Method		1	20-Sep
Downstream	3/7/2024	11:30	Bupropion	<1	ng/L		Low Level Method		5	7-Mar
Upstream	3/7/2024	13:00	Bupropion	<1	ng/L		Low Level Method		5	7-Mar
Downstream	6/12/2024	11:30	Bupropion	<1	ng/L		Low Level Method		5	12-Jun
Upstream	6/12/2024	10:20	Bupropion	<1	ng/L		Low Level Method		5	12-Jun
Downstream	9/16/2024	13:00	Bupropion	<5	ng/l		Low Level Method		5	18-Sep
Upstream	9/16/2024	11:00	Bupropion	<5	ng/l		Low Level Method		5	18-Sep
Downstream	3/7/2024	11:30	C10-EO4	n.d.	ng/L		Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	C10-EO4	n.d.	ng/L		Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	C10-EO4	n.d.	ng/L		Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	C10-EO4	n.d.	ng/L		Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	C10-EO4	n.d.	ng/l		Screening Method		200	20-Sep
Upstream	9/16/2024	11:00	C10-EO4	n.d.	ng/l		Screening Method		200	20-Sep
Downstream	3/7/2024	11:30	C10-EO5	n.d.	ng/L		Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	C10-EO5	n.d.	ng/L		Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	C10-EO5	n.d.	ng/L		Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	C10-EO5	n.d.	ng/L		Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	C10-EO5	n.d.	ng/l		Screening Method		200	20-Sep
Upstream	9/16/2024	11:00	C10-EO5	n.d.	ng/l		Screening Method		200	20-Sep
Downstream	3/7/2024	11:30	C10-EO6	n.d.	ng/L		Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	C10-EO6	n.d.	ng/L		Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	C10-EO6	n.d.	ng/L		Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	C10-EO6	n.d.	ng/L		Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	C10-EO6	n.d.	ng/l		Screening Method		200	20-Sep
Upstream	9/16/2024	11:00	C10-EO6	n.d.	ng/l		Screening Method		200	20-Sep
Downstream	3/7/2024	11:30	C10-EO7	n.d.	ng/L		Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	C10-EO7	n.d.	ng/L		Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	C10-EO7	n.d.	ng/L		Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	C10-EO7	n.d.	ng/L		Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	C10-EO7	n.d.	ng/l		Screening Method		200	20-Sep
Upstream	9/16/2024	11:00	C10-EO7	n.d.	ng/l		Screening Method		200	20-Sep
Downstream	3/7/2024	11:30	C10-EO8	n.d.	ng/L		Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	C10-EO8	n.d.	ng/L		Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	C10-EO8	n.d.	ng/L		Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	C10-EO8	n.d.	ng/L		Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	C10-EO8	n.d.	ng/l		Screening Method		200	20-Sep
Upstream	9/16/2024	11:00	C10-EO8	n.d.	ng/l		Screening Method		200	20-Sep
Upstream	3/7/2024	13:00	Cadmium	ND	mg/L	Dissolved	EPA 200.8	0.0001	0.000006	14-Mar
Downstream	6/12/2024	11:30	Cadmium	ND	mg/L	Dissolved	EPA 200.8	0.0001	0.000006	14-Jun
Upstream	6/12/2024	10:20	Cadmium	ND	mg/L	Dissolved	EPA 200.8	0.0001	0.000006	14-Jun
Downstream	9/16/2024	13:00	Cadmium	ND	mg/l	Dissolved	EPA 200.8	0.0001	0.000006	20-Sep
Upstream	9/16/2024	11:00	Cadmium	ND	mg/l	Dissolved	EPA 200.8	0.0001	0.000006	20-Sep
Downstream	11/18/2024	12:20	Cadmium	ND	mg/l	Dissolved	EPA 200.8	0.0001	0.000006	22-Nov
Upstream	11/18/2024	10:50	Cadmium	ND	mg/l	Dissolved	EPA 200.8	0.0001	0.000006	22-Nov
Downstream	3/7/2024	11:30	Caffeine	n.d.	ng/L		Screening Method	20		7-Mar
Upstream	3/7/2024	13:00	Caffeine	n.d.	ng/L		Screening Method	20		7-Mar
Downstream	6/12/2024	11:30	Caffeine	79	ng/L		Screening Method	20		12-Jun
Upstream	6/12/2024	10:20	Caffeine	153	ng/L		Screening Method	20		12-Jun
Downstream	9/16/2024	13:00	Caffeine	n.d.	ng/l		Screening Method		20	18-Sep
Upstream	9/16/2024	11:00	Caffeine	n.d.	ng/l		Screening Method		20	20-Sep
Downstream	6/12/2024	11:30	Calcium	104	mg/L	Total	EPA 200.7	0.1	0.01	14-Jun
Upstream	6/12/2024	10:20	Calcium	6	mg/L	Total	EPA 200.7	0.1	0.01	14-Jun
Downstream	9/16/2024	13:00	Calcium	332	mg/l	Total	EPA 200.7	0.1	0.01	18-Sep
Upstream	9/16/2024	11:00	Calcium	12.3	mg/l	Total	EPA 200.7	0.1	0.01	18-Sep
Downstream	11/18/2024	12:20	Calcium	230	mg/l	Total	EPA 200.7	0.1	0.01	20-Nov

Upstream	11/18/2024	10:50	Calcium	10.2	mg/l	Total	EPA 200.7	0.1	0.01	20-Nov
Downstream	3/7/2024	11:30	Cannabidiol	n.d.	ng/L		Screening Method	50		7-Mar
Upstream	3/7/2024	13:00	Cannabidiol	n.d.	ng/L		Screening Method	50		7-Mar
Downstream	6/12/2024	11:30	Cannabidiol	n.d.	ng/L		Screening Method	50		12-Jun
Upstream	6/12/2024	10:20	Cannabidiol	n.d.	ng/L		Screening Method	50		12-Jun
Downstream	9/16/2024	13:00	Cannabidiol	n.d.	ng/l		Screening Method	50		18-Sep
Upstream	9/16/2024	11:00	Cannabidiol	n.d.	ng/l		Screening Method	50		20-Sep
Downstream	3/7/2024	11:30	Carbamazepine	1.6	ng/L		Low Level Method	1		7-Mar
Upstream	3/7/2024	13:00	Carbamazepine	<5	ng/L		Low Level Method	1		7-Mar
Downstream	6/12/2024	11:30	Carbamazepine	2.0	ng/L		Low Level Method	1		12-Jun
Upstream	6/12/2024	10:20	Carbamazepine	<5	ng/L		Low Level Method	1		12-Jun
Downstream	9/16/2024	13:00	Carbamazepine	<1	ng/l		Low Level Method	1		18-Sep
Upstream	9/16/2024	11:00	Carbamazepine	<1	ng/l		Low Level Method	1		18-Sep
Downstream	3/7/2024	11:30	Carbaryl	n.d.	ng/L		Screening Method	3		7-Mar
Upstream	3/7/2024	13:00	Carbaryl	n.d.	ng/L		Screening Method	3		7-Mar
Downstream	6/12/2024	11:30	Carbaryl	n.d.	ng/L		Screening Method	3		12-Jun
Upstream	6/12/2024	10:20	Carbaryl	n.d.	ng/L		Screening Method	3		12-Jun
Downstream	9/16/2024	13:00	Carbaryl	n.d.	ng/l		Screening Method	3		18-Sep
Upstream	9/16/2024	11:00	Carbaryl	n.d.	ng/l		Screening Method	3		20-Sep
Downstream	3/7/2024	11:30	Carbendazim	n.d.	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Carbendazim	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Carbendazim	n.d.	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Carbendazim	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Carbendazim	n.d.	ng/l		Screening Method	1		18-Sep
Upstream	9/16/2024	11:00	Carbendazim	n.d.	ng/l		Screening Method	1		20-Sep
Downstream	3/7/2024	11:30	Carbofuran	n.d.	ng/L		Screening Method	4		7-Mar
Upstream	3/7/2024	13:00	Carbofuran	n.d.	ng/L		Screening Method	4		7-Mar
Downstream	6/12/2024	11:30	Carbofuran	n.d.	ng/L		Screening Method	4		12-Jun
Upstream	6/12/2024	10:20	Carbofuran	n.d.	ng/L		Screening Method	4		12-Jun
Downstream	9/16/2024	13:00	Carbofuran	n.d.	ng/l		Screening Method	4		18-Sep
Upstream	9/16/2024	11:00	Carbofuran	n.d.	ng/l		Screening Method	4		20-Sep
Downstream	3/7/2024	11:30	Chlorpyrifos methyl	n.d.	ng/L		Screening Method	30		7-Mar
Upstream	3/7/2024	13:00	Chlorpyrifos methyl	n.d.	ng/L		Screening Method	30		7-Mar
Downstream	6/12/2024	11:30	Chlorpyrifos methyl	n.d.	ng/L		Screening Method	30		12-Jun
Upstream	6/12/2024	10:20	Chlorpyrifos methyl	n.d.	ng/L		Screening Method	30		12-Jun
Downstream	9/16/2024	13:00	Chlorpyrifos methyl	n.d.	ng/l		Screening Method	30		18-Sep
Upstream	9/16/2024	11:00	Chlorpyrifos methyl	n.d.	ng/l		Screening Method	30		20-Sep
Upstream	3/7/2024	13:00	Chromium - Hexavalent	ND	mg/L	Dissolved	SM 3500-Cr B	0.02	0.01	12-Mar
Downstream	6/12/2024	11:30	Chromium - Hexavalent	ND	mg/L	Dissolved	SM 3500-Cr B	0.02	0.01	19-Jun
Upstream	6/12/2024	10:20	Chromium - Hexavalent	ND	mg/L	Dissolved	SM 3500-Cr B	0.02	0.01	19-Jun
Downstream	9/16/2024	13:00	Chromium - Hexavalent	ND	mg/l	Dissolved	SM 3500-Cr B	0.02	0.01	19-Sep
Upstream	9/16/2024	11:00	Chromium - Hexavalent	ND	mg/l	Dissolved	SM 3500-Cr B	0.02	0.01	19-Sep
Downstream	11/18/2024	12:20	Chromium VI	ND	mg/l	Dissolved	SM 3500-Cr B	0.02	0.01	20-Nov
Upstream	11/18/2024	10:50	Chromium VI	ND	mg/l	Dissolved	SM 3500-Cr B	0.02	0.01	20-Nov
Downstream	3/7/2024	11:30	Cimetidine	n.d.	ng/L		Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Cimetidine	n.d.	ng/L		Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Cimetidine	n.d.	ng/L		Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Cimetidine	n.d.	ng/L		Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Cimetidine	n.d.	ng/l		Screening Method	10		18-Sep
Upstream	9/16/2024	11:00	Cimetidine	n.d.	ng/l		Screening Method	10		20-Sep
Downstream	6/12/2024	11:30	Clarithromycin	<5	ng/L		Low Level Method	5		12-Jun
Upstream	6/12/2024	10:20	Clarithromycin	<5	ng/L		Low Level Method	5		12-Jun
Downstream	9/16/2024	13:00	Clarithromycin	<5	ng/l		Low Level Method	5		18-Sep
Upstream	9/16/2024	11:00	Clarithromycin	<5	ng/l		Low Level Method	5		18-Sep
Downstream	3/7/2024	11:30	Clarithromycin (ng/L)	3.4	ng/L		Low Level Method	5		7-Mar
Upstream	3/7/2024	13:00	Clarithromycin (ng/L)	19.2	ng/L		Low Level Method	5		7-Mar
Downstream	3/7/2024	11:30	Codeine	n.d.	ng/L		Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Codeine	n.d.	ng/L		Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Codeine	n.d.	ng/L		Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Codeine	n.d.	ng/L		Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Codeine	n.d.	ng/l		Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Codeine	n.d.	ng/l		Screening Method	5		20-Sep
Downstream	11/18/2024	12:20	Conductivity	1628			Probe			18-Nov
Upstream	11/18/2024	10:50	Conductivity	87			Probe			18-Nov
Upstream	3/7/2024	13:00	Copper	0.0013	mg/L	Dissolved	EPA 200.8	0.0008	0.00001	14-Mar
Downstream	6/12/2024	11:30	Copper	0.001	mg/L	Dissolved	EPA 200.8	0.0008	0.00001	14-Jun
Upstream	6/12/2024	10:20	Copper	0.0014	mg/L	Dissolved	EPA 200.8	0.0008	0.00001	14-Jun
Downstream	9/16/2024	13:00	Copper	ND	mg/l	Dissolved	EPA 200.8	0.0008	0.00001	20-Sep
Upstream	9/16/2024	11:00	Copper	0.0008	mg/l	Dissolved	EPA 200.8	0.0008	0.00001	20-Sep
Downstream	11/18/2024	12:20	Copper	ND	mg/l	Dissolved	EPA 200.8	0.0008	0.00001	22-Nov
Upstream	11/18/2024	10:50	Copper	0.0012	mg/l	Dissolved	EPA 200.8	0.0008	0.00001	22-Nov
Downstream	3/7/2024	11:30	Cotinine	<20	ng/L		Low Level Method	10		7-Mar
Upstream	3/7/2024	13:00	Cotinine	<20	ng/L		Low Level Method	10		7-Mar
Downstream	6/12/2024	11:30	Cotinine	<20	ng/L		Low Level Method	10		12-Jun
Upstream	6/12/2024	10:20	Cotinine	<20	ng/L		Low Level Method	10		12-Jun
Downstream	9/16/2024	13:00	Cotinine	10.2	ng/l		Low Level Method	10		18-Sep
Upstream	9/16/2024	11:00	Cotinine	<10	ng/l		Low Level Method	10		18-Sep
Downstream	3/7/2024	11:30	Cyproconazole	n.d.	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Cyproconazole	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Cyproconazole	n.d.	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Cyproconazole	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Cyproconazole	n.d.	ng/l		Screening Method	1		18-Sep
Upstream	9/16/2024	11:00	Cyproconazole	n.d.	ng/l		Screening Method	1		20-Sep
Downstream	3/7/2024	11:30	Cyromazine	n.d.	ng/L		Screening Method	9		7-Mar
Upstream	3/7/2024	13:00	Cyromazine	n.d.	ng/L		Screening Method	9		7-Mar
Downstream	6/12/2024	11:30	Cyromazine	n.d.	ng/L		Screening Method	9		12-Jun
Upstream	6/12/2024	10:20	Cyromazine	n.d.	ng/L		Screening Method	9		12-Jun
Downstream	9/16/2024	13:00	Cyromazine	n.d.	ng/l		Screening Method	9		18-Sep
Upstream	9/16/2024	11:00	Cyromazine	n.d.	ng/l		Screening Method	9		20-Sep
Downstream	3/7/2024	11:30	DEET	<5	ng/L		Low Level Method	20		7-Mar
Upstream	3/7/2024	13:00	DEET	<5	ng/L		Low Level Method	20		7-Mar
Downstream	6/12/2024	11:30	DEET	51.1	ng/L		Low Level Method	20		12-Jun
Upstream	6/12/2024	10:20	DEET	<5	ng/L		Low Level Method	20		12-Jun
Downstream	9/16/2024	13:00	DEET	<20	ng/l		Low Level Method	20		18-Sep
Upstream	9/16/2024	11:00	DEET	<20	ng/l		Low Level Method	20		18-Sep
Downstream	3/7/2024	11:30	Deethylatrazine	n.d.	ng/L		Screening Method	2		7-Mar
Upstream	3/7/2024	13:00	Deethylatrazine	n.d.	ng/L		Screening Method	2		7-Mar
Downstream	6/12/2024	11:30	Deethylatrazine	2	ng/L		Screening Method	2		12-Jun
Upstream	6/12/2024	10:20	Deethylatrazine	n.d.	ng/L		Screening Method	2		12-Jun
Downstream	9/16/2024	13:00	Deethylatrazine	n.d.	ng/l		Screening Method	2		18-Sep
Upstream	9/16/2024	11:00	Deethylatrazine	n.d.	ng/l		Screening Method	2		20-Sep
Downstream	3/7/2024	11:30	Dehydronifedipine	n.d.	ng/L		Screening Method	2		7-Mar
Upstream	3/7/2024	13:00	Dehydronifedipine	n.d.	ng/L		Screening Method	2		7-Mar

Downstream	6/12/2024	11:30	Dehydronifedipine	n.d.	ng/L	Screening Method	2		12-Jun
Upstream	6/12/2024	10:20	Dehydronifedipine	n.d.	ng/L	Screening Method	2		12-Jun
Downstream	9/16/2024	13:00	Dehydronifedipine	n.d.	ng/l	Screening Method		2	18-Sep
Upstream	9/16/2024	11:00	Dehydronifedipine	n.d.	ng/l	Screening Method		2	20-Sep
Downstream	3/7/2024	11:30	Deisopropylatrazine	n.d.	ng/L	Screening Method	2		7-Mar
Upstream	3/7/2024	13:00	Deisopropylatrazine	n.d.	ng/L	Screening Method	2		7-Mar
Downstream	6/12/2024	11:30	Deisopropylatrazine	n.d.	ng/L	Screening Method	2		12-Jun
Upstream	6/12/2024	10:20	Deisopropylatrazine	n.d.	ng/L	Screening Method	2		12-Jun
Downstream	9/16/2024	13:00	Deisopropylatrazine	n.d.	ng/l	Screening Method		2	18-Sep
Upstream	9/16/2024	11:00	Deisopropylatrazine	n.d.	ng/l	Screening Method		2	20-Sep
Downstream	3/7/2024	11:30	Desmethyl-tramadol	n.d.	ng/L	Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Desmethyl-tramadol	n.d.	ng/L	Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Desmethyl-tramadol	n.d.	ng/L	Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Desmethyl-tramadol	n.d.	ng/L	Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Desmethyl-tramadol	n.d.	ng/l	Screening Method		10	18-Sep
Upstream	9/16/2024	11:00	Desmethyl-tramadol	n.d.	ng/l	Screening Method		10	20-Sep
Downstream	3/7/2024	11:30	Desmethyl-venlafaxine	n.d.	ng/L	Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Desmethyl-venlafaxine	n.d.	ng/L	Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Desmethyl-venlafaxine	n.d.	ng/L	Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Desmethyl-venlafaxine	n.d.	ng/L	Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Desmethyl-venlafaxine	n.d.	ng/l	Screening Method		10	18-Sep
Upstream	9/16/2024	11:00	Desmethyl-venlafaxine	n.d.	ng/l	Screening Method		10	20-Sep
Downstream	3/7/2024	11:30	Dextromethorphan	n.d.	ng/L	Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Dextromethorphan	n.d.	ng/L	Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Dextromethorphan	n.d.	ng/L	Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Dextromethorphan	n.d.	ng/L	Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Dextromethorphan	n.d.	ng/l	Screening Method		10	18-Sep
Upstream	9/16/2024	11:00	Dextromethorphan	n.d.	ng/l	Screening Method		10	20-Sep
Downstream	3/7/2024	11:30	Dextrorphan	<5	ng/L	Low Level Method		5	7-Mar
Upstream	3/7/2024	13:00	Dextrorphan	<5	ng/L	Low Level Method		5	7-Mar
Downstream	6/12/2024	11:30	Dextrorphan	<5	ng/L	Low Level Method		5	12-Jun
Upstream	6/12/2024	10:20	Dextrorphan	<5	ng/L	Low Level Method		5	12-Jun
Downstream	9/16/2024	13:00	Dextrorphan	<5	ng/l	Low Level Method		5	18-Sep
Upstream	9/16/2024	11:00	Dextrorphan	<5	ng/l	Low Level Method		5	18-Sep
Downstream	3/7/2024	11:30	Diazepam	n.d.	ng/L	Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Diazepam	n.d.	ng/L	Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Diazepam	n.d.	ng/L	Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Diazepam	n.d.	ng/L	Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Diazepam	n.d.	ng/l	Screening Method		5	18-Sep
Upstream	9/16/2024	11:00	Diazepam	n.d.	ng/l	Screening Method		5	20-Sep
Downstream	3/7/2024	11:30	Diazinon	<5	ng/L	Low Level Method		5	7-Mar
Upstream	3/7/2024	13:00	Diazinon	<5	ng/L	Low Level Method		5	7-Mar
Downstream	6/12/2024	11:30	Diazinon	<5	ng/L	Low Level Method		5	12-Jun
Upstream	6/12/2024	10:20	Diazinon	<5	ng/L	Low Level Method		5	12-Jun
Downstream	9/16/2024	13:00	Diazinon	<5	ng/l	Low Level Method		5	18-Sep
Upstream	9/16/2024	11:00	Diazinon	<5	ng/l	Low Level Method		5	18-Sep
Downstream	3/7/2024	11:30	Dichlorvos	n.d.	ng/L	Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Dichlorvos	n.d.	ng/L	Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Dichlorvos	n.d.	ng/L	Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Dichlorvos	n.d.	ng/L	Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Dichlorvos	n.d.	ng/l	Screening Method		1	18-Sep
Upstream	9/16/2024	11:00	Dichlorvos	n.d.	ng/l	Screening Method		1	20-Sep
Downstream	3/7/2024	11:30	Diclofenac	n.d.	ng/L	Screening Method	20		7-Mar
Upstream	3/7/2024	13:00	Diclofenac	n.d.	ng/L	Screening Method	20		7-Mar
Downstream	6/12/2024	11:30	Diclofenac	n.d.	ng/L	Screening Method	20		12-Jun
Upstream	6/12/2024	10:20	Diclofenac	n.d.	ng/L	Screening Method	20		12-Jun
Downstream	9/16/2024	13:00	Diclofenac	n.d.	ng/l	Screening Method		20	18-Sep
Upstream	9/16/2024	11:00	Diclofenac	n.d.	ng/l	Screening Method		20	20-Sep
Downstream	3/7/2024	11:30	Difenoconazole	n.d.	ng/L	Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Difenoconazole	n.d.	ng/L	Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Difenoconazole	n.d.	ng/L	Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Difenoconazole	n.d.	ng/L	Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Difenoconazole	n.d.	ng/l	Screening Method		1	18-Sep
Upstream	9/16/2024	11:00	Difenoconazole	n.d.	ng/l	Screening Method		1	20-Sep
Downstream	3/7/2024	11:30	Diflubenzuron	n.d.	ng/L	Screening Method	12		7-Mar
Upstream	3/7/2024	13:00	Diflubenzuron	n.d.	ng/L	Screening Method	12		7-Mar
Downstream	6/12/2024	11:30	Diflubenzuron	n.d.	ng/L	Screening Method	12		12-Jun
Upstream	6/12/2024	10:20	Diflubenzuron	n.d.	ng/L	Screening Method	12		12-Jun
Downstream	9/16/2024	13:00	Diflubenzuron	n.d.	ng/l	Screening Method		12	18-Sep
Upstream	9/16/2024	11:00	Diflubenzuron	n.d.	ng/l	Screening Method		12	20-Sep
Downstream	3/7/2024	11:30	Dihydrocodeine	n.d.	ng/L	Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Dihydrocodeine	n.d.	ng/L	Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Dihydrocodeine	n.d.	ng/L	Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Dihydrocodeine	n.d.	ng/L	Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Dihydrocodeine	n.d.	ng/l	Screening Method		5	18-Sep ***
Upstream	9/16/2024	11:00	Dihydrocodeine	n.d.	ng/l	Screening Method		5	20-Sep
Downstream	3/7/2024	11:30	Diltiazem	<5	ng/L	Low Level Method		5	7-Mar
Upstream	3/7/2024	13:00	Diltiazem	<5	ng/L	Low Level Method		5	7-Mar
Downstream	6/12/2024	11:30	Diltiazem	<5	ng/L	Low Level Method		5	12-Jun
Upstream	6/12/2024	10:20	Diltiazem	<5	ng/L	Low Level Method		5	12-Jun
Downstream	9/16/2024	13:00	Diltiazem	<5	ng/l	Low Level Method		5	18-Sep
Upstream	9/16/2024	11:00	Diltiazem	<5	ng/l	Low Level Method		5	18-Sep
Downstream	3/7/2024	11:30	Dimethenamide	n.d.	ng/L	Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Dimethenamide	n.d.	ng/L	Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Dimethenamide	n.d.	ng/L	Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Dimethenamide	n.d.	ng/L	Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Dimethenamide	n.d.	ng/l	Screening Method		1	18-Sep
Upstream	9/16/2024	11:00	Dimethenamide	n.d.	ng/l	Screening Method		1	20-Sep
Downstream	3/7/2024	11:30	Dimethoate	n.d.	ng/L	Screening Method	1.5		7-Mar
Upstream	3/7/2024	13:00	Dimethoate	n.d.	ng/L	Screening Method	1.5		7-Mar
Downstream	6/12/2024	11:30	Dimethoate	n.d.	ng/L	Screening Method	1.5		12-Jun
Upstream	6/12/2024	10:20	Dimethoate	n.d.	ng/L	Screening Method	1.5		12-Jun
Downstream	9/16/2024	13:00	Dimethoate	n.d.	ng/l	Screening Method		1.5	18-Sep
Upstream	9/16/2024	11:00	Dimethoate	n.d.	ng/l	Screening Method		1.5	20-Sep
Downstream	3/7/2024	11:30	Dimethomorph	n.d.	ng/L	Screening Method	4		7-Mar
Upstream	3/7/2024	13:00	Dimethomorph	n.d.	ng/L	Screening Method	4		7-Mar
Downstream	6/12/2024	11:30	Dimethomorph	n.d.	ng/L	Screening Method	4		12-Jun
Upstream	6/12/2024	10:20	Dimethomorph	n.d.	ng/L	Screening Method	4		12-Jun
Downstream	9/16/2024	13:00	Dimethomorph	n.d.	ng/l	Screening Method		4	18-Sep
Upstream	9/16/2024	11:00	Dimethomorph	n.d.	ng/l	Screening Method		4	20-Sep
Downstream	3/7/2024	11:30	Diphenhydramine	3.1	ng/L	Low Level Method		5	7-Mar
Upstream	3/7/2024	13:00	Diphenhydramine	10.3	e	Low Level Method		5	7-Mar
Downstream	6/12/2024	11:30	Diphenhydramine	<5	ng/L	Low Level Method		5	12-Jun

Upstream	6/12/2024	10:20	Diphenhydramine	<5	ng/L		Low Level Method	5		12-Jun ***
Downstream	9/16/2024	13:00	Diphenhydramine	<5	ng/l		Low Level Method	5		18-Sep
Upstream	9/16/2024	11:00	Diphenhydramine	<5	ng/l		Low Level Method	5		18-Sep
Downstream	3/7/2024	11:30	Dissolved Oxygen (mg/L)	9.9	mg/L	Dissolved	SM 4500-G	0.1		7-Mar
Upstream	3/7/2024	13:00	Dissolved Oxygen (mg/L)	9.8	mg/L	Dissolved	SM 4500-G	0.1		7-Mar
Downstream	6/12/2024	11:30	Dissolved Oxygen (mg/L)	7	mg/L		SM 4500-G	0.1		12-Jun
Upstream	6/12/2024	10:20	Dissolved Oxygen (mg/L)	8.2	mg/L	Dissolved	SM 4500-G	0.1		12-Jun
Downstream	9/16/2024	13:00	Dissolved Oxygen (mg/L)	8.5	mg/l	Dissolved	SM 4500-G	0.1		18-Sep
Upstream	9/16/2024	11:00	Dissolved Oxygen (mg/L)	8.1	mg/l	Dissolved	SM 4500-G	0.1		16-Sep
Downstream	11/18/2024	12:20	Dissolved Oxygen (mg/L)	10	mg/l	Dissolved	SM 4500-G	0.1		18-Nov
Upstream	11/18/2024	10:50	Dissolved Oxygen (mg/L)	9.5	mg/l	Dissolved	SM 4500-G	0.1		18-Nov
Downstream	3/7/2024	11:30	Diuron	<5	ng/L		Low Level Method	5		8-Mar
Upstream	3/7/2024	13:00	Diuron	<5	ng/L		Low Level Method	5		8-Mar
Downstream	6/12/2024	11:30	Diuron	<5	ng/L		Low Level Method	5		19-Jun
Upstream	6/12/2024	10:20	Diuron	<5	ng/L		Low Level Method	5		19-Jun
Downstream	9/16/2024	13:00	Diuron	<5	ng/l		Low Level Method	5		20-Sep
Upstream	9/16/2024	11:00	Diuron	<5	ng/l		Low Level Method	5		20-Sep
Upstream	3/7/2024	13:00	E. coli	ND	mpn/100mL		Colilert	1	1	8-Mar
Downstream	6/12/2024	11:30	E. coli	649	mpn/100mL		Colilert	1	1	13-Jun
Upstream	6/12/2024	10:20	E. coli	4	mpn/100mL		Colilert	1	1	13-Jun
Downstream	9/16/2024	13:00	E. coli	160	mpn/100mL		Colilert	1	1	16-Sep
Upstream	9/16/2024	11:00	E. coli	1203	mpn/100mL		Colilert	1	1	17-Sep
Downstream	11/18/2024	12:20	E. coli	166	mpn/100mL		Colilert	1	1	19-Nov
Upstream	11/18/2024	10:50	E. coli	48	mpn/100mL		Colilert	1	1	19-Nov
Downstream	3/7/2024	11:30	E. coli (mpn/100mL)	36	mpn/100mL		Colilert	1	1	8-Mar
Downstream	3/7/2024	11:30	EDDP	<10	ng/L		Low Level Method	5		7-Mar
Upstream	3/7/2024	13:00	EDDP	<10	ng/L		Low Level Method	5		7-Mar
Downstream	6/12/2024	11:30	EDDP	<10	ng/L		Low Level Method	5		12-Jun
Upstream	6/12/2024	10:20	EDDP	<10	ng/L		Low Level Method	5		12-Jun
Downstream	9/16/2024	13:00	EDDP	<5	ng/l		Low Level Method	5		18-Sep
Upstream	9/16/2024	11:00	EDDP	<5	ng/l		Low Level Method	5		18-Sep
Downstream	3/7/2024	11:30	Erythrohydrobupropion	n.d.	ng/L		Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Erythrohydrobupropion	n.d.	ng/L		Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Erythrohydrobupropion	n.d.	ng/L		Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Erythrohydrobupropion	n.d.	ng/L		Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Erythrohydrobupropion	n.d.	ng/l		Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Erythrohydrobupropion	n.d.	ng/l		Screening Method	5		20-Sep
Downstream	3/7/2024	11:30	Erythromycin	<5	ng/L		Low Level Method	10		7-Mar
Upstream	3/7/2024	13:00	Erythromycin	<5	ng/L		Low Level Method	10		7-Mar
Downstream	6/12/2024	11:30	Erythromycin	<5	ng/L		Low Level Method	10		12-Jun
Upstream	6/12/2024	10:20	Erythromycin	<5	ng/L		Low Level Method	10		12-Jun
Downstream	9/16/2024	13:00	Erythromycin	<10	ng/l		Low Level Method	10		18-Sep
Upstream	9/16/2024	11:00	Erythromycin	<10	ng/l		Low Level Method	10		18-Sep
Downstream	3/7/2024	11:30	Erythromycin Anhydrate	n.d.	ng/L		Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Erythromycin Anhydrate	n.d.	ng/L		Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Erythromycin Anhydrate	n.d.	ng/L		Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Erythromycin Anhydrate	n.d.	ng/L		Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Erythromycin Anhydrate	n.d.	ng/l		Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Erythromycin Anhydrate	n.d.	ng/l		Screening Method	5		20-Sep
Downstream	3/7/2024	11:30	Ethoprop	n.d.	ng/L		Screening Method	20		7-Mar
Upstream	3/7/2024	13:00	Ethoprop	n.d.	ng/L		Screening Method	20		7-Mar
Downstream	6/12/2024	11:30	Ethoprop	n.d.	ng/L		Screening Method	20		12-Jun
Upstream	6/12/2024	10:20	Ethoprop	n.d.	ng/L		Screening Method	20		12-Jun
Downstream	9/16/2024	13:00	Ethoprop	n.d.	ng/l		Screening Method	20		18-Sep
Upstream	9/16/2024	11:00	Ethoprop	n.d.	ng/l		Screening Method	20		20-Sep
Downstream	3/7/2024	11:30	Fentanyl	n.d.	ng/L		Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Fentanyl	n.d.	ng/L		Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Fentanyl	n.d.	ng/L		Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Fentanyl	n.d.	ng/L		Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Fentanyl	n.d.	ng/l		Screening Method	10		18-Sep
Upstream	9/16/2024	11:00	Fentanyl	n.d.	ng/l		Screening Method	10		20-Sep
Downstream	3/7/2024	11:30	Fexofenadine	<1	ng/L		Low Level Method	5		7-Mar
Upstream	3/7/2024	13:00	Fexofenadine	<1	ng/L		Low Level Method	5		7-Mar
Downstream	6/12/2024	11:30	Fexofenadine	11.7	ng/L		Low Level Method	5		12-Jun
Upstream	6/12/2024	10:20	Fexofenadine	<1	ng/L		Low Level Method	5		12-Jun
Downstream	9/16/2024	13:00	Fexofenadine	<5	ng/l		Low Level Method	5		18-Sep
Upstream	9/16/2024	11:00	Fexofenadine	<5	ng/l		Low Level Method	5		18-Sep
Downstream	3/7/2024	11:30	Flufenacet	n.d.	ng/L		Screening Method	3		7-Mar
Upstream	3/7/2024	13:00	Flufenacet	n.d.	ng/L		Screening Method	3		7-Mar
Downstream	6/12/2024	11:30	Flufenacet	n.d.	ng/L		Screening Method	3		12-Jun
Upstream	6/12/2024	10:20	Flufenacet	n.d.	ng/L		Screening Method	3		12-Jun
Downstream	9/16/2024	13:00	Flufenacet	n.d.	ng/l		Screening Method	3		18-Sep
Upstream	9/16/2024	11:00	Flufenacet	n.d.	ng/l		Screening Method	3		20-Sep
Downstream	3/7/2024	11:30	Fluoxetine	n.d.	ng/L		Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Fluoxetine	n.d.	ng/L		Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Fluoxetine	n.d.	ng/L		Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Fluoxetine	n.d.	ng/L		Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Fluoxetine	n.d.	ng/l		Screening Method	10		18-Sep
Upstream	9/16/2024	11:00	Fluoxetine	n.d.	ng/l		Screening Method	10		20-Sep
Downstream	3/7/2024	11:30	Fluridone	<10	ng/L		Low Level Method	1		7-Mar
Upstream	3/7/2024	13:00	Fluridone	<10	ng/L		Low Level Method	1		7-Mar
Downstream	6/12/2024	11:30	Fluridone	<10	ng/L		Low Level Method	1		12-Jun
Upstream	6/12/2024	10:20	Fluridone	<10	ng/L		Low Level Method	1		12-Jun
Downstream	9/16/2024	13:00	Fluridone	<1	ng/l		Low Level Method	1		18-Sep
Upstream	9/16/2024	11:00	Fluridone	<1	ng/l		Low Level Method	1		18-Sep
Downstream	3/7/2024	11:30	Fluroxypyr	n.d.	ng/L		Screening Method	45		7-Mar
Upstream	3/7/2024	13:00	Fluroxypyr	n.d.	ng/L		Screening Method	45		7-Mar
Downstream	6/12/2024	11:30	Fluroxypyr	n.d.	ng/L		Screening Method	45		12-Jun
Upstream	6/12/2024	10:20	Fluroxypyr	n.d.	ng/L		Screening Method	45		12-Jun
Downstream	9/16/2024	13:00	Fluroxypyr	n.d.	ng/l		Screening Method	45		18-Sep
Upstream	9/16/2024	11:00	Fluroxypyr	n.d.	ng/l		Screening Method	45		20-Sep
Downstream	3/7/2024	11:30	Gabapentin	n.d.	ng/L		Screening Method	100		7-Mar
Upstream	3/7/2024	13:00	Gabapentin	n.d.	ng/L		Screening Method	100		7-Mar
Downstream	6/12/2024	11:30	Gabapentin	n.d.	ng/L		Screening Method	100		12-Jun
Upstream	6/12/2024	10:20	Gabapentin	n.d.	ng/L		Screening Method	100		12-Jun
Downstream	9/16/2024	13:00	Gabapentin	n.d.	ng/l		Screening Method	100		18-Sep
Upstream	9/16/2024	11:00	Gabapentin	n.d.	ng/l		Screening Method	100		20-Sep
Downstream	3/7/2024	11:30	Gemfibrozil	<10	ng/L		Low Level Method	10		8-Mar
Upstream	3/7/2024	13:00	Gemfibrozil	<10	ng/L		Low Level Method	10		8-Mar
Downstream	6/12/2024	11:30	Gemfibrozil	<10	ng/L		Low Level Method	10		19-Jun
Upstream	6/12/2024	10:20	Gemfibrozil	<10	ng/L		Low Level Method	10		19-Jun
Downstream	9/16/2024	13:00	Gemfibrozil	<10	ng/l		Low Level Method	10		20-Sep
Upstream	9/16/2024	11:00	Gemfibrozil	<10	ng/l		Low Level Method	10		20-Sep

Downstream	3/7/2024	11:30	Hydrocodone	n.d.	ng/L		Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Hydrocodone	n.d.	ng/L		Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Hydrocodone	n.d.	ng/L		Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Hydrocodone	n.d.	ng/L		Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Hydrocodone	n.d.	ng/l		Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Hydrocodone	n.d.	ng/l		Screening Method	5		20-Sep
Downstream	3/7/2024	11:30	Hydroxyatrazine	n.d.	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Hydroxyatrazine	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Hydroxyatrazine	1.8	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Hydroxyatrazine	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Hydroxyatrazine	1.7	ng/l		Screening Method	1		18-Sep
Upstream	9/16/2024	11:00	Hydroxyatrazine	n.d.	ng/l		Screening Method	1		20-Sep
Downstream	3/7/2024	11:30	Ibuprofen	n.d.	ng/L		Screening Method	50		7-Mar
Upstream	3/7/2024	13:00	Ibuprofen	n.d.	ng/L		Screening Method	50		7-Mar
Downstream	6/12/2024	11:30	Ibuprofen	n.d.	ng/L		Screening Method	50		12-Jun
Upstream	6/12/2024	10:20	Ibuprofen	n.d.	ng/L		Screening Method	50		12-Jun
Downstream	9/16/2024	13:00	Ibuprofen	n.d.	ng/l		Screening Method	50		18-Sep
Upstream	9/16/2024	11:00	Ibuprofen	n.d.	ng/l		Screening Method	50		20-Sep
Downstream	3/7/2024	11:30	Imazamox	<1	ng/L		Low Level Method	10		7-Mar
Upstream	3/7/2024	13:00	Imazamox	<1	ng/L		Low Level Method	10		7-Mar
Downstream	6/12/2024	11:30	Imazamox	<1	ng/L		Low Level Method	10		12-Jun
Upstream	6/12/2024	10:20	Imazamox	<1	ng/L		Low Level Method	10		12-Jun
Downstream	9/16/2024	13:00	Imazamox	<10	ng/l		Low Level Method	10		18-Sep
Upstream	9/16/2024	11:00	Imazamox	<10	ng/l		Low Level Method	10		18-Sep
Downstream	3/7/2024	11:30	Imazapyr	n.d.	ng/L		Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Imazapyr	n.d.	ng/L		Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Imazapyr	n.d.	ng/L		Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Imazapyr	n.d.	ng/L		Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Imazapyr	n.d.	ng/l		Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Imazapyr	n.d.	ng/l		Screening Method	5		20-Sep
Downstream	3/7/2024	11:30	Imidacloprid	n.d.	ng/L		Screening Method	2		7-Mar
Upstream	3/7/2024	13:00	Imidacloprid	n.d.	ng/L		Screening Method	2		7-Mar
Downstream	6/12/2024	11:30	Imidacloprid	n.d.	ng/L		Screening Method	2		12-Jun
Upstream	6/12/2024	10:20	Imidacloprid	n.d.	ng/L		Screening Method	2		12-Jun
Downstream	9/16/2024	13:00	Imidacloprid	n.d.	ng/l		Screening Method	2		18-Sep
Upstream	9/16/2024	11:00	Imidacloprid	n.d.	ng/l		Screening Method	2		20-Sep
Downstream	3/7/2024	11:30	Iopromide	n.d.	ng/L		Screening Method	50		7-Mar
Upstream	3/7/2024	13:00	Iopromide	n.d.	ng/L		Screening Method	50		7-Mar
Downstream	6/12/2024	11:30	Iopromide	n.d.	ng/L		Screening Method	50		12-Jun
Upstream	6/12/2024	10:20	Iopromide	n.d.	ng/L		Screening Method	50		12-Jun
Downstream	9/16/2024	13:00	Iopromide	n.d.	ng/l		Screening Method	50		18-Sep
Upstream	9/16/2024	11:00	Iopromide	n.d.	ng/l		Screening Method	50		20-Sep
Downstream	3/7/2024	11:30	Iprodione	n.d.	ng/L		Screening Method	4		7-Mar
Upstream	3/7/2024	13:00	Iprodione	n.d.	ng/L		Screening Method	4		7-Mar
Downstream	6/12/2024	11:30	Iprodione	n.d.	ng/L		Screening Method	4		12-Jun
Upstream	6/12/2024	10:20	Iprodione	n.d.	ng/L		Screening Method	4		12-Jun
Downstream	9/16/2024	13:00	Iprodione	n.d.	ng/l		Screening Method	4		18-Sep
Upstream	9/16/2024	11:00	Iprodione	n.d.	ng/l		Screening Method	4		20-Sep
Upstream	3/7/2024	13:00	Iron	0.071	mg/L	Total	EPA 200.7	0.005	0.0005	12-Mar
Downstream	6/12/2024	11:30	Iron	5.05	mg/L	Total	EPA 200.7	0.005	0.0005	14-Jun
Upstream	6/12/2024	10:20	Iron	0.316	mg/L	Total	EPA 200.7	0.005	0.0005	14-Jun
Downstream	9/16/2024	13:00	Iron	0.112	mg/l	Total	EPA 200.7	0.005	0.00005	18-Sep
Upstream	9/16/2024	11:00	Iron	0.11	mg/l	Total	EPA 200.7	0.005	0.0005	18-Sep
Downstream	11/18/2024	12:20	Iron	0.276	mg/l	Total	EPA 200.7	0.005	0.0005	20-Nov
Upstream	11/18/2024	10:50	Iron	0.362	mg/l	Total	EPA 200.7	0.005	0.0005	20-Nov
Downstream	3/7/2024	11:30	Iron (Total mg/L)	0.149	mg/L	Total	EPA 200.7	0.005	0.0005	12-Mar
Downstream	3/7/2024	11:30	Isoproturon	n.d.	ng/L		Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Isoproturon	n.d.	ng/L		Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Isoproturon	n.d.	ng/L		Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Isoproturon	n.d.	ng/L		Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Isoproturon	n.d.	ng/l		Screening Method	10		18-Sep
Upstream	9/16/2024	11:00	Isoproturon	n.d.	ng/l		Screening Method	10		20-Sep
Downstream	3/7/2024	11:30	Isoxaben	n.d.	ng/L		Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Isoxaben	n.d.	ng/L		Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Isoxaben	n.d.	ng/L		Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Isoxaben	n.d.	ng/L		Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Isoxaben	n.d.	ng/l		Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Isoxaben	n.d.	ng/l		Screening Method	5		20-Sep
Downstream	3/7/2024	11:30	Isoxaflutole	n.d.	ng/L		Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Isoxaflutole	n.d.	ng/L		Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Isoxaflutole	n.d.	ng/L		Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Isoxaflutole	n.d.	ng/L		Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Isoxaflutole	n.d.	ng/l		Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Isoxaflutole	n.d.	ng/l		Screening Method	5		20-Sep
Downstream	3/7/2024	11:30	Lamotrigine	2.3	ng/L		Low Level Method	1		7-Mar
Upstream	3/7/2024	13:00	Lamotrigine	<5	ng/L		Low Level Method	1		7-Mar
Downstream	6/12/2024	11:30	Lamotrigine	10.6	ng/L		Low Level Method	1		12-Jun
Upstream	6/12/2024	10:20	Lamotrigine	<5	ng/L		Low Level Method	1		12-Jun
Downstream	9/16/2024	13:00	Lamotrigine	5.9	ng/l		Low Level Method	1		18-Sep
Upstream	9/16/2024	11:00	Lamotrigine	<1	ng/l		Low Level Method	1		18-Sep
Downstream	3/7/2024	11:30	Lamotrigine Glucuronide	n.d.	ng/L		Screening Method	50		7-Mar
Upstream	3/7/2024	13:00	Lamotrigine Glucuronide	n.d.	ng/L		Screening Method	50		7-Mar
Downstream	6/12/2024	11:30	Lamotrigine Glucuronide	n.d.	ng/L		Screening Method	50		12-Jun
Upstream	6/12/2024	10:20	Lamotrigine Glucuronide	n.d.	ng/L		Screening Method	50		12-Jun
Downstream	9/16/2024	13:00	Lamotrigine Glucuronide	n.d.	ng/l		Screening Method	50		18-Sep
Upstream	9/16/2024	11:00	Lamotrigine Glucuronide	n.d.	ng/l		Screening Method	50		20-Sep
Downstream	6/12/2024	11:30	Lead	ND	mg/L	Dissolved	EPA 200.8	0.0001	0.000006	14-Jun
Upstream	6/12/2024	10:20	Lead	0.0001	mg/L	Dissolved	EPA 200.8	0.0001	0.000006	14-Jun
Downstream	9/16/2024	13:00	Lead	ND	mg/l	Dissolved	EPA 200.8	0.0001	0.000006	20-Sep
Upstream	9/16/2024	11:00	Lead	ND	mg/l	Dissolved	EPA 200.8	0.0001	0.000006	20-Sep
Downstream	11/18/2024	12:20	Lead	ND	mg/l	Dissolved	EPA 200.8	0.0001	0.000006	22-Nov
Upstream	11/18/2024	10:50	Lead	0.0001	mg/l	Dissolved	EPA 200.8	0.0001	0.000006	22-Nov
Downstream	6/12/2024	11:30	Magnesium	20.5	mg/L	Total	EPA 200.7	0.02	0.002	14-Jun
Upstream	6/12/2024	10:20	Magnesium	1.19	mg/L	Total	EPA 200.7	0.02	0.002	14-Jun
Downstream	9/16/2024	13:00	Magnesium	71.8	mg/l	Total	EPA 200.7	0.02	0.002	18-Sep
Upstream	9/16/2024	11:00	Magnesium	1.92	mg/l	Total	EPA 200.7	0.02	0.002	18-Sep
Downstream	11/18/2024	12:20	Magnesium	65	mg/l	Total	EPA 200.7	0.02	0.002	20-Nov
Upstream	11/18/2024	10:50	Magnesium	2.08	mg/l	Total	EPA 200.7	0.02	0.002	20-Nov
Downstream	3/7/2024	11:30	Malathion	n.d.	ng/L		Screening Method	1.5		7-Mar
Upstream	3/7/2024	13:00	Malathion	n.d.	ng/L		Screening Method	1.5		7-Mar
Downstream	6/12/2024	11:30	Malathion	n.d.	ng/L		Screening Method	1.5		12-Jun
Upstream	6/12/2024	10:20	Malathion	n.d.	ng/L		Screening Method	1.5		12-Jun
Downstream	9/16/2024	13:00	Malathion	n.d.	ng/l		Screening Method	1.5		18-Sep

Upstream	9/16/2024	11:00	Malathion	n.d.	ng/l		Screening Method	1.5		20-Sep
Upstream	3/7/2024	13:00	Manganese	0.0013	mg/L	Dissolved	EPA 200.8	0.0008	0.00001	14-Mar
Downstream	6/12/2024	11:30	Manganese	0.0024	mg/L	Dissolved	EPA 200.8	0.0008	0.00001	14-Jun
Upstream	6/12/2024	10:20	Manganese	0.0043	mg/L	Dissolved	EPA 200.8	0.0008	0.00001	14-Jun
Downstream	9/16/2024	13:00	Manganese	0.0649	mg/l	Dissolved	EPA 200.8	0.0008	0.00001	20-Sep
Upstream	9/16/2024	11:00	Manganese	0.0015	mg/l	Dissolved	EPA 200.8	0.0008	0.00001	20-Sep
Downstream	11/18/2024	12:20	Manganese	0.1156	mg/l	Dissolved	EPA 200.8	0.0008	0.00001	22-Nov
Upstream	11/18/2024	10:50	Manganese	0.0039	mg/l	Dissolved	EPA 200.8	0.0008	0.00001	22-Nov
Downstream	3/7/2024	11:30	Melamine	n.d.	ng/L		Screening Method	50		7-Mar
Upstream	3/7/2024	13:00	Melamine	n.d.	ng/L		Screening Method	50		7-Mar
Downstream	6/12/2024	11:30	Melamine	n.d.	ng/L		Screening Method	50		12-Jun
Upstream	6/12/2024	10:20	Melamine	n.d.	ng/L		Screening Method	50		12-Jun
Downstream	9/16/2024	13:00	Melamine	n.d.	ng/l		Screening Method	50		18-Sep
Upstream	9/16/2024	11:00	Melamine	n.d.	ng/l		Screening Method	50		20-Sep
Downstream	3/7/2024	11:30	Meprobamate	n.d.	ng/L		Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Meprobamate	n.d.	ng/L		Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Meprobamate	n.d.	ng/L		Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Meprobamate	n.d.	ng/L		Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Meprobamate	n.d.	ng/l		Screening Method	10		18-Sep
Upstream	9/16/2024	11:00	Meprobamate	n.d.	ng/l		Screening Method	10		20-Sep
Downstream	3/7/2024	11:30	Metalaxyl	n.d.	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Metalaxyl	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Metalaxyl	n.d.	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Metalaxyl	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Metalaxyl	n.d.	ng/l		Screening Method	1		18-Sep
Upstream	9/16/2024	11:00	Metalaxyl	n.d.	ng/l		Screening Method	1		20-Sep
Downstream	3/7/2024	11:30	Metformin	n.d.	ng/L		Screening Method	50		7-Mar
Upstream	3/7/2024	13:00	Metformin	n.d.	ng/L		Screening Method	50		7-Mar
Downstream	6/12/2024	11:30	Metformin	n.d.	ng/L		Screening Method	50		12-Jun
Upstream	6/12/2024	10:20	Metformin	n.d.	ng/L		Screening Method	50		12-Jun
Downstream	9/16/2024	13:00	Metformin	n.d.	ng/l		Screening Method	50		18-Sep
Upstream	9/16/2024	11:00	Metformin	n.d.	ng/l		Screening Method	50		20-Sep
Downstream	3/7/2024	11:30	Methadone	n.d.	ng/L		Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Methadone	n.d.	ng/L		Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Methadone	n.d.	ng/L		Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Methadone	n.d.	ng/L		Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Methadone	n.d.	ng/l		Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Methadone	n.d.	ng/l		Screening Method	5		20-Sep
Downstream	3/7/2024	11:30	Methidathion	n.d.	ng/L		Screening Method	15		7-Mar
Upstream	3/7/2024	13:00	Methidathion	n.d.	ng/L		Screening Method	15		7-Mar
Downstream	6/12/2024	11:30	Methidathion	n.d.	ng/L		Screening Method	15		12-Jun
Upstream	6/12/2024	10:20	Methidathion	n.d.	ng/L		Screening Method	15		12-Jun
Downstream	9/16/2024	13:00	Methidathion	n.d.	ng/l		Screening Method	15		18-Sep
Upstream	9/16/2024	11:00	Methidathion	n.d.	ng/l		Screening Method	15		20-Sep
Downstream	3/7/2024	11:30	Methiocarb	n.d.	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Methiocarb	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Methiocarb	n.d.	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Methiocarb	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Methiocarb	n.d.	ng/l		Screening Method	1		18-Sep
Upstream	9/16/2024	11:00	Methiocarb	n.d.	ng/l		Screening Method	1		20-Sep
Downstream	3/7/2024	11:30	Methiocarb sulfone	n.d.	ng/L		Screening Method	9		7-Mar
Upstream	3/7/2024	13:00	Methiocarb sulfone	n.d.	ng/L		Screening Method	9		7-Mar
Downstream	6/12/2024	11:30	Methiocarb sulfone	n.d.	ng/L		Screening Method	9		12-Jun
Upstream	6/12/2024	10:20	Methiocarb sulfone	n.d.	ng/L		Screening Method	9		12-Jun
Downstream	9/16/2024	13:00	Methiocarb sulfone	n.d.	ng/l		Screening Method	9		18-Sep
Upstream	9/16/2024	11:00	Methiocarb sulfone	n.d.	ng/l		Screening Method	9		20-Sep
Downstream	3/7/2024	11:30	Methomyl	n.d.	ng/L		Screening Method	2		7-Mar
Upstream	3/7/2024	13:00	Methomyl	n.d.	ng/L		Screening Method	2		7-Mar
Downstream	6/12/2024	11:30	Methomyl	n.d.	ng/L		Screening Method	2		12-Jun
Upstream	6/12/2024	10:20	Methomyl	n.d.	ng/L		Screening Method	2		12-Jun
Downstream	9/16/2024	13:00	Methomyl	n.d.	ng/l		Screening Method	2		18-Sep
Upstream	9/16/2024	11:00	Methomyl	n.d.	ng/l		Screening Method	2		20-Sep
Downstream	3/7/2024	11:30	Metolachlor	n.d.	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Metolachlor	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Metolachlor	2.0	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Metolachlor	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Metolachlor	n.d.	ng/l		Screening Method	1		18-Sep
Upstream	9/16/2024	11:00	Metolachlor	n.d.	ng/l		Screening Method	1		20-Sep
Downstream	3/7/2024	11:30	Metoprolol	<10	ng/L		Low Level Method	5		7-Mar
Upstream	3/7/2024	13:00	Metoprolol	<10	ng/L		Low Level Method	5		7-Mar
Downstream	6/12/2024	11:30	Metoprolol	<10	ng/L		Low Level Method	5		12-Jun
Upstream	6/12/2024	10:20	Metoprolol	<10	ng/L		Low Level Method	5		12-Jun
Downstream	9/16/2024	13:00	Metoprolol	<5	ng/l		Low Level Method	5		18-Sep
Upstream	9/16/2024	11:00	Metoprolol	<5	ng/l		Low Level Method	5		18-Sep
Downstream	3/7/2024	11:30	Metribuzin	n.d.	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Metribuzin	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Metribuzin	n.d.	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Metribuzin	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Metribuzin	n.d.	ng/l		Screening Method	1		18-Sep
Upstream	9/16/2024	11:00	Metribuzin	n.d.	ng/l		Screening Method	1		20-Sep
Downstream	3/7/2024	11:30	Miconazole	n.d.	ng/L		Screening Method	20		7-Mar
Upstream	3/7/2024	13:00	Miconazole	n.d.	ng/L		Screening Method	20		7-Mar
Downstream	6/12/2024	11:30	Miconazole	n.d.	ng/L		Screening Method	20		12-Jun
Upstream	6/12/2024	10:20	Miconazole	n.d.	ng/L		Screening Method	20		12-Jun
Downstream	9/16/2024	13:00	Miconazole	n.d.	ng/l		Screening Method	20		18-Sep
Upstream	9/16/2024	11:00	Miconazole	n.d.	ng/l		Screening Method	20		20-Sep
Upstream	3/7/2024	13:00	Molybdenum	0.0007	mg/L	Total	EPA 200.8	0.0005	0.00005	14-Mar
Downstream	6/12/2024	11:30	Molybdenum	0.005	mg/L	Total	EPA 200.8	0.0005	0.00005	14-Jun
Upstream	6/12/2024	10:20	Molybdenum	ND	mg/L	Total	EPA 200.8	0.0005	0.00005	14-Jun
Downstream	9/16/2024	13:00	Molybdenum	0.0098	mg/l	Total	EPA 200.8	0.0005	0.00005	20-Sep
Upstream	9/16/2024	11:00	Molybdenum	0.0007	mg/l	Total	EPA 200.8	0.0005	0.00005	20-Sep
Downstream	11/18/2024	12:20	Molybdenum	0.0097	mg/l	Total	EPA 200.8	0.0005	0.00005	22-Nov
Upstream	11/18/2024	10:50	Molybdenum	0.0005	mg/l	Total	EPA 200.8	0.0005	0.00005	22-Nov
Downstream	3/7/2024	11:30	Naproxen	n.d.	ng/L		Screening Method	50		7-Mar
Upstream	3/7/2024	13:00	Naproxen	n.d.	ng/L		Screening Method	50		7-Mar
Downstream	6/12/2024	11:30	Naproxen	n.d.	ng/L		Screening Method	50		12-Jun
Upstream	6/12/2024	10:20	Naproxen	n.d.	ng/L		Screening Method	50		12-Jun
Downstream	9/16/2024	13:00	Naproxen	n.d.	ng/l		Screening Method	50		18-Sep
Upstream	9/16/2024	11:00	Naproxen	n.d.	ng/l		Screening Method	50		20-Sep
Upstream	3/7/2024	13:00	Nickel	ND	mg/L	Dissolved	EPA 200.8	0.0009	0.00005	14-Mar
Downstream	6/12/2024	11:30	Nickel	0.0014	mg/L	Dissolved	EPA 200.8	0.0009	0.00005	14-Jun
Upstream	6/12/2024	10:20	Nickel	ND	mg/L	Dissolved	EPA 200.8	0.0009	0.00005	14-Jun
Downstream	9/16/2024	13:00	Nickel	0.0032	mg/l	Dissolved	EPA 200.8	0.0009	0.00005	20-Sep

Upstream	9/16/2024	11:00	Nickel	ND	mg/l		Dissolved	EPA 200.8	0.0009	0.00005	20-Sep
Downstream	11/18/2024	12:20	Nickel	0.0028	mg/l		Dissolved	EPA 200.8	0.0009	0.00005	22-Nov
Upstream	11/18/2024	10:50	Nickel	ND	mg/l		Dissolved	EPA 200.8	0.0009	0.00005	22-Nov
Downstream	3/7/2024	11:30	Nicosulfuron	n.d.	ng/L			Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Nicosulfuron	n.d.	ng/L			Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Nicosulfuron	n.d.	ng/L			Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Nicosulfuron	n.d.	ng/L			Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Nicosulfuron	n.d.	ng/l			Screening Method	1		18-Sep
Upstream	9/16/2024	11:00	Nicosulfuron	n.d.	ng/l			Screening Method	1		20-Sep
Upstream	3/7/2024	13:00	Nitrate Nitrogen	ND	mg/L	Nitrogen		EPA 300.0	0.05	0.02	8-Mar
Downstream	6/12/2024	11:30	Nitrate Nitrogen	0.35	mg/L			EPA 300.0	0.05	0.02	12-Jun
Upstream	6/12/2024	10:20	Nitrate Nitrogen	ND	mg/L	Nitrogen		EPA 300.0	0.05	0.02	12-Jun
Downstream	9/16/2024	13:00	Nitrate Nitrogen	0.82	mg/l	Nitrogen		EPA 300.0	0.05	0.02	17-Sep
Upstream	9/16/2024	11:00	Nitrate Nitrogen	ND	mg/l	Nitrogen		EPA 300.0	0.05	0.02	17-Sep
Downstream	11/18/2024	12:20	Nitrate Nitrogen	0.94	mg/l	as N		EPA 300.0	0.05	0.02	19-Nov
Upstream	11/18/2024	10:50	Nitrate Nitrogen	ND	mg/l	as N		EPA 300.0	0.05	0.02	19-Nov
Upstream	3/7/2024	13:00	Nitrate/Nitrite Nitrogen	ND	mg/l	Nitrogen		Calculation	0.05	0.02	11-Mar
Downstream	6/12/2024	11:30	Nitrate/Nitrite Nitrogen	0.35	mg/L			Calculation	0.05	0.02	13-Jun
Upstream	6/12/2024	10:20	Nitrate/Nitrite Nitrogen	ND	mg/L	Nitrogen		Calculation	0.05	0.02	13-Jun
Downstream	9/16/2024	13:00	Nitrate/Nitrite Nitrogen	0.82	mg/l	Nitrogen		Calculation	0.05	0.02	17-Sep
Upstream	9/16/2024	11:00	Nitrate/Nitrite Nitrogen	ND	mg/l	Nitrogen		Calculation	0.05	0.02	17-Sep
Downstream	11/18/2024	12:20	Nitrate/Nitrite Nitrogen	0.94	mg/l	as N		Calculation	0.05	0.02	19-Nov
Upstream	11/18/2024	10:50	Nitrate/Nitrite Nitrogen	ND	mg/l	as N		Calculation	0.05	0.02	19-Nov
Upstream	3/7/2024	13:00	Nitrite Nitrogen	ND	mg/L	Nitrogen		EPA 300.0	0.03	0.01	8-Mar
Downstream	6/12/2024	11:30	Nitrite Nitrogen	ND	mg/L	Nitrogen		EPA 300.0	0.03	0.01	12-Jun
Upstream	6/12/2024	10:20	Nitrite Nitrogen	ND	mg/L	Nitrogen		EPA 300.0	0.03	0.01	12-Jun
Downstream	9/16/2024	13:00	Nitrite Nitrogen	ND	mg/l	Nitrogen		EPA 300.0	0.03	0.01	17-Sep
Upstream	9/16/2024	11:00	Nitrite Nitrogen	ND	mg/l	Nitrogen		EPA 300.0	0.03	0.01	17-Sep
Downstream	11/18/2024	12:20	Nitrite Nitrogen	ND	mg/l	as N		EPA 300.0	0.03	0.01	19-Nov
Upstream	11/18/2024	10:50	Nitrite Nitrogen	ND	mg/l	as N		EPA 300.0	0.03	0.01	19-Nov
Downstream	3/7/2024	11:30	Oxycodone	n.d.	ng/L			Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Oxycodone	n.d.	ng/L			Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Oxycodone	n.d.	ng/L			Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Oxycodone	n.d.	ng/L			Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Oxycodone	n.d.	ng/l			Screening Method	10		18-Sep
Upstream	9/16/2024	11:00	Oxycodone	n.d.	ng/l			Screening Method	10		20-Sep
Downstream	3/7/2024	11:30	Oxyfluorfen	n.d.	ng/L			Screening Method	20		7-Mar
Upstream	3/7/2024	13:00	Oxyfluorfen	n.d.	ng/L			Screening Method	20		7-Mar
Downstream	6/12/2024	11:30	Oxyfluorfen	n.d.	ng/L			Screening Method	20		12-Jun
Upstream	6/12/2024	10:20	Oxyfluorfen	n.d.	ng/L			Screening Method	20		12-Jun
Downstream	9/16/2024	13:00	Oxyfluorfen	n.d.	ng/l			Screening Method	20		18-Sep
Upstream	9/16/2024	11:00	Oxyfluorfen	n.d.	ng/l			Screening Method	20		20-Sep
Downstream	3/7/2024	11:30	Parathion-methyl	n.d.	ng/L			Screening Method	17		7-Mar
Upstream	3/7/2024	13:00	Parathion-methyl	n.d.	ng/L			Screening Method	17		7-Mar
Downstream	6/12/2024	11:30	Parathion-methyl	n.d.	ng/L			Screening Method	17		12-Jun
Upstream	6/12/2024	10:20	Parathion-methyl	n.d.	ng/L			Screening Method	17		12-Jun
Downstream	9/16/2024	13:00	Parathion-methyl	n.d.	ng/l			Screening Method	17		18-Sep
Upstream	9/16/2024	11:00	Parathion-methyl	n.d.	ng/l			Screening Method	17		20-Sep
Downstream	3/7/2024	11:30	PEG-EO10	n.d.	ng/L			Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	PEG-EO10	n.d.	ng/L			Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	PEG-EO10	n.d.	ng/L			Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	PEG-EO10	n.d.	ng/L			Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	PEG-EO10	n.d.	ng/l			Screening Method	200		20-Sep
Upstream	9/16/2024	11:00	PEG-EO10	n.d.	ng/l			Screening Method	200		20-Sep
Downstream	3/7/2024	11:30	PEG-EO11	n.d.	ng/L			Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	PEG-EO11	n.d.	ng/L			Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	PEG-EO11	n.d.	ng/L			Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	PEG-EO11	n.d.	ng/L			Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	PEG-EO11	n.d.	ng/l			Screening Method	200		20-Sep
Upstream	9/16/2024	11:00	PEG-EO11	n.d.	ng/l			Screening Method	200		20-Sep
Downstream	3/7/2024	11:30	PEG-EO7	n.d.	ng/L			Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	PEG-EO7	n.d.	ng/L			Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	PEG-EO7	n.d.	ng/L			Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	PEG-EO7	n.d.	ng/L			Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	PEG-EO7	n.d.	ng/l			Screening Method	200		20-Sep
Upstream	9/16/2024	11:00	PEG-EO7	n.d.	ng/l			Screening Method	200		20-Sep
Downstream	3/7/2024	11:30	PEG-EO8	n.d.	ng/L			Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	PEG-EO8	n.d.	ng/L			Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	PEG-EO8	n.d.	ng/L			Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	PEG-EO8	n.d.	ng/L			Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	PEG-EO8	n.d.	ng/l			Screening Method	200		20-Sep
Upstream	9/16/2024	11:00	PEG-EO8	n.d.	ng/l			Screening Method	200		20-Sep
Downstream	3/7/2024	11:30	PEG-EO9	n.d.	ng/L			Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	PEG-EO9	n.d.	ng/L			Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	PEG-EO9	n.d.	ng/L			Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	PEG-EO9	n.d.	ng/L			Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	PEG-EO9	n.d.	ng/l			Screening Method	200		20-Sep
Upstream	9/16/2024	11:00	PEG-EO9	n.d.	ng/l			Screening Method	200		20-Sep
Downstream	3/7/2024	11:30	Pendimethalin	n.d.	ng/L			Screening Method	11		7-Mar
Upstream	3/7/2024	13:00	Pendimethalin	n.d.	ng/L			Screening Method	11		7-Mar
Downstream	6/12/2024	11:30	Pendimethalin	n.d.	ng/L			Screening Method	11		12-Jun
Upstream	6/12/2024	10:20	Pendimethalin	n.d.	ng/L			Screening Method	11		12-Jun
Downstream	9/16/2024	13:00	Pendimethalin	n.d.	ng/l			Screening Method	11		18-Sep
Upstream	9/16/2024	11:00	Pendimethalin	n.d.	ng/l			Screening Method	11		20-Sep
Downstream	3/7/2024	11:30	Penoxsulam	<5	ng/L			Low Level Method	10		7-Mar
Upstream	3/7/2024	13:00	Penoxsulam	<5	ng/L			Low Level Method	10		7-Mar
Downstream	6/12/2024	11:30	Penoxsulam	<5	ng/L			Low Level Method	10		12-Jun
Upstream	6/12/2024	10:20	Penoxsulam	<5	ng/L			Low Level Method	10		12-Jun
Downstream	9/16/2024	13:00	Penoxsulam	<10	ng/l			Low Level Method	10		18-Sep
Upstream	9/16/2024	11:00	Penoxsulam	<10	ng/l			Low Level Method	10		18-Sep
Downstream	3/7/2024	11:30	pH	8.15	SU			Probe			7-Mar
Upstream	3/7/2024	13:00	pH	8.44	SU			Probe			7-Mar
Downstream	6/12/2024	11:30	pH	8.16	SU			Probe			12-Jun
Upstream	6/12/2024	10:20	pH	8.37	SU			Probe			12-Jun
Downstream	9/16/2024	13:15	pH	8.12	pH			Probe			16-Sep
Upstream	9/16/2024	11:15	pH	8.26	SU			Probe			16-Sep
Downstream	11/18/2024	12:20	pH	8.1				Probe			18-Nov
Upstream	11/18/2024	10:50	pH	7.92				Probe			18-Nov
Downstream	3/7/2024	11:30	Phosmet	n.d.	ng/L			Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Phosmet	n.d.	ng/L			Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Phosmet	n.d.	ng/L			Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Phosmet	n.d.	ng/L			Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Phosmet	n.d.	ng/l			Screening Method	1		18-Sep

Upstream	9/16/2024	11:00	Phosmet	n.d.	ng/l		Screening Method	1		20-Sep
Downstream	6/12/2024	11:30	Phosphate - Ortho	ND	mg/L	As PO4	EPA 300.0	0.1	0.01	12-Jun
Downstream	11/18/2024	12:20	Phosphate - Ortho	ND	mg/l	as P	EPA 300.0	0.1	0.01	19-Nov
Downstream	11/18/2024	12:20	Phosphate - Ortho	ND	mg/l	as PO4	EPA 300.0	0.1	0.01	19-Nov
Upstream	11/18/2024	10:50	Phosphate - Ortho	ND	mg/l	as P	EPA 300.0	0.1	0.01	19-Nov
Upstream	11/18/2024	10:50	Phosphate - Ortho	ND	mg/l	as PO4	EPA 300.0	0.1	0.01	19-Nov
Downstream	6/12/2024	11:30	Phosphate - Ortho	ND	mg/L	As P	EPA 300.0	0.1	0.01	12-Jun
Upstream	6/12/2024	10:20	Phosphate - Ortho	ND	mg/L	as P	EPA 300.0	0.1	0.01	12-Jun
Upstream	6/12/2024	10:20	Phosphate - Ortho	ND	mg/L	as PO4	EPA 300.0	0.1	0.01	12-Jun
Downstream	9/16/2024	13:00	Phosphate - Ortho	ND	mg/l	as P	EPA 300.0	0.1	0.01	17-Sep
Downstream	9/16/2024	13:00	Phosphate - Ortho	ND	mg/l	as PO4	EPA 300.0	0.1	0.01	17-Sep
Upstream	9/16/2024	11:00	Phosphate - Ortho	ND	mg/l	as P	EPA 300.0	0.1	0.01	17-Sep
Upstream	9/16/2024	11:00	Phosphate - Ortho	ND	mg/l	as PO4	EPA 300.0	0.1	0.01	17-Sep
Downstream	3/7/2024	11:30	Piperonyl butoxide	n.d.	ng/L		Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Piperonyl butoxide	n.d.	ng/L		Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Piperonyl butoxide	n.d.	ng/L		Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Piperonyl butoxide	n.d.	ng/L		Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Piperonyl butoxide	n.d.	ng/l		Screening Method	10		18-Sep
Upstream	9/16/2024	11:00	Piperonyl butoxide	n.d.	ng/l		Screening Method	10		20-Sep
Downstream	3/7/2024	11:30	PPG-PO5	n.d.	ng/L		Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	PPG-PO5	n.d.	ng/L		Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	PPG-PO5	n.d.	ng/L		Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	PPG-PO5	n.d.	ng/L		Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	PPG-PO5	n.d.	ng/l		Screening Method	200		20-Sep
Upstream	9/16/2024	11:00	PPG-PO5	n.d.	ng/l		Screening Method	200		20-Sep
Downstream	3/7/2024	11:30	PPG-PO6	n.d.	ng/L		Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	PPG-PO6	n.d.	ng/L		Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	PPG-PO6	n.d.	ng/L		Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	PPG-PO6	n.d.	ng/L		Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	PPG-PO6	n.d.	ng/l		Screening Method	200		20-Sep
Upstream	9/16/2024	11:00	PPG-PO6	n.d.	ng/l		Screening Method	200		20-Sep
Downstream	3/7/2024	11:30	PPG-PO7	n.d.	ng/L		Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	PPG-PO7	n.d.	ng/L		Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	PPG-PO7	n.d.	ng/L		Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	PPG-PO7	n.d.	ng/L		Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	PPG-PO7	n.d.	ng/l		Screening Method	200		20-Sep
Upstream	9/16/2024	11:00	PPG-PO7	n.d.	ng/l		Screening Method	200		20-Sep
Downstream	3/7/2024	11:30	PPG-PO8	n.d.	ng/L		Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	PPG-PO8	n.d.	ng/L		Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	PPG-PO8	n.d.	ng/L		Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	PPG-PO8	n.d.	ng/L		Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	PPG-PO8	n.d.	ng/l		Screening Method	200		20-Sep
Upstream	9/16/2024	11:00	PPG-PO8	n.d.	ng/l		Screening Method	200		20-Sep
Downstream	3/7/2024	11:30	PPG-PO9	n.d.	ng/L		Screening Method	200		7-Mar
Upstream	3/7/2024	13:00	PPG-PO9	n.d.	ng/L		Screening Method	200		7-Mar
Downstream	6/12/2024	11:30	PPG-PO9	n.d.	ng/L		Screening Method	200		12-Jun
Upstream	6/12/2024	10:20	PPG-PO9	n.d.	ng/L		Screening Method	200		12-Jun
Downstream	9/16/2024	13:00	PPG-PO9	n.d.	ng/l		Screening Method	200		20-Sep
Upstream	9/16/2024	11:00	PPG-PO9	n.d.	ng/l		Screening Method	200		20-Sep
Downstream	3/7/2024	11:30	Profenofos	n.d.	ng/L		Screening Method	20		7-Mar
Upstream	3/7/2024	13:00	Profenofos	n.d.	ng/L		Screening Method	20		7-Mar
Downstream	6/12/2024	11:30	Profenofos	n.d.	ng/L		Screening Method	20		12-Jun
Upstream	6/12/2024	10:20	Profenofos	n.d.	ng/L		Screening Method	20		12-Jun
Downstream	9/16/2024	13:00	Profenofos	n.d.	ng/l		Screening Method	20		18-Sep
Upstream	9/16/2024	11:00	Profenofos	n.d.	ng/l		Screening Method	20		20-Sep
Downstream	3/7/2024	11:30	Prometon	5.2	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Prometon	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Prometon	2.0	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Prometon	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Prometon	5.7	ng/l		Screening Method	1		18-Sep
Upstream	9/16/2024	11:00	Prometon	n.d.	ng/l		Screening Method	1		20-Sep
Downstream	3/7/2024	11:30	Propazine	n.d.	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Propazine	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Propazine	n.d.	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Propazine	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Propazine	n.d.	ng/l		Screening Method	1		18-Sep
Upstream	9/16/2024	11:00	Propazine	n.d.	ng/l		Screening Method	1		20-Sep
Downstream	3/7/2024	11:30	Propiconazole	n.d.	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Propiconazole	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Propiconazole	n.d.	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Propiconazole	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Propiconazole	n.d.	ng/l		Screening Method	1		18-Sep
Upstream	9/16/2024	11:00	Propiconazole	n.d.	ng/l		Screening Method	1		20-Sep
Downstream	3/7/2024	11:30	Propoxur	n.d.	ng/L		Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Propoxur	n.d.	ng/L		Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Propoxur	n.d.	ng/L		Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Propoxur	n.d.	ng/L		Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Propoxur	n.d.	ng/l		Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Propoxur	n.d.	ng/l		Screening Method	5		20-Sep
Downstream	3/7/2024	11:30	Propranolol	<20	ng/L		Low Level Method	5		7-Mar
Upstream	3/7/2024	13:00	Propranolol	<20	ng/L		Low Level Method	5		7-Mar
Downstream	6/12/2024	11:30	Propranolol	<20	ng/L		Low Level Method	5		12-Jun
Upstream	6/12/2024	10:20	Propranolol	<20	ng/L		Low Level Method	5		12-Jun
Downstream	9/16/2024	13:00	Propranolol	<5	ng/l		Low Level Method	5		18-Sep
Upstream	9/16/2024	11:00	Propranolol	<5	ng/l		Low Level Method	5		18-Sep
Downstream	3/7/2024	11:30	Prosulfuron	n.d.	ng/L		Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Prosulfuron	n.d.	ng/L		Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Prosulfuron	n.d.	ng/L		Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Prosulfuron	n.d.	ng/L		Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Prosulfuron	n.d.	ng/l		Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Prosulfuron	n.d.	ng/l		Screening Method	5		20-Sep
Downstream	3/7/2024	11:30	Ranitidine	n.d.	ng/L		Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Ranitidine	n.d.	ng/L		Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Ranitidine	n.d.	ng/L		Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Ranitidine	n.d.	ng/L		Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Ranitidine	n.d.	ng/l		Screening Method	10		18-Sep
Upstream	9/16/2024	11:00	Ranitidine	n.d.	ng/l		Screening Method	10		20-Sep
Upstream	3/7/2024	13:00	Salinity	0.05	ppt		Probe			7-Mar
Downstream	6/12/2024	11:30	Salinity	0.33	ppt		Probe			12-Jun
Upstream	6/12/2024	10:20	Salinity	0.03	ppt		Probe			12-Jun
Downstream	9/16/2024	13:15	Salinity	0.96	ppt		Probe			16-Sep
Upstream	9/16/2024	11:15	Salinity	0.04	ppt		Probe			16-Sep
Downstream	11/18/2024	12:20	Salinity	0.82			Probe			18-Nov

Upstream	11/18/2024	10:50	Salinity	0.04			Probe			18-Nov
Downstream	3/7/2024	11:30	Salinity (ppt)	0.96	ppt		Probe			7-Mar
Upstream	3/7/2024	13:00	Selenium	ND	mg/L	Dissolved	EPA 200.8	0.0008	0.00008	14-Mar
Downstream	6/12/2024	11:30	Selenium	0.0049	mg/L	Dissolved	EPA 200.8	0.0008	0.00008	14-Jun
Downstream	6/12/2024	11:30	Selenium	0.0049	mg/L	Total	EPA 200.8	0.0008	0.00008	14-Jun
Upstream	6/12/2024	10:20	Selenium	ND	mg/L	Dissolved	EPA 200.8	0.0008	0.00008	14-Jun
Upstream	6/12/2024	10:20	Selenium	ND	mg/L	Total	EPA 200.8	0.0008	0.00008	14-Jun
Downstream	9/16/2024	13:00	Selenium	0.0201	mg/l	Dissolved	EPA 200.8	0.0008	0.00008	20-Sep
Downstream	9/16/2024	13:00	Selenium	0.202	mg/l	Total	EPA 200.8	0.0008	0.00008	20-Sep
Upstream	9/16/2024	11:00	Selenium	ND	mg/l	Dissolved	EPA 200.8	0.0008	0.00008	20-Sep
Upstream	9/16/2024	11:00	Selenium	ND	mg/l	Total	EPA 200.8	0.0008	0.00008	20-Sep
Downstream	11/18/2024	12:20	Selenium	0.022	mg/l	Dissolved	EPA 200.8	0.0008	0.00008	22-Nov
Downstream	11/18/2024	12:20	Selenium	0.0221	mg/l	Total	EPA 200.8	0.0008	0.00008	22-Nov
Upstream	11/18/2024	10:50	Selenium	ND	mg/l	Dissolved	EPA 200.8	0.0008	0.00008	22-Nov
Upstream	11/18/2024	10:50	Selenium	ND	mg/l	Total	EPA 200.8	0.0008	0.00008	22-Nov
Downstream	3/7/2024	11:30	Selenium (Total mg/L)	0.0364	mg/L	Total	EPA 200.8	0.0008	0.00008	14-Mar
Upstream	3/7/2024	13:00	Selenium (Total mg/L)	ND	mg/L	Total	EPA 200.8	0.0008	0.00008	14-Mar
Upstream	3/7/2024	13:00	Silver	ND	mg/L	Dissolved	EPA 200.8	0.0005	0.000003	14-Mar
Downstream	6/12/2024	11:30	Silver	ND	mg/L	Dissolved	EPA 200.8	0.0005	0.000003	14-Jun
Upstream	6/12/2024	10:20	Silver	ND	mg/L	Dissolved	EPA 200.8	0.0005	0.000003	14-Jun
Downstream	9/16/2024	13:00	Silver	ND	mg/l	Dissolved	EPA 200.8	0.0005	0.000003	20-Sep
Upstream	9/16/2024	11:00	Silver	ND	mg/l	Dissolved	EPA 200.8	0.0005	0.000003	20-Sep
Downstream	11/18/2024	12:20	Silver	ND	mg/l	Dissolved	EPA 200.8	0.0005	0.000003	22-Nov
Upstream	11/18/2024	10:50	Silver	ND	mg/l	Dissolved	EPA 200.8	0.0005	0.000003	22-Nov
Downstream	3/7/2024	11:30	Simazine	n.d.	ng/L		Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Simazine	n.d.	ng/L		Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Simazine	n.d.	ng/L		Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Simazine	n.d.	ng/L		Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Simazine	n.d.	ng/l		Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Simazine	n.d.	ng/l		Screening Method	5		20-Sep
Downstream	9/16/2024	13:00	Specific Conductance	1948	umhos/cm @25C		EPA 120.1	5	5	18-Sep
Upstream	9/16/2024	11:00	Specific Conductance	94	umhos/cm @25C		EPA 120.1	5	5	17-Sep
Downstream	3/7/2024	11:30	Specific Conductivity	1918	uS/cm		Probe			7-Mar
Upstream	3/7/2024	13:00	Specific Conductivity	101	uS/cm		Probe			7-Mar
Downstream	6/12/2024	11:30	Specific Conductivity	650	uS/cm		Probe			12-Jun
Upstream	6/12/2024	10:20	Specific Conductivity	52.3	uS/cm		Probe			12-Jun
Downstream	9/16/2024	13:15	Specific Conductivity	1919	uS/cm		Probe			16-Sep
Upstream	9/16/2024	11:15	Specific Conductivity	88.9	uS/cm		Probe			16-Sep
Downstream	3/7/2024	11:30	Spinosyn A	n.d.	ng/L		Screening Method	1		7-Mar
Upstream	3/7/2024	13:00	Spinosyn A	n.d.	ng/L		Screening Method	1		7-Mar
Downstream	6/12/2024	11:30	Spinosyn A	n.d.	ng/L		Screening Method	1		12-Jun
Upstream	6/12/2024	10:20	Spinosyn A	n.d.	ng/L		Screening Method	1		12-Jun
Downstream	9/16/2024	13:00	Spinosyn A	n.d.	ng/l		Screening Method	1		18-Sep
Upstream	9/16/2024	11:00	Spinosyn A	n.d.	ng/l		Screening Method	1		20-Sep
Downstream	3/7/2024	11:30	Spinosyn D	n.d.	ng/L		Screening Method	6		7-Mar
Upstream	3/7/2024	13:00	Spinosyn D	n.d.	ng/L		Screening Method	6		7-Mar
Downstream	6/12/2024	11:30	Spinosyn D	n.d.	ng/L		Screening Method	6		12-Jun
Upstream	6/12/2024	10:20	Spinosyn D	n.d.	ng/L		Screening Method	6		12-Jun
Downstream	9/16/2024	13:00	Spinosyn D	n.d.	ng/l		Screening Method	6		18-Sep
Upstream	9/16/2024	11:00	Spinosyn D	n.d.	ng/l		Screening Method	6		20-Sep
Downstream	3/7/2024	11:30	Sucralose	n.d.	ng/L		Screening Method			7-Mar
Upstream	3/7/2024	13:00	Sucralose	n.d.	ng/L		Screening Method	500		7-Mar
Downstream	6/12/2024	11:30	Sucralose	n.d.	ng/L		Screening Method	500		12-Jun
Upstream	6/12/2024	10:20	Sucralose	n.d.	ng/L		Screening Method	500		12-Jun
Downstream	9/16/2024	13:00	Sucralose	n.d.	ng/l		Screening Method	500		18-Sep
Upstream	9/16/2024	11:00	Sucralose	n.d.	ng/l		Screening Method	500		20-Sep
Downstream	3/7/2024	11:30	Sulfadimethoxine	n.d.	ng/L		Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Sulfadimethoxine	n.d.	ng/L		Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Sulfadimethoxine	n.d.	ng/L		Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Sulfadimethoxine	n.d.	ng/L		Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Sulfadimethoxine	n.d.	ng/l		Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Sulfadimethoxine	n.d.	ng/l		Screening Method	5		20-Sep
Downstream	3/7/2024	11:30	Sulfamethoxazole	<20	ng/L		Low Level Method	20		7-Mar
Upstream	3/7/2024	13:00	Sulfamethoxazole	<20	ng/L		Low Level Method	20		7-Mar
Downstream	6/12/2024	11:30	Sulfamethoxazole	<20	ng/L		Low Level Method	20		12-Jun
Upstream	6/12/2024	10:20	Sulfamethoxazole	<20	ng/L		Low Level Method	20		12-Jun
Downstream	9/16/2024	13:00	Sulfamethoxazole	<20	ng/l		Low Level Method	20		18-Sep
Upstream	9/16/2024	11:00	Sulfamethoxazole	<20	ng/l		Low Level Method	20		18-Sep
Upstream	3/7/2024	13:00	Sulfate	7.99	mg/L	Nitrogen	EPA 300.0	0.1	0.012	8-Mar
Downstream	6/12/2024	11:30	Sulfate	205	mg/L		EPA 300.0	1	0.012	12-Jun
Upstream	6/12/2024	10:20	Sulfate	4.7	mg/L		EPA 300.0	1	0.012	12-Jun
Downstream	9/16/2024	13:00	Sulfate	964	mg/l		EPA 300.0	1	0.012	17-Sep
Upstream	9/16/2024	11:00	Sulfate	5.52	mg/l		EPA 300.0	1	0.012	17-Sep
Downstream	11/18/2024	12:20	Sulfate	698	mg/l		EPA 300.0	0.1	0.012	19-Nov
Upstream	11/18/2024	10:50	Sulfate	6.3	mg/l		EPA 300.0	0.1	0.012	19-Nov
Upstream	3/7/2024	13:00	TDS	72.8	ppt		Probe			7-Mar
Downstream	6/12/2024	11:30	TDS	461	ppt		Probe			12-Jun
Upstream	6/12/2024	10:20	TDS	37.5	ppt		Probe			12-Jun
Downstream	9/16/2024	13:15	TDS	1.36	ppt		Probe			16-Sep
Upstream	9/16/2024	11:15	TDS	63.2	ppt		Probe			16-Sep
Downstream	11/18/2024	12:20	TDS	1.16			Probe			18-Nov
Upstream	11/18/2024	10:50	TDS	60.6			Probe			18-Nov
Downstream	3/7/2024	11:30	TDS (ppt)	1.36	ppt		Probe			7-Mar
Downstream	3/7/2024	11:30	Tebuconazole	n.d.	ng/L		Screening Method	20		7-Mar
Upstream	3/7/2024	13:00	Tebuconazole	n.d.	ng/L		Screening Method	20		7-Mar
Downstream	6/12/2024	11:30	Tebuconazole	n.d.	ng/L		Screening Method	20		12-Jun
Upstream	6/12/2024	10:20	Tebuconazole	n.d.	ng/L		Screening Method	20		12-Jun
Downstream	9/16/2024	13:00	Tebuconazole	n.d.	ng/l		Screening Method	20		18-Sep
Upstream	9/16/2024	11:00	Tebuconazole	n.d.	ng/l		Screening Method	20		20-Sep
Downstream	3/7/2024	11:30	Tebufenozide	n.d.	ng/L		Screening Method	50		7-Mar
Upstream	3/7/2024	13:00	Tebufenozide	n.d.	ng/L		Screening Method	50		7-Mar
Downstream	6/12/2024	11:30	Tebufenozide	n.d.	ng/L		Screening Method	50		12-Jun
Upstream	6/12/2024	10:20	Tebufenozide	n.d.	ng/L		Screening Method	50		12-Jun
Downstream	9/16/2024	13:00	Tebufenozide	n.d.	ng/l		Screening Method	50		18-Sep
Upstream	9/16/2024	11:00	Tebufenozide	n.d.	ng/l		Screening Method	50		20-Sep
Downstream	3/7/2024	11:30	Temperature	10.4	C		Probe			7-Mar
Upstream	3/7/2024	13:00	Temperature	5.6	C		Probe			7-Mar
Downstream	6/12/2024	11:30	Temperature	22.5	C		Probe			12-Jun
Upstream	6/12/2024	10:20	Temperature	15	C		Probe			12-Jun
Downstream	9/16/2024	13:15	Temperature	17.8	C		Probe			16-Sep
Upstream	9/16/2024	11:15	Temperature	14.5	C		Probe			16-Sep
Downstream	11/18/2024	12:20	Temperature	9.9			Probe			18-Nov
Upstream	11/18/2024	10:50	Temperature	3.4			Probe			18-Nov

Downstream	3/7/2024	11:30	Terbuthylazine	n.d.	ng/L			Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Terbuthylazine	n.d.	ng/L			Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Terbuthylazine	n.d.	ng/L			Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Terbuthylazine	n.d.	ng/L			Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Terbuthylazine	n.d.	ng/l			Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Terbuthylazine	n.d.	ng/l			Screening Method	5		20-Sep
Downstream	3/7/2024	11:30	THC	n.d.	ng/L			Screening Method	50		7-Mar
Upstream	3/7/2024	13:00	THC	n.d.	ng/L			Screening Method	50		7-Mar
Downstream	6/12/2024	11:30	THC	n.d.	ng/L			Screening Method	50		12-Jun
Upstream	6/12/2024	10:20	THC	n.d.	ng/L			Screening Method	50		12-Jun
Downstream	9/16/2024	13:00	THC	n.d.	ng/l			Screening Method	50		18-Sep
Upstream	9/16/2024	11:00	THC	n.d.	ng/l			Screening Method	50		20-Sep
Downstream	3/7/2024	11:30	Thiabendazole	n.d.	ng/L			Screening Method	5		7-Mar
Upstream	3/7/2024	13:00	Thiabendazole	n.d.	ng/L			Screening Method	5		7-Mar
Downstream	6/12/2024	11:30	Thiabendazole	n.d.	ng/L			Screening Method	5		12-Jun
Upstream	6/12/2024	10:20	Thiabendazole	n.d.	ng/L			Screening Method	5		12-Jun
Downstream	9/16/2024	13:00	Thiabendazole	n.d.	ng/l			Screening Method	5		18-Sep
Upstream	9/16/2024	11:00	Thiabendazole	n.d.	ng/l			Screening Method	5		20-Sep
Downstream	3/7/2024	11:30	Thiacloprid	n.d.	ng/L			Screening Method	1.5		7-Mar
Upstream	3/7/2024	13:00	Thiacloprid	n.d.	ng/L			Screening Method	1.5		7-Mar
Downstream	6/12/2024	11:30	Thiacloprid	n.d.	ng/L			Screening Method	1.5		12-Jun
Upstream	6/12/2024	10:20	Thiacloprid	n.d.	ng/L			Screening Method	1.5		12-Jun
Downstream	9/16/2024	13:00	Thiacloprid	n.d.	ng/l			Screening Method	1.5		18-Sep
Upstream	9/16/2024	11:00	Thiacloprid	n.d.	ng/l			Screening Method	1.5		20-Sep
Downstream	3/7/2024	11:30	Thiophanate-methyl	n.d.	ng/L			Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Thiophanate-methyl	n.d.	ng/L			Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Thiophanate-methyl	n.d.	ng/L			Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Thiophanate-methyl	n.d.	ng/L			Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Thiophanate-methyl	n.d.	ng/l			Screening Method	10		18-Sep
Upstream	9/16/2024	11:00	Thiophanate-methyl	n.d.	ng/l			Screening Method	10		20-Sep
Upstream	3/7/2024	13:00	TKN	ND	mg/L	Nitrogen		SM 4500-Norg-B	0.1	0.018	13-Mar
Downstream	6/12/2024	11:30	TKN	ND	mg/L		Total	SM 4500-Norg-B	0.1	0.018	18-Jun
Upstream	6/12/2024	10:20	TKN	ND	mg/L	Nitrogen	Total	SM 4500-Norg-B	0.1	0.018	18-Jun
Downstream	9/16/2024	13:00	TKN	ND	mg/l	Nitrogen		SM 4500-Norg-B	0.1	0.018	20-Sep
Upstream	9/16/2024	11:00	TKN	ND	mg/l			SM 4500-Norg-B	0.1	0.018	20-Sep
Downstream	11/18/2024	12:20	TKN	ND	mg/l		Total	SM 4500-Norg-B	0.1	0.018	22-Nov
Upstream	11/18/2024	10:50	TKN	ND	mg/l		Total	SM 4500-Norg-B	0.1	0.018	22-Nov
Downstream	3/7/2024	11:30	Topramezone	<10	ng/L			Low Level Method	20		8-Mar
Upstream	3/7/2024	13:00	Topramezone	<10	ng/L			Low Level Method	20		8-Mar
Downstream	6/12/2024	11:30	Topramezone	<10	ng/L			Low Level Method	20		19-Jun
Upstream	6/12/2024	10:20	Topramezone	<10	ng/L			Low Level Method	20		19-Jun
Downstream	9/16/2024	13:00	Topramezone	<20	ng/l			Low Level Method	20		20-Sep
Upstream	9/16/2024	11:00	Topramezone	<20	ng/l			Low Level Method	20		20-Sep
Upstream	3/7/2024	13:00	Total Hardness	42.4	mg/L	as CaCO3	Total	SM 2340-B	0.1		12-Mar
Downstream	6/12/2024	11:30	Total Hardness	344.5	mg/L	as CaCO3	Total	SM 2340-B	0.1		14-Jun
Upstream	6/12/2024	10:20	Total Hardness	20	mg/L	as CaCO3	Total	SM 2340-B	0.1		14-Jun
Downstream	9/16/2024	13:00	Total Hardness	1123.8	mg/l	as CaCO3	Total	SM 2340-B	0.1	0.01	18-Sep
Upstream	9/16/2024	11:00	Total Hardness	38.5	mg/l	as CaCO3	Total	SM 2340-B	0.1	0.01	18-Sep
Downstream	11/18/2024	12:20	Total Hardness	840.3	mg/l	as CaCO3	Total	EPA 200.8	0.1	0.01	20-Nov
Upstream	11/18/2024	10:50	Total Hardness	34	mg/l	as CaCO3	Total	EPA 200.8	0.1	0.01	20-Nov
Upstream	3/7/2024	13:00	Total Nitrogen	ND	mg/L	Nitrogen	Total	Calculation	0.1	0.02	21-Mar
Downstream	6/12/2024	11:30	Total Nitrogen	0.36	mg/L	Nitrogen	Total	Calculation	0.1	0.02	19-Jun
Upstream	6/12/2024	10:20	Total Nitrogen	ND	mg/L	Nitrogen	Total	Calculation	0.1	0.02	19-Jun
Downstream	9/16/2024	13:00	Total Nitrogen	0.8	mg/l	Nitrogen	Total	Calculation	0.1	0.02	24-Sep
Upstream	9/16/2024	11:00	Total Nitrogen	ND	mg/l	Nitrogen	Total	Calculation	0.1	0.02	24-Sep
Downstream	11/18/2024	12:20	Total Nitrogen	0.9	mg/l		Total	Calculation	0.1	0.02	25-Nov
Upstream	11/18/2024	10:50	Total Nitrogen	ND	mg/l		Total	Calculation	0.1	0.02	25-Nov
Upstream	3/7/2024	13:00	Total Phosphorus	ND	mg/L	Phosphorus	Total	EPA 365.1	0.05	0.006	12-Mar
Downstream	6/12/2024	11:30	Total Phosphorus	0.27	mg/L	Phosphorus	Total	EPA 365.1	0.05	0.006	13-Jun
Upstream	6/12/2024	10:20	Total Phosphorus	ND	mg/L	Phosphorus	Total	EPA 365.1	0.05	0.006	13-Jun
Downstream	9/16/2024	13:00	Total Phosphorus	ND	mg/l	Phosphorus	Total	EPA 365.1	0.05	0.006	17-Sep
Upstream	9/16/2024	11:00	Total Phosphorus	ND	mg/l	Phosphorus	Total	EPA 365.1	0.05	0.006	17-Sep
Downstream	11/18/2024	12:20	Total Phosphorus	ND	mg/l		Total	EPA 365.1	0.05	0.006	19-Nov
Upstream	11/18/2024	10:50	Total Phosphorus	ND	mg/l		Total	EPA 365.1	0.05	0.006	19-Nov
Downstream	3/7/2024	11:30	Tramadol	<5	ng/L			Low Level Method	10		7-Mar
Upstream	3/7/2024	13:00	Tramadol	<5	ng/L			Low Level Method	10		7-Mar
Downstream	6/12/2024	11:30	Tramadol	<5	ng/L			Low Level Method	10		12-Jun
Upstream	6/12/2024	10:20	Tramadol	<5	ng/L			Low Level Method	10		12-Jun
Downstream	9/16/2024	13:00	Tramadol	<10	ng/l			Low Level Method	10		18-Sep
Upstream	9/16/2024	11:00	Tramadol	<10	ng/l			Low Level Method	10		18-Sep
Downstream	3/7/2024	11:30	Tributyl phosphate	n.d.	ng/L			Screening Method	20		7-Mar
Upstream	3/7/2024	13:00	Tributyl phosphate	n.d.	ng/L			Screening Method	20		7-Mar
Downstream	6/12/2024	11:30	Tributyl phosphate	n.d.	ng/L			Screening Method	20		12-Jun
Upstream	6/12/2024	10:20	Tributyl phosphate	n.d.	ng/L			Screening Method	20		12-Jun
Downstream	9/16/2024	13:00	Tributyl phosphate	n.d.	ng/l			Screening Method	20		18-Sep
Upstream	9/16/2024	11:00	Tributyl phosphate	n.d.	ng/l			Screening Method	20		20-Sep
Downstream	3/7/2024	11:30	Triclocarban	n.d.	ng/L			Screening Method	20		7-Mar
Upstream	3/7/2024	13:00	Triclocarban	n.d.	ng/L			Screening Method	20		7-Mar
Downstream	6/12/2024	11:30	Triclocarban	n.d.	ng/L			Screening Method	20		12-Jun
Upstream	6/12/2024	10:20	Triclocarban	n.d.	ng/L			Screening Method	20		12-Jun
Downstream	9/16/2024	13:00	Triclocarban	n.d.	ng/l			Screening Method	20		18-Sep
Upstream	9/16/2024	11:00	Triclocarban	n.d.	ng/l			Screening Method	20		20-Sep
Downstream	3/7/2024	11:30	Triclopyr	<10	ng/L			Low Level Method	5		8-Mar
Upstream	3/7/2024	13:00	Triclopyr	<10	ng/L			Low Level Method	5		8-Mar
Downstream	6/12/2024	11:30	Triclopyr	<10	ng/L			Low Level Method	5		19-Jun
Upstream	6/12/2024	10:20	Triclopyr	<10	ng/L			Low Level Method	5		19-Jun
Downstream	9/16/2024	13:00	Triclopyr	<5	ng/l			Low Level Method	5		20-Sep
Upstream	9/16/2024	11:00	Triclopyr	<5	ng/l			Low Level Method	5		20-Sep
Downstream	3/7/2024	11:30	Triclosan	<5	ng/L			Low Level Method	10		8-Mar
Upstream	3/7/2024	13:00	Triclosan	<5	ng/L			Low Level Method	10		8-Mar
Downstream	6/12/2024	11:30	Triclosan	<5	ng/L			Low Level Method	10		19-Jun
Upstream	6/12/2024	10:20	Triclosan	<5	ng/L			Low Level Method	10		19-Jun
Downstream	9/16/2024	13:00	Triclosan	<10	ng/l			Low Level Method	10		20-Sep
Upstream	9/16/2024	11:00	Triclosan	<10	ng/l			Low Level Method	10		20-Sep
Downstream	3/7/2024	11:30	Triflumizole	n.d.	ng/L			Screening Method	3		7-Mar
Upstream	3/7/2024	13:00	Triflumizole	n.d.	ng/L			Screening Method	3		7-Mar
Downstream	6/12/2024	11:30	Triflumizole	n.d.	ng/L			Screening Method	3		12-Jun
Upstream	6/12/2024	10:20	Triflumizole	n.d.	ng/L			Screening Method	3		12-Jun
Downstream	9/16/2024	13:00	Triflumizole	n.d.	ng/l			Screening Method	3		18-Sep
Upstream	9/16/2024	11:00	Triflumizole	n.d.	ng/l			Screening Method	3		20-Sep
Downstream	3/7/2024	11:30	Trimethoprim	<5	ng/L			Low Level Method	5		7-Mar
Upstream	3/7/2024	13:00	Trimethoprim	<5	ng/L			Low Level Method	5		7-Mar
Downstream	6/12/2024	11:30	Trimethoprim	<5	ng/L			Low Level Method	5		12-Jun

Upstream	6/12/2024	10:20	Trimethoprim	<5	ng/L		Low Level Method	5		12-Jun
Downstream	9/16/2024	13:00	Trimethoprim	<5	ng/l		Low Level Method	5		18-Sep
Upstream	9/16/2024	11:00	Trimethoprim	<5	ng/l		Low Level Method	5		18-Sep
Downstream	3/7/2024	11:30	Triphenyl phosphate	n.d.	ng/L		Screening Method	20		7-Mar
Upstream	3/7/2024	13:00	Triphenyl phosphate	n.d.	ng/L		Screening Method	20		7-Mar
Downstream	6/12/2024	11:30	Triphenyl phosphate	n.d.	ng/L		Screening Method	20		12-Jun
Upstream	6/12/2024	10:20	Triphenyl phosphate	n.d.	ng/L		Screening Method	20		12-Jun
Downstream	9/16/2024	13:00	Triphenyl phosphate	n.d.	ng/l		Screening Method	20		18-Sep
Upstream	9/16/2024	11:00	Triphenyl phosphate	n.d.	ng/l		Screening Method	20		20-Sep
Downstream	3/7/2024	11:30	Tris(2-chloroethyl) phosphate	n.d.	ng/L		Screening Method	20		7-Mar
Upstream	3/7/2024	13:00	Tris(2-chloroethyl) phosphate	n.d.	ng/L		Screening Method	20		7-Mar
Downstream	6/12/2024	11:30	Tris(2-chloroethyl) phosphate	n.d.	ng/L		Screening Method	20		12-Jun
Upstream	6/12/2024	10:20	Tris(2-chloroethyl) phosphate	n.d.	ng/L		Screening Method	20		12-Jun
Downstream	9/16/2024	13:00	Tris(2-chloroethyl) phosphate	n.d.	ng/l		Screening Method	20		18-Sep
Upstream	9/16/2024	11:00	Tris(2-chloroethyl) phosphate	n.d.	ng/l		Screening Method	20		20-Sep
Downstream	3/7/2024	11:30	Venlafaxine	<5	ng/L		Low Level Method	5		7-Mar
Upstream	3/7/2024	13:00	Venlafaxine	<5	ng/L		Low Level Method	5		7-Mar
Downstream	6/12/2024	11:30	Venlafaxine	<5	ng/L		Low Level Method	5		12-Jun
Upstream	6/12/2024	10:20	Venlafaxine	<5	ng/L		Low Level Method	5		12-Jun
Downstream	9/16/2024	13:00	Venlafaxine	<5	ng/l		Low Level Method	5		18-Sep
Upstream	9/16/2024	11:00	Venlafaxine	<5	ng/l		Low Level Method	5		18-Sep
Downstream	3/7/2024	11:30	Warfarin	n.d.	ng/L		Screening Method	10		7-Mar
Upstream	3/7/2024	13:00	Warfarin	n.d.	ng/L		Screening Method	10		7-Mar
Downstream	6/12/2024	11:30	Warfarin	n.d.	ng/L		Screening Method	10		12-Jun
Upstream	6/12/2024	10:20	Warfarin	n.d.	ng/L		Screening Method	10		12-Jun
Downstream	9/16/2024	13:00	Warfarin	n.d.	ng/l		Screening Method	10		18-Sep
Upstream	9/16/2024	11:00	Warfarin	n.d.	ng/l		Screening Method	10		20-Sep
Upstream	3/7/2024	13:00	Zinc	0.001	mg/L	Dissolved	EPA 200.8	0.001	0.00003	14-Mar
Downstream	6/12/2024	11:30	Zinc	ND	mg/L	Dissolved	EPA 200.8	0.001	0.00003	14-Jun
Upstream	6/12/2024	10:20	Zinc	0.006	mg/L	Dissolved	EPA 200.8	0.001	0.00003	14-Jun
Downstream	9/16/2024	13:00	Zinc	ND	mg/l	Dissolved	EPA 200.8	0.001	0.00003	20-Sep
Upstream	9/16/2024	11:00	Zinc	0.001	mg/l	Dissolved	EPA 200.8	0.001	0.00003	20-Sep
Downstream	11/18/2024	12:20	Zinc	ND	mg/l	Dissolved	SM 2340-B	0.001	0.00003	22-Nov
Upstream	11/18/2024	10:50	Zinc	0.004	mg/l	Dissolved	SM 2340-B	0.001	0.00003	22-Nov
Upstream	11/18/2024	10:50	2,4-D	<5	ng/L		Low Level Method	5		13-Dec
Upstream	11/18/2024	10:50	Atenolol	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	Atrazine	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	Bupropion	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	Carbamazepine	<1	ng/L		Low Level Method	1		17-Dec
Upstream	11/18/2024	10:50	Clarithromycin	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	Cotinine	<10	ng/L		Low Level Method	10		17-Dec
Upstream	11/18/2024	10:50	DEET	<20	ng/L		Low Level Method	20		17-Dec
Upstream	11/18/2024	10:50	Dextrorphan	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	Diazinon	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	Diltiazem	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	Diphenhydramine	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	Diuron	<5	ng/L		Low Level Method	5		13-Dec
Upstream	11/18/2024	10:50	EDDP	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	Erythromycin	<10	ng/L		Low Level Method	10		17-Dec
Upstream	11/18/2024	10:50	Fexofenadine	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	Fluridone	<1	ng/L		Low Level Method	1		17-Dec
Upstream	11/18/2024	10:50	Gemfibrozil	<10	ng/L		Low Level Method	10		13-Dec
Upstream	11/18/2024	10:50	Imazamox	<10	ng/L		Low Level Method	10		17-Dec
Upstream	11/18/2024	10:50	Lamotrigine	<1	ng/L		Low Level Method	1		17-Dec
Upstream	11/18/2024	10:50	Metoprolol	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	Penoxsulam	<10	ng/L		Low Level Method	10		17-Dec
Upstream	11/18/2024	10:50	Propranolol	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	Sulfamethoxazole	<20	ng/L		Low Level Method	20		17-Dec
Upstream	11/18/2024	10:50	Topramezone	<20	ng/L		Low Level Method	20		13-Dec
Upstream	11/18/2024	10:50	Tramadol	<10	ng/L		Low Level Method	10		17-Dec
Upstream	11/18/2024	10:50	Triclopyr	<5	ng/L		Low Level Method	5		13-Dec
Upstream	11/18/2024	10:50	Triclosan	<10	ng/L		Low Level Method	10		13-Dec
Upstream	11/18/2024	10:50	Trimethoprim	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	Venlafaxine	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	2,4-D	<5	ng/L		Low Level Method	5		13-Dec
Downstream	11/18/2024	12:20	Atenolol	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	Atrazine	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	Bupropion	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	Carbamazepine	<1	ng/L		Low Level Method	1		17-Dec
Downstream	11/18/2024	12:20	Clarithromycin	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	Cotinine	<10	ng/L		Low Level Method	10		17-Dec
Downstream	11/18/2024	12:20	DEET	<20	ng/L		Low Level Method	20		17-Dec
Downstream	11/18/2024	12:20	Dextrorphan	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	Diazinon	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	Diltiazem	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	Diphenhydramine	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	Diuron	<5	ng/L		Low Level Method	5		13-Dec
Downstream	11/18/2024	12:20	EDDP	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	Erythromycin	<10	ng/L		Low Level Method	10		17-Dec
Downstream	11/18/2024	12:20	Fexofenadine	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	Fluridone	<1	ng/L		Low Level Method	1		17-Dec
Downstream	11/18/2024	12:20	Gemfibrozil	<10	ng/L		Low Level Method	10		13-Dec
Downstream	11/18/2024	12:20	Imazamox	<10	ng/L		Low Level Method	10		17-Dec
Downstream	11/18/2024	12:20	Lamotrigine	3.1	ng/L		Low Level Method	1		17-Dec
Downstream	11/18/2024	12:20	Metoprolol	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	Penoxsulam	<10	ng/L		Low Level Method	10		17-Dec
Downstream	11/18/2024	12:20	Propranolol	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	Sulfamethoxazole	<20	ng/L		Low Level Method	20		17-Dec
Downstream	11/18/2024	12:20	Topramezone	<20	ng/L		Low Level Method	20		13-Dec
Downstream	11/18/2024	12:20	Tramadol	<10	ng/L		Low Level Method	10		17-Dec
Downstream	11/18/2024	12:20	Triclopyr	<5	ng/L		Low Level Method	5		13-Dec
Downstream	11/18/2024	12:20	Triclosan	<10	ng/L		Low Level Method	10		13-Dec
Downstream	11/18/2024	12:20	Trimethoprim	<5	ng/L		Low Level Method	5		17-Dec
Downstream	11/18/2024	12:20	Venlafaxine	<5	ng/L		Low Level Method	5		17-Dec
Upstream	11/18/2024	10:50	1, 7-dimethylxanthine	n.d.	ng/L		Screening Method	100		17-Dec
Upstream	11/18/2024	10:50	10-Hydroxy-carbamazepine	n.d.	ng/L		Screening Method	5		17-Dec
Upstream	11/18/2024	10:50	4-methyl-benzotriazole	n.d.	ng/L		Screening Method	5		17-Dec
Upstream	11/18/2024	10:50	5-methyl-benzotriazole	n.d.	ng/L		Screening Method	5		17-Dec
Upstream	11/18/2024	10:50	Acetaminophen	n.d.	ng/L		Screening Method	50		17-Dec
Upstream	11/18/2024	10:50	Acetamiprid	n.d.	ng/L		Screening Method	3		17-Dec
Upstream	11/18/2024	10:50	Acetochlor	n.d.	ng/L		Screening Method	2		17-Dec
Upstream	11/18/2024	10:50	Alachlor	n.d.	ng/L		Screening Method	3		17-Dec
Upstream	11/18/2024	10:50	Albuterol	n.d.	ng/L		Screening Method	10		17-Dec

Upstream	11/18/2024	10:50	Amphetamine	n.d.	ng/L	Screening Method	50	17-Dec
Upstream	11/18/2024	10:50	Atorvastatin	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Azithromycin	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Azoxystrobin	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Benzotriazole	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Benzothiazole	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Bromuconazole	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Buprofezin	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Caffeine	n.d.	ng/L	Screening Method	20	17-Dec
Upstream	11/18/2024	10:50	Carbaryl	n.d.	ng/L	Screening Method	3	17-Dec
Upstream	11/18/2024	10:50	Carbendazim	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Carbofuran	n.d.	ng/L	Screening Method	4	17-Dec
Upstream	11/18/2024	10:50	Cannabidiol	n.d.	ng/L	Screening Method	50	17-Dec
Upstream	11/18/2024	10:50	Chlorpyrifos methyl	n.d.	ng/L	Screening Method	30	17-Dec
Upstream	11/18/2024	10:50	Cimetidine	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Codeine	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Cyproconazole	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Cyromazine	n.d.	ng/L	Screening Method	9	17-Dec
Upstream	11/18/2024	10:50	Deethylatrazine	n.d.	ng/L	Screening Method	2	17-Dec
Upstream	11/18/2024	10:50	Dehydronifedipine	n.d.	ng/L	Screening Method	2	17-Dec
Upstream	11/18/2024	10:50	Deisopropylatrazine	n.d.	ng/L	Screening Method	2	17-Dec
Upstream	11/18/2024	10:50	Desmethyl-tramadol	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Desmethyl-venlafaxine	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Dextromethorphan	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Diazepam	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Dichlorvos	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Diclofenac	n.d.	ng/L	Screening Method	20	17-Dec
Upstream	11/18/2024	10:50	Difenoconazole	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Diflubenzuron	n.d.	ng/L	Screening Method	12	17-Dec
Upstream	11/18/2024	10:50	Dihydrocodeine	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Dimethenamide	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Dimethoate	n.d.	ng/L	Screening Method	1.5	17-Dec
Upstream	11/18/2024	10:50	Dimethomorph	n.d.	ng/L	Screening Method	4	17-Dec
Upstream	11/18/2024	10:50	Erythrohydrobupropion	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Erythromycin Anhydrate	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Ethoprop	n.d.	ng/L	Screening Method	20	17-Dec
Upstream	11/18/2024	10:50	Fentanyl	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Flufenacet	n.d.	ng/L	Screening Method	3	17-Dec
Upstream	11/18/2024	10:50	Fluoxetine	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Fluroxypyr	n.d.	ng/L	Screening Method	45	17-Dec
Upstream	11/18/2024	10:50	Gabapentin	n.d.	ng/L	Screening Method	100	17-Dec
Upstream	11/18/2024	10:50	Hydrocodone	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Hydroxyatrazine	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Ibuprofen	n.d.	ng/L	Screening Method	50	17-Dec
Upstream	11/18/2024	10:50	Imazapyr	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Imidacloprid	n.d.	ng/L	Screening Method	2	17-Dec
Upstream	11/18/2024	10:50	Iopromide	n.d.	ng/L	Screening Method	50	17-Dec
Upstream	11/18/2024	10:50	Iprodione	n.d.	ng/L	Screening Method	4	17-Dec
Upstream	11/18/2024	10:50	Isoproturon	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Isoxaben	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Isoxaflutole	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Lamotrigine Glucuronide	n.d.	ng/L	Screening Method	50	17-Dec
Upstream	11/18/2024	10:50	Malathion	n.d.	ng/L	Screening Method	1.5	17-Dec
Upstream	11/18/2024	10:50	Melamine	n.d.	ng/L	Screening Method	50	17-Dec
Upstream	11/18/2024	10:50	Meprobamate	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Metalaxyl	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Metformin	n.d.	ng/L	Screening Method	50	17-Dec
Upstream	11/18/2024	10:50	Methadone	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Methidathion	n.d.	ng/L	Screening Method	15	17-Dec
Upstream	11/18/2024	10:50	Methiocarb	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Methiocarb sulfone	n.d.	ng/L	Screening Method	9	17-Dec
Upstream	11/18/2024	10:50	Methomyl	n.d.	ng/L	Screening Method	2	17-Dec
Upstream	11/18/2024	10:50	Metolachlor	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Metribuzin	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Miconazole	n.d.	ng/L	Screening Method	20	17-Dec
Upstream	11/18/2024	10:50	Naproxen	n.d.	ng/L	Screening Method	50	17-Dec
Upstream	11/18/2024	10:50	Nicosulfuron	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Oxycodone	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Oxyfluorfen	n.d.	ng/L	Screening Method	20	17-Dec
Upstream	11/18/2024	10:50	Parathion-methyl	n.d.	ng/L	Screening Method	17	17-Dec
Upstream	11/18/2024	10:50	Pendimethalin	n.d.	ng/L	Screening Method	11	17-Dec
Upstream	11/18/2024	10:50	Phosmet	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Piperonyl butoxide	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Profenofos	n.d.	ng/L	Screening Method	20	17-Dec
Upstream	11/18/2024	10:50	Prometon	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Propazine	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Propiconazole	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Propoxur	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Prosulfuron	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Ranitidine	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Simazine	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Spinosyn A	n.d.	ng/L	Screening Method	1	17-Dec
Upstream	11/18/2024	10:50	Spinosyn D	n.d.	ng/L	Screening Method	6	17-Dec
Upstream	11/18/2024	10:50	Sucralose	n.d.	ng/L	Screening Method	500	17-Dec
Upstream	11/18/2024	10:50	Sulfadimethoxine	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Tebuconazole	n.d.	ng/L	Screening Method	20	17-Dec
Upstream	11/18/2024	10:50	Tebufenozide	n.d.	ng/L	Screening Method	50	17-Dec
Upstream	11/18/2024	10:50	Terbuthylazine	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	THC	n.d.	ng/L	Screening Method	50	17-Dec
Upstream	11/18/2024	10:50	Thiabendazole	n.d.	ng/L	Screening Method	5	17-Dec
Upstream	11/18/2024	10:50	Thiacloprid	n.d.	ng/L	Screening Method	1.5	17-Dec
Upstream	11/18/2024	10:50	Thiophanate-methyl	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	Tributyl phosphate	n.d.	ng/L	Screening Method	20	17-Dec
Upstream	11/18/2024	10:50	Triclocarban	n.d.	ng/L	Screening Method	20	17-Dec
Upstream	11/18/2024	10:50	Triflumizole	n.d.	ng/L	Screening Method	3	17-Dec
Upstream	11/18/2024	10:50	Triphenyl phosphate	n.d.	ng/L	Screening Method	20	17-Dec
Upstream	11/18/2024	10:50	Tris(2-chloroethyl) phosphate	n.d.	ng/L	Screening Method	20	17-Dec
Upstream	11/18/2024	10:50	Warfarin	n.d.	ng/L	Screening Method	10	17-Dec
Upstream	11/18/2024	10:50	PEG-EO7	n.d.	ng/L	Screening Method	200	17-Dec
Upstream	11/18/2024	10:50	PEG-EO8	n.d.	ng/L	Screening Method	200	17-Dec
Upstream	11/18/2024	10:50	PEG-EO9	n.d.	ng/L	Screening Method	200	17-Dec
Upstream	11/18/2024	10:50	PEG-EO10	n.d.	ng/L	Screening Method	200	17-Dec
Upstream	11/18/2024	10:50	PEG-EO11	n.d.	ng/L	Screening Method	200	17-Dec

Upstream	11/18/2024	10:50	PPG-PO5	n.d.	ng/L	Screening Method	200	17-Dec
Upstream	11/18/2024	10:50	PPG-PO6	n.d.	ng/L	Screening Method	200	17-Dec
Upstream	11/18/2024	10:50	PPG-PO7	n.d.	ng/L	Screening Method	200	17-Dec
Upstream	11/18/2024	10:50	PPG-PO8	n.d.	ng/L	Screening Method	200	17-Dec
Upstream	11/18/2024	10:50	PPG-PO9	n.d.	ng/L	Screening Method	200	17-Dec
Upstream	11/18/2024	10:50	C10-EO4	n.d.	ng/L	Screening Method	200	17-Dec
Upstream	11/18/2024	10:50	C10-EO5	n.d.	ng/L	Screening Method	200	17-Dec
Upstream	11/18/2024	10:50	C10-EO6	n.d.	ng/L	Screening Method	200	17-Dec
Upstream	11/18/2024	10:50	C10-EO7	n.d.	ng/L	Screening Method	200	17-Dec
Upstream	11/18/2024	10:50	C10-EO8	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	1, 7-dimethylxanthine	n.d.	ng/L	Screening Method	100	17-Dec
Downstream	11/18/2024	12:20	10-Hydroxy-carbamazepine	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	4-methyl-benzotriazole	134	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	5-methyl-benzotriazole	8	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Acetaminophen	n.d.	ng/L	Screening Method	50	17-Dec
Downstream	11/18/2024	12:20	Acetamiprid	n.d.	ng/L	Screening Method	3	17-Dec
Downstream	11/18/2024	12:20	Acetochlor	n.d.	ng/L	Screening Method	2	17-Dec
Downstream	11/18/2024	12:20	Alachlor	n.d.	ng/L	Screening Method	3	17-Dec
Downstream	11/18/2024	12:20	Albuterol	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Amphetamine	n.d.	ng/L	Screening Method	50	17-Dec
Downstream	11/18/2024	12:20	Atorvastatin	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Azithromycin	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Azoxystrobin	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Benzotriazole	6.1	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Benzothiazole	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Bromuconazole	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Buprofezin	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Caffeine	n.d.	ng/L	Screening Method	20	17-Dec
Downstream	11/18/2024	12:20	Carbaryl	n.d.	ng/L	Screening Method	3	17-Dec
Downstream	11/18/2024	12:20	Carbendazim	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Carbofuran	n.d.	ng/L	Screening Method	4	17-Dec
Downstream	11/18/2024	12:20	Cannabidiol	n.d.	ng/L	Screening Method	50	17-Dec
Downstream	11/18/2024	12:20	Chlorpyrifos methyl	n.d.	ng/L	Screening Method	30	17-Dec
Downstream	11/18/2024	12:20	Cimetidine	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Codeine	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Cyproconazole	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Cyromazine	n.d.	ng/L	Screening Method	9	17-Dec
Downstream	11/18/2024	12:20	Deethylatrazine	n.d.	ng/L	Screening Method	2	17-Dec
Downstream	11/18/2024	12:20	Dehydronifedipine	n.d.	ng/L	Screening Method	2	17-Dec
Downstream	11/18/2024	12:20	Deisopropylatrazine	n.d.	ng/L	Screening Method	2	17-Dec
Downstream	11/18/2024	12:20	Desmethyl-tramadol	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Desmethyl-venlafaxine	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Dextromethorphan	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Diazepam	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Dichlorvos	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Diclofenac	n.d.	ng/L	Screening Method	20	17-Dec
Downstream	11/18/2024	12:20	Difenoconazole	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Diflubenzuron	n.d.	ng/L	Screening Method	12	17-Dec
Downstream	11/18/2024	12:20	Dihydrocodeine	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Dimethenamide	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Dimethoate	n.d.	ng/L	Screening Method	1.5	17-Dec
Downstream	11/18/2024	12:20	Dimethomorph	n.d.	ng/L	Screening Method	4	17-Dec
Downstream	11/18/2024	12:20	Erythrohydrobupropion	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Erythromycin Anhydrate	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Ethoprop	n.d.	ng/L	Screening Method	20	17-Dec
Downstream	11/18/2024	12:20	Fentanyl	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Flufenacet	n.d.	ng/L	Screening Method	3	17-Dec
Downstream	11/18/2024	12:20	Fluoxetine	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Fluroxypyr	n.d.	ng/L	Screening Method	45	17-Dec
Downstream	11/18/2024	12:20	Gabapentin	n.d.	ng/L	Screening Method	100	17-Dec
Downstream	11/18/2024	12:20	Hydrocodone	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Hydroxyatrazine	1.6	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Ibuprofen	n.d.	ng/L	Screening Method	50	17-Dec
Downstream	11/18/2024	12:20	Imazapyr	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Imidacloprid	n.d.	ng/L	Screening Method	2	17-Dec
Downstream	11/18/2024	12:20	Iopromide	n.d.	ng/L	Screening Method	50	17-Dec
Downstream	11/18/2024	12:20	Iprodione	n.d.	ng/L	Screening Method	4	17-Dec
Downstream	11/18/2024	12:20	Isoproturon	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Isoxaben	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Isoxaflutole	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Lamotrigine Glucuronide	n.d.	ng/L	Screening Method	50	17-Dec
Downstream	11/18/2024	12:20	Malathion	n.d.	ng/L	Screening Method	1.5	17-Dec
Downstream	11/18/2024	12:20	Melamine	n.d.	ng/L	Screening Method	50	17-Dec
Downstream	11/18/2024	12:20	Meprobamate	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Metalaxyl	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Metformin	n.d.	ng/L	Screening Method	50	17-Dec
Downstream	11/18/2024	12:20	Methadone	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Methidathion	n.d.	ng/L	Screening Method	15	17-Dec
Downstream	11/18/2024	12:20	Methiocarb	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Methiocarb sulfone	n.d.	ng/L	Screening Method	9	17-Dec
Downstream	11/18/2024	12:20	Methomyl	n.d.	ng/L	Screening Method	2	17-Dec
Downstream	11/18/2024	12:20	Metolachlor	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Metribuzin	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Miconazole	n.d.	ng/L	Screening Method	20	17-Dec
Downstream	11/18/2024	12:20	Naproxen	n.d.	ng/L	Screening Method	50	17-Dec
Downstream	11/18/2024	12:20	Nicosulfuron	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Oxycodone	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Oxyfluorfen	n.d.	ng/L	Screening Method	20	17-Dec
Downstream	11/18/2024	12:20	Parathion-methyl	n.d.	ng/L	Screening Method	17	17-Dec
Downstream	11/18/2024	12:20	Pendimethalin	n.d.	ng/L	Screening Method	11	17-Dec
Downstream	11/18/2024	12:20	Phosmet	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Piperonyl butoxide	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Profenofos	n.d.	ng/L	Screening Method	20	17-Dec
Downstream	11/18/2024	12:20	Prometon	5	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Propazine	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Propiconazole	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Propoxur	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Prosulfuron	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Ranitidine	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Simazine	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Spinosyn A	n.d.	ng/L	Screening Method	1	17-Dec
Downstream	11/18/2024	12:20	Spinosyn D	n.d.	ng/L	Screening Method	6	17-Dec
Downstream	11/18/2024	12:20	Sucralose	n.d.	ng/L	Screening Method	500	17-Dec

Downstream	11/18/2024	12:20	Sulfadimethoxine	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Tebuconazole	n.d.	ng/L	Screening Method	20	17-Dec
Downstream	11/18/2024	12:20	Tebufenozide	n.d.	ng/L	Screening Method	50	17-Dec
Downstream	11/18/2024	12:20	Terbuthylazine	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	THC	n.d.	ng/L	Screening Method	50	17-Dec
Downstream	11/18/2024	12:20	Thiabendazole	n.d.	ng/L	Screening Method	5	17-Dec
Downstream	11/18/2024	12:20	Thiacloprid	n.d.	ng/L	Screening Method	1.5	17-Dec
Downstream	11/18/2024	12:20	Thiophanate-methyl	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	Tributyl phosphate	n.d.	ng/L	Screening Method	20	17-Dec
Downstream	11/18/2024	12:20	Triclocarban	n.d.	ng/L	Screening Method	20	17-Dec
Downstream	11/18/2024	12:20	Triflumizole	n.d.	ng/L	Screening Method	3	17-Dec
Downstream	11/18/2024	12:20	Triphenyl phosphate	n.d.	ng/L	Screening Method	20	17-Dec
Downstream	11/18/2024	12:20	Tris(2-chloroethyl) phosphate	n.d.	ng/L	Screening Method	20	17-Dec
Downstream	11/18/2024	12:20	Warfarin	n.d.	ng/L	Screening Method	10	17-Dec
Downstream	11/18/2024	12:20	PEG-EO7	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	PEG-EO8	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	PEG-EO9	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	PEG-EO10	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	PEG-EO11	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	PPG-PO5	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	PPG-PO6	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	PPG-PO7	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	PPG-PO8	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	PPG-PO9	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	C10-EO4	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	C10-EO5	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	C10-EO6	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	C10-EO7	n.d.	ng/L	Screening Method	200	17-Dec
Downstream	11/18/2024	12:20	C10-EO8	n.d.	ng/L	Screening Method	200	17-Dec

RESPEC

APPENDIX E

EXISTING WATER QUALITY DATA

Pueblo WWD
Hwy 50 Routine Sampling

Monitoring Location Name	Activity Type	Media	Media Subdivision	Activity Start Date	Activity Start Time	Time Zone	Parameter Name	Fraction	Op	Value	Unit	Value Type	Status	Detection Condition
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Conductivity			1900	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Dissolved oxygen (DO)			11.2	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-03-2019	10:33:00 AM	MST	pH			7.83	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Temperature, water			7.04	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Flow			10.2	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Ammonia	Total	<	0.0494	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Arsenic	Total Recoverable		0.782	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Cadmium	Dissolved	<	0.0392	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Chloride	Total		21.5	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Chromium	Total Recoverable	<	0.0846	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Copper	Dissolved	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Hardness, carbonate	Total		1130	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Inorganic nitrogen (nitrate and nitrite) ***retired***(	Total		0.874	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Lead	Dissolved	<	0.0571	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Manganese	Dissolved		125	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Molybdenum	Total Recoverable		10.4	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Nickel	Dissolved		3.41	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Nitrogen	Total		1.02	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Orthophosphate	Dissolved	<	0.00704	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Phosphorus	Total		0.0181	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Selenium	Dissolved		23.4	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Sulfate	Total		925	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-03-2019	10:33:00 AM	MST	Zinc	Dissolved	<	2.38	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Dissolved oxygen (DO)			12.9	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Temperature, water			3.64	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-07-2020	10:29:00 AM	MST	pH			7.88	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Conductivity			1700	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Hardness, carbonate	Total		887	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Arsenic	Total Recoverable		0.874	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Chromium	Total Recoverable		0.543	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Molybdenum	Total Recoverable		9.79	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Cadmium	Dissolved	<	0.0392	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Copper	Dissolved	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Lead	Dissolved	<	0.0571	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Manganese	Dissolved		116	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Nickel	Dissolved		2.56	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Selenium	Dissolved		28.2	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Zinc	Dissolved	<	2.38	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Ammonia	Total	<	0.0494	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Inorganic nitrogen (nitrate and nitrite) ***retired***(	Total		1.21	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Nitrogen	Total		1.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Phosphorus	Total		0.0205	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Orthophosphate	Dissolved	<	0.00704	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Sulfate	Total		780	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Chloride	Total		23.9	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	01-07-2020	10:29:00 AM	MST	Flow			10.2	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Dissolved oxygen (DO)			14.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Temperature, water			1.9	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-04-2020	10:38:00 AM	MST	pH			8.01	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Conductivity			1670	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Hardness, carbonate	Total		843	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Arsenic	Total Recoverable		0.863	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Chromium	Total Recoverable		0.673	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Molybdenum	Total Recoverable		9.75	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Cadmium	Dissolved	<	0.0392	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Copper	Dissolved	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Lead	Dissolved	<	0.0571	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Manganese	Dissolved		110	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Nickel	Dissolved		2.62	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Selenium	Dissolved		26.6	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Silver	Dissolved	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Zinc	Dissolved	<	2.38	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Ammonia	Total	<	0.0494	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Inorganic nitrogen (nitrate and nitrite) ***retired***(	Total		1.28	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM	MST	Nitrogen	Total		1.4	mg/L	Actual	Final	

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM MST	Phosphorus	Total		0.0437	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM MST	Orthophosphate	Dissolved	<	0.00704	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM MST	Sulfate	Total		676	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-04-2020	10:38:00 AM MST	Chloride	Total		19.6	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	02-04-2020	10:38:00 AM MST	Flow			11.2	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-03-2020	10:30:00 AM MST	Dissolved oxygen (DO)			10.4	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-03-2020	10:30:00 AM MST	Temperature, water			7.43	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-03-2020	10:30:00 AM MST	pH			8.02	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-03-2020	10:30:00 AM MST	Conductivity			1530	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Hardness, carbonate	Total		810	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Arsenic	Total Recoverable		1.14	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Chromium	Total Recoverable		0.792	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Molybdenum	Total Recoverable		9.85	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Cadmium	Dissolved	<	0.0392	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Copper	Dissolved	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Lead	Dissolved	<	0.0571	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Manganese	Dissolved		109	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Nickel	Dissolved		2.61	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Selenium	Dissolved		23.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Zinc	Dissolved	<	2.38	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Ammonia	Total	<	0.0494	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.895	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Nitrogen	Total		1.05	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Phosphorus	Total		0.0426	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Orthophosphate	Dissolved	<	0.00704	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Sulfate	Total		675	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Chloride	Total		23.1	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-03-2020	10:30:00 AM MST	Total suspended solids	Total		17	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	03-03-2020	10:30:00 AM MST	Flow			13.3	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Dissolved oxygen (DO)			9.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Temperature, water			15.7	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-05-2020	10:45:00 AM MDT	pH			8.01	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Conductivity			1710	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Hardness, carbonate	Total		898	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Arsenic	Total Recoverable		1.21	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Chromium	Total Recoverable	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Molybdenum	Total Recoverable		8.81	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Cadmium	Dissolved	<	0.0321	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Copper	Dissolved	<	0.281	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Lead	Dissolved	<	0.105	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Manganese	Dissolved		147	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Nickel	Dissolved		2.42	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Selenium	Dissolved		11.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Zinc	Dissolved		25.2	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Ammonia	Total		0.0663	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.402	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Nitrogen	Total		0.509	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Phosphorus	Total		0.0241	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Orthophosphate	Dissolved	<	0.00649	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Sulfate	Total		750	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Chloride	Total		19.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	05-05-2020	10:45:00 AM MDT	Flow			7.5	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Dissolved oxygen (DO)			7.44	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Temperature, water			19.3	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-02-2020	10:00:00 AM MDT	pH			7.86	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Conductivity			1500	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Hardness, carbonate	Total		719	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Arsenic	Total Recoverable		4.16	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Chromium	Total Recoverable		4.69	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Molybdenum	Total Recoverable		11	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Cadmium	Dissolved	<	0.0321	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Copper	Dissolved		1.53	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Lead	Dissolved		1.98	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Manganese	Dissolved		140	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Nickel	Dissolved		4.17	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Selenium	Dissolved		13.4	ug/L	Actual	Final	

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Zinc	Dissolved		40.1	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Ammonia	Total		0.159	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.398	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Nitrogen	Total		0.742	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Phosphorus	Total		0.264	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Orthophosphate	Dissolved	<	0.00649	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Sulfate	Total		610	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Chloride	Total		24.1	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Total suspended solids	Total		159	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	06-02-2020	10:00:00 AM MDT	Flow			15.7	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Dissolved oxygen (DO)			7.31	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Temperature, water			21.2	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-07-2020	9:55:00 AM MDT	pH			7.68	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Conductivity			1900	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Hardness, carbonate	Total		1020	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Arsenic	Total Recoverable		1.31	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Chromium	Total Recoverable		0.535	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Molybdenum	Total Recoverable		8.64	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Cadmium	Dissolved	<	0.0321	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Copper	Dissolved	<	0.281	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Lead	Dissolved	<	0.105	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Manganese	Dissolved		70.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Nickel	Dissolved		2.58	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Selenium	Dissolved		14.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Zinc	Dissolved	<	2.1	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Ammonia	Total	<	0.0472	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.356	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Nitrogen	Total		0.543	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Phosphorus	Total		0.0431	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Orthophosphate	Dissolved	<	0.00649	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Sulfate	Total		889	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Chloride	Total		18.5	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Total suspended solids	Total		14.7	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	07-07-2020	9:55:00 AM MDT	Flow			5.97	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Dissolved oxygen (DO)			11.7	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Temperature, water			21.2	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-04-2020	10:20:00 AM MDT	pH			7.9	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Conductivity			1360	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Hardness, carbonate	Total		702	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Arsenic	Total Recoverable		3.24	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Chromium	Total Recoverable		4.8	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Molybdenum	Total Recoverable		9.8	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Cadmium	Dissolved	<	0.0321	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Copper	Dissolved		1.9	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Lead	Dissolved		1.47	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Manganese	Dissolved		129	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Nickel	Dissolved		3.59	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Selenium	Dissolved		13.1	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Silver	Dissolved	<	0.0475	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Zinc	Dissolved	<	2.1	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Ammonia	Total	<	0.0472	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.517	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Nitrogen	Total		0.617	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Phosphorus	Total		0.155	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Orthophosphate	Dissolved	<	0.00649	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Sulfate	Total		547	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Chloride	Total		18.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Total suspended solids	Total		169	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	08-04-2020	10:20:00 AM MDT	Flow			10.7	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Dissolved oxygen (DO)			7.71	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Temperature, water			18.5	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-02-2020	10:12:00 AM MDT	pH			8.62	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Conductivity			1550	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Hardness, carbonate	Total		865	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Arsenic	Total Recoverable		4.36	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Chromium	Total Recoverable		7.47	ug/L	Actual	Final	

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Molybdenum	Total Recoverable		11.1	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Cadmium	Dissolved	<	0.0321	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Copper	Dissolved	<	0.281	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Lead	Dissolved	<	0.105	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Manganese	Dissolved		112	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Nickel	Dissolved		2.93	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Selenium	Dissolved		15.2	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Zinc	Dissolved	<	2.1	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Ammonia	Total		0.0558	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.677	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Nitrogen	Total		0.732	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Phosphorus	Total		0.288	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Orthophosphate	Dissolved	<	0.00649	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Sulfate	Total		667	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Chloride	Total		20.6	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Total suspended solids	Total		219	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	09-02-2020	10:12:00 AM MDT	Flow			9.69	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Dissolved oxygen (DO)			10.5	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Temperature, water			13.5	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-06-2020	10:47:00 AM MDT	pH			7.68	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Conductivity			2070	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Hardness, carbonate	Total		1130	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Arsenic	Total Recoverable		1.29	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Chromium	Total Recoverable		1.11	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Molybdenum	Total Recoverable		11	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Cadmium	Dissolved	<	0.0321	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Copper	Dissolved	<	0.281	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Lead	Dissolved	<	0.105	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Manganese	Dissolved		113	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Nickel	Dissolved		3.41	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Selenium	Dissolved		18.6	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Zinc	Dissolved	<	2.1	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Ammonia	Total		0.0672	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.382	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Nitrogen	Total		0.614	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Phosphorus	Total		0.0526	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Orthophosphate	Dissolved	<	0.00649	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Sulfate	Total		883	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Chloride	Total		18.2	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Total suspended solids	Total		19.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	10-06-2020	10:47:00 AM MDT	Flow			4.64	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-03-2020	10:40:00 AM MST	Dissolved oxygen (DO)			8.48	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-03-2020	10:40:00 AM MST	Temperature, water			10.3	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-03-2020	10:40:00 AM MST	pH			7.59	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-03-2020	10:40:00 AM MST	Conductivity			1780	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Hardness, carbonate	Total		877	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Arsenic	Total Recoverable		1.12	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Chromium	Total Recoverable		1.06	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Molybdenum	Total Recoverable		9.33	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Cadmium	Dissolved	<	0.0321	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Copper	Dissolved	<	0.281	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Lead	Dissolved	<	0.105	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Manganese	Dissolved		97.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Nickel	Dissolved		2.75	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Selenium	Dissolved		14.3	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Zinc	Dissolved	<	2.1	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Ammonia	Total	<	0.0472	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.448	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Nitrogen	Total		0.66	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Phosphorus	Total		0.0563	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Orthophosphate	Dissolved	<	0.00649	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Sulfate	Total		733	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Chloride	Total		16.8	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-03-2020	10:40:00 AM MST	Total suspended solids	Total		30.8	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	11-03-2020	10:40:00 AM MST	Flow			9.69	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-08-2020	10:55:00 AM MST	Dissolved oxygen (DO)			13.9	mg/L	Actual	Final	

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-08-2020	10:55:00 AM MST	Temperature, water			5.63	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-08-2020	10:55:00 AM MST	pH			8.03	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-08-2020	10:55:00 AM MST	Conductivity			2180	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Hardness, carbonate	Total		1100	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Arsenic	Total Recoverable		0.81	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Chromium	Total Recoverable	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Molybdenum	Total Recoverable		10.2	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Cadmium	Dissolved	<	0.0321	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Copper	Dissolved	<	0.281	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Lead	Dissolved	<	0.105	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Manganese	Dissolved		118	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Nickel	Dissolved		3.18	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Selenium	Dissolved		20.8	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Zinc	Dissolved	<	2.1	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Ammonia	Total	<	0.0472	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.707	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Nitrogen	Total		0.886	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Phosphorus	Total		0.0236	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Orthophosphate	Dissolved	<	0.00649	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Sulfate	Total		954	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Chloride	Total		27.1	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-08-2020	10:55:00 AM MST	Total suspended solids	Total		8.7	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	12-08-2020	10:55:00 AM MST	Flow			8.34	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Hardness, carbonate	Total		1080	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Arsenic	Total Recoverable		0.763	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Chromium	Total Recoverable	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Molybdenum	Total Recoverable		10.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Cadmium	Dissolved	<	0.0321	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Copper	Dissolved	<	0.281	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Lead	Dissolved	<	0.105	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Manganese	Dissolved		121	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Nickel	Dissolved		2.98	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Selenium	Dissolved		19	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Zinc	Dissolved		17.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Ammonia	Total	<	0.0472	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.748	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Nitrogen	Total		0.808	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Phosphorus	Total		0.0198	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Orthophosphate	Dissolved	<	0.00649	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Sulfate	Total		919	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Chloride	Total		27.8	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	01-05-2021	11:29:00 AM MST	Flow			7.91	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-05-2021	11:29:00 AM MST	Dissolved oxygen (DO)			13.6	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-05-2021	11:29:00 AM MST	Temperature, water			4.73	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-05-2021	11:29:00 AM MST	pH			7.81	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-05-2021	11:29:00 AM MST	Conductivity			2160	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-05-2021	11:29:00 AM MST	Total suspended solids	Total		9.73	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Hardness, carbonate	Total		1110	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Arsenic	Total Recoverable		0.853	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Chromium	Total Recoverable		0.633	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Molybdenum	Total Recoverable		11.1	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Cadmium	Dissolved	<	0.0321	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Copper	Dissolved	<	0.281	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Lead	Dissolved	<	0.105	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Manganese	Dissolved		132	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Nickel	Dissolved		2.78	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Selenium	Dissolved		17.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Silver	Dissolved	<	0.0475	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Zinc	Dissolved	<	2.1	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Ammonia	Total	<	0.0472	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.907	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Nitrogen	Total		0.961	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Phosphorus	Total		0.0246	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Orthophosphate	Dissolved	<	0.00649	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Sulfate	Total		921	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Chloride	Total		29.3	mg/L	Actual	Final	

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	02-02-2021	10:12:00 AM MST	Flow			6.71	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-02-2021	10:12:00 AM MST	Dissolved oxygen (DO)			8.71	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-02-2021	10:12:00 AM MST	Temperature, water			4.82	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-02-2021	10:12:00 AM MST	pH			7.41	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-02-2021	10:12:00 AM MST	Conductivity			2160	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-02-2021	10:12:00 AM MST	Total suspended solids	Total		11.7	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Hardness, carbonate	Total		1050	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Arsenic	Total Recoverable		0.849	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Chromium	Total Recoverable	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Molybdenum	Total Recoverable		11.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Cadmium	Dissolved	<	0.0321	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Copper	Dissolved		1.63	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Lead	Dissolved	<	0.105	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Manganese	Dissolved		159	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Nickel	Dissolved		3.26	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Selenium	Dissolved		17.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Zinc	Dissolved	<	2.1	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Ammonia	Total	<	0.0472	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Inorganic nitrogen (nitrate and nitrite) ***retired***(	Total		0.598	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Nitrogen	Total		0.715	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Phosphorus	Total		0.0323	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Orthophosphate	Dissolved	<	0.00649	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Sulfate	Total		928	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Chloride	Total		27.8	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	03-02-2021	10:28:00 AM MST	Flow			5.28	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-02-2021	10:28:00 AM MST	Dissolved oxygen (DO)			10.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-02-2021	10:28:00 AM MST	Temperature, water			6.52	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-02-2021	10:28:00 AM MST	pH			7.56	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-02-2021	10:28:00 AM MST	Conductivity			2040	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-02-2021	10:28:00 AM MST	Total suspended solids	Total		9.2	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Hardness, carbonate	Total		731	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Arsenic	Total Recoverable		1.87	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Chromium	Total Recoverable		1.58	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Molybdenum	Total Recoverable		11.9	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Cadmium	Dissolved	<	0.0276	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Copper	Dissolved	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Lead	Dissolved	<	0.101	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Manganese	Dissolved		116	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Nickel	Dissolved		2.36	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Selenium	Dissolved		22.4	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Zinc	Dissolved		18.9	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Ammonia	Total		0.14	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***(	Total		0.367	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Nitrogen	Total		0.569	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Phosphorus	Total		0.067	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Orthophosphate	Dissolved	<	0.00694	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Sulfate	Total		654	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Chloride	Total		23.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Flow			19	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Dissolved oxygen (DO)			7.84	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Temperature, water			12.8	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	04-06-2021	10:35:00 AM MDT	pH			7.76	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Conductivity			1540	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-06-2021	10:35:00 AM MDT	Total suspended solids	Total		55.6	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Hardness, carbonate	Total		428	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Arsenic	Total Recoverable		2.76	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Chromium	Total Recoverable		3.45	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Molybdenum	Total Recoverable		7.32	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Cadmium	Dissolved	<	0.0276	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Copper	Dissolved		1.16	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Lead	Dissolved	<	0.101	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Manganese	Dissolved		51.6	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Nickel	Dissolved		2.03	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Selenium	Dissolved		10.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Zinc	Dissolved	<	1.9	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Ammonia	Total		0.0895	mg/L	Actual	Final	

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.402	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Nitrogen	Total		0.79	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Phosphorus	Total		0.166	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Orthophosphate	Dissolved	<	0.00694	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Sulfate	Total		304	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Chloride	Total		13.1	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Flow			41	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Dissolved oxygen (DO)			6.87	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Temperature, water			13.7	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-04-2021	11:00:00 AM MDT	pH			8.03	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Conductivity			801	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-04-2021	11:00:00 AM MDT	Total suspended solids	Total		115	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Hardness, carbonate	Total		282	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Arsenic	Total Recoverable		2.59	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Chromium	Total Recoverable		3.65	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Molybdenum	Total Recoverable		5.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Cadmium	Dissolved	<	0.0276	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Copper	Dissolved		1.2	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Lead	Dissolved	<	0.101	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Manganese	Dissolved		12.8	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Nickel	Dissolved		1.37	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Selenium	Dissolved		4.63	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Zinc	Dissolved	<	1.9	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Ammonia	Total		0.061	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.247	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Nitrogen	Total		0.482	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Phosphorus	Total		0.237	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Orthophosphate	Dissolved		0.027	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Sulfate	Total		174	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Chloride	Total		8.4	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Flow			124	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Dissolved oxygen (DO)			6.22	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Temperature, water			22.7	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-08-2021	11:25:00 AM MDT	pH			7.9	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Conductivity			651	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-08-2021	11:25:00 AM MDT	Total suspended solids	Total		149	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Hardness, carbonate	Total		2530	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Arsenic	Total Recoverable		104	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Chromium	Total Recoverable		205	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Molybdenum	Total Recoverable		41.8	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Cadmium	Dissolved	<	0.0276	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Copper	Dissolved		1.83	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Lead	Dissolved		0.549	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Manganese	Dissolved		10.6	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Nickel	Dissolved		2.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Selenium	Dissolved		5.43	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Zinc	Dissolved	<	1.9	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Ammonia	Total		0.121	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***	Total		0.928	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Nitrogen	Total		1.11	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Phosphorus	Total		0.647	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Orthophosphate	Dissolved	<	0.00694	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Sulfate	Total		484	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Chloride	Total		6.03	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Flow			152	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Dissolved oxygen (DO)			9.66	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Temperature, water			23.5	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-07-2021	11:32:00 AM MDT	pH			7.65	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Conductivity			1100	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-07-2021	11:32:00 AM MDT	Total suspended solids	Total		14200	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Hardness, carbonate	Total		461	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Arsenic	Total Recoverable		14.3	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Chromium	Total Recoverable		25.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Molybdenum	Total Recoverable		7.76	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Cadmium	Dissolved	<	0.0276	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Copper	Dissolved		4.25	ug/L	Actual	Final	

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Lead	Dissolved		2.51	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Manganese	Dissolved		77.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Nickel	Dissolved		4.62	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Selenium	Dissolved		1.94	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Silver	Dissolved	<	0.0168	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Zinc	Dissolved		15	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Ammonia	Total	<	0.0467	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***(	Total		0.126	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Nitrogen	Total		0.952	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Phosphorus	Total		1.21	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Orthophosphate	Dissolved		0.046	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Sulfate	Total		74.2	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Chloride	Total		4.68	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Flow			343	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Dissolved oxygen (DO)			7.51	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Temperature, water			20.6	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-03-2021	10:55:00 AM MDT	pH			7.39	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Conductivity			353	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-03-2021	10:55:00 AM MDT	Total suspended solids	Total		1430	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Hardness, carbonate	Total		880	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Arsenic	Total Recoverable		2.66	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Chromium	Total Recoverable		4.36	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Molybdenum	Total Recoverable		11.3	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Cadmium	Dissolved	<	0.0276	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Copper	Dissolved	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Lead	Dissolved	<	0.101	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Manganese	Dissolved		182	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Nickel	Dissolved		3.35	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Selenium	Dissolved		16.4	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Zinc	Dissolved	<	1.9	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Ammonia	Total	<	0.0467	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***(	Total		0.766	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Nitrogen	Total		1.06	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Phosphorus	Total		0.17	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Orthophosphate	Dissolved		0.047	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Sulfate	Total		719	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Chloride	Total		20.4	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Flow			8.34	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Dissolved oxygen (DO)			7.71	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Temperature, water			18.4	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-08-2021	11:05:00 AM MDT	pH			7.61	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Conductivity			1720	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-08-2021	11:05:00 AM MDT	Total suspended solids	Total		119	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Hardness, carbonate	Total		1100	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Arsenic	Total Recoverable		1.21	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Chromium	Total Recoverable		0.764	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Molybdenum	Total Recoverable		11.4	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Cadmium	Dissolved	<	0.0276	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Copper	Dissolved	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Lead	Dissolved	<	0.101	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Manganese	Dissolved		112	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Nickel	Dissolved		3.19	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Selenium	Dissolved		17.8	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Zinc	Dissolved	<	1.9	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Ammonia	Total		0.189	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***(	Total		0.587	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Nitrogen	Total		0.823	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Phosphorus	Total		0.0517	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Orthophosphate	Dissolved	<	0.00694	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Sulfate	Total		913	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Chloride	Total		28	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Flow			5.28	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Dissolved oxygen (DO)			2.63	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Temperature, water			15.8	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-05-2021	11:11:00 AM MDT	pH			8.07	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Conductivity			2080	umho/cm	Actual	Final	

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-05-2021	11:11:00 AM MDT	Total suspended solids	Total		35.8	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Hardness, carbonate	Total		265	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Arsenic	Total Recoverable		1.55	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Chromium	Total Recoverable		1.64	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Molybdenum	Total Recoverable		5.74	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Cadmium	Dissolved	<	0.0276	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Copper	Dissolved	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Lead	Dissolved	<	0.101	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Manganese	Dissolved		23.3	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Nickel	Dissolved		1.65	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Selenium	Dissolved		7.51	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Zinc	Dissolved	<	1.9	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Ammonia	Total	<	0.0467	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Inorganic nitrogen (nitrate and nitrite) ***retired***(	Total		0.243	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Nitrogen	Total		0.372	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Phosphorus	Total		0.0766	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Orthophosphate	Dissolved	<	0.00694	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Sulfate	Total		228	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Chloride	Total		10	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Flow			47.7	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Dissolved oxygen (DO)			3.21	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Temperature, water			10.4	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-02-2021	11:00:00 AM MDT	pH			8.32	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Conductivity			742	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-02-2021	11:00:00 AM MDT	Total suspended solids	Total		56	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Hardness, carbonate	Total		904	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Arsenic	Total Recoverable		1.11	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Chromium	Total Recoverable		1.26	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Molybdenum	Total Recoverable		10.9	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Cadmium	Dissolved	<	0.0276	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Copper	Dissolved	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Lead	Dissolved	<	0.101	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Manganese	Dissolved		88.1	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Nickel	Dissolved		2.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Selenium	Dissolved		27.3	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Zinc	Dissolved	<	1.9	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Ammonia	Total		0.0626	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Inorganic nitrogen (nitrate and nitrite) ***retired***(	Total		1.22	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Nitrogen	Total		1.39	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Phosphorus	Total		0.0645	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Orthophosphate	Dissolved	<	0.00694	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Sulfate	Total		836	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Chloride	Total		26.8	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	12-07-2021	11:14:00 AM MST	Flow			11.7	cfs	Calculated	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-07-2021	11:14:00 AM MST	Dissolved oxygen (DO)			3.2	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-07-2021	11:14:00 AM MST	Temperature, water			5	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-07-2021	11:14:00 AM MST	pH			7.65	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-07-2021	11:14:00 AM MST	Conductivity			1900	umho/cm	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-07-2021	11:14:00 AM MST	Total suspended solids	Total		28.5	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-04-2022	10:21:00 AM MST	Conductivity			2260	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-04-2022	10:21:00 AM MST	Dissolved oxygen (DO)			10.8	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-04-2022	10:21:00 AM MST	pH			7.28	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-04-2022	10:21:00 AM MST	Temperature, water			2.19	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	01-04-2022	10:21:00 AM MST	Flow			10.2	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Ammonia	Total	<	0.0467	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Arsenic	Total Recoverable		0.632	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Cadmium	Dissolved	<	0.0276	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Chloride	Total		22.9	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Chromium	Total Recoverable	<	0.14	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Copper	Dissolved	<	0.166	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Hardness, carbonate	Total		841	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Lead	Dissolved	<	0.101	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Manganese	Dissolved		110	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Molybdenum	Total Recoverable		9.65	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Nickel	Dissolved		2.88	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Nitrate + Nitrite	Total		1.48	mg/L	Actual	Final	

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Orthophosphate	Dissolved	<	0.00694	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Selenium	Dissolved		30.3	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Sulfate	Total		799	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Total Nitrogen, mixed forms	Total		1.69	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Total Phosphorus, mixed forms	Total		0.0274	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Total suspended solids	Suspended		4.8	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-04-2022	10:21:00 AM MST	Zinc	Dissolved	<	1.9	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-08-2022	10:30:00 AM MST	Conductivity			1940	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-08-2022	10:30:00 AM MST	Dissolved oxygen (DO)			11.2	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-08-2022	10:30:00 AM MST	pH			7.4	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-08-2022	10:30:00 AM MST	Temperature, water			3.04	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	02-08-2022	10:30:00 AM MST	Flow			11.2	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Ammonia	Total		0.0542	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Arsenic	Total Recoverable		0.872	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Cadmium	Dissolved	<	0.0276	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Chloride	Total		28.6	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Chromium	Total Recoverable		0.684	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Copper	Dissolved		1.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Hardness, carbonate	Total		961	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Lead	Dissolved	<	0.101	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Manganese	Dissolved		85	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Molybdenum	Total Recoverable		9.41	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Nickel	Dissolved		2.35	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Nitrate + Nitrite	Total		1.14	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Orthophosphate	Dissolved	<	0.00694	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Selenium	Dissolved		27.2	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Silver	Dissolved	<	0.0168	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Sulfate	Total		717	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Total Nitrogen, mixed forms	Total		1.46	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Total Phosphorus, mixed forms	Total		0.0491	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Total suspended solids	Suspended		9.41	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-08-2022	10:30:00 AM MST	Zinc	Dissolved	<	1.9	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-08-2022	10:40:00 AM MST	Conductivity			1910	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-08-2022	10:40:00 AM MST	Dissolved oxygen (DO)			7.33	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-08-2022	10:40:00 AM MST	pH			7.69	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-08-2022	10:40:00 AM MST	Temperature, water			4.2	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	03-08-2022	10:40:00 AM MST	Flow			11.2	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Ammonia	Total		0.051	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Arsenic	Total Recoverable		1.04	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Cadmium	Dissolved	<	0.0325	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Chloride	Total		25.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Chromium	Total Recoverable		0.736	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Copper	Dissolved	<	0.159	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Hardness, carbonate	Total		744	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Lead	Dissolved	<	0.0367	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Manganese	Dissolved		84.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Molybdenum	Total Recoverable		9.86	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Nickel	Dissolved		2.2	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Nitrate + Nitrite	Total		1.17	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Orthophosphate	Dissolved	<	0.00694	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Selenium	Dissolved		25.2	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Sulfate	Total		667	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Total Nitrogen, mixed forms	Total		1.22	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Total Phosphorus, mixed forms	Total		0.0715	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Total suspended solids	Suspended		20	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-08-2022	10:40:00 AM MST	Zinc	Dissolved	<	3.58	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Conductivity			887	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Dissolved oxygen (DO)			8.86	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	04-05-2022	10:35:00 AM MDT	pH			7.3	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Temperature, water			12.3	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Flow			32.9	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Ammonia	Total	<	0.0467	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Arsenic	Total Recoverable		1.99	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Cadmium	Dissolved	<	0.0325	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Chloride	Total		10.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Chromium	Total Recoverable		2.8	ug/L	Actual	Final	

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Copper	Dissolved		1.14	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Hardness, carbonate	Total		443	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Lead	Dissolved		0.73	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Manganese	Dissolved		51.1	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Molybdenum	Total Recoverable		6.35	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Nickel	Dissolved		2.16	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Nitrate + Nitrite	Total		0.378	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Orthophosphate	Dissolved	<	0.00694	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Selenium	Dissolved		10.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Sulfate	Total		254	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Total Nitrogen, mixed forms	Total		0.588	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Total Phosphorus, mixed forms	Total		0.137	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Total suspended solids	Suspended		82.8	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-05-2022	10:35:00 AM MDT	Zinc	Dissolved	<	3.58	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Conductivity			1170	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Dissolved oxygen (DO)			9.14	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-03-2022	10:44:00 AM MDT	pH			7.6	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Temperature, water			10.4	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Flow			29.2	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Ammonia	Total		0.0566	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Arsenic	Total Recoverable		1.13	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Cadmium	Dissolved	<	0.0325	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Chloride	Total		13.6	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Chromium	Total Recoverable		1.01	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Copper	Dissolved	<	0.159	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Hardness, carbonate	Total		492	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Lead	Dissolved	<	0.0367	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Manganese	Dissolved		36	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Molybdenum	Total Recoverable		7.6	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Nickel	Dissolved		1.71	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Nitrate + Nitrite	Total		0.48	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Orthophosphate	Dissolved	<	0.0106	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Selenium	Dissolved		11.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Sulfate	Total		381	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Total Nitrogen, mixed forms	Total		2.21	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Total Phosphorus, mixed forms	Total		0.047	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Total suspended solids	Suspended		22.9	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-03-2022	10:44:00 AM MDT	Zinc	Dissolved	<	3.58	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Conductivity			854	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Dissolved oxygen (DO)			7.88	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-07-2022	10:33:00 AM MDT	pH			8.17	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Temperature, water			20.9	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Flow			32.9	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Ammonia	Total	<	0.0446	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Arsenic	Total Recoverable		2.22	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Cadmium	Dissolved	<	0.0325	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Chloride	Total		13	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Chromium	Total Recoverable		2.51	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Copper	Dissolved	<	0.159	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Hardness, carbonate	Total		422	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Lead	Dissolved	<	0.0367	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Manganese	Dissolved		18.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Molybdenum	Total Recoverable		6.76	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Nickel	Dissolved		1.42	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Nitrate + Nitrite	Total		0.333	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Orthophosphate	Dissolved	<	0.0106	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Selenium	Dissolved		7.31	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Sulfate	Total		273	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Total Nitrogen, mixed forms	Total		0.583	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Total Phosphorus, mixed forms	Total		0.133	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Total suspended solids	Suspended		98	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-07-2022	10:33:00 AM MDT	Zinc	Dissolved	<	3.58	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Conductivity			1490	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Dissolved oxygen (DO)			7.12	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-06-2022	10:45:00 AM MDT	pH			8.75	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Temperature, water			22.8	deg C	Actual	Final	

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Hwy 50 Routine Sampling

St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Flow			4.64	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Ammonia	Total	<	0.0446	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Arsenic	Total Recoverable		2	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Cadmium	Dissolved	<	0.0325	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Chloride	Total		20.1	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Chromium	Total Recoverable		2.35	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Copper	Dissolved	<	0.159	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Hardness, carbonate	Total		739	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Lead	Dissolved	<	0.0367	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Manganese	Dissolved		183	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Molybdenum	Total Recoverable		10.2	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Nickel	Dissolved		3.41	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Nitrate + Nitrite	Total		0.419	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Orthophosphate	Dissolved	<	0.0106	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Selenium	Dissolved		10.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Sulfate	Total		677	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Total Nitrogen, mixed forms	Total		0.702	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Total Phosphorus, mixed forms	Total		0.0758	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Total suspended solids	Suspended		76	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-06-2022	10:45:00 AM MDT	Zinc	Dissolved	<	3.58	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Conductivity			2000	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Dissolved oxygen (DO)			6.51	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-02-2022	10:53:00 AM MDT	pH			7.63	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Temperature, water			24.3	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Flow			13.9	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Ammonia	Total	<	0.0446	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Arsenic	Total Recoverable		4.38	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Cadmium	Dissolved	<	0.0325	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Chloride	Total		17.6	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Chromium	Total Recoverable		6.42	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Copper	Dissolved	<	0.159	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Hardness, carbonate	Total		582	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Lead	Dissolved	<	0.0367	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Manganese	Dissolved		29	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Molybdenum	Total Recoverable		9.97	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Nickel	Dissolved		2.28	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Nitrate + Nitrite	Total		0.358	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Orthophosphate	Dissolved	<	0.0106	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Selenium	Dissolved		8.94	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Silver	Dissolved	<	0.0407	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Sulfate	Total		417	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Total Nitrogen, mixed forms	Total		0.706	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Total Phosphorus, mixed forms	Total		0.32	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Total suspended solids	Suspended		295	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-02-2022	10:53:00 AM MDT	Zinc	Dissolved	<	3.58	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Conductivity			1960	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Dissolved oxygen (DO)			8.09	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-13-2022	10:20:00 AM MDT	pH			8.06	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Temperature, water			17.4	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Flow			2.32	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Ammonia	Total	<	0.0446	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Arsenic	Total Recoverable		1.13	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Cadmium	Dissolved	<	0.0325	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Chloride	Total		21.6	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Chromium	Total Recoverable	<	0.194	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Copper	Dissolved	<	0.159	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Hardness, carbonate	Total		749	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Lead	Dissolved	<	0.0367	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Manganese	Dissolved		76.3	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Molybdenum	Total Recoverable		10.8	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Nickel	Dissolved		2.58	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Nitrate + Nitrite	Total		0.226	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Orthophosphate	Dissolved	<	0.0106	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Selenium	Dissolved		12.9	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Sulfate	Total		820	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Total Nitrogen, mixed forms	Total		0.469	mg/L	Actual	Final	

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Total Phosphorus, mixed forms	Total		0.0184	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Total suspended solids	Suspended		8.83	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-13-2022	10:20:00 AM MDT	Zinc	Dissolved	<	3.58	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Conductivity			2190	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Dissolved oxygen (DO)			7.69	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-04-2022	10:39:00 AM MDT	pH			7.97	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Temperature, water			16.2	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Flow			3.76	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Ammonia	Total	<	0.0446	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Arsenic	Total Recoverable		1.01	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Cadmium	Dissolved	<	0.0325	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Chloride	Total		18.5	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Chromium	Total Recoverable	<	0.194	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Copper	Dissolved	<	0.159	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Hardness, carbonate	Total		1160	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Lead	Dissolved	<	0.0367	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Manganese	Dissolved		74.4	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Molybdenum	Total Recoverable		9.08	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Nickel	Dissolved		2.95	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Nitrate + Nitrite	Total		0.216	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Orthophosphate	Dissolved	<	0.0106	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Selenium	Dissolved		16.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Sulfate	Total		971	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Total Nitrogen, mixed forms	Total		0.344	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Total Phosphorus, mixed forms	Total		0.0225	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Total suspended solids	Suspended		11.4	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-04-2022	10:39:00 AM MDT	Zinc	Dissolved	<	3.58	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-08-2022	10:26:00 AM MST	Conductivity			1920	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-08-2022	10:26:00 AM MST	Dissolved oxygen (DO)			11.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-08-2022	10:26:00 AM MST	pH			8.02	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-08-2022	10:26:00 AM MST	Temperature, water			7.9	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	11-08-2022	10:26:00 AM MST	Flow			10.2	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Ammonia	Total	<	0.0446	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Arsenic	Total Recoverable		1.22	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Cadmium	Dissolved	<	0.0325	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Chloride	Total		25.5	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Chromium	Total Recoverable		1.84	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Copper	Dissolved	<	0.159	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Hardness, carbonate	Total		1030	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Lead	Dissolved	<	0.0367	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Manganese	Dissolved		71.1	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Molybdenum	Total Recoverable		9.33	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Nickel	Dissolved		3.22	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Nitrate + Nitrite	Total		0.422	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Orthophosphate	Dissolved	<	0.0106	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Selenium	Dissolved		13.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Sulfate	Total		882	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Total Nitrogen, mixed forms	Total		0.612	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Total Phosphorus, mixed forms	Total		0.0583	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Total suspended solids	Suspended		35	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-08-2022	10:26:00 AM MST	Zinc	Dissolved	<	3.58	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-06-2022	10:21:00 AM MST	Conductivity			1990	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-06-2022	10:21:00 AM MST	Dissolved oxygen (DO)			9.68	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-06-2022	10:21:00 AM MST	pH			8.14	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-06-2022	10:21:00 AM MST	Temperature, water			4.8	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	12-06-2022	10:21:00 AM MST	Flow			2.99	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Ammonia	Total		0.0533	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Arsenic	Total Recoverable		0.578	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Cadmium	Dissolved	<	0.0325	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Chloride	Total		19.4	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Chromium	Total Recoverable	<	0.194	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Copper	Dissolved	<	0.159	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Hardness, carbonate	Total		1150	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Lead	Dissolved	<	0.0367	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Manganese	Dissolved		97.1	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Molybdenum	Total Recoverable		8.5	ug/L	Actual	Final	

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Nickel	Dissolved		3.08	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Nitrate + Nitrite	Total		0.57	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Orthophosphate	Dissolved		0.11	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Selenium	Dissolved		16.1	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Sulfate	Total		951	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Total Nitrogen, mixed forms	Total		0.732	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Total Phosphorus, mixed forms	Total		0.0118	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Total suspended solids	Suspended		5.62	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-06-2022	10:21:00 AM MST	Zinc	Dissolved	<	3.58	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-10-2023	10:01:00 AM MST	Conductivity			1730	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-10-2023	10:01:00 AM MST	Dissolved oxygen (DO)			11.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-10-2023	10:01:00 AM MST	pH			7.83	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	01-10-2023	10:01:00 AM MST	Temperature, water			2.9	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	01-10-2023	10:01:00 AM MST	Flow			6.71	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Ammonia	Total		0.0722	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Arsenic	Total Recoverable		0.787	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Cadmium	Dissolved	<	0.0325	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Chloride	Total		25.4	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Chromium	Total Recoverable	<	0.194	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Copper	Dissolved		2.12	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Hardness, carbonate	Total		904	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Lead	Dissolved	<	0.0367	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Manganese	Dissolved		94.9	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Molybdenum	Total Recoverable		8.95	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Nickel	Dissolved		2.74	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Nitrate + Nitrite	Total		0.705	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Orthophosphate	Dissolved	<	0.0106	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Selenium	Dissolved		16.9	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Sulfate	Total		780	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Total Nitrogen, mixed forms	Total		0.875	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Total Phosphorus, mixed forms	Total		0.0313	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Total suspended solids	Suspended		18.5	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	01-10-2023	10:01:00 AM MST	Zinc	Dissolved			ug/L	Actual	Final	Not Reported
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-07-2023	11:00:00 AM MST	Conductivity			1730	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-07-2023	11:00:00 AM MST	Dissolved oxygen (DO)			7.79	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-07-2023	11:00:00 AM MST	pH			7.81	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	02-07-2023	11:00:00 AM MST	Temperature, water			6	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	02-07-2023	11:00:00 AM MST	Flow			7.1	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Ammonia	Total	<	0.0446	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Arsenic	Total Recoverable		0.74	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Cadmium	Dissolved	<	0.0325	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Chloride	Total		23.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Chromium	Total Recoverable		0.685	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Copper	Dissolved	<	0.159	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Hardness, carbonate	Total		817	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Lead	Dissolved	<	0.0367	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Manganese	Dissolved		95.6	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Molybdenum	Total Recoverable		8.57	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Nickel	Dissolved		2.53	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Nitrate + Nitrite	Total		0.835	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Orthophosphate	Dissolved	<	0.0106	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Selenium	Dissolved		20.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Silver	Dissolved	<	0.0144	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Sulfate	Total		645	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Total Nitrogen, mixed forms	Total		1.03	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Total Phosphorus, mixed forms	Total		0.0281	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Total suspended solids	Suspended		15.1	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	02-07-2023	11:00:00 AM MST	Zinc	Dissolved	<	3.58	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-07-2023	10:32:00 AM MST	Conductivity			2010	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-07-2023	10:32:00 AM MST	Dissolved oxygen (DO)			9.34	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-07-2023	10:32:00 AM MST	pH			7.98	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	03-07-2023	10:32:00 AM MST	Temperature, water			4.9	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	03-07-2023	10:32:00 AM MST	Flow			9.69	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Ammonia	Total	<	0.0446	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Arsenic	Total Recoverable		0.769	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Cadmium	Dissolved	<	0.0294	ug/L	Actual	Final	Not Detected

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Chloride	Total		25.8	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Chromium	Total Recoverable		1.09	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Copper	Dissolved	<	0.369	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Hardness, carbonate	Total		848	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Lead	Dissolved	<	0.0459	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Manganese	Dissolved		118	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Molybdenum	Total Recoverable		9.18	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Nickel	Dissolved		2.86	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Nitrate + Nitrite	Total		0.683	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Orthophosphate	Dissolved	<	0.0106	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Selenium	Dissolved		26	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Sulfate	Total		729	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Total Nitrogen, mixed forms	Total		0.863	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Total Phosphorus, mixed forms	Total		0.029	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Total suspended solids	Suspended		13.7	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	03-07-2023	10:32:00 AM MST	Zinc	Dissolved	<	3.7	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Conductivity			1910	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Dissolved oxygen (DO)			9.53	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	04-04-2023	10:31:00 AM MDT	pH			8.02	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Temperature, water			10.4	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Flow			4.04	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Ammonia	Total		0.0502	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Arsenic	Total Recoverable		0.851	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Cadmium	Dissolved	<	0.0294	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Chloride	Total		29.2	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Chromium	Total Recoverable	<	0.26	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Copper	Dissolved	<	0.369	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Hardness, carbonate	Total		1090	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Lead	Dissolved	<	0.0459	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Manganese	Dissolved		178	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Molybdenum	Total Recoverable		10.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Nickel	Dissolved		3.03	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Nitrate + Nitrite	Total		0.235	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Orthophosphate	Dissolved	<	0.00431	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Selenium	Dissolved		17	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Sulfate	Total		885	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Total Nitrogen, mixed forms	Total		0.52	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Total Phosphorus, mixed forms	Total		0.0354	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Total suspended solids	Suspended		13.4	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	04-04-2023	10:31:00 AM MDT	Zinc	Dissolved	<	3.7	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Conductivity			1350	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Dissolved oxygen (DO)			8.05	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-02-2023	10:19:00 AM MDT	pH			7.93	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Temperature, water			15.7	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Flow			13.9	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Ammonia	Total		0.0741	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Arsenic	Total Recoverable		1.16	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Cadmium	Dissolved	<	0.0294	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Chloride	Total		21.7	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Chromium	Total Recoverable	<	0.26	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Copper	Dissolved	<	0.369	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Hardness, carbonate	Total		687	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Lead	Dissolved	<	0.0459	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Manganese	Dissolved		105	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Molybdenum	Total Recoverable		8.81	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Nickel	Dissolved		2.17	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Nitrate + Nitrite	Total		0.217	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Orthophosphate	Dissolved	<	0.00431	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Selenium	Dissolved		12.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Sulfate	Total		490	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Total Nitrogen, mixed forms	Total		1.61	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Total Phosphorus, mixed forms	Total		0.0361	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Total suspended solids	Suspended		26.4	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	05-02-2023	10:19:00 AM MDT	Zinc	Dissolved	<	3.7	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Conductivity			437	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Dissolved oxygen (DO)			6.56	mg/L	Actual	Final	

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-06-2023	10:49:00 AM MDT	pH			7.86	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Temperature, water			16.1	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Flow			263	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Ammonia	Total	<	0.0488	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Arsenic	Total Recoverable		24.3	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Cadmium	Dissolved	<	0.0294	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Chloride	Total		9.25	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Chromium	Total Recoverable		42.8	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Copper	Dissolved		9.03	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Hardness, carbonate	Total		651	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Lead	Dissolved		7.52	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Manganese	Dissolved		140	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Molybdenum	Total Recoverable		11.3	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Nickel	Dissolved		12.4	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Nitrate + Nitrite	Total		0.177	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Orthophosphate	Dissolved		0.051	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Selenium	Dissolved		2.9	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Sulfate	Total		122	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Total Nitrogen, mixed forms	Total		0.533	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Total Phosphorus, mixed forms	Total		0.288	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Total suspended solids	Suspended		3440	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	06-06-2023	10:49:00 AM MDT	Zinc	Dissolved			ug/L	Actual	Final	Not Reported
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Conductivity			567	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Dissolved oxygen (DO)			6.95	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-12-2023	8:54:00 AM MDT	pH			7.9	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Temperature, water			19.2	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Flow			29	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Ammonia	Total	<	0.0488	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Arsenic	Total Recoverable		2.34	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Cadmium	Dissolved	<	0.0294	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Chloride	Total		23.1	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Chromium	Total Recoverable		2.85	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Copper	Dissolved		1.58	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Hardness, carbonate	Total		213	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Lead	Dissolved	<	0.0459	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Manganese	Dissolved	<	0.139	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Molybdenum	Total Recoverable		4.46	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Nickel	Dissolved	<	0.616	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Nitrate + Nitrite	Total		0.854	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Orthophosphate	Dissolved		0.037	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Selenium	Dissolved		5.24	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Sulfate	Total		106	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Total Nitrogen, mixed forms	Total		0.997	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Total Phosphorus, mixed forms	Total		0.113	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Total suspended solids	Suspended		224	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	07-12-2023	8:54:00 AM MDT	Zinc	Dissolved	<	3.7	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Conductivity			696	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Dissolved oxygen (DO)			6.54	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-08-2023	10:33:00 AM MDT	pH			8.04	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Temperature, water			23.9	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Flow			7.06	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Ammonia	Total		0.0926	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Arsenic	Total Recoverable		4.33	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Cadmium	Dissolved		0.741	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Chloride	Total		31.3	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Chromium	Total Recoverable		7.25	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Copper	Dissolved		1.77	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Hardness, carbonate	Total		297	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Lead	Dissolved		0.797	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Manganese	Dissolved		23.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Molybdenum	Total Recoverable		4.32	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Nickel	Dissolved		1.87	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Nitrate + Nitrite	Total		1.1	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Orthophosphate	Dissolved		0.0635	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Selenium	Dissolved		5.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Silver	Dissolved	<	0.0144	ug/L	Actual	Final	Not Detected

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Sulfate	Total		142	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Total Nitrogen, mixed forms	Total		1.34	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Total Phosphorus, mixed forms	Total		0.312	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Total suspended solids	Suspended		310	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	08-08-2023	10:33:00 AM MDT	Zinc	Dissolved		12.2	ug/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Conductivity			1950	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Dissolved oxygen (DO)			6.61	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-12-2023	10:46:00 AM MDT	pH			8.08	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Temperature, water			16.7	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Flow			7.49	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Ammonia	Total	<	0.0488	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Arsenic	Total Recoverable		1.36	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Cadmium	Dissolved	<	0.0294	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Chloride	Total		18.6	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Chromium	Total Recoverable		1.2	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Copper	Dissolved		1.33	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Hardness, carbonate	Total		908	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Lead	Dissolved	<	0.0459	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Manganese	Dissolved		117	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Molybdenum	Total Recoverable		8.76	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Nickel	Dissolved		3.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Nitrate + Nitrite	Total		0.675	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Orthophosphate	Dissolved	<	0.00431	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Selenium	Dissolved		18.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Sulfate	Total		757	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Total Nitrogen, mixed forms	Total		0.847	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Total Phosphorus, mixed forms	Total		0.0699	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Total suspended solids	Suspended		38	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	09-12-2023	10:46:00 AM MDT	Zinc	Dissolved	<	3.7	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Conductivity			2550	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Dissolved oxygen (DO)			7.88	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-02-2023	11:11:00 AM MDT	pH			7.98	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Temperature, water			19	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Flow			4.73	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Ammonia	Total	<	0.0488	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Arsenic	Total Recoverable		0.902	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Cadmium	Dissolved	<	0.0294	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Chloride	Total		20.6	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Chromium	Total Recoverable	<	0.26	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Copper	Dissolved	<	0.369	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Hardness, carbonate	Total		1430	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Lead	Dissolved	<	0.0459	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Manganese	Dissolved		99.7	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Molybdenum	Total Recoverable		9.06	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Nickel	Dissolved		3.58	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Nitrate + Nitrite	Total		0.856	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Orthophosphate	Dissolved	<	0.00431	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Selenium	Dissolved		23.5	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Sulfate	Total		1130	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Total Nitrogen, mixed forms	Total		1.04	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Total Phosphorus, mixed forms	Total		0.0153	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Total suspended solids	Suspended		5.8	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	10-02-2023	11:11:00 AM MDT	Zinc	Dissolved	<	3.7	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-07-2023	10:43:00 AM MST	Conductivity			1920	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-07-2023	10:43:00 AM MST	Dissolved oxygen (DO)			8.03	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-07-2023	10:43:00 AM MST	pH			7.97	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	11-07-2023	10:43:00 AM MST	Temperature, water			10.8	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	11-07-2023	10:43:00 AM MST	Flow			8.72	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Ammonia	Total	<	0.0488	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Arsenic	Total Recoverable		0.771	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Cadmium	Dissolved	<	0.0294	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Chloride	Total		25.1	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Chromium	Total Recoverable	<	0.26	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Copper	Dissolved		1.42	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Hardness, carbonate	Total		992	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Lead	Dissolved	<	0.0459	ug/L	Actual	Final	Not Detected

Pueblo WWD
Hwy 50 Routine Sampling

St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Manganese	Dissolved		105	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Molybdenum	Total Recoverable		9.25	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Nickel	Dissolved		3.22	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Nitrate + Nitrite	Total		0.709	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Orthophosphate	Dissolved	<	0.00431	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Selenium	Dissolved		15.1	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Sulfate	Total		791	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Total Nitrogen, mixed forms	Total		0.858	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Total Phosphorus, mixed forms	Total		0.0257	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Total suspended solids	Suspended		11.4	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	11-07-2023	10:43:00 AM MST	Zinc	Dissolved	<	3.7	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-05-2023	10:47:00 AM MST	Conductivity			2190	umho/cm	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-05-2023	10:47:00 AM MST	Dissolved oxygen (DO)			9.67	mg/L	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-05-2023	10:47:00 AM MST	pH			8.66	None	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs	Water	Surface Water	12-05-2023	10:47:00 AM MST	Temperature, water			4.4	deg C	Actual	Final	
St. Charles at Hwy 50	Field Msr/Obs-Portable Data Logger	Water	Surface Water	12-05-2023	10:47:00 AM MST	Flow			7.93	cfs	Calculated	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Ammonia	Total	<	0.0488	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Arsenic	Total Recoverable		0.618	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Cadmium	Dissolved	<	0.0294	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Chloride	Total		27.1	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Chromium	Total Recoverable	<	0.26	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Copper	Dissolved		1.18	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Hardness, carbonate	Total		1160	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Lead	Dissolved	<	0.0459	ug/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Manganese	Dissolved		127	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Molybdenum	Total Recoverable		10.1	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Nickel	Dissolved		4.12	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Nitrate + Nitrite	Total		1.05	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Orthophosphate	Dissolved	<	0.00431	mg/L	Actual	Final	Not Detected
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Selenium	Dissolved		20.4	ug/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Sulfate	Total		946	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Total Nitrogen, mixed forms	Total		1.12	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Total Phosphorus, mixed forms	Total		0.0284	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Total suspended solids	Suspended		6.71	mg/L	Actual	Final	
St. Charles at Hwy 50	Sample-Routine	Water	Surface Water	12-05-2023	10:47:00 AM MST	Zinc	Dissolved		22.7	ug/L	Actual	Final	

APPENDIX F

WQX DATA UPLOAD CONFIRMATION

Log Out (45 min)

Home Page Setup Domain Values Import & Submit Review Help

a ase e ails

R turn c D cete R cr sc Doc uments c xport c Su mit to DX c

Dataset Informatio nc

Type: Results & A ctivities

Import Configuration: c .Template Physical/Chemical (Template) c

Type of File: c Xlsx c

Worksheet(s) to Import: 5

Organization ID: c PACOG_WQX

Options: c
Ignore First Row c
All ew An cExisting Data
et Me Review My Dataset Before Sc bmitting

Status: c Comp c d c C c

Submission o Successful!

The final step in this process has ompleted and the WQX database has updated. It may take up to four days for this data to be published and available from the Water Quality Portal.

Export Event c

Start Time: 12-20-2024 10:18:09 AM

End Time: c 12-20-2024 10:23:36 AM c

Transa tion ID: _a a8 02a-4ff -4712-b1e2-0f2894 28250 c

Event Log:

Message Type	Count	Event Log
Message	5	View Log

Import Event c

Start Time: 12-20-2024 10:11:39 AM

End Time: 12-20-2024 10:17:03 AM

File Name: c PACOG-St. Charles River 2024.v2.xlsx c

Event Log: c View all validation errors and warnings

Message Type	Total	Resolved	Event Log c	Resolution c

Log Out (44 min. c

a ase e ails

t rn R fr c nt E p rt & S t t C X

Dataset Information:

Type: Results & A tivities c
Import Configuration: .Template Physical/Chemical (Template) c
Type of File: c Xlsx c
Worksheet(s) to Import: 5
Organization ID: c PACOG_WQX
Options: Igno e Fi st Row
All ew Data
Status: c Complete at CDX

Submission o Successful! c

The final step in this pro ess has ompleted and the WQX database ha updated. It may take up to four days for this data to be published and available from the Water Quality Portal.

Export Event

Start Time: 12-05-2024 01:07:23 PM
End Time: 12-05-2024 01:08:54 PM c
Transa tion ID: _e5a01e00-1e60-4eb1-b299-2e303b63d6f9 c
Event Log:

Message Type	Count	Event Log
Message	5	View Log

Import Event c

Start Time: 12-05-2024 01:04:39 PM c
End Time: 12-05-2024 01:06:45 PM c
File Name: c PACOG-St. Charles River 2024.xlsx
Event Log: View all validation errors and warnings

Message Type	Total	Resolved	Event Log	Resolution

Outlook r

[cdx-wqx] Transaction is finished with status COMPLETED

From cdx@epa.gov <cdx@epa.gov>
Date Tue 12/3/2024 10:16 AM
To Willow Hassel <willow.hassel@respec.com>

This Messa e s m an Exte nal Sende
This message came f om outside you o ganization.

T ansaction is finished with status: COMPLETED.

T ansaction Info mation:

Envi onment: p od
T ansaction Id: _7893d8dc-fdae-4325-a713-1873fd315508
Submission Time: 2024-12-03 12:12:41.963
Submitte Use Id: WILLOWHASSEL
Submission Status: COMPLETED
Submission Details:

Please visit the WQX website o download WQX documents using you node fo additional info mation r ega ding you submission.

Outlook r

[cdx-wqx] Transaction is finished with status COMPLETED

From cdx@epa.gov <cdx@epa.gov>
Date Fri 12/20/2024 8:25 AM
To Willow Hassel <willow.hassel@respec.com>

This Messa e s m an Exte nal Sende
This message came f om outside you o ganization.

T ansaction is finished with status: COMPLETED.

T ansaction Info mation:

Envi onment: p od
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Submission Time: 2024-12-20 10:23:35.719
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Submission Details:

Please visit the WQX website o download WQX documents using you node fo additional info mation r ega ding you submission.

Outlook r

[cdx-wqx] Transaction is finished with status COMPLETED

From cdx@epa.gov <cdx@epa.gov>
Date Thu 12/5/2024 11:13 AM
To Willow Hassel <willow.hassel@respec.com>

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This message came f om outside you o ganization.

T ansaction is finished with status: COMPLETED.

T ansaction Info mation:

Envi onment: p od
T ansaction Id: _e5a01e00-1e60-4eb1-b299-2e303b63d6f9
Submission Time: 2024-12-05 13:08:53.742
Submitte Use Id: WILLOWHASSEL
Submission Status: COMPLETED
Submission Details:

Please visit the WQX website o download WQX documents using you node fo additional info mation r ega ding you submission.

Outlook r

[cdx-wqx] Transaction is finished with status COMPLETED

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Date Tue 12/3/2024 9:57 AM
To Willow Hassel <willow.hassel@respec.com>

This Messa e s m an Exte nal Sende
This message came f om outside you o ganization.

T ansaction is finished with status: COMPLETED.

T ansaction Info mation:

Envi onment: p od
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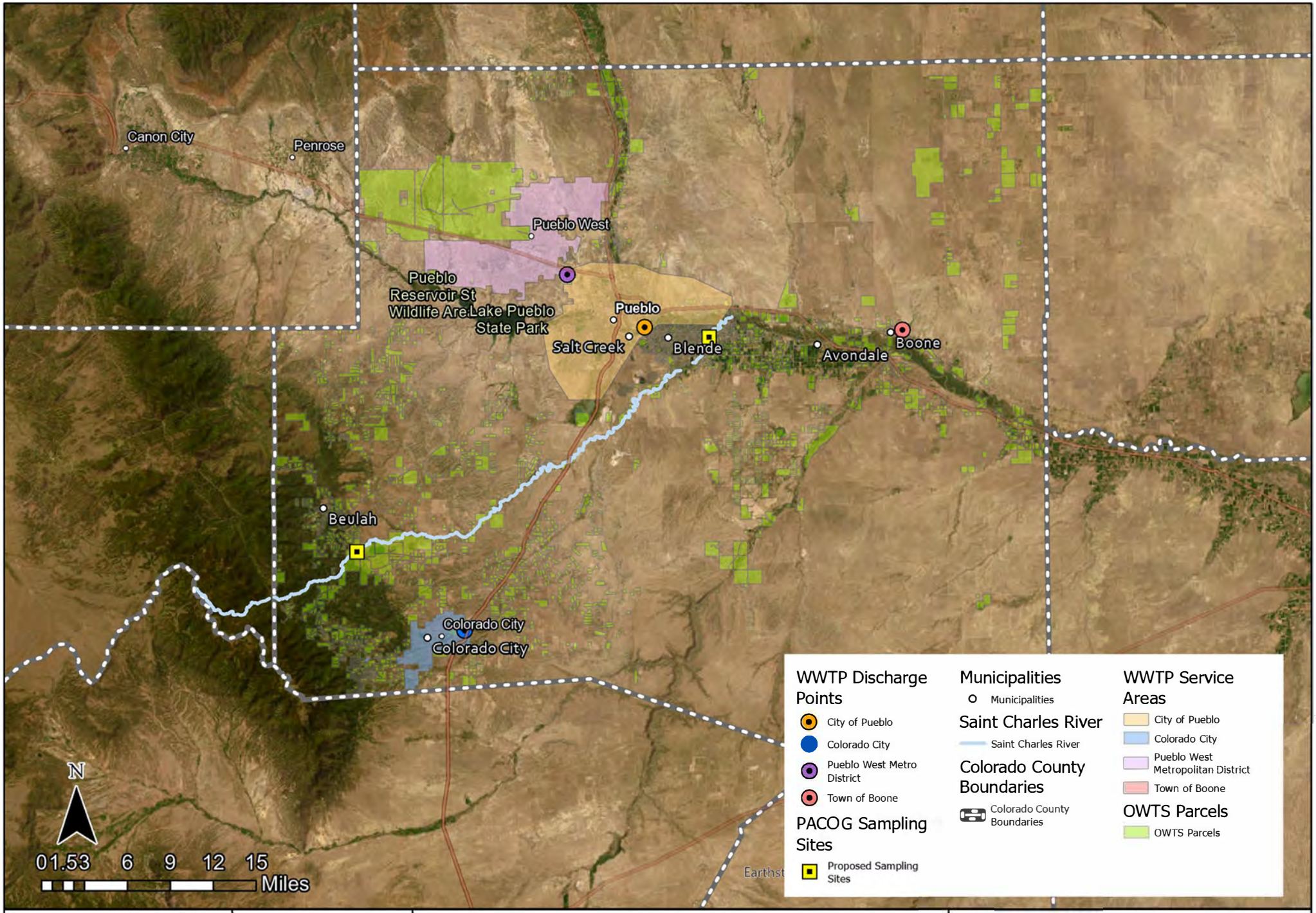
Submission Status: COMPLETED
Submission Details:

Please visit the WQX website o download WQX documents using you node fo additional info mation r ega ding you submission.

APPENDIX G

CENTRAL SEWER AND OWTS MAPS



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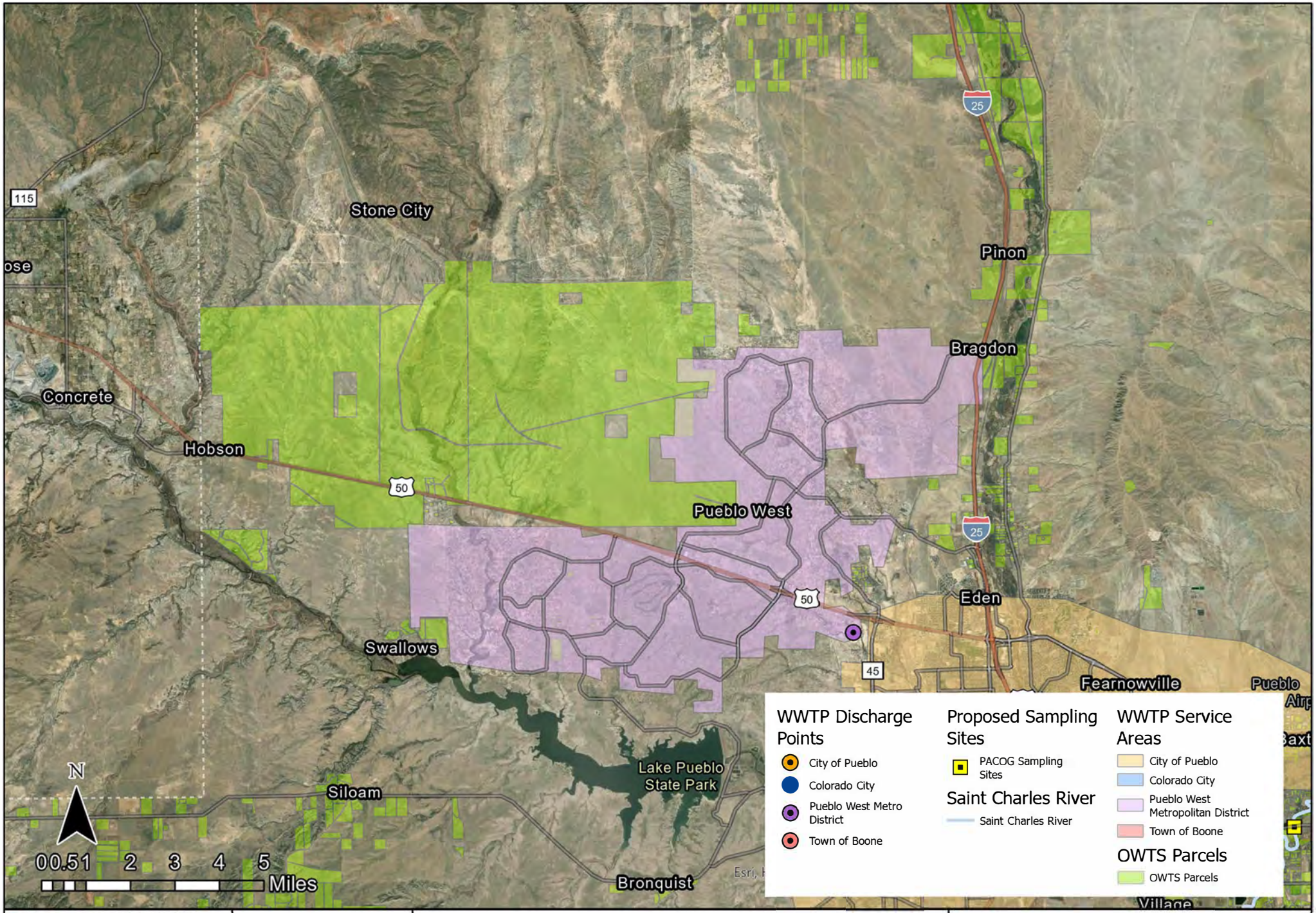
Created by: C. Macek
Updated: 11/26/2024

Pueblo County
Saint Charles River Basin
Overview



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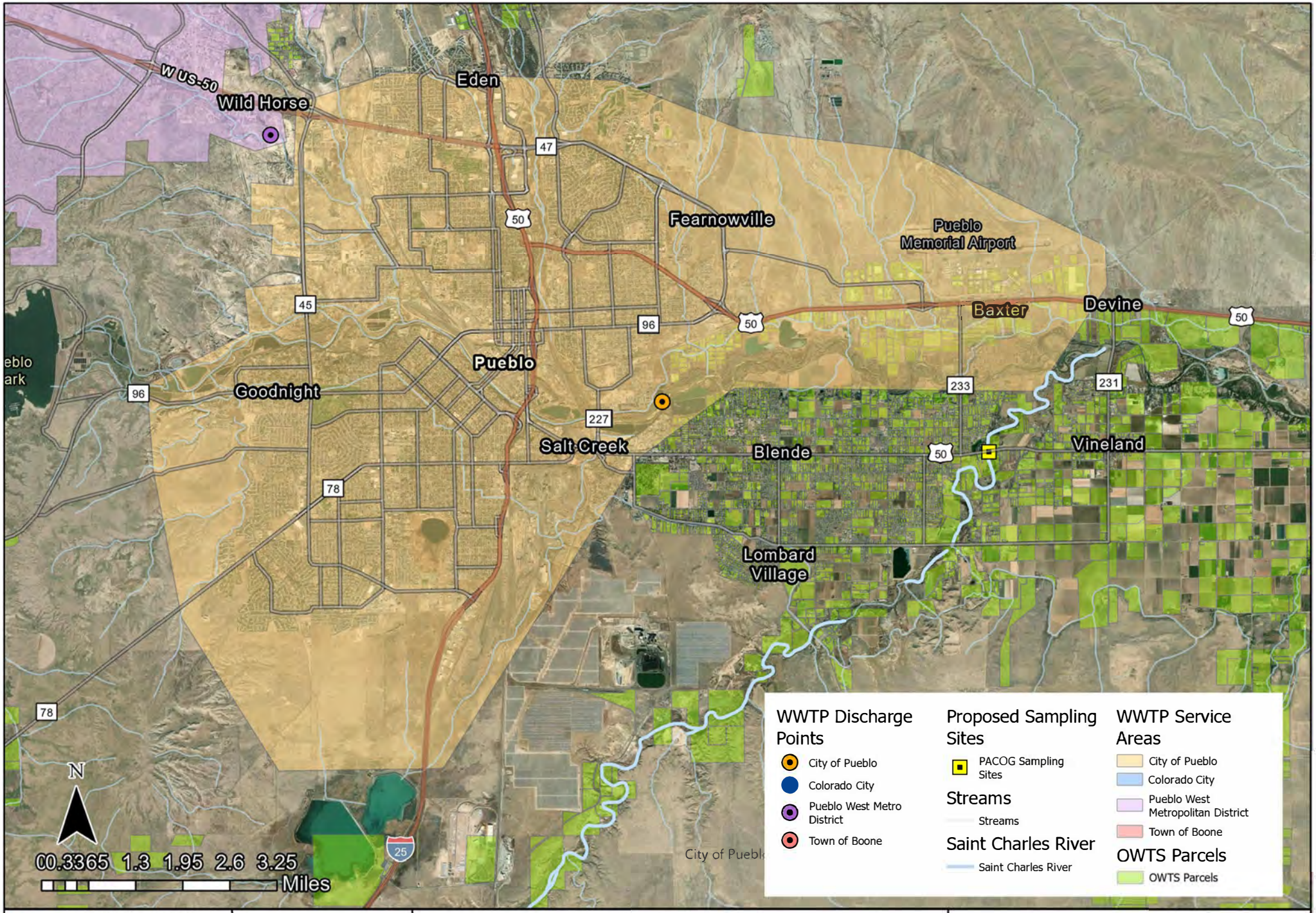
Updated: 11/26/2024

Pueblo County
Saint Charles River Basin
Stone City & Pueblo West



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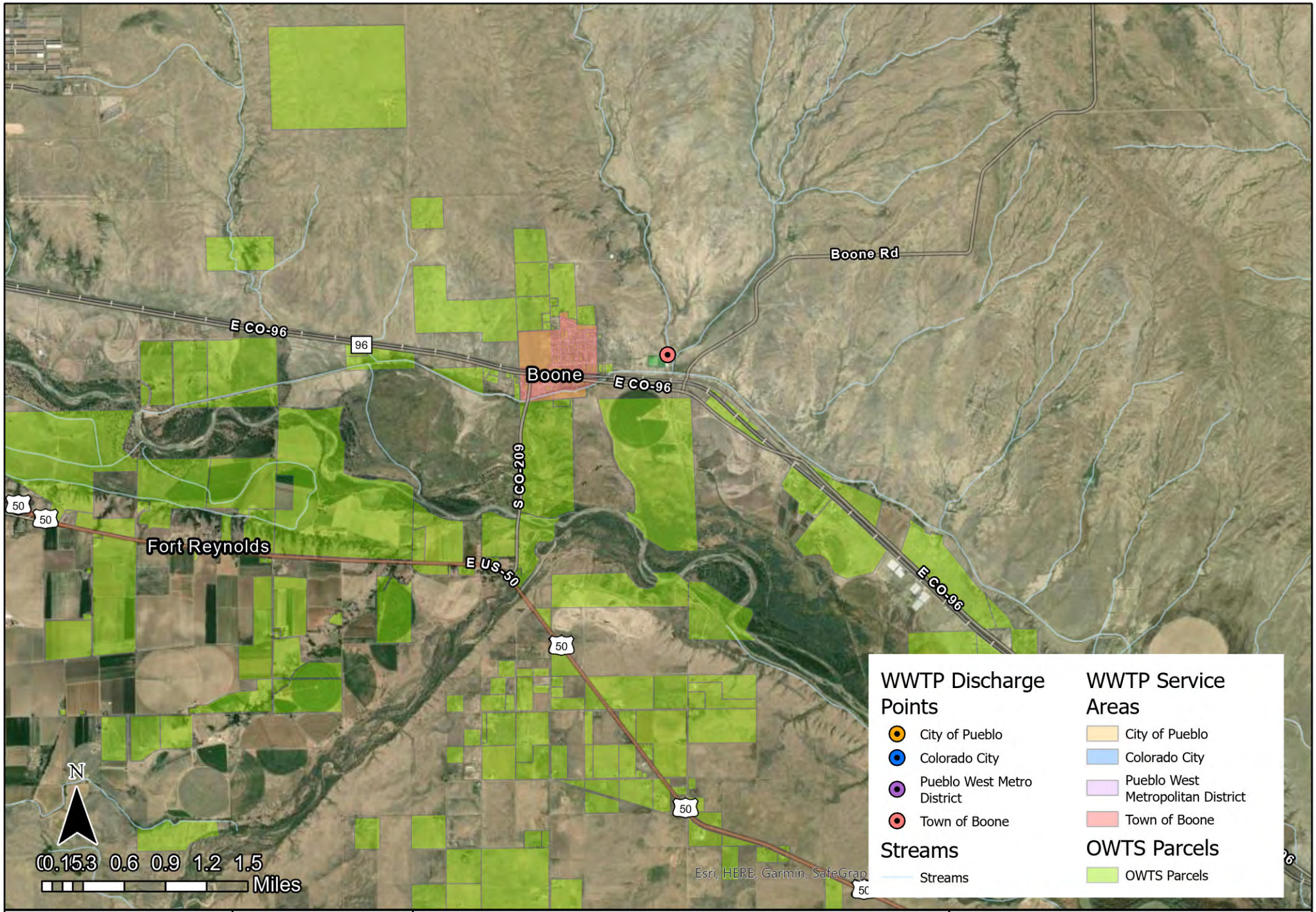
Created by: C. Macek
Update: 11/26/2024

Pueblo County
Saint Charles River Basin
Pueblo Service Area



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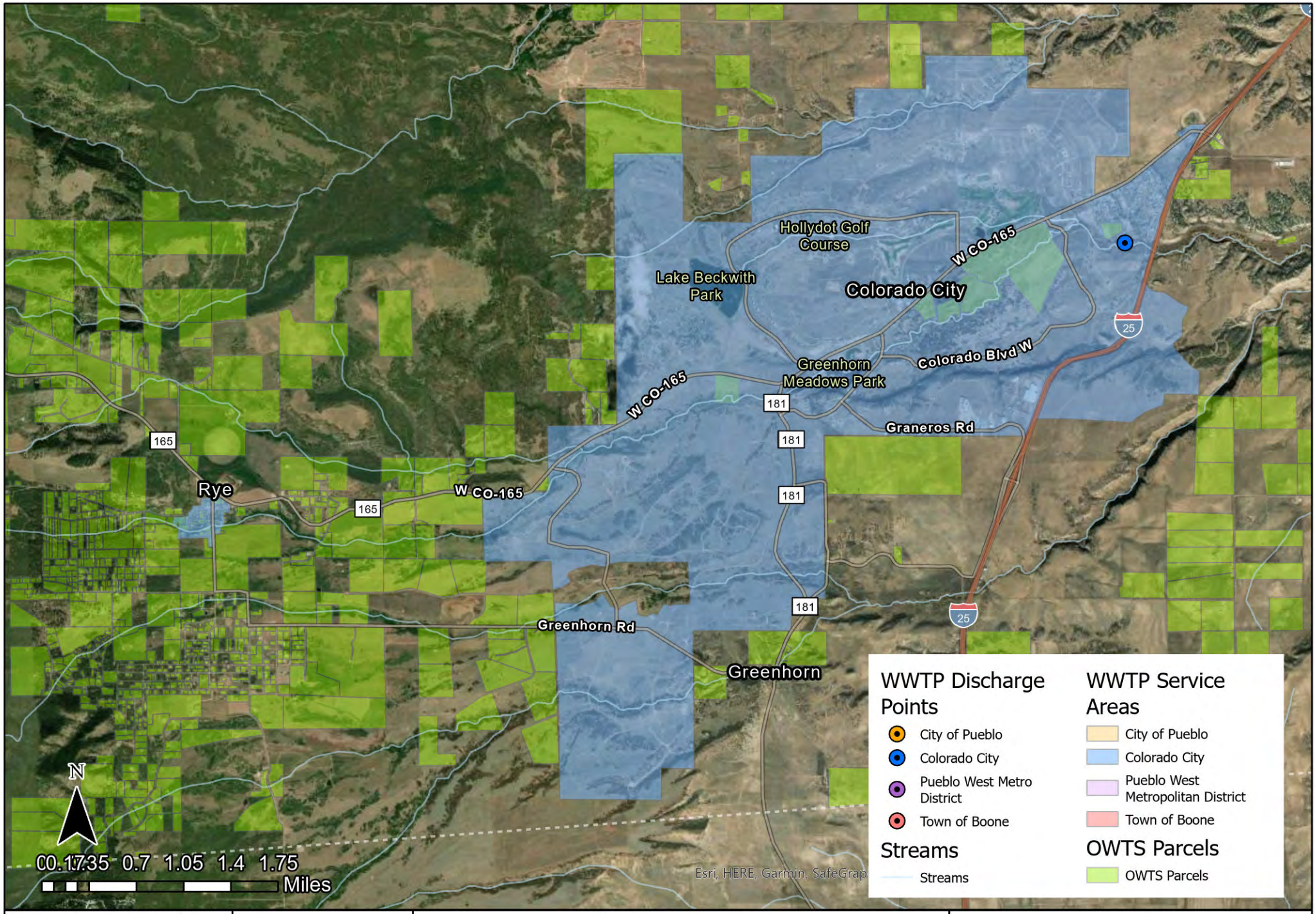
Created by: C. Macek
Date: 11/14/2023

Pueblo County
Saint Charles River Basin
Boone Service Area



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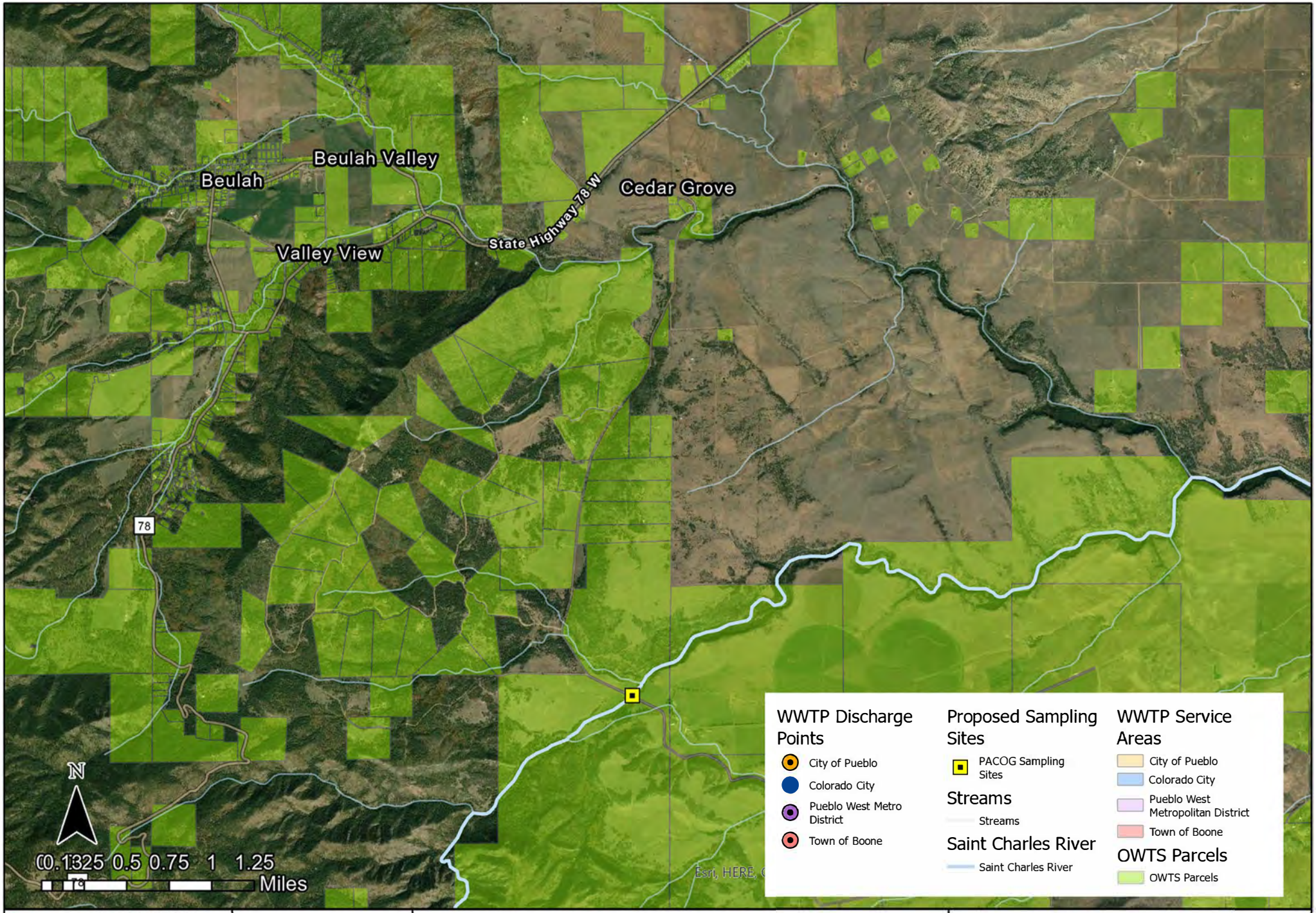
Created by: C. Macek
Date: 11/14/2023

Pueblo County
Saint Charles River Basin
Colorado City Service Area



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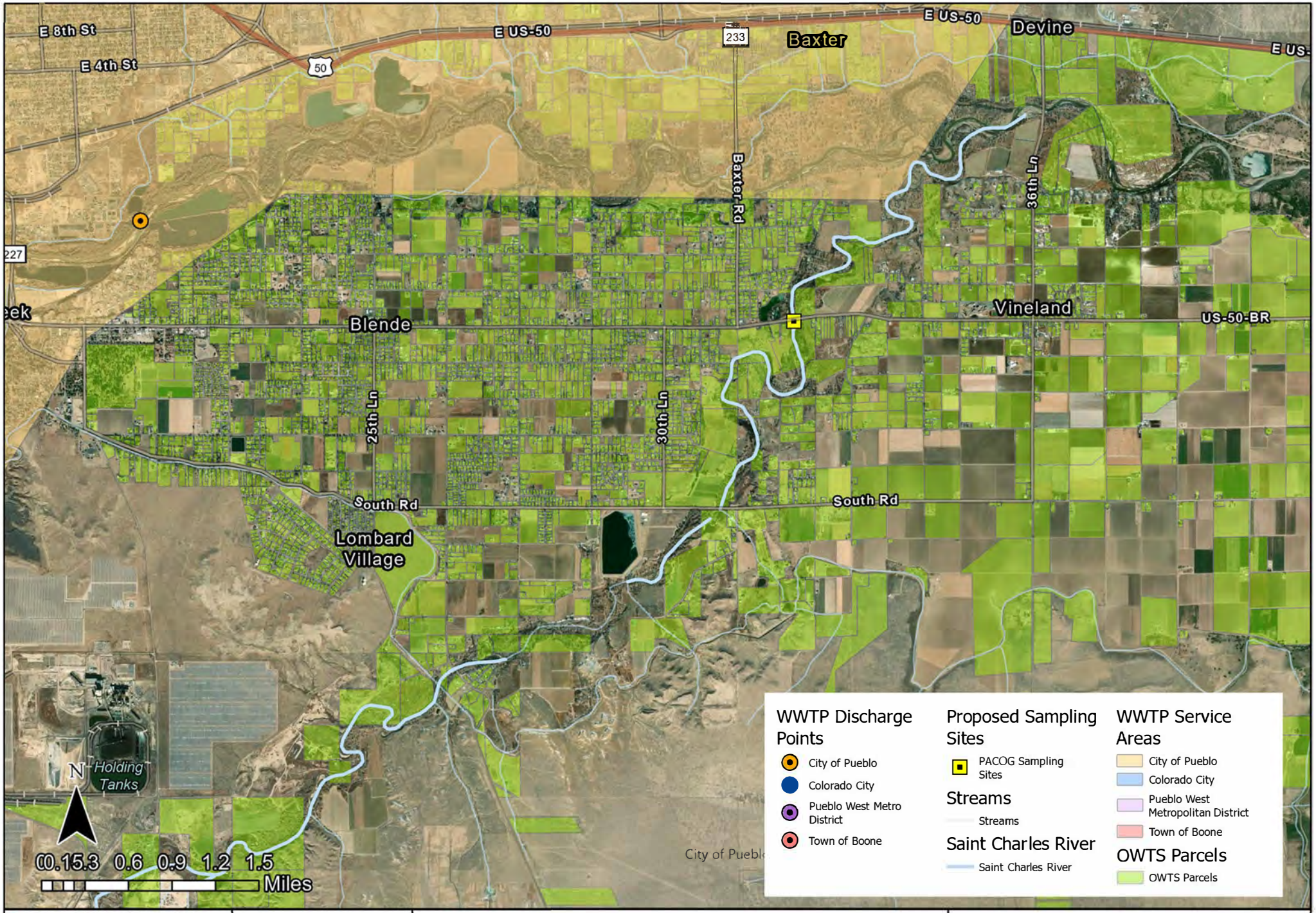
Created by: C. Macek
Updated: 11/2 6/2024

Pueblo County
Saint Charles River Basin
Beulah Valley



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Created by: C. Macek
Updated: 11/26/2024

Pueblo County
Saint Charles River Basin
Blende & Vineland

APPENDIX H

STAKEHOLDER MEETING NOTES

MINUTES
PUEBLO AREA COUNCIL OF GOVERNMENTS

A meeting of the Pueblo Area Council of Governments was held on Thursday, January 25, 2024. The meeting was held in person. The meeting was called to order by PACOG Vice-Chairman, at 12:15 p.m.

Roll Call:

Members Present were:

Zach Swearingen	Ed Gutierrez
Mike Cafasso	Mark Aliff
Danya Esgar	Harry Hochstetler
Chris DeLuca	Dennis Flores
Sarah Martinez	

Members Absent:

Heather Graham	Joseph Latino
Regina Maestri	Roger Gomez
Doug Proal	
Eppie Greigo	

.Also Present Were:

Aaron Willis -CDOT	Eva Cosyleon PACOG MPO
Patrick Vigil - CDOT	Hannah Haunert -PACOG MPO
Jason Nelson -CDOT	Huerta, Antonio- Sen Hickenlooper's office
Don Bruestle Planning Commission??	Isabel Rollins -Grant Navigator
Sabina Geniso, Pueblo County	Luann Martinez-??
Terry Hart	Carmen Howard
Dillion Goodman PACOG MPO	
Douglas Schwenke, RESPEC	

PUBLIC COMMENTS:

There were no public comments.

Commissioner Sweringen called the meeting to order at 12:18

Roll call was taken, and it was determined there was a quorum present.

First item of the agenda:

Nominating of PACOG 2024 Officers: The PACOG Board nominated officers for the 2024 fiscal year. Mark Aliff was nominated and voted in as chair, Chris Deluca accepted the nomination for vice-chair, and Dennis Flores again accepted the Treasure's position. The three members will serve until December 31, 2024.

The gavel was exchanged to Mr. Aliff and the vice chair and secretary were nominated for the PACOG budget committee. Commissioner Esgar accepted the budget committee vice-chair position and Chris Deluca accepted the Secretary position for the budget committee.

The new City council members were welcomed to the Board, and it was noted that Mr. Aliff was the only one of the new members in attendance.

Next, the consent agenda items were acted upon. Ms. Howard presented the following topics for approval. The October 26, 2023, minutes, the September, October, and November 2023 financial statements were received and filed, and three resolutions were presented for approval. They are as follows: 1) for the retention of accounting services by McPherson, Goodrich, Paolucci, and Mihelich, PC, for PACOG, 2) Professional Services between the Pueblo Area Council of Governments and RESPEC for the 208-water quality plan, and 3) the official place to post meeting notices for the PACOG Board meeting were approved with a unanimous vote.

The new PACOG chair then presented the PACOG Budget hearing. It is required to hold a public comment session before the Budget is officially adopted by the PACOG Board. Mr. Aliff opened the hearing, asked for public comment, and there were no comments submitted, Mr. Aliff then closed the hearing and the resolution to adopt the budget was formally acted upon to adopt the fiscal year 2024 PACOG budget by the PACOG Board.

There were two more resolutions on the agenda for the PACOG Board to consider from the regular items on the agenda, the first was a Resolution Directing the Pueblo County Planning and Development Department to Implement the FY 2024 Work Program and Appropriating Funds for the Work Program. The next Resolution was for approving the Pueblo Area Council of Governments' (PACOG) FY 2024 Membership Contribution Schedule for Administration and Insurance Activities.

Each of these items was approved unanimously by and individual vote on each resolution by the PACOG Board.

The Metropolitan Planning Organization (MPO) for the Pueblo area also had three transportation resolutions for federal dollars to be programmed and for The Statewide Advisory Committee appointments that needed action as well. The MPOI items are as follows:

A. A RESOLUTION AMENDING THE PUEBLO AREA COUNCIL OF GOVERMENTS FY2023-2027 TRANSPORTATION IMPROVEMENT PROGRAM(TIP) ASSIGNING FISCAL YEAR 2028 REGIONAL PRIORITY PROGRAM FUNDS IN THE AMOUNT OF $800,000.00 FOR SAFETY IMPROVEMENTS ALONG I-25 THROUGH PUEBLO.

Pueblo Area Council of Governments Transportation Improvement Plan
FY2028 Regional Priority Program
CDOT Region 2 requests the addition of the following project in FY2028, to be funded by RPP
Policy Action:
Project Name**:** I-25A Pueblo Safety Improvements
STIP Number SRR26867.TBD

Project Location and Description: Safety & operational improvements along I-25A through Pueblo Fund Source(s):
FY28 Region 2 Regional Priority Program (RPP)

Federal Program Funds:	**$ 729,680**
State Matching Funds:	**$ 70,320**
Local Matching Funds:	**$**
Other Project Funds:	**$**
TOTAL PROJECT FUND AMENDMENT:	**$ 800,000**

This amendment programs FY28 funds to the construction phase of this project

B. A RESOLUTION ASSIGNING FISCAL YEAR 2024 COLORADO DEPARTMENT OF TRANSPORTATION DIVISOIN OF TRANSIT AND RAIL, CLEAN TRANSIT ENTERPRISE FUNDING TO PUEBLO TRANSIT IN THE AMOUNT OF $99,000.00 FOR ZERO EMISSION VEHICLE TRANSITION PLANNING.

Policy Action:

CLEAN TRANSIT ENTERPRISE FUNDING

Project Name**:** Transit ZEV Transition Planning
STIP Number: TBD
Project Location and Description: ZEV Transition planning for Pueblo Transit
Fund Source(s): FY24 Colorado Clean Energy, CDOT DTR

Federal Program Funds:	**$**
State Matching Funds:	**$ 99,000.00**
Local Matching Funds:	**$ 11,000.00**
Other Project Funds:	**$**
TOTAL PROJECT FUND AMENDMENT:	**$ 110,000.00**

ZEV transition planning for Pueblo Transit to plan and prepare for deployment of zero- emission transit vehicles and support infrastructure, facilities, and organizational investments

C. A resolution appointing a representative and alternates from the Pueblo Area Council of Governments MPO/TPR to the State Transportation Advisory committee (STAC). In the discussion Wendy Pettit was reappointed as Primary, and Ms. Geniso, the County administrator, nominated the Deputy of public works, Greg George as the alternate. Mr. George was not present to accept the appointment. An email was sent for his concurrence with the appointment.

REGULAR ITEMS:

The remaining regular items on the agenda were acted upon next.

Chairperson's Report: (New Chair)

A) Lunch Appreciation

Action Required: Mr. Aliff Thanked the Pueblo West Metro District for Providing Lunch.

Next on the agenda was the **Manager's Report:** Ms. Carmen Howard presented these items to the PACOG Board.

A) Grant Navigator Report; Ms. Isabel Rawlins went over her report attached in the packet materials for review prior to the meeting. The report was informational.

B) 2024 PACOG Meeting Date Schedule was also an informational item. The meeting schedule for the entire year was given and was also included in the meeting packet materials.

C) ADA minutes were Included in the January packet for information as well.

D) Ms. Howard introduced Mr. Douglas Schwenke, with RESPEC to give and overview of 2023 Watershed Plan for the St. Charles River Basin. The full report was posted on the PACOG website for review. The link is as follows for further review of the Watershed Plan:

The link for the pdf of the report can be found as follows: is

The link to the PACOG website is https://www.pacog.net/waterquality

Link to the 2023 report;
https://www.pacog.net/_files/ugd/a105ae_82ba873fdeaa48d28d09bbc013d52de3.pdf.

Mr. Dougals Schwenke gave a brief overview of the 2023 annual report. The report is sent annually to the Colorado Health Department at the year end. The report summarized activities completed using 604b funding dedicated to implement PACO's 206 plan. In addition, the report also summarized efforts completed using Power Authority funds to assist with the development of the 9-Element watershed plan. One of the largest efforts completed in 2023 was the development of the sampling and analysis plan, which has been drafted to coordinate water sampling and analysis in accordance with the EPA 9-point watershed planning analysis. In 2022, a survey was conducted in conjunction with EPAC and other PACOG stakeholders to get input on areas of interest to be studied with the 2023 9-Element Watershed Plan funding. The survey resulted in an elevated interest in the St. Charles River Basin area as the preferred area of study to help determine if there is significant contamination of the River due to failed OWTS systems and surface water runoff from agricultural locations. A comprehensive evaluation was completed to determine additional locations along the St Charles River basin to sample. In addition, RESPEC conducted meetings with the Colorado Department of Agriculture (CDA), the Colorado Department of Public Health and Environment (CDPHE), Michael Bartolo, and the University of Colorado regarding potential areas and constituents that would be best to sample for (in addition to contaminants and locations already sampled by CDPHE and CDA). In the end, two locations were selected to conduct additional sampling. The St Charles River headwaters south of Beulah and the location where US 50

crosses the St Charles River were the two areas chosen. A variety of pollutants were recommended for analysis over the next two years, on an interval of four (4) times per year. The 2024 Sampling and Analysis Plan (SAP) has been submitted to CDPHE for review and approval prior to initiation of the sampling program along the St. Charles River. The funding to continue this work is limited past 2025, so the need for grants to continue the sampling and analysis work may be needed. Of note, the annual report will be presented to the Environmental Policy Advisory Committee (EPAC) on February 1 to update this committee on the latest environmental efforts by PACOG.

3. Transportation Commissioner or CDOT Region 2 Report (Terry Hart or Shane Ferguson)

A) Patrick Vigil, CDOT Region 2 South regional Engineer, gave a brief overview of specific CDOT projects underway. Project information was attached in the packet for review the full list of projects and details.

B) The CDOT traffic engineer, Jason Nelson gave an update on the US 50 at 36th Lane Project. The project is almost done, CDOT has had a testing phase going on in the project footprint, but it still needs a bit of refinement. The project should be complete in about two weeks. The Monument pedestrian project is complete with a special designed ped crossing. A safety study was done on SH 45, also known as Pueblo Blvd. Dedicated turn lanes are going to be added on the arterial, Mirror Ave will have a signal project designed so when it is warranted it will be ready to go, the interchange at the I-25 intersection is being reevaluated too. A lot of new development is happening in the area. The I-25 and 50 bypass construction project is finishing up the design phase, clearances with the railroad and environmental issues are the last issues before it is slated for ad in May 2024, with construction to begin during the summer of 2024. The project is estimated to take 24 to 36 months to complete. The new structure is being built just to the north of the existing structure, so traffic tie ups should be minimal. Commissioner Swearingen again asked about improvements at Abriendo and I-25. He asked if improvements could be made to the accel and deceleration lanes as they are too short and dangerous, maybe there could be some relief in restriping the area? Jason Nelson said he would look for any options for restriping and report back in February. The i-25 North bound to Colorado Springs is moving forward and should be done next summer. Exit 104 is done and getting final touches and will have a ribbon cutting soon. A resurfacing project will be done through Pueblo and the work is planned for nighttime work. Exit 108 is beginning design to see what options can be built in the area that meet the needs of the traveling public. More info to come on that project as it is developed.

C) Transportation Commissioner Terry Hart
Commissioner Hart gave an overview of the transportation commission meeting from January 18th, 2024. The Transportation Commission took up a short fall in funding to award a joint CDOT Region 2 and Region 5 project on US 50 near Salida at their meeting. The bids came in over the engineering estimate. The transportation commission was given a presentation on the 12 different categories of CDOT assets programs, he emphasized that rest areas were in the asset category being looked at, as well as, bridges, tunnels, pavement, and equipment, etc. Mr. Hart went on to say that CDOT has allocated $10 million dollars to both rest areas north of Pueblo to come up with a solution to the septic system problem. He went on to say there was discussion about moving the north and south rest areas closer to the City so that they can utilize City utilities. Mr. Hart is part of the committee trying to come up with a solution and he Is looking for more local official representation on the committee for input into the final decision CDOT will

make with the rest area issue. The $10 million dollars will not get the whole issue resolved he said, but it will give the County a good start in the right direction. He also went on to say the project is going to need financial support from both the City and County. Dennis Flores went on to say that having the rest areas shut down is having a negative effect on the Community. CDOT is looking at exit 108 for the rest area solution. The interchange at MP 108 will need to be rebuilt from the box culvert design it now has, and at the time it is built a new rest area can be part of the project that will serve both north and south bound travelers. Mr. Hart next went on to HB1101 and its impact to the PACOG neighboring TPR's to the south and to the east. The Southeast transportation planning area and the South-central transportation planning areas are against being consolidated. The Intermountain transportation planning area in the Vail and Breckenridge area has grown and changed significantly that it needs to be split in to two areas according to CDOT and the Colorado law states there are only 15 transportation planning areas allowed, so a consolidation somewhere is needed and CDOT staff has recommended the Southeast area and the South-central areas be combined into one TPR to keep the 15 that the law requires. The transportation commission is the body in charge of making the changes if they determine it is the right way to go, there will be hearings in March to discuss the changes and the by the end of June 2024 the transportation commission will make a formal decision to accept the recommendations of CDOT or leave the boundaries as they are making no changes. At the December 2023 transportation commission meeting an issue on fiber being installed in the CDOT right of was discussed. The process to get permission to utilize the right-of-way is very time consuming and expensive. It could take as long as two years to get access to the right-of -way and can be expensive as the current process requires a determination of value. State and Federal law require the use of the right of way be done on value basis. The Transportation Commission and CDOT staff have continued to work on a solution to the costs involved, and they have researched other methods by other governmental entities and are planning for the Department to adopt the US forest service's process for right of way use that only charges a few cents per foot on an annual basis, CDOT is implementing this process with the idea that it is not the final change to the process, and to wait and see if the legislature comes up with a new set of rules and laws for the right of way use for broadband and fiber. Next item he covered was the beginning of the next transportation planning cycle has begun. The project selection process is prioritized through conversation with CDOT and the locals to determine a set of transportation related projects to move forward with for the plan. Currently there is a ten-year list of projects that were developed out of the 2045 planning cycle. The first four years of that plan are funded, the next 6 years are not funded, but can be reprioritized in the process to adopt the 2050 planning documents. The local entities need to participate to get their projects in the que and funded, or on the list for the 2055 planning cycle.

4. State Transportation Advisory Committee (STAC) August 2023 Meeting Update

Wendy Pettit gave the STAC update for the PACOG area. Details from each meeting are included in the packet for review. The two items of significance that were discussed, were the Statewide freight has been completed for use in the 2050 plan development and the 2024 work plan for the STAC has been given out for review.

5. **MPO Staff Report (Eva Cosyleon, MPO Manager)**

A. MPO annual report-Eva Cosyleon gave a presentation on the MPO accomplishments. The first item she covered was the work on the bylaws form the TAC have

been on the agenda for development over 2023. Once a final version is decided upon it will go to then PACOG attorney for review and then incorporated into the PACOG bylaws. The MPO has participated in public activities regarding bike, ped, and active transportation topics and activities in the community. The MPO has been working with the City and County for a possible grant for the La Crosse bridge to have upgrades made to accommodate active transportation activities. Unfortunately, the grant was not awarded to the City. The MPO also issued a NOFA for the multi-modal funds and carbon reduction funds available for programming in the PACOG area. The project selection committee met this week for project selection. Four projects were submitted:

1 The Sande Cristo Art center charging station for both bicycles and vehicles submitted by Pueblo County
2. 33 solar lights at transit stops submitted by Pueblo Transit
3. Connectivity at the civic center submitted by Pueblo West
4. Better connectivity near and around the State fair facility submitted by The City of Pueblo

The MPO has also posted the federally obligated projects on the website, last year $53 million dollars was obligated on the Pueblo Area.

Last year the complete street initiative was a highlight of 2023, there were 5 workshops, and two walk audits. Out of these activities safety issues were identified and there is a new policy framework being developed from the discoveries from the activities.

Traffic and accident data is now more readily available form a new software implemented in 2023 that the MPO, the City and the County staff all utilize called Diexsys. The software allows for pinpoint information on specific intersections and corridors.

The travel demand model for transportation needs is being upgraded now for the 2050 plan activities. The bicycle and pedestrian map has been put on line now for easier access. The map shows the current network , it shows proposed projects, and it shows where the gaps are in the network.

B. CDOT Region 2 request(s) for PACOG MPO/TPR TIP amendment(s)*

FY 2024 - 2027 Transportation Improvement Program
Administrative notification.

a. Administrative Action:

Project Name**:** I25 and US50B Interchange
STIP Number: SR25216.164
Project Location and Description: Reconstruction of the interchange at Exit 100A and bridges over I-25, RR, and Fountain Creek
Fund Source(s): FY25 Region 2 Surface Treatment Program (SUR)

Federal Program Funds:	**$ (2,814,860)**
State Matching Funds:	**$ (585,140)**
Local Matching Funds:	**$**
Other Project Funds:	**$**

TOTAL PROJECT FUND AMENDMENT: $ (3,400,000)
This administrative action moves FY25 funds to FY26 for the construction phase of this project

b. Administrative Action:
Project Name**:** I25 and US50B Interchange
STIP Number: SR25216.164
Project Location and Description: Reconstruction of the interchange at Exit 100A and bridges over I-25, RR, and Fountain Creek
Fund Source(s): FY26 Region 2 Surface Treatment Program (SUR)

Federal Program Funds:	**$ 2,814,860**
State Matching Funds:	**$ 585,140**
Local Matching Funds:	**$**
Other Project Funds:	**$**

TOTAL PROJECT FUND AMENDMENT: $ 3,400,000
This administrative action moves FY25 funds to FY26 for the construction phase of this project

c. Administrative Action:
Project Name**:** I25 Resurfacing Near Colorado City ~ MP 64-80
STIP Number: SR25216.171
Project Location and Description: Pavement rehabilitation I-25 vicinity Lascar (SCTPR) to Muddy Creek.
Fund Source(s): FY24 Region 2 Surface Treatment Program (SUR)

Federal Program Funds:	**$ 10,489,150**
State Matching Funds:	**$ 1,010,850**
Local Matching Funds:	**$**
Other Project Funds:	**$**

TOTAL PROJECT FUND AMENDMENT: $ 11,500,000
This administrative action adds FY24 funds to the construction phase of this project

d. Administrative Action:
Project Name**:** I-25 Resurfacing near Colorado City ~MP 64 - 80
STIP Number: SR25216.171
Project Location and Description: Pavement rehabilitation I-25 vicinity Lascar (SCTPR) to Muddy Creek.
Fund Source(s): FY25 Region 2 Surface Treatment Program (SUR)

Federal Program Funds:	$ 9,577,050
State Matching Funds:	$ 922,950
Local Matching Funds:	$
Other Project Funds:	$

TOTAL PROJECT FUND AMENDMENT: $ 10,500,000
This administrative action adds FY25 funds for the construction phase of this project

e. Administrative Action:
Project Name**:** I-25 Resurfacing near Colorado City ~MP 64 - 80
STIP Number: SR25216.171
Project Location and Description: Pavement rehabilitation I-25 vicinity Lascar (SCTPR) to Muddy Creek.
Fund Source(s): FY26 Region 2 Surface Treatment Program (SUR)

Federal Program Funds:	**$ 6,384,700**
State Matching Funds:	**$ 615,300**
Local Matching Funds:	**$**
Other Project Funds:	**$**

TOTAL PROJECT FUND AMENDMENT: $ 7,000,000
This administrative action adds FY26 funds to the construction phase

f. Administrative Action:
Project Name**:** SH 47A Preventative Maintenance
STIP Number: SR25216.161
Project Location and Description: Design and construction of Micro surfacing pavement treatment east of I25 near MP 0-3 Fund Source(s):
FY25 Region 2 Surface Treatment Program (SUR)

Federal Program Funds:	**$ 1,281,175**
State Matching Funds:	**$ 266,325**
Local Matching Funds:	**$**
Other Project Funds:	**$**

TOTAL PROJECT FUND AMENDMENT: $ 1,547,500
This administrative action adds FY25 funds for the construction phase of this project

g. Administrative Action:
Project Name**:** US 50C/Baxter Road Improvements
STIP Number: SR26646.999
Project Location and Description: Design and construction of traffic control improvements at US50C and Baxter Road
Fund Source(s): FY25 Region 2 Traffic Signal Pool (SGN)

Federal Program Funds:	$
State Matching Funds:	$ 245,250
Local Matching Funds:	$
Other Project Funds:	$

TOTAL PROJECT FUND AMENDMENT: $ 245,250

This administrative action adds FY25 funds for the construction phase of this project

h. Administrative Action:

Project Name: Joe Martinez Trail in Pueblo West
STIP Number: SR25079.079
Project Location and Description: Design for a multi-purpose trail located adjacent to E. Joe Martinez Blvd. between S. McCulloch Blvd. and W. John Powell Blvd.
Fund Source(s): FY24 Region 2 Transportation Alternatives Program (TAP)

Federal Program Funds:	**$ 1,171,039**
State Matching Funds:	**$**
Local Matching Funds:	**$**
Other Project Funds:	**$**

TOTAL PROJECT FUND AMENDMENT: $ 1,171,039

This administrative action rolls forward $1,171,039 of the design phase from FY23 to FY24 for this project. NOTE: The ARPA MMO Local Match Roll Forward of $76,411 has already been approved by PACOG.

i. Administrative Action:

Project Name**:** I25 Resurfacing Near Colorado City ~ MP 64-80
STIP Number: SR25216.171
Project Location and Description: Pavement rehabilitation I-25 vicinity Lascar (SCTPR) to Muddy Creek.
Fund Source(s): FY24 Region 2 Surface Treatment Program (SUR)

Federal Program Funds:	**$ 364,840**
State Matching Funds:	**$ 35,160**
Local Matching Funds:	**$**
Other Project Funds:	**$**

TOTAL PROJECT FUND AMENDMENT: $ 400,000

This administrative action adds FY24 funds to the design phase of this project

j. Administrative Action:

Project Name**:** Purcell & Industrial Intersection Improvements Pueblo West
STIP Number: SR27016.027
Project Location and Description: Study and design of the intersection off US50A at Purcell Blvd. and Industrial Blvd.

Fund Source(s): FY24 State funded Local Multi-Modal Options Fund (MMM)

Federal Program Funds:	$ 161,500
State Matching Funds:	$
Local Matching Funds:	$
Other Project Funds:	$
TOTAL PROJECT FUND AMENDMENT:	**$ 161,500**

This administrative action programs FY24 funds to the design phase of this project

k. Administrative Action:

Project Name**:** I-25A Pavement Rehabilitation MP 92 – 102.6
STIP Number: SR25216.178
Project Location and Description: Pavement rehabilitation of I-25 through Pueblo
Fund Source(s): FY25 Region 2 Surface Treatment Program (SUR)

Federal Program Funds:	**$ 21,890,400**
State Matching Funds:	**$ 2,109,600**
Local Matching Funds:	**$**
Other Project Funds:	**$**
TOTAL PROJECT FUND AMENDMENT:	**$ 24,000,000**

This administrative action programs FY25 funds to the construction phase of this project

l. Policy Action:

Project Name**:** Joe Martinez Extension (Medal of Honor) Trail STIP Number SR27016.013
Project Location and Description: Swap from State Multimodal option to Federal ARPA Funds
Fund Source(s): FY22 MMOF

Federal Program Funds:	**$ 102,126.00**
State Matching Funds:	**$ 1,350,082.00**
Local Matching Funds:	**$**
Other Project Funds:	**$ 547,792.00**
TOTAL PROJECT FUND AMENDMENT:	**$ 2,000,000.00**

Swap from State Multimodal mitigation option to Federal ARPA funds

m. Administrative Action:

Project Name: CO45 Safety Improvements ~MP 0 - 6
STIP Number: SR27002.086

Project Location and Description: Address the existing line configuration on Pueblo Boulevard that contributes to broadside, approach turn, and side swipe type accidents.
Fund Source(s): FY24 Region 2 FASTER Safety Program (FAS)

Federal Program Funds:	$
State Matching Funds:	$ **250,000**
Local Matching Funds:	$
Other Project Funds:	$
TOTAL PROJECT FUND AMENDMENT:	$ **250,000**

This administrative action adds FY24 funds to the design phase of this new project

n. Administrative Action:

Project Name**:** CO45 Safety Improvements ~MP 0 - 6
STIP Number: SR27002.086
Project Location and Description: Address the existing line configuration on Pueblo Boulevard that contributes to accidents.
Fund Source(s): FY25 Region 2 FASTER Safety Program (FAS)

Federal Program Funds:	**$**
State Matching Funds:	**$ 250,000**
Local Matching Funds:	**$**
Other Project Funds:	**$**
TOTAL PROJECT FUND AMENDMENT:	**$ 250,000**

This administrative action adds FY25 funds for the construction phase of this new project

o. Administrative Action:

Project Name**:** US 50B and US 50C at SH 231 Safety Improvements
STIP Number: SR27002.078
Project Location and Description: Safety Improvements at 36th Lane
Fund Source(s): FY24 Region 2 Region 2 FASTER Safety Program (FAS)

Federal Program Funds:	**$**
State Matching Funds:	**$ 2,500**
Local Matching Funds:	**$**
Other Project Funds:	**$**
TOTAL PROJECT FUND AMENDMENT:	**$ 2,500**

This administrative action adds FY24 funds for the construction phase of this project

p. Administrative Action:
Project Name**:** I-25 Resurfacing near Colorado City ~MP 64 - 80

STIP Number: SR25216.171
Project Location and Description: Pavement rehabilitation I-25 vicinity Lascar (SCTPR) to Muddy Creek.
Fund Source(s): FY24 Region 2 Construction Bridge Program (CBP)

Federal Program Funds:	**$ 456,050**
State Matching Funds:	**$ 43,950**
Local Matching Funds:	**$**
Other Project Funds:	**$**
TOTAL PROJECT FUND AMENDMENT:	**$ 500,000**

This administrative action adds FY24 funds to the construction phase of this project.

q. Administrative Action:

Project Name**:** I-25 Resurfacing near Colorado City ~MP 64 - 80
STIP Number: SR25216.171
Project Location and Description: Pavement rehabilitation I-25 vicinity Lascar (SCTPR) to Muddy Creek.
Fund Source(s): FY24 Region 2 Surface Treatment Program (SUR)

Federal Program Funds:	**$ (263,317)**
State Matching Funds:	**$ (25,376)**
Local Matching Funds:	**$**
Other Project Funds:	**$**
TOTAL PROJECT FUND AMENDMENT:	**$ (288,693)**

This administrative action de-programs FY24 funds from the construction phase of this project to finalize the award.

r. Administrative Action:
Project Name: I-25 Resurfacing near Colorado City ~MP 64 - 80
STIP Number: SR25216.171
Project Location and Description: Pavement rehabilitation I-25 vicinity Lascar (SCTPR) to Muddy Creek.
Fund Source(s): FY26 Region 2 Surface Treatment Program (SUR)

Federal Program Funds:	**$ (3,332,898)**
State Matching Funds:	**$ (321,195)**
Local Matching Funds:	**$**
Other Project Funds:	**$**
TOTAL PROJECT FUND AMENDMENT:	**$ (3,654,093)**

This administrative action de-programs FY24 funds from the construction phase of this project to finalize the award.

s. Administrative Action:
Project Name**:** I-25A Pavement Rehabilitation MP 92 – 102.6

STIP Number: SR25216.178
Project Location and Description: Pavement rehabilitation of I-25 through Pueblo
Fund Source(s): FY24 Region 2 Surface Treatment Program (SUR)
Federal Program Funds: **$ (235,067)**
State Matching Funds: **$ (22,654)**
Local Matching Funds: **$**
Other Project Funds: **$**
TOTAL PROJECT FUND AMENDMENT: $ (257,721)
This administrative action de-programs FY24 funds from the design phase of this project due to cost savings

t. Administrative Action:
Project Name: I-25A Pavement Rehabilitation MP 92 – 102.6
STIP Number: SR25216.178
Project Location and Description: Pavement rehabilitation of I-25 through Pueblo
Fund Source(s): FY25 Region 2 Surface Treatment Program (SUR)
Federal Program Funds: **$ (2,469,369)**
State Matching Funds: **$ (237,976)**
Local Matching Funds: **$**
Other Project Funds: **$**
TOTAL PROJECT FUND AMENDMENT: $ (2,707,345)
This administrative action de-programs FY25 funds from the design phase of this project due to cost savings.

u. Administrative Action:
Project Name**:** SH 47A Preventative Maintenance
STIP Number: SR25216.161
Project Location and Description: Design and construction of Micro surfacing pavement treatment east of I25 near MP 0-3
Fund Source(s): FY25 Region 2 Surface Treatment Program (SUR)
Federal Program Funds: **$ (559,632)**
State Matching Funds: **$ (53,932)**
Local Matching Funds: **$**
Other Project Funds: **$**
TOTAL PROJECT FUND AMENDMENT: $ (613,564)
This administrative action de-programs FY25 funds for the construction phase of this project to finalize the award.

Last action at the meeting was the voting for the respective Community Board vacancies.

Ballot Votes for Board vacancies:

Ballot votes were collected for the respective vacancies to be forwarded on to the respective committees listed.

A. Pueblo Human Relations Commission
B. Plumbing Board of Appeals
C. Fountain Creek Watershed Board
D. Citizens Service Advisory Commission (CSAC).

No New Business was brought to the meeting and only Jason Nelson's CDOT report out on the Abriendo exits was put on the February agenda as a future agenda item.

ADJOURNMENT took place at 1:27 pm by the new Chair, Mr. Aliff.(WJP**)**

MINUTES
PUEBLO AREA COUNCIL OF GOVERNMENTS

A meeting of the Pueblo Area Council of Governments was held on Thursday, May 23, 2024. The meeting was held in person. The meeting was called to order by PACOG Chairman, at 12:15 p.m.

Roll Call:
Members Present were:

Zach Swearingen	Danya Esgar
Eppie Greigo	Mark Aliff
William Thiebaut	Harry Hochstetler
Chris DeLuca	Dennis Flores
Regina Mastri – City Council	
Mike Cafasso	

Members Absent:

Ed Gutierrez	Joseph Latino -City Council
Heather Graham – Mayor City of Pueblo	Roger Gomez -City Council
Roger Gomez -City Council	Terry Hart – Transportation Commissioner
Doug Proal -Pueblo West	Sarah Martinez City Council

.Also Present Were:

Aaron Willis -CDOT	Eva Cosyleon PACOG MPO
Geoff Guthrie-CDOT	Hannah Haunert -PACOG MPO
Scott Skinner -CDOT	Patrick Vigil-CDOT
Don Bruestle Planning Commission	Isabel Rollins -Grant Navigator
Sabina Geniso, Pueblo County	Lindsey Jaquez-CDOT
Dillion Goodman PACOG MPO	Carmen Howard – Pueblo County
Jason Nelson-CDOT	Carla Sikes- Pueblo City Attorney
Sarah Skinner -Pueblo County	Maureen Paz de Araujo, - Wilson and Co.
Garrison Ortiz	

PUBLIC COMMENTS:

There were no public comments.

PACOG Chair, Mark Aliff called the meeting to order at 12:15 pm

Roll call was taken, and it was determined there was a quorum present.

First items of the agenda:
The CONSENT ITEMS were first on the agenda. Ms. Carmen Howard, PACOG Manager, presented the following:

1 Minutes of April 25, 2024, Meeting were presented for edits and approval.

The minutes were approved by a formal recommendation made by Mr. Mike Cafasso, with a second on the recommendation made by Commissioner Esgar.

1. Chairperson's Report:

A) Lunch Appreciation: Mr. Aliff thanked the Board of Commissioners for the catered lunch.

2. Manager's Report: (Ms. Carmen Howard) covered the following items under her report.

First item on the agenda was the 2025 to 2028 Transportation Improvement Plan adoption. Ms. Howard passed the floor to **Eva Cosyleon- PACOG MPO Manger.**

A) 2025-2028 Draft Transportation Improvement Program was presented for Adoption by PACOG Board. Ms. Cosyleon went over the comments received during the public comment period, she gave a brief overview of the details and how the MPO addressed the comments. The comments and the MPO replies are included as part of the permanent document being adopted and are in the PACOG packet for further review. The document covers transportation programming with federal, state, and local funding for all of Pueblo County, the MPO areas as well as the TPR areas that are in Pueblo County. The plan was approved by a motion from Commissioner Esgar with a second by Mr. Mike Cafasso.

B) Next on the agenda was the Update on 9 Element Watershed Plan activities. Ms. Howard introduced Mr. Doug Schwenke, from RESPEC, our consultant for the plan and Mr. Michael Bartolo, Ph.D. Mr. Schwenke gave an update, the activities for the plan have a shortfall, of roughly $15,000. The update was originally scheduled to ask the PACOG Board for funding to cover the shortfall, but it has been funded by the CDPHE. The CDPHE had the funding available through the Colorado Water and Power authority to fund our activities and make the scope of work for 2024 whole. This extra funding will allow for the 4 sets of samples originally planned to happen as planned and finish the annual report. This will allow for the completion of the analysis that is needed for the 9-element plan. 2025 will also need the $40,000 budget to complete the need sampling and work associated with the plan, RESPEC and Ms. Howard are involved in conversations with CDPHE and DOLA now on the available options for funding for 2025. In the 604B activities, the EPA has a funding source for disadvantaged communities called "closing the gap to America's wastewater gap", the program is free to participate in and the Pueblo area was chosen to participate in the program, the ultimate goal is to have funding available to help residents with failed septic systems and mitigate the pollutants in the water. The area being looked at is the St. Charles Mesa area as was reported in the last update.

Next Mr. Bartolo spoke on the water quality issues on the St Charle Mesa, 25 years ago the failed septic systems were detected, and recently the same testing was replicated in conjunction with Colorado Department of agriculture, and the same 14 well sights were sampled, 7 of the samples were analyzed at the CU Dept of Biochemistry. Certain compounds were detected that are common with failed septic systems and were very widespread on the St Charles Mesa. The results have been shared with the Health Department; Pueblo has a very instrumental part in the water quality issues along the US 50 corridor. As the larger communities take their water up stream for their municipal use,

the lower quality water that is left is a problem for the agricultural uses, and the communities to the east for drinking water and their municipal uses.

C) Ms. Isabel Rollins gave the Grant Navigator Report. She reported on the Local Infrastructure boot camps that are coming up. The items are for bridges, brown fields, etc., Pueblo County is eligible to participate. The City is not eligible as they are over 150K in population. Mr. Rollins is putting together a list of all grants that are upcoming over the next 2 years, the infrastructure funding is still available for the next 2 years under the IIJA legislation. Her full report is included in the PACOG packet for further information.

D) Mr. Garrison Ortiz gave a presentation on Southern Colorado Institute of Transportation Technology (SCITT) housed at CSU Pueblo. Governor Jared Polis created the 'Southern Colorado Institute of Transportation Technology' in 2022. The role of the institute is to conduct and facilitate education, training, and research on issues related to the safety, security, and innovation of intermodal transportation. The institute also serves as an information exchange and repository for the most current information pertaining to surface transportation education, research, and related issues, including the economic development of transportation technology in Colorado and nationwide. He introduced his colleagues in the program, they are as follows:

- Dr. Chad Kinney, Director of ICR at CSU Pueblo
- Dr. Md Rashad Islam, PE, Director of SCITT at CSU Pueblo
- Dr. Hasan Faisal, Faculty at School of Engineering at CSU Pueblo

Mr. Ortiz and his team gave information on three programs the SCITT groups are working on and need additional funding. They are as follows:

- Plastic Pollution to Plastic Solution in Asphalt Pavement
- Waste Hemp Fiber in Asphalt Mix
- Cold Asphalt Mix for 365-Day Paving

The complete presentation and the white paper are included in the PACOG packet for more detailed information.

E) Mr. Ted Lopez gave the EPAC Minutes and Report. Mr. Lopez gave the citizens environmental group report. They meet every month at 5;15 to 6:30 on the first Thursday of the month. Recently an application was received from Mr. Joe Latino, that application will be included in next months PACOG Packet for action to appoint Mr. Latino to the committee. (Since last month, Mr. Latino has withdrawn his application.) Mr. Lopez went over the EPAC responsibilities and their recommendation process to PACOG, he also went on to say the EPAC is looking at future projects they received to weigh in on, the recycling activities both in the City and County are being reviewed, Mr. Doug Schwenke has also shared his reports and findings with EPAC on a regular basis for their input, they are reviewing Agriculture land preservation strategies as well. He also went on to say, they also review conservation easements, and have been given information on the new commercial development happening at SH 47 and Dillion Drive where a lift station will be installed and will connect with the City of Pueblo to service wastewater needs.

Next on the regular agenda were the following items:

3. Neither Terry Hart nor Shane Ferguson were in attendance to give the CDOT update. The CDOT region 2 update for May was given and the regional engineer for the pueblo area, Mr. Patrick Vigil along with Mr. Jason Nelson for traffic projects. The CDOT project listing of both programs along with their status are also included in as attachment in the May PACOG Packet. The main

highlight of the engineering report was the closure of the right lanes south of Eagleridge for concrete slab replacement. Mr. Nelson spoke about traffic projects. The 36th Lane and US 50 is completed. There is a preliminary discussion on Baxter and US 50 needs, and CDOT has funds to make improvements. Pedestrian facilities make up about one-third of facilities in the state, Pueblo and the City of Colorado Springs will have their ped facilities looked at in detail for mitigation of Ped facilities. Councilor Flores asked Mr. Nelson about the new signage installed to give information on advanced warning to give the travelling public information on the next intersection. Mr. Nelson said it took time to get the signs down to Pueblo, but they are common all over the state. The rest areas were discussed with Mr. Nelson again this month, but he did not have any new information to share.

4 **State Transportation Advisory Committee** (STAC)
May 2nd, 2024, Meeting report was given by Wendy Pettit. The main topics from the meeting were the closure of US 50 at the Blue Mesa reservoir and the changes to the MMOF programming for new projects. The Central Federal Lands Program Manager gave a brief overview of the need for the program to be included the 2050 long range transportation planning efforts that are about to start. The Manger of the Transportation Development branch from CDOT also gave a brief presentation on the 2050 planning efforts. He said the policy Directive 14 information will go to the transportation commission in May for information and action in June to get the planning activities underway. The notes from the meeting are included in the PACOG Board packet for further details.

5. **MPO Staff Report**
(Eva Cosyleon, MPO Manager)

A) The 2021 Top 25 High Crash Locations and Fatal Locations was moved to the June 2024 meeting due to time constraints.

B) Ms. Cosyleon gave a brief overview of the Pueblo area's June Bike Month activities. The MPO created a bingo card for Bike month, there will be a festivity at the Fuel and Iron building in June, completed Bingo cards can be turned in for prizes, there were several activities also on the calendar such as a scavenger hunt, and a community bike ride are a couple of the activities planned. There are many partners this year to support the biking activities, Southern Colorado Runners, Subaru of Pueblo, Pueblo Chamber, and the Pueblo Conservancy Group, are a few of the sponsors.

C) Other Transportation Matters – No other matters were brought forward for discussion.

6. The last of the regular items were presented. The vacancies on the Citizens Services Advisory Committee ballots were distributed and were voted upon for May 2024 appointments and collected for tally and confirmation.

7. Next New Business was called for with no new items brought forward.

8. Future Agenda Items: Travel Demand Model Presentation for the MPO – TPR area, the 2021 Top 25 High Crash Locations and Fatal Locations

ADJOURNMENT of the regular meeting was made by Mr. Aliff at 1:15pm

The PACOG Board went into executive session upon adjournment: The Board had a conference with the PACOG Attorney for the purposes of determining positions relative to matters that may be subject to negotiations, developing strategy for negotiations, and/or instructing negotiators, under C.R.S. Section 24 6 402(4)(e), regarding potential changes to the Grant Navigator contract. **(**WJP**):**

The next meeting of the Pueblo Area Council of Governments is to be held on Thursday, June 27, 2024, at the PUEBLO COUNTY DEPARTMENT OF EMERGENCY MANAGEMENT 101 WEST 10TH STREET, FIRST FLOOR CONFERENCE ROOM the meeting will be held in-person and virtually via Zoom.

INDIVIDUALS REQUIRING SPECIAL ACCOMMODATIONS ARE REQUESTED TO NOTIFY PACOG AT (719) 553-2259 AT LEAST TWO (2) WORKING DAYS IN ADVANCE OF THE MEETING.

* Denotes additional materials are attached.
** Denotes material to be distributed at PACOG Meeting

APPENDIX I

TECHNICAL ADVISORY TEAM MEETING NOTES

MINUTES
ENVIRONMENTAL POLICY ADVISORY COMMITTEE
February 1, 2024

A meeting of the Environmental Policy Advisory Committee (EPAC) was convened on Thursday, February 1, 2024, at 5:15 p.m.

Chair Lopez called the meeting to order at 5:21 p.m.

ROLL CALL

Those members present were:

Andra Ahrens
Arleen Aguirre
Amanda Weidner
Ted Lopez

Members absent: None.

Pueblo County Planning and Development Staff present: Carmen Howard, Director; Bree Thornton, Administrative Assistant III, and Sandra Smith, Administrative Assistant IV.

APPROVAL OF THE FEBRUARY 1, 2024, EPAC AGENDA

Chair Lopez called for a motion to approve the agenda of the February 1, 2024, Environmental Policy Advisory Committee meeting as presented.

Ms. Andra Ahrens motioned to approve the agenda of the February 1, 2024, Environmental Policy Advisory Committee meeting as presented. Ms. Amanda Weidner seconded the motion. The motion carried unanimously.

APPROVAL OF MINUTES FROM THE OCTOBER 5, 2023, EPAC MEETING

Chair Lopez called for a motion to approve the minutes from the October 5, 2023, Environmental Policy Advisory Committee meeting with some minor grammar corrections he would provide to Ms. Sandra Smith.

Ms. Ahrens motioned to approve the minutes from the October 5, 2023, Environmental Policy Advisory Committee meeting as corrected. Ms. Weidner seconded the motion. The motion carried unanimously.

CHAIR'S REPORT - TED LOPEZ, CHAIR

Chair Lopez stated he did not have a report.

2003 ANNUAL REPORT EPA 9- ELEMENT WATERSHED- BASED PLAN AND 208 WATER QUALITY MANAGEMENT PLAN – DOUG SCHWENKE, P. E.

Mr. Doug Schwenke summarized the annual report (Exhibit A) which also contained the sampling analysis plan for the proposed 9-Element Watershed Plan. The entire report was sent to Colorado Department of Public Health and Environment (CDPHE) as part of their statement of work in mid-December. This particular version was drafted and tailored for the area they elected to do the 9-Element Water Treatment Plan for the St. Charles water basin. That effort comprised a lot of their work in 2023 with the funding of the 604B and power authority

funding they received for the 9-Element Water Treatment Plan. The intent was to focus on a smaller scale where more impacts, activity and failed On-Site Wastewater Treatment Systems (OWTS) were in a consolidated area, due to the budget. Additional efforts in 2024 will focus on developing educational materials, maintenance programs and OWTS. In addition, those efforts will focus on surface water, irrigation practices and the impacts of cattle farms. The goal is to continue to sample and compile existing data over the next three years, depending on the budget.

REVIEW AND RECOMMENDATION TO PACOG FOR THE PROPOSED LIFT STATION FOR DILLON NORTH SUBDIVISION – CARMEN HOWARD

Director Carmen Howard presented the request from King Fisher Engineering Company who is doing a project for the city. The project is a lift station serving the Dillion North Subdivision. The city is anticipating development in the area shown on the map presented in Exhibit B. This lift station is needed to handle the project. The developer is going to be paying for the lift station. As the 208 Agency for the region, Pueblo Area Council of Governments (PACOG) is required to sign off on the project; therefore, this is being presented as a recommendation to PACOG to further this project. Ms. Ahrens questioned if there was a complete engineering packet with a thorough review and report that may include any emergency strategies and impact reports. It was determined that since the proper engineering report may not have been present in its entirety, Director Howard will send an email to the King Fisher representative requesting that they provide the EPAC members with the complete packet of the proper information, before EPAC can move forward in deciding on this review and recommendation.

ENVIRONMENTAL HEALTH SPECIALIST REPORT - ARLEEN AGUIRRE

Ms. Aguirre reported RecycleWorks on Stockyard Road had issues with plastics and no longer accepts certain plastics for the foreseeable future. They accept film, grocery bags, shrink wrap but no other plastic such as beverage bottles. She continued, noting that Free Radon Air test kits were available at the Pueblo Department of Health and Environment on the 3rd floor for interested parties. The test results will be emailed. Chair Lopez added a few comments, stating that within the last two weeks No. 2 plastics were no longer being collected by RecycleWorks, and that using a small container, people could bring grocery bags No. 2 and No. 4, as well as zip lock bags and shrink wrap. He continued, noting the gentleman in charge of the facility has been unsuccessful in obtaining funding to expand the operation and that county funding could help to increase RecycleWorks' capability and usage by the public. Chair Lopez questioned if the county had considered recycling or some sort of waste management practices. Ms. Ahrens stated Jared Miera is in the process of getting the county their own recycling bins. She continued, noting there has been talk of the county starting their own recycling facility so that recycling is more accessible to county residents, because RecycleWorks services are limited to those who reside within city limits.

WATER QUALITY SUBCOMMITTEE REPORT - ANDRA AHRENS

Ms. Ahrens stated the CDPHE is working on a fee bill for both the drinking water industry and clean water entities. The CDPHE is in a holding pattern as they decided to turn towards feasibility for different reasons. She recommended providing more information to PACOG to create a study to enhance, maintain or increase waste streams and to include household hazardous waste at RecycleWorks.

SOLID WASTE SUBCOMMITTEE - TED LOPEZ

No report was given.

ELECTION OF OFFICERS - CHAIR LOPEZ

Chair Lopez called for a motion to name Ted Lopez to the position of Chair for EPAC for 2024. Ms. Ahrens motioned to approve electing Ted Lopez as Chair of EPAC. Ms. Weidner seconded the motion. The motion passed unanimously approved.

Chair Lopez called for a motion to name Andra Ahrens as Vice Chair of EPAC for 2024. Ms. Weidner motioned to approve electing Andra Ahrens as Vice Chair of EPAC. Ms. Aguirre second the motion. The motion passed unanimously.

ADJOURNMENT

The next regularly scheduled EPAC meeting is Thursday, April 4, 2024, from 5:15 p.m. to 6:30 p.m. It will be held in person and via Zoom at the Department of Planning and Development, 229 West 12th Street.

There being no further business before EPAC, Chair Lopez adjourned the meeting at 6:06 p.m.

Bree Thornton
EPAC Recording Secretary

YRD

MINUTES
ENVIRONMENTAL POLICY ADVISORY COMMITTEE
APRIL 4, 2024

A meeting of the Environmental Policy Advisory Committee (EPAC) was convened on Thursday, April 4, 2024, at 5:15 p.m.

Chair Lopez called the meeting to order at 5:20 p.m.

ROLL CALL

Members present were:

Arleen Aguirre (via Zoom)
Vice Chair Andra Ahrens
Rick Hanger
Chair Ted Lopez
Amanda Weidner (via Zoom)

Members absent: None.

Pueblo County Planning and Development Staff present: Emma Strong, Planner II and Yvonne Doria, Administrative Assistant III.

Others present: Douglas E. Schwenke, RESPEC Principal Engineer (via Zoom)

APPROVAL OF THE APRIL 4, 2024, EPAC AGENDA

Chair Lopez called for a motion to approve the agenda of the April 4, 2024, Environmental Policy Advisory Committee meeting as presented.

Vice Chair Ahrens moved to approve the April 4, 2024, EPAC Meeting Agenda as presented. Mr. Hanger seconded the motion. The motion carried unanimously.

APPROVAL OF MINUTES FROM THE FEBRUARY 1, 2023, EPAC MEETING

Chair Lopez called for a motion to approve the minutes from the February 1, 2024, EPAC meeting, with corrections provided by Chair Lopez and Vice Chair Ahrens.

Vice Chair Ahrens motioned to approve the minutes from the February 1, 2024, EPAC meeting as corrected. Ms. Weidner seconded the motion. The motion carried unanimously.

CHAIR'S REPORT - TED LOPEZ, CHAIR

Chair Lopez introduced new member Richard Hanger. Mr. Hanger shared about himself, noting that he prefers Rick. He stated that he was originally from Cleveland, Ohio, and his wife was originally from Detroit, Michigan. Rick and his wife had first moved to Pueblo in 1995 and had lived in Pueblo intermittently since then. They had moved to West Park, west of City Park, in Pueblo a couple of years ago. Rick retired from the State and his wife has an interior design business. He had discovered the vacancies on EPAC on google within recent months. Chair Lopez stated that he had brought a new member application from Joseph Latino, a sitting member of the Pueblo City Council, noting that he would provide the application to staff.

9-ELEMENT WATERSHED PLAN AND WATER QUALITY MANAGEMENT PLAN UPDATES

Doug Schwenke presented a report which had been distributed via email to EPAC members on the day of the meeting, April 4, 2024. Mr. Schwenke stated that the first water surface samplings in the 9-Element Watershed Plan had been conducted at two selected sampling locations, on the St. Charles River, and the sampling was for many of the constituents included on the sampling analysis plan.

Results from the University of Colorado Boulder Mass Spectrometry Lab were not back yet. A few results from Colorado Analytical Lab and from a couple of field tests were back. Of most interest in the results were the selenium levels that exceeded Colorado Regulation 32 acute level of 18.4 ug/L. That was not one of the constituents in the 9-Element Watershed Plan, but it was a concern within Pueblo County.

The plan was to conduct a total of four samplings in 2024. The remaining three would be after all the results from the first samplings were in, probably in June, then in August, and then sometime in the Fall. The current budget would be tight to complete the planned sampling visits, run samples to the labs, then receive and tabulate the data. Carmen was aware that additional funds were requested from Colorado Department of Public Health and Environment (CDPHE). The response from CDPHE was that an additional $5,000 to $10,000 was available, and possibly more from the unused funds within the power authority.

Mr. Schwenke stated that the first year of sampling was funded and would be completed. The intent had been to finish at least two years of sampling, then group the results with data collected from the CDPHE and from online data reservoirs. The next step would be teaming up to reduce constituents of concern. Intermittently, the focus would be on producing the education and implementation deliverables in the water quality management plan.

Mr. Schwenke noted that the EPA's Wastewater Gap Technical Assistance Program has been contacted about the potential for consolidating some septic areas with central sewers. The city of Pueblo and Pueblo West were areas of interest. The EPA program would have suggestions to help. It was likely to be difficult, but the CDPHE wanted to explore potential improvements to wastewater treatment. Educational outreach material would be prepared, working with Pueblo County CSU-Extension regarding septic system maintenance, and proper agricultural irrigation practices to mitigate run-off. Mr. Schwenke welcomed questions from the meeting attendees.

Chair Lopez questioned what was the Wastewater Gap as in the title of the EPA program. Mr. Schwenke replied that the gap was the availability of wastewater treatment especially in economically disadvantaged communities. Options to expand wastewater treatment availability would include adding septic systems as they were deemed viable and/or consolidating into central wastewater systems which were the existing sewer systems. Financial equity across communities within the region was part of the discussion.

Chair Lopez questioned what the measurement term was in the handout under the heading, Initial Results. Vice Chair Ahrens replied that it was micro-Siemens percent, a measurement of electroconductivity and identifies certain particulates in the water.

ENVIRONMENTAL HEALTH SPECIALIST REPORT - ARLEEN AGUIRRE

Ms. Aguirre reported the West Side neighborhood cleanup will be April 20, 2024, from 8:00 a.m. to 2:00 p.m. She noted that Pueblo County had asked the Pueblo Department of Public Health and Environment (PDPHE) to sign up for the county outdoor event in observance of Earth Day, on April 22, 2024, noting the street behind the courthouse, West 11th Street, would be blocked

off for the event. There would be vendors sharing information about the environment, recycling, and other programs. The PDPHE would be promoting RecycleWorks and other places to take recycling items in Pueblo County. The PDPHE would also share information about the waste tire program, asking the public to report to PDPHE any areas where waste tires were being illegally dumped in Pueblo County. Ms. Aguirre welcomed questions about the two events in her report.

Chair Lopez questioned whether Ms. Aguirre had an update on what was happening at RecycleWorks or information about a city-wide clean-up happening in the Spring. Ms. Aguirre responded that she had no update on RecycleWorks at the moment. Regarding the city-wide clean-up, Ms. Aguirre replied she believed City Council was working on scheduling it in late April or early May. She stated that she had heard as much by listening to the City Council meetings, but the city had not notified PDPHE. Ms. Aguirre noted that she looked forward to having Mr. Latino on EPAC so that the committee would have access to timely updates on the city's environmental health plans.

WATER QUALITY SUBCOMMITTEE REPORT - ANDRA AHRENS

Ms. Ahren had nothing to report.

SOLID WASTE SUBCOMMITTEE - TED LOPEZ

Chair Lopez had nothing to report.

Chair Lopez questioned the status of Pueblo Area Council of Governments' (PACOG) approval, the start of construction, and the general plans for the lift station on College Road and Dillon. Ms. Ahrens replied that PACOG, the city, and the county had approved the lift station, noting construction had already started. The site approval plans were currently with the State for review and authorization. The project was seeking Urban Renewal Grant funds for utilities. Ms. Ahrens explained it was necessary to raise the ground about 20 feet in order to bring the land above the flood zone. She noted the lift station would service a small development in the area, including a tire shop and a car wash, among other businesses.

Chair Lopez asked if there was anything else from anyone in attendance. Ms. Aguirre commented that she would like EPAC to submit a request to PACOG the need to consider increasing aid for RecycleWorks. She noted that RecycleWorks was struggling with plastics, as they had been for years. Ms. Aguirre stated that RecycleWorks was in need of support and EPAC might be able to help. Chair Lopez offered to work on this with Ms. Aguirre, to talk and make a plan to attend the PACOG meeting as soon as possible.

ADJOURNMENT

Chair Lopez stated the next regularly scheduled EPAC meeting was scheduled for Thursday, June 6, 2024, from 5:15 p.m. to 6:30 p.m. It would be held in person and via Zoom at the Department of Planning and Development, 229 West 12th Street.

There being no further business before EPAC, Chair Lopez adjourned the meeting at 5:41 p.m.

Submitted by:

Yvonne Doria
EPAC Recording Secretary

MINUTES
ENVIRONMENTAL POLICY ADVISORY COMMITTEE
JUNE 6, 2024

A meeting of the Environmental Policy Advisory Committee (EPAC) was convened on Thursday, June 6, 2024, at 5:15 p.m.

Chair Lopez called the meeting to order at 5:30 p.m.

ROLL CALL

Those members present were:

Andra Ahrens
Arleen Aguirre
Richard Hanger
Amanda Weidner
Ted Lopez

Members absent: None

Pueblo County Planning and Development Staff present: Carmen Howard, Director; Emma Strong, Planner II, Yvonne Doria, Administrative Assistant III, Scott Callahan, GIS Mapping Specialist, Aaron Martinez, Program Manager, Pueblo Department of Public Health and Environment

APPROVAL OF THE JUNE 6, 2024, EPAC AGENDA

Chair Lopez called for a motion to approve the agenda of the June 6, 2024, Environmental Policy Advisory Committee meeting as presented.

Ms. Andra Ahrens motioned to approve the agenda of the June 6, 2024, Environmental Policy Advisory Committee meeting as presented. Ms. Amanda Weidner seconded the motion. The motion carried unanimously.

APPROVAL OF MINUTES FROM THE APRIL 4, 2024, EPAC MEETING

Chair Lopez called for a motion to approve the minutes from the April 4, 2024, Environmental Policy Advisory Committee meeting.

Ms. Weidner motioned to approve the minutes from the April 4, 2024, Environmental Policy Advisory Committee meeting. Mr. Richard Hanger seconded the motion. The motion carried unanimously.

CHAIR'S REPORT - TED LOPEZ, CHAIR

Chair Lopez stated he joined the PACOG meeting in May and from that, there were two areas of interest to relay to EPAC members. There is a group that has been investigating changing the composition of asphalt by inclusion of plastics. Chair Lopez said there was talk of the stockyard roads that had been doing a study on using a standard asphalt mix and the other half had been using a half and half mixture of plastics. The second topic was a report given by Dillon Goodman with Transportation Planning for the City of Pueblo, who reminded everyone that June is citywide bike month. Chair Lopez explained riding a bike is healthy and saves costs on transportation. He presented a flyer that had different activities and information was provided on

a bike club that goes to different parts of the city. He also mentioned there was a photo contest, a scavenger hunt, and a Bingo card that people could enter for a chance to win a bicycle.

9-ELEMENT WATERSHED PLAN SAMPLING EFFORT RESULTS AND CLOSING AMERICA'S WASTEWATER GAP MEETINGS WITH EPA UPDATE – DOUG SCHWENKE, P.E.

Mr. Doug Schwenke stated the 9-Element Watershed Plan sampling effort was able to obtain their first set of sample results on the St. Charles River. The results were forwarded to the EPAC committee. He reported there will be another sampling visit scheduled next week. There will be more sites to be added to the current locations. He stated the program was awarded more grant money from Colorado Department of Public Health and Environment (CDPHE) to continue the sampling efforts, noting he supplied the information to the Pueblo Area Council of Governments (PACOG). He stated his team has been talking to the Environmental Protection Agency (EPA) about participating in the Closing America's Wastewater Access Gap program for Pueblo County. He then explained Theresa Connor was in attendance as his guest speaker to present information about the program for the EPA.

Ms. Theresa Connor introduced herself as a contractor for EPA that works with the Enterprise Resource Planning (ERP) consulting team and explained her company is supporting EPA and the initiative for Closing America's Wastewater Access Gap technical assistance initiatives program. Ms. Connor gave a PowerPoint presentation on the background of what the program entailed. The bullet points of discussion pinpointed the background of the initiative, Pueblo County projects, potential funding sources, and determining project areas. Ms. Connor explained the wastewater challenges in rural America and small towns such as Pueblo County that lack basic running water and indoor plumbing needs. Mr. Schwenke stated there are areas of Pueblo County that qualify for the program, noting more outreach studies will be conducted. The United States Department of Agriculture (USDA) is prepared to host events and set up awareness to gain community engagement to help this program evolve.

ENVIRONMENTAL HEALTH JUSTICE ISSUES – AARON MARTINEZ

Mr. Aaron Martinez was asked by Chair Lopez to give a brief introduction about himself. Mr. Martinez explained he was born and raised in Pueblo, Colorado and has worked at the Pueblo Department of Public Health and Environment (PDPHE) for 13 years, and he is a Program Manager for eight different programs. Mr. Martinez explained he sits on the Environmental Justice Board with PDPHE. He expressed that Pueblo County is the most burdened city in all of Colorado. He discussed his PowerPoint presentation in detail and answered questions from the Committee members during the presentation. He briefly discussed three topics: 1. The Pueblo Diesel Plume. 2. A tire shop out of Fowler, Colorado has over five thousand tires on the property and is under enforcement by CDPHE. 3. CCUS – Carbon Capture, Utilization, and Sequestration.

ENVIRONMENTAL HEALTH SPECIALIST REPORT - ARLEEN AGUIRRE

Ms. Arleen Aguirre reported there will be a community cleanup this weekend for the zip code of 81007 for anyone who wants to bring household clean up items. There are new QR codes that need to be presented to the Pueblo Department of Public Health and Environment.

SOLID WASTE SUBCOMMITTEE - TED LOPEZ

No report was given.

ADJOURNMENT

The next regularly scheduled EPAC meeting is Thursday, August 1, 2024, from 5:15 p.m. to 6:30 p.m. It will be held in person and via Zoom at the Department of Planning and Development, 229 West 12th Street.

There being no further business before EPAC, Chair Lopez adjourned the meeting at 6:47 p.m.

Bree Thornton
EPAC Recording Secretary

Attachments: Meeting handouts

Environmental Justice Pueblo County

Aaron Martinez Program Manager

06/06/24

Pueblo Department of Public Health & Environment

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CDPHE Colorado Enviro Screen

The Enviro Screen score combines five components: Environmental exposures, Environmental effects, Climate vulnerability, Sensitive population, and Demographics.

	GEOID	County Name	EnviroScreen Score Percentile	EnviroScreen Score	Pollution and Climate Burden Score Percentile	Pollution and Climate Burden Score	Health and Social Factors Score Percentile	Health and Social Factors Score
1	08101	Pueblo County	100	86.055	93.75	63.073	96.875	72.405
59	08089	Otero County	98.438	70.701	76.562	48.88	100	76.759
50	08071	Las Animas County	96.875	63.59	65.625	46.524	98.438	72.535
3	08105	Rio Grande County	95.312	61.264	64.062	46.14	93.75	70.463
53	08077	Mesa	93.75	59.626	87.5	58.962	71.875	53.666

Pueblo Department of Public Health & Environment

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Grove diesel plume

Pueblo Department of Public Health & Environment

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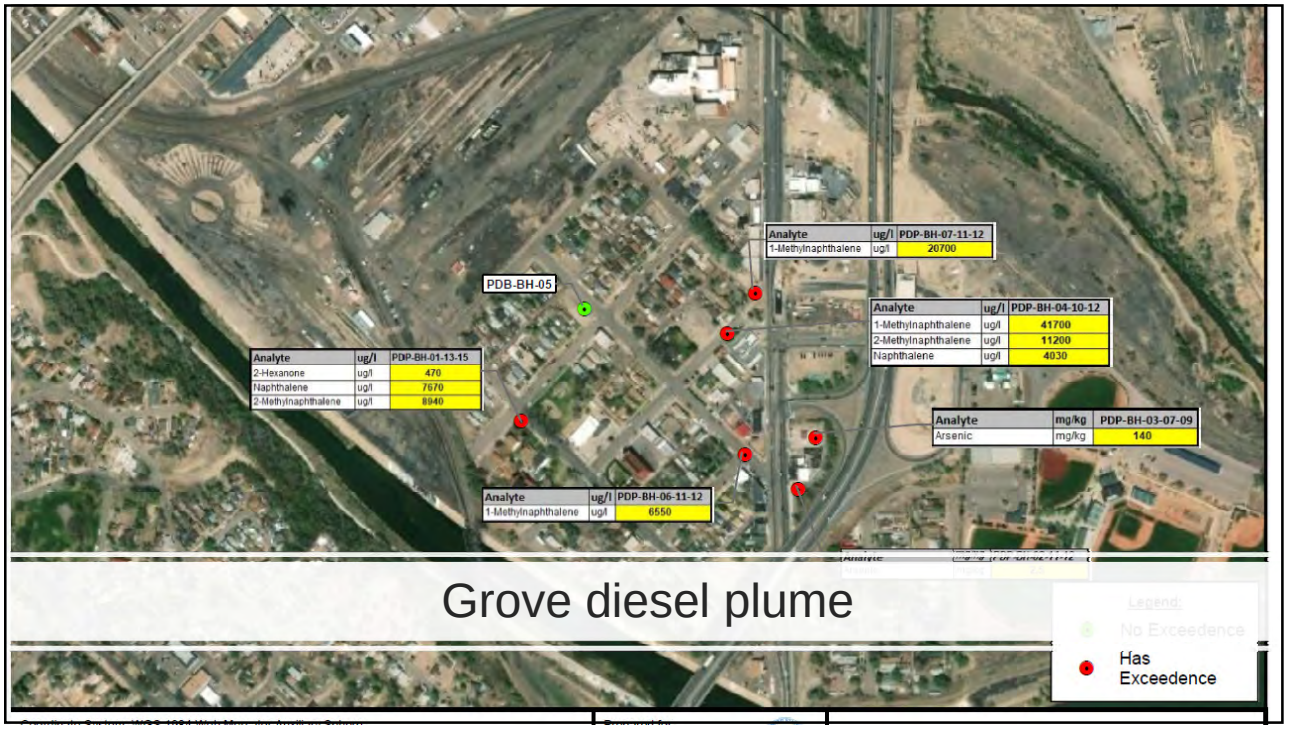

47

Grove

Pueblo Department of Public Health & Environment

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Weathered Diesel

WESTON SOLUTIONS

PHOTOGRAPH LOG

Project Name: Pueblo Diesel Plume	**Site Location:** 400 Block South Santa Fe Ave, Pueblo, Colorado.	**TDD No.** 0003-1805-03
Photo No. 11 / **Date:** 4/25/18		
Direction Photo Taken: East		
Description: Free product found while ground water sampling borehole number seven. Sample: PDP-FP-01-20180725		

67

60500 Huckleberry Rd

Ag tires

87

97

107

117

Pueblo Department of Public Health & Environment

127

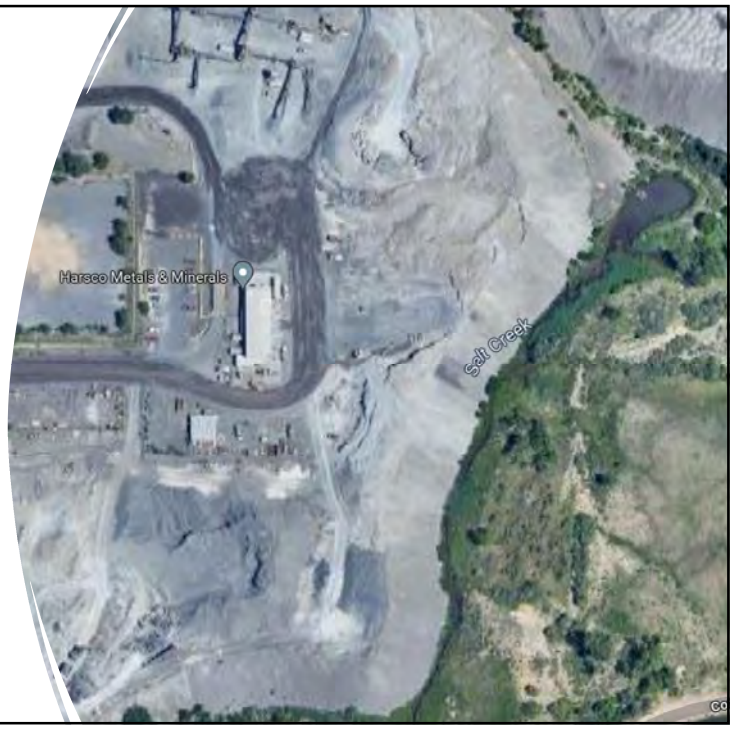
137

3000 Plus tires

Pueblo Department of Public Health & Environment

147

EAF slag



157

bon capture
tilization sequestration (CCUP)


THE COLORADO SUN

Climate Change Hits Home

Colorado gets $32 million to create carbon-stuffing hub underground at Pueblo

School of Mines will run tests for a regional hub to sequester greenhouse gases from the city's big cement and power plants

167

17

Thank you!

Aaron Martinez
719 583-4341
martinezaa@pueblocounty.us

Pueblo Department of Public Health & Environment

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PUEBLO BIKE MONTH

JUNE 2024

GET YOUR FREE BINGO CARD TO PARTICIPATE

ACTIVITIES INCLUDE:

- SOCIAL RIDES
- SPECIAL EVENTS
- TRIP IDEAS
- PHOTO CONTEST
- SCAVENGER HUNT
- BIG PRIZES!

BIKE MONTH SUPPORTERS

SOUTHERN COLORADO RUNNERS

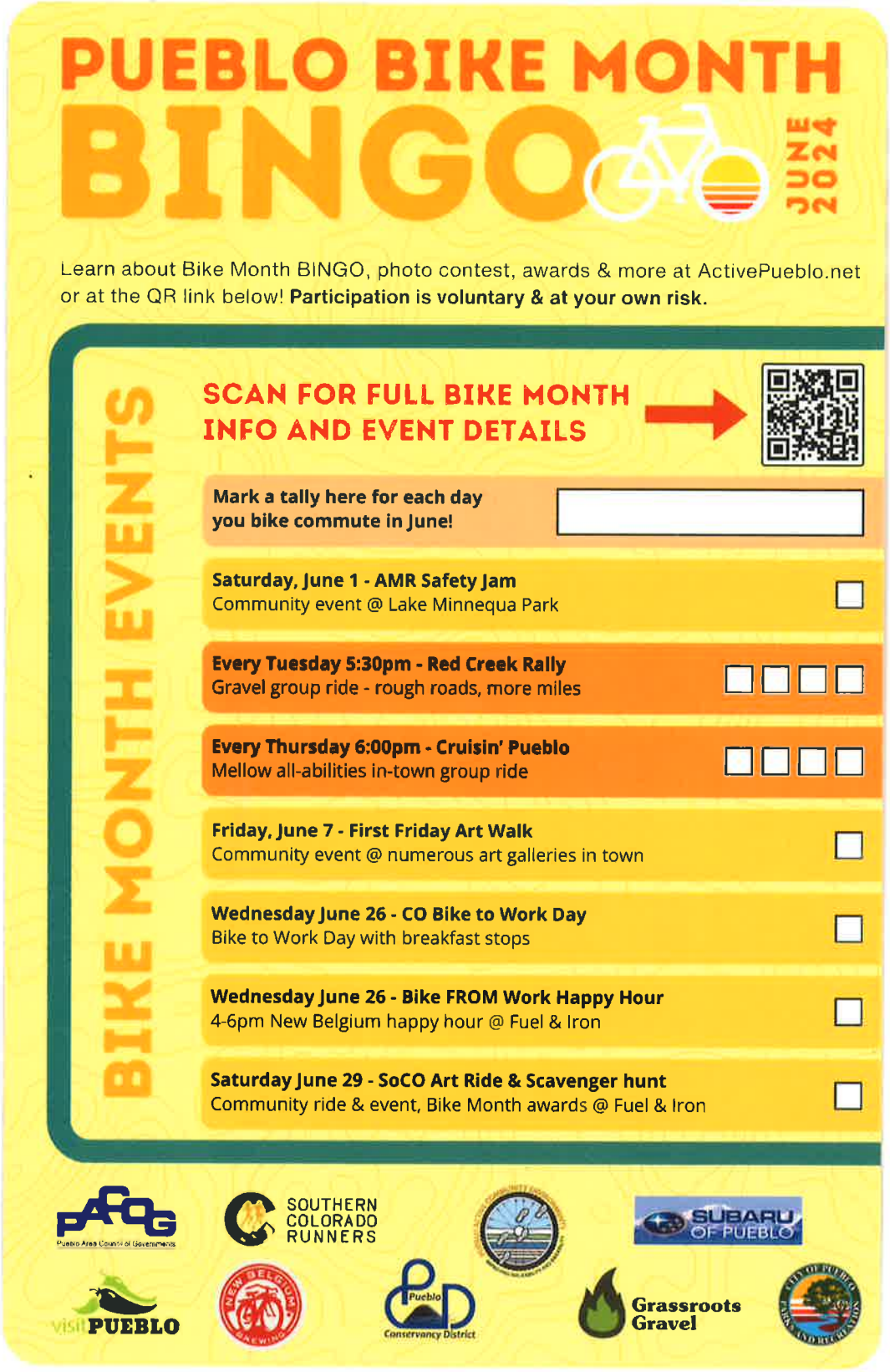
visitPUEBLO

Pueblo Conservancy District

Grassroots Gravel

FULL INFO:

Scan QR or visit www.activepueblo.net


PUEBLO BIKE MONTH
BINGO
JUNE 2024
Learn about Bike Month BINGO, photo contest, awards & more at ActivePueblo.net or at the QR link below! Participation is voluntary & at your own risk.
BIKE MONTH EVENTS
SCAN FOR FULL BIKE MONTH INFO AND EVENT DETAILS
Mark a tally here for each day you bike commute in June!
Saturday, June 1 - AMR Safety Jam
Community event @ Lake Minnequa Park
Every Tuesday 5:30pm - Red Creek Rally
Gravel group ride - rough roads, more miles
Every Thursday 6:00pm - Cruisin' Pueblo
Mellow all-abilities in-town group ride
Friday, June 7 - First Friday Art Walk
Community event @ numerous art galleries in town
Wednesday June 26 - CO Bike to Work Day
Bike to Work Day with breakfast stops
Wednesday June 26 - Bike FROM Work Happy Hour
4-6pm New Belgium happy hour @ Fuel & Iron
Saturday June 29 - SoCO Art Ride & Scavenger hunt
Community ride & event, Bike Month awards @ Fuel & Iron
PACOG
Pueblo Area Council of Governments
SOUTHERN COLORADO RUNNERS
SUBARU OF PUEBLO
visit PUEBLO
NEW BELGIUM BREWING
Pueblo Conservancy District
Grassroots Gravel

Large Item Drop-Off

**City residents only*

1) Purchase a voucher at Public Works
211 E. D Street - (719) 553-2295

2) Drop off at Pueblo RecycleWorks
1595 Stockyard Rd.
Thursday & Friday (1-5 PM)
Saturday & Sunday (10 AM - 1 PM)

Items accepted include:
Mattresses, box springs, sofas, love seats, recliners, tires (no rims)

Full Pueblo Recycle Guide available at

pueblohealth.org

Paint & Cooking Oil
Southern Colorado Services & Recycling
1731 N. Erie Ave (719) 542-6910

Appliances, Electronics, TVs*
3R Technology Solutions
1045 S. Santa Fe Dr (719) 645-7497
8 AM to 4 PM *Fees for TVs only

Furniture
Habitat for Humanity
2313 S. Prairie Ave (719) 543-0702
9 AM to 5 PM
Good condition, usable furniture, fixtures, lighting, and cabinets.

General Recycling
Pueblo RecycleWorks
1595 Stockyard Rd (719) 553-2748
Thursday & Friday (1-5 PM)
Saturday & Sunday (10 AM - 1 PM)
Glass, cardboard, papers, metals, etc.

6-6-2024 EPAC Meeting

Recycling Guide

Readers are encouraged to contact each location, business, or organization for the most current information regarding hours, recycling procedures, acceptable items, and fees.

Pueblo Department of Public Health & Environment

MINUTES

ENVIRONMENTAL POLICY ADVISORY COMMITTEE

THURSDAY, AUGUST 1, 2024

A meeting of the Environmental Policy Advisory Committee (EPAC) was convened on Thursday, August 1, 2024, from 5:21 p.m. to 5:59 p.m.

ROLL CALL AND DECLARATION OF QUORUM

Roll-Call Attendance: P=Present, E=Excused, A=Absent

Chair Ted Lopez	P	Rich Hanger	P
Vice-Chair Andra Ahrens	**P**	Amanda Weidner	**P**
Arleen Aguire	**P**		

Staff Present:

Emma Strong, Planner II
Yvonne Noble, Administrative Assistant III

Others Present:

Douglas E. Schwenke, RESPEC Principal Engineer
Casey Hinkson, RESPEC

Called to Order: 5:21 p.m.

APPROVAL OF AUGUST 21, 2024, AGENDA

- Changes to the Agenda: *No*
    - *Vice Chair, Ahrens moved to approve the Agenda. Ms. Weidner, seconded. The motion passed unanimously.*

APPROVAL OF JUNE 6, 2024, MINUTES

- *Corrections Requested: Yes*
    - *Approved, as amended by Vice Chair Ahrens, seconded by Ms. Weidner, unanimously approved.*
- Corrections to be provided to the recording secretary for addition into the June 6, 2024, meeting minutes.

CHAIRPERSON'S REPORT

None.

REPORTS:

- 9-Element Watershed Plan Sampling Effort Update & EPA Program, Closing America's Wastewater Access Gap:
    - Mr. Schwenke provided a report regarding the second set of water quality sampling on the St. Charles River, and future studies from the CDPHE sampling site.
    - Mr. Schwenke provided an overview of the planned site visit to Pueblo County (St. Charles Mesa, Baxter Subdivision, King-Dunn Subdivision) by the EPA Program, Closing America's Wastewater Access Gap.
- Environmental Health Specialist Report:
    - Ms. Aguirre reported on the July 27th PDPHE held a used motor oil drop at Pueblo Recycleworks.
    - Ms. Aguirre reported the week of July 12th, PDPHE removed waste tires from an identified waste tire dump site in Pueblo County.
        - Two waste tire collections are being planned for Pueblo County (Santa Fe/Avondale/Boone/Wild Horse areas). Events anticipated in September / October 2024.
- Water Quality Subcommittee Report:
    - None
- Solid Waste Subcommittee Report:
    - None

RECOMMENDATIONS TO PACOG:

Pueblo County High School WWTF Expansion	Casey Hinkson, RESPEC
Request: Approval for expansion to the facility to accommodate increase in the student and staff population, as well as to provide additional wastewater treatment, particularly for nitrogen levels	Forward a recommendation of PACOG approval.
Moved by Vice Chair Ahrens, seconded by Ms. Weidner, unanimously approved.	

NEXT MEETING:

October 3, 2024, at 5:15 p.m.

ADJOURNMENT: 5:59 pm

For detailed information pertaining to items discussed at this meeting, please refer to the recording of this meeting.

Submitted by,

Yvonne Noble, Recording Secretary

Carmen Howard, Director
Pueblo County Government Services Center
Planning and Development
201 W. 8th Street
Pueblo, CO 81003-2810

719.583.6100 (main)
http://county.pueblo.org/planning

APPENDIX J

9-ELEMENT WATERSHED PLAN: CHAPTERS 1-5 AND 12

SAINT CHARLES RIVER OUTLET WATERSHED IMPLEMENTATION PLAN

DRAFT REPORT RSI-3522

PREPARED BY
Doug Schwenke
Natalie Acosta
Willow Hassel
Cindie Kirby

RESPEC
5540 Tech Center Dr
Colorado Springs, CO 80919

PREPARED FOR
Pueblo Area Council of Governments
229 West 12th Street
Pueblo, CO 81003-2810

DECEMBER 2024

Project Number W0275.23010

LIST OF ABBREVIATIONS

µg/L	micrograms per liter
ACEP	Agricultural Conservation Easement Program
AFA	Alternative Funding Arrangement
AFO	animal feeding operation
AFP	Announcement for Funding Proposals
AML	abandoned mine land
AWEP	Agricultural Water Enhancement Program
BMP	best management practices
BMPDB	International Stormwater Best Management Practices Database
CAFO	concentrated animal feed operation
CASTNET	Clean Air Status and Trends Network
CAWA	Colorado Ag Water Alliance
CCR	Code of Colorado Regulation
CDPHE	Colorado Department of Public Health and Environment
cfu/head/day	colony-forming units per head per day
CIG	Conservation Innovation Grants
CPPE	Conservation Practice Physical Effects
CPS	Conservation Practice Standard
CRP	Conservation Reserve Program
CSP	Conservation Stewardship Program
CSU	Colorado State University
CTA	Conservation Technical Assistance
CWA	Clean Water Act
CWCB	Colorado Water Conservation Board
CWSRF	Clean Water State Revolving Fund
DRUM	Defense-Related Uranium Mine
EPA	U.S. Environmental Protection Agency
EQIP	Environmental Quality Incentives Program
ESRI	Environmental Systems Research Institute, Inc.
EWP	Emergency Watershed Protection Program
FEMA	Federal Emergency Management Agency
FRPP	Farm and Ranch Lands Protection Program
GRP	Grass Reserve Program
HUC	Hydrologic Unit Code
lb/year	pounds per year
LID	Low Impact Development
mg/L	milligrams per liter
mi^2	square miles
MIDS	Minimal Impact Design Standards
mL	milliliter
mpn	most probable number
MS4	Municipal Separate Storm Sewer System

LIST OF ABBREVIATIONS (CONTINUED)

NADP	National Atmospheric Deposition Program
NLCD	National Land Cover Dataset
NPS	nonpoint source
NRCS	Natural Resources Conservation Service
OHV	Off Highway Vehicle
OWTS	Onsite Wastewater Treatment System
PACOG	Pueblo Area Council of Governments
PEPO	Public Education, Participation, and Outreach
PFAS	per- and polyfluoroalkyl substances
PLET	Pollutant Load Estimation Tool
RCD	Resource Conservation and Development
RCPP	Regional Conservation Partnership Program
SSURGO	Soil Survey Geographic Database
SWAP	Source Water Assessment and Protection
SWPPP	stormwater pollution prevention plan
TMDL	total maximum daily load
TSS	total suspended solids
USBR	U.S. Bureau of Reclamation
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WFPO	Watershed Protection and Flood Prevention Operations
WHIP	Wildlife Habitat Incentive Program
WHRB	Watershed Rehabilitation
WRP	Wetlands Reserve Program
WRSF	Water Supply Reserve Funds
WWTP	Wastewater Treatment Plant

1.0 INTRODUCTION

With assistance from RESPEC Company, LLC (RESPEC), the Pueblo Area Council of Governments (PACOG) set out to create and execute a 9-Element Watershed Plan for Pueblo County (County). Planning efforts have been underway since 2022. The purpose of this watershed plan is to bring PACOG members together to protect our shared natural resources and ensure their beneficial uses are protected for future generations. After careful consideration, stakeholder input, and acquisition of survey input, the Saint Charles River was identified as PACOG's priority water body for this planning effort.

The primary purpose of this implementation plan is to recommend best management practices (BMPs) that would reduce pollutants of concern within Pueblo County Colorado, specifically the Saint Charles River Outlet Watershed (Hydrologic Unit Code [HUC] 110200021201) from nonpoint sources (NPSs). Although this implementation plan is a stand-alone NPS plan, water planning should be done in a holistic manner, with teamwork between point and NPSs of pollution. Pollution reductions from NPSs upstream of point sources reduce the strain on the point sources. Municipal, industrial, and agricultural entities working together toward the shared goal of protecting waterbodies before they become impaired will reduce future regulations on these entities.

The implementation plan is based on an adaptive approach that emphasizes making continued progress toward achieving milestones and load reduction by identifying the most impactful implementation measures for priority areas. This implementation plan summarizes past conservation accomplishments and recommends implementation actions that can assist residents, landowners, and stakeholders in the project area to improve water quality. Private, local, state, and federal partnership efforts should continue to support and promote the implementation of management measures while additional water quality monitoring is conducted to guide watershed plan revisions and assess adaptive implementation activities.

The implementation plan builds on past conservation accomplishments in the project area and complements water quality efforts by the following organizations, as well as the local communities:

Table 1-1. PACOG Stakeholders for the 9-Element Watershed Plan Preplanning Process

/ City of Pueblo – Wastewater Department	/ EPAC Board Members
/ City of Pueblo – Stormwater Department	/ Pueblo Department of Public Health – OWTS
/ Pueblo Board of Water Works	/ Beulah Water Works District
/ School District 60	/ Pine Drive Water District
/ School District 70	/ Blende Sanitation District
/ Pueblo West Metropolitan District	/ Pueblo Nature Center
/ Colorado City Metropolitan District	/ Southeastern Colorado Conservatory
/ Town of Rye	/ Pueblo Plex – Pueblo Chemical Depot
/ Town of Boone	

/ Pueblo Airport Industrial Park	/ San Isabel Land Protection Trust
/ Pueblo Reservoir State Recreation Area	/ Palmer Land Conservatory
/ Pueblo County Stormwater	/ State of Colorado Land Trust
/ Saint Charles Mesa Sanitation District	/ Colorado Cattleman's Association
/ Meadowbrook Mobile Home Park	/ Genova Brothers Farms and Feedlots
/ Avondale Water and Sanitation District	/ Chili Growers Association
/ Comanche Generating Station	/ US Consolidated Farm Service Agency
/ Evraz Rocky Mountain Steel	/ Bartolo Family Farm
/ Salt Creek Metropolitan District	/ PACOG Members
/ Fort Reynolds	

This implementation plan also incorporates the strategies, goals, and objectives of CDPHE's *Colorado's Nonpoint Source Management Plan: 2022* and addresses the U.S. Environmental Protection Agency (EPA) nine key elements outlined in the management plan [CDPHE, 2022]. Table 1-2 describes these nine key elements and their corresponding locations within this implementation plan [EPA, 2008].

This implementation plan is not intended to identify which specific BMPs or remediation actions should be included in certain discharge permits, ordinances, stormwater pollution prevention plans (SWPPPs), or conservation plans. Rather, the plan provides an adaptive implementation approach with suggested structural and nonstructural BMPs necessary to address the NPSs of pollutants of concern. For the purposes of this implementation plan, BMPs refer to structural and nonstructural actions or measures installed or implemented to reduce the delivery of sediment and nutrients to waterbodies in the project area. Sources of available funding and technical assistance for and associated estimated costs of these BMPs are included to provide landowners, residents, stakeholders, community leaders, and public agencies perspectives on the technical and economic demands of this watershed plan.

Essential to the development of this implementation plan is ascertaining and collecting feedback and input from a cross section of stakeholders, including cities, counties, sanitation districts, towns, watershed organizations, and others who will identify, fund, and prioritize projects to implement these practices and BMPs. As a part of this project, PACOG surveyed stakeholders in 2022 to determine the NPSs, pollutants of concern, and the project area of concern.

PACOG received participant responses and the top two NPSs of concern were agriculture (contaminants from fertilizer, runoff from grazing lands, or irrigation runoff) and pollution from Onsite Wastewater Treatment Systems (OWTS) in the Saint Charles Mesa area.

Table 1-2. Sections of the Implementation Plan That Fulfill the US Environmental Protection Agency's Nine Key Elements for Watershed Planning

EPA Element Number	EPA's Nine Key Elements Plan	Applicable Section of Implementation Plan
1	Identify the causes and sources of pollution that need to be controlled to achieve load reductions and other goals (e.g., recreational, economic, ecological) identified in the plan.	5.0 Source Assessment 6.0 Priority Areas for Implementation
2	Estimate load reductions expected from the action strategy identified.	6.0 Priority Areas for Implementation 7.0 Best Management Practices Load Reductions
3	Describe NPS management measures, including operation/maintenance requirements, and targeted critical areas (i.e., action strategy) needed to achieve identified load reductions.	6.0 Priority Areas for Implementation 7.0 Best Management Practices Load Reductions 8.0 Past and Current Best Management Practices 9.0 Recommended Best Management Practices
4	Estimate technical and financial assistance needed, associated costs, and/or the sources and authorities that will be relied upon to implement the watershed-based plan.	13.0 Sources of Technical and Financial Assistance
5	Develop an information and education component that will be used to enhance public understanding of the NPS management measures and encourage their early and continued participation in selecting, designing, and implementing the Action Strategy.	10.0 Information, Education, and Outreach
6	Develop a project schedule.	11.0 Criteria to Assess Progress
7	Describe interim, measurable milestones.	11.0 Criteria to Assess Progress
8	Identify a set of criteria to assess progress/effectiveness in achieving water quality standards or other appropriate end targets.	11.0 Criteria to Assess Progress
9	Develop a monitoring component to evaluate the effectiveness of the implementation efforts over time and measured against the criteria established to document load reductions.	12.0 Monitoring Best Management Practice Effectiveness

2.0 WATERSHED CHARACTERIZATION

The project area for this implementation plan is shown in Figure 2-1, which includes the mainstem of the Saint Charles River from the confluence with Edison Arroyo to the confluence with the Arkansas River (HUC 110200021201) in Pueblo County, Colorado. The Saint Charles River Outlet flows South to North and has a total area of approximately 58 square miles.

A summary of the project area's land cover characteristics was completed using the 2019 National Land Cover Dataset (NLCD). The NLCD is a 16-category, multilayer land cover classification dataset derived from Landsat imagery and ancillary data for consistent land cover data for all 50 states. The land cover is depicted in Figure 2-2 [Multi-Resolution Land Characteristics Consortium, 2019]. In the project area approximately 75 percent of the area is herbaceous; 14 percent is shrub scrub; and all other land uses make up less than 5 percent each.

As indicated in Figure 2-3, precipitation varies throughout the project area. Typical annual precipitation is between 12 inches to 14 inches per year [PRISM Climate Group, 2024].

Of the 1700 acres of irrigated lands withing the Saint Charles River Outlet, 96 percent of parcels indicated practicing the flooding method, and less than 4 percent implement the sprinkler and/or drip methods Figure 2-4. **Irrigation**.

Hydrologic soil groups can significantly impact the amount of water that infiltrates or runs off during precipitation events. Type A soils are generally sand or sandy loams with high infiltration rates; Type B soils are silt loam or loam soils with moderate rates; Type C soils are generally sandy, clay loams with low infiltration rates; and Type D soils are heavy soils; clay loams; and silty, clay soils with low infiltration rates. The project area comprises approximately 7 percent A, 36 percent B, 43 percent C, and 12 percent D soil types. Figure 2-5 shows the distribution of hydrologic soil groups in the watershed using the Soil Survey Geographic Database (SSURGO) [NRCS, 2024a].

The project area comprises approximately 865 acres of the Municipal Separate Storm Sewer System (MS4) Figure 2-2-6. MS4 Boundary in Project Area.

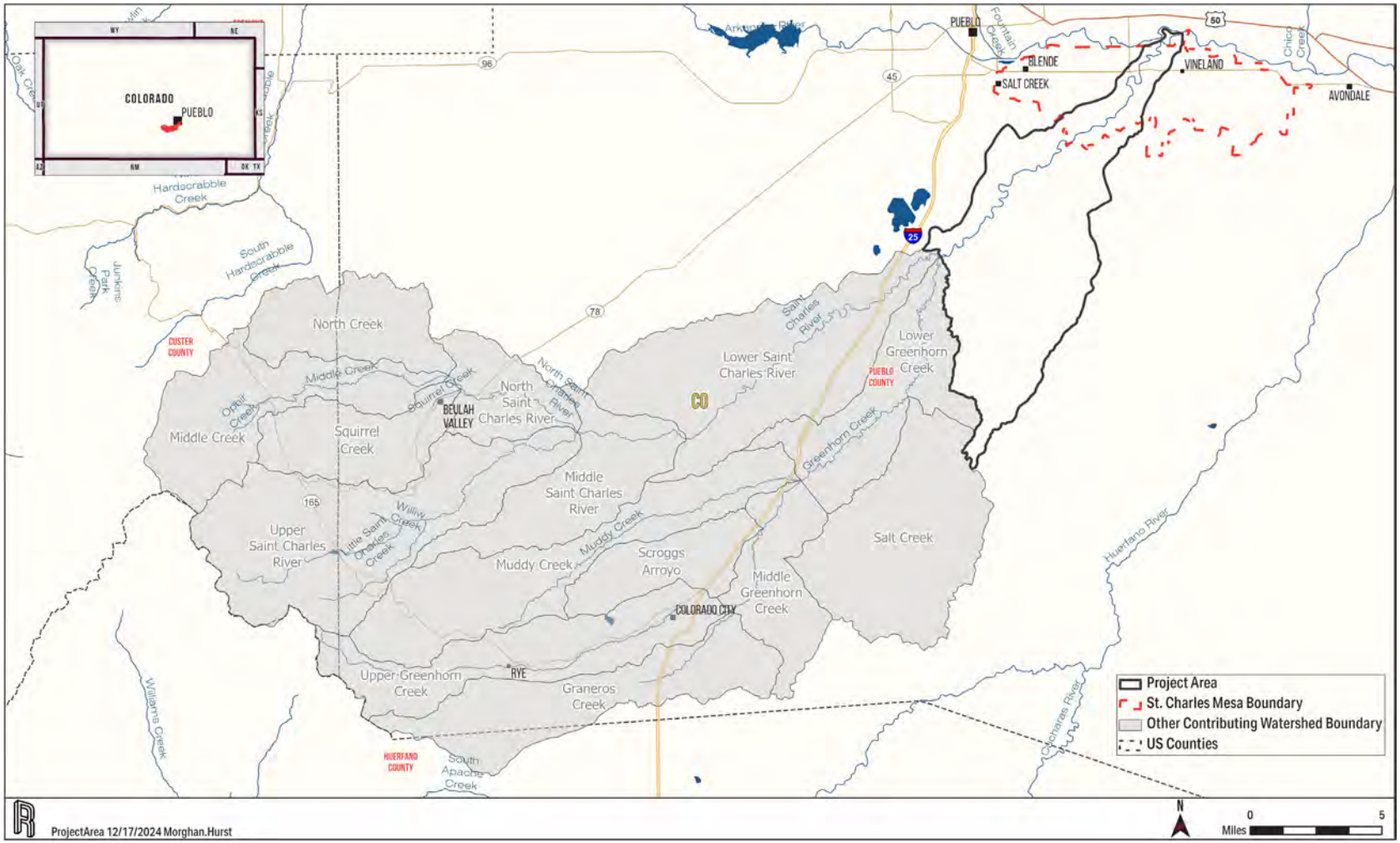


Figure 2-1. Saint Charles River Outlet HUC8 Project Area.

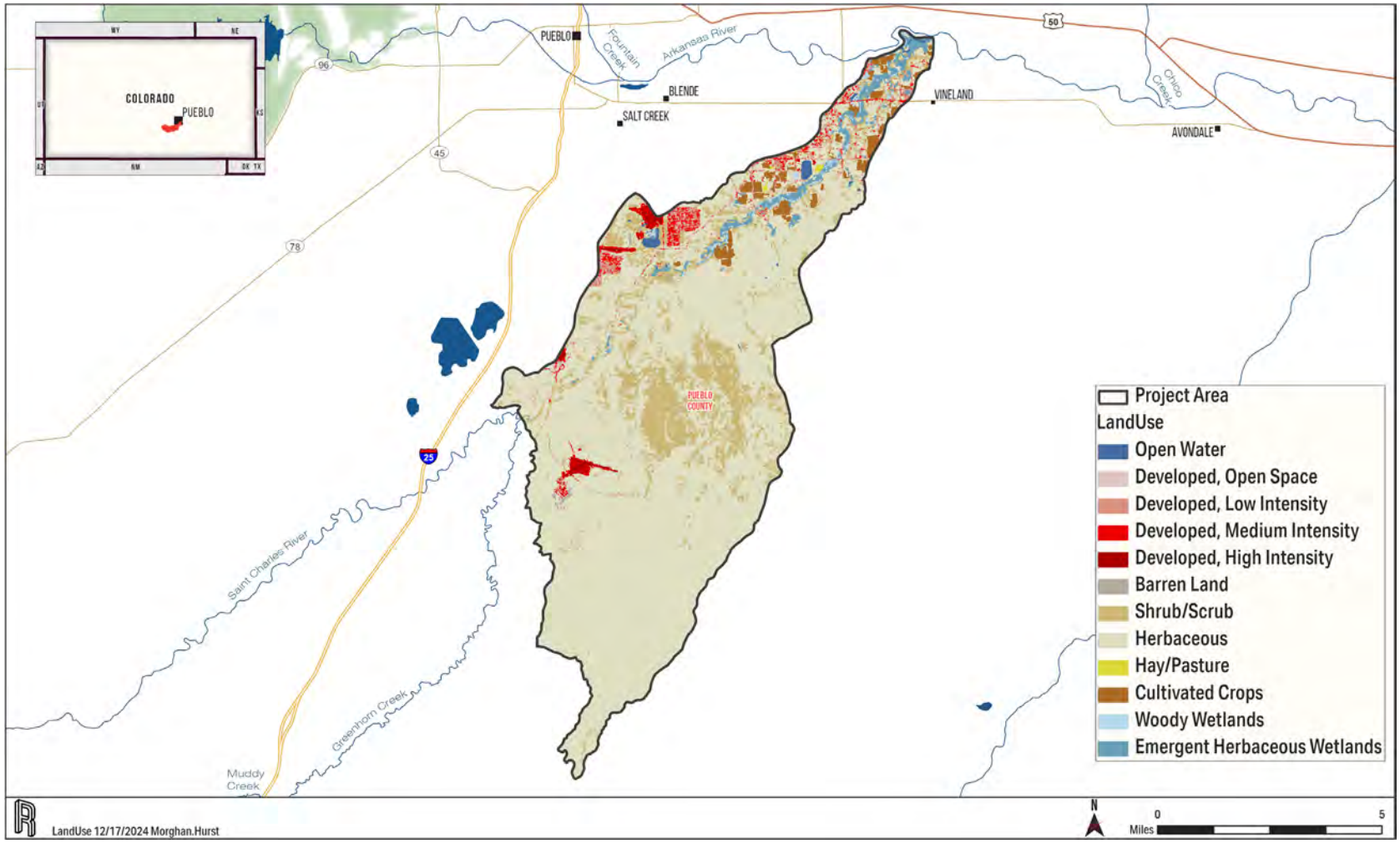


Figure 2-2. National Land Cover Dataset 2019 Land Use.

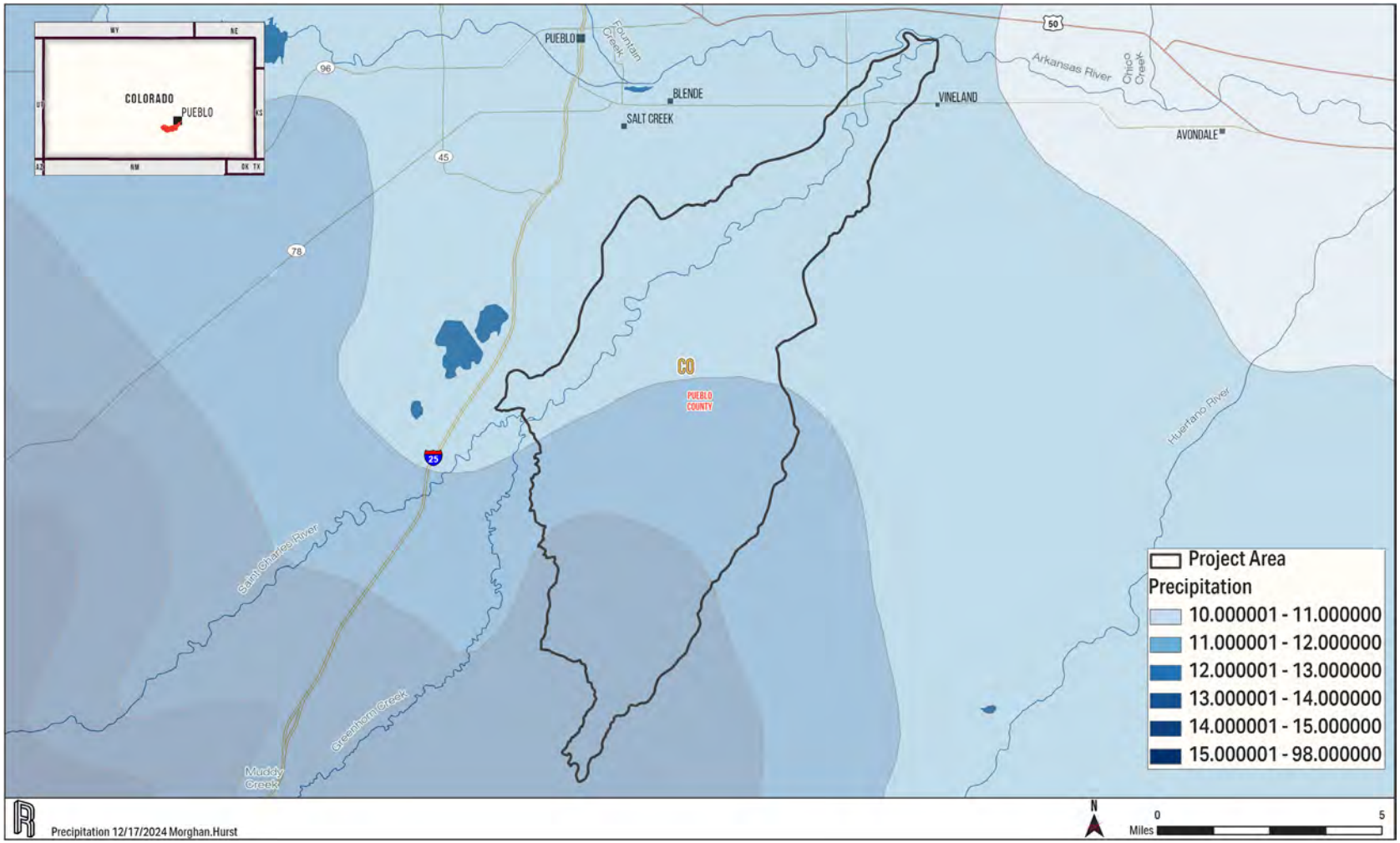


Figure 2-3. Average Annual Precipitation (1981 to 2010).

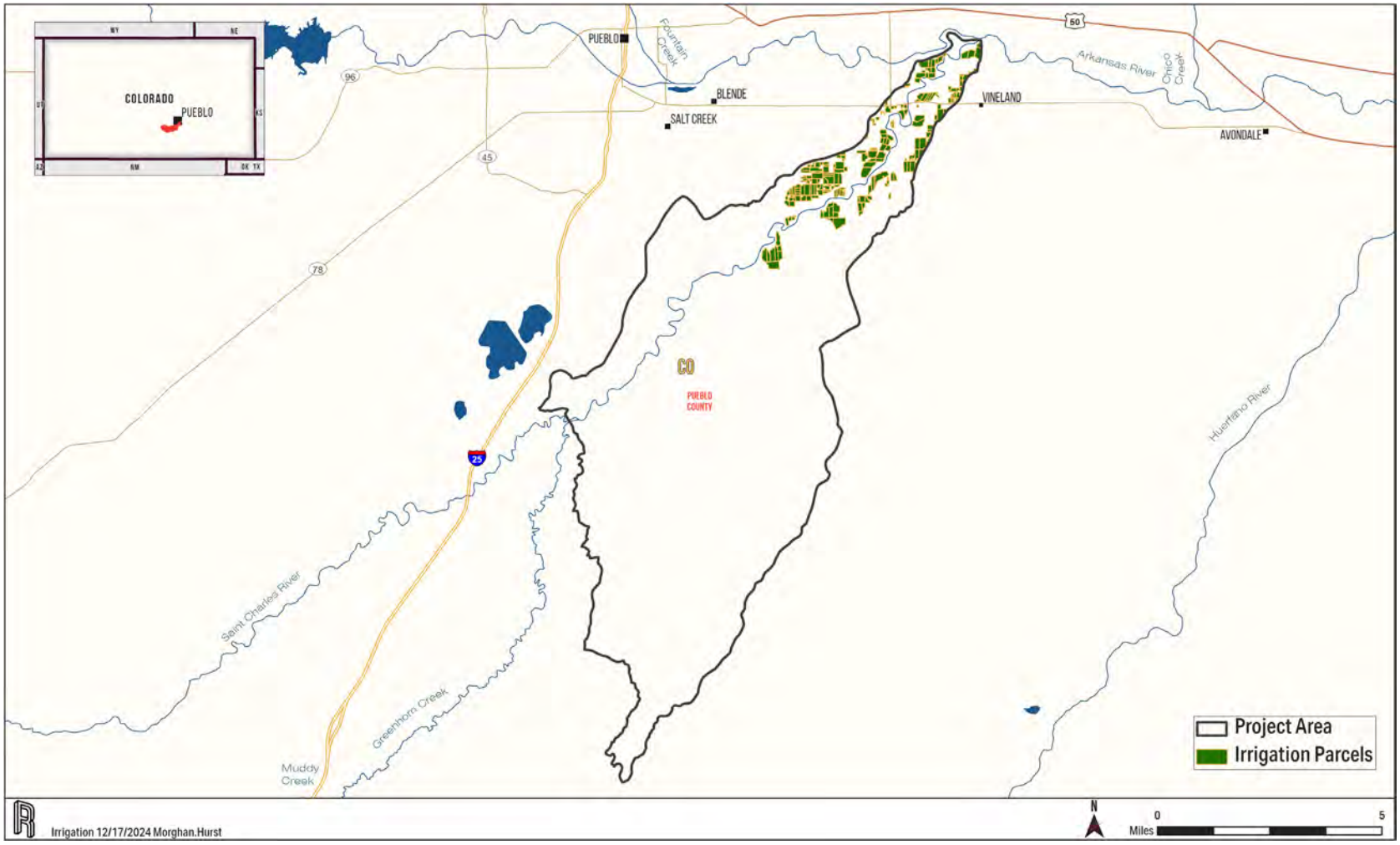


Figure 2-4. Irrigation.

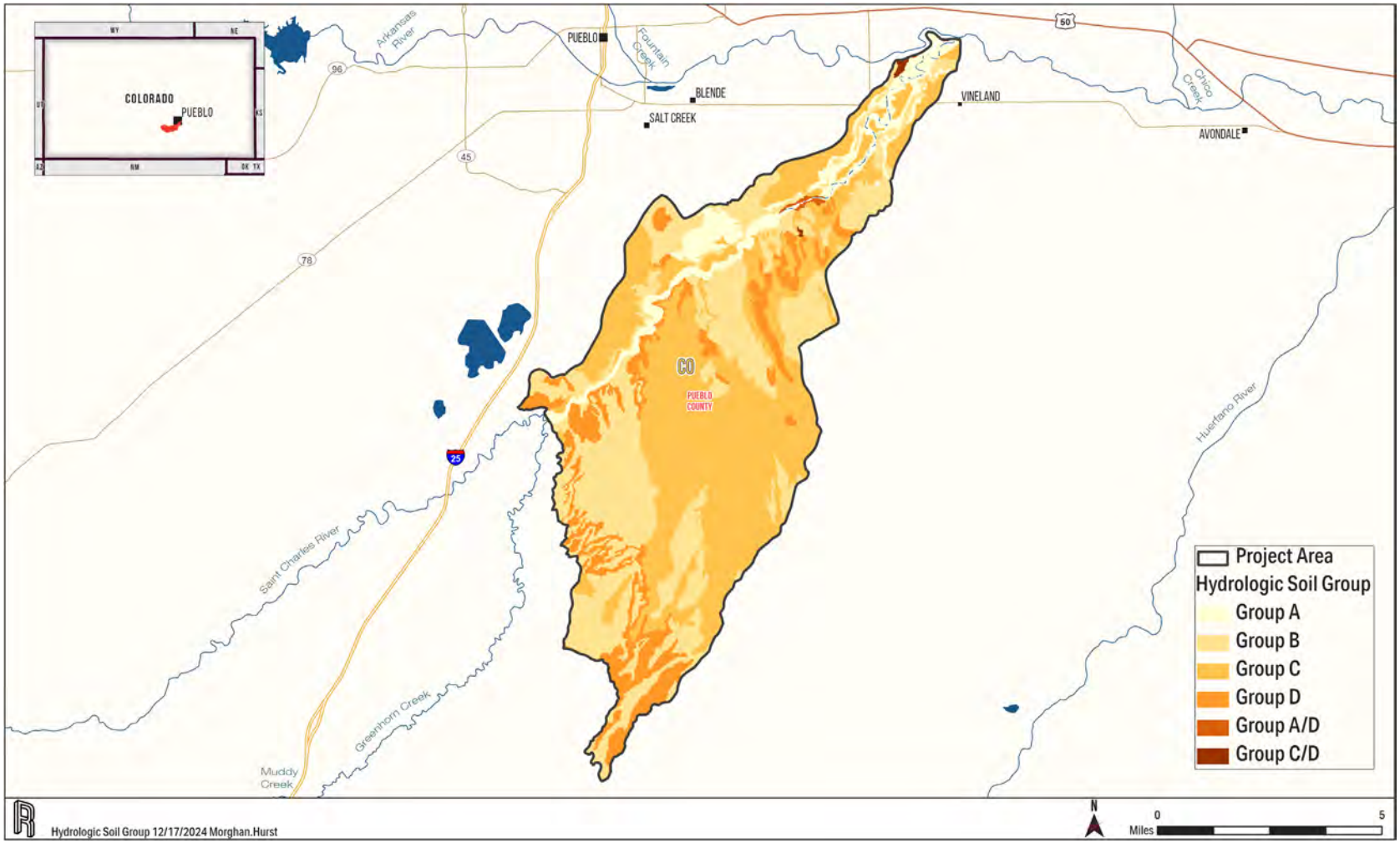


Figure 2-5. Hydrologic Soil Group.

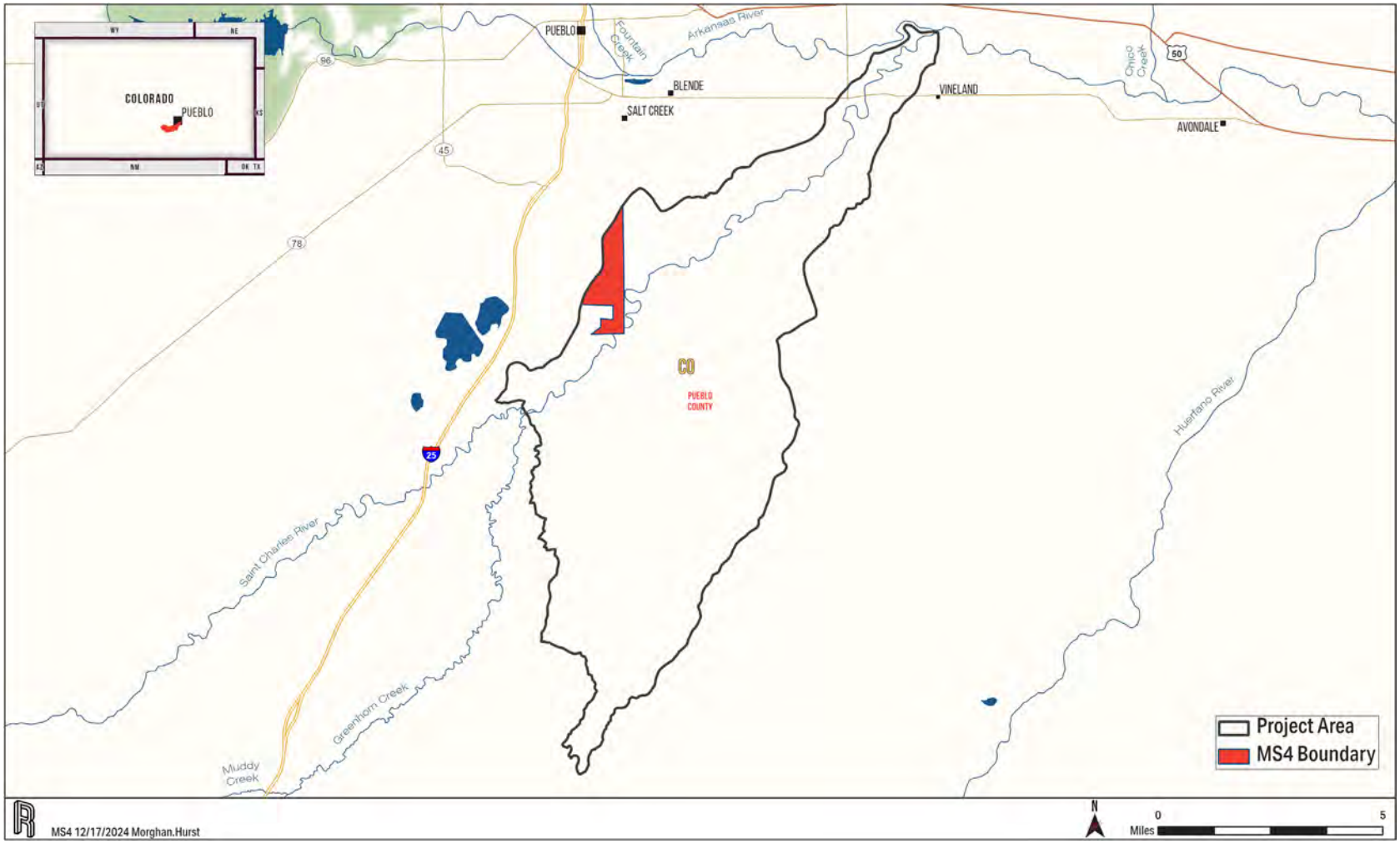


Figure 2-2-6. MS4 Boundary in Project Area

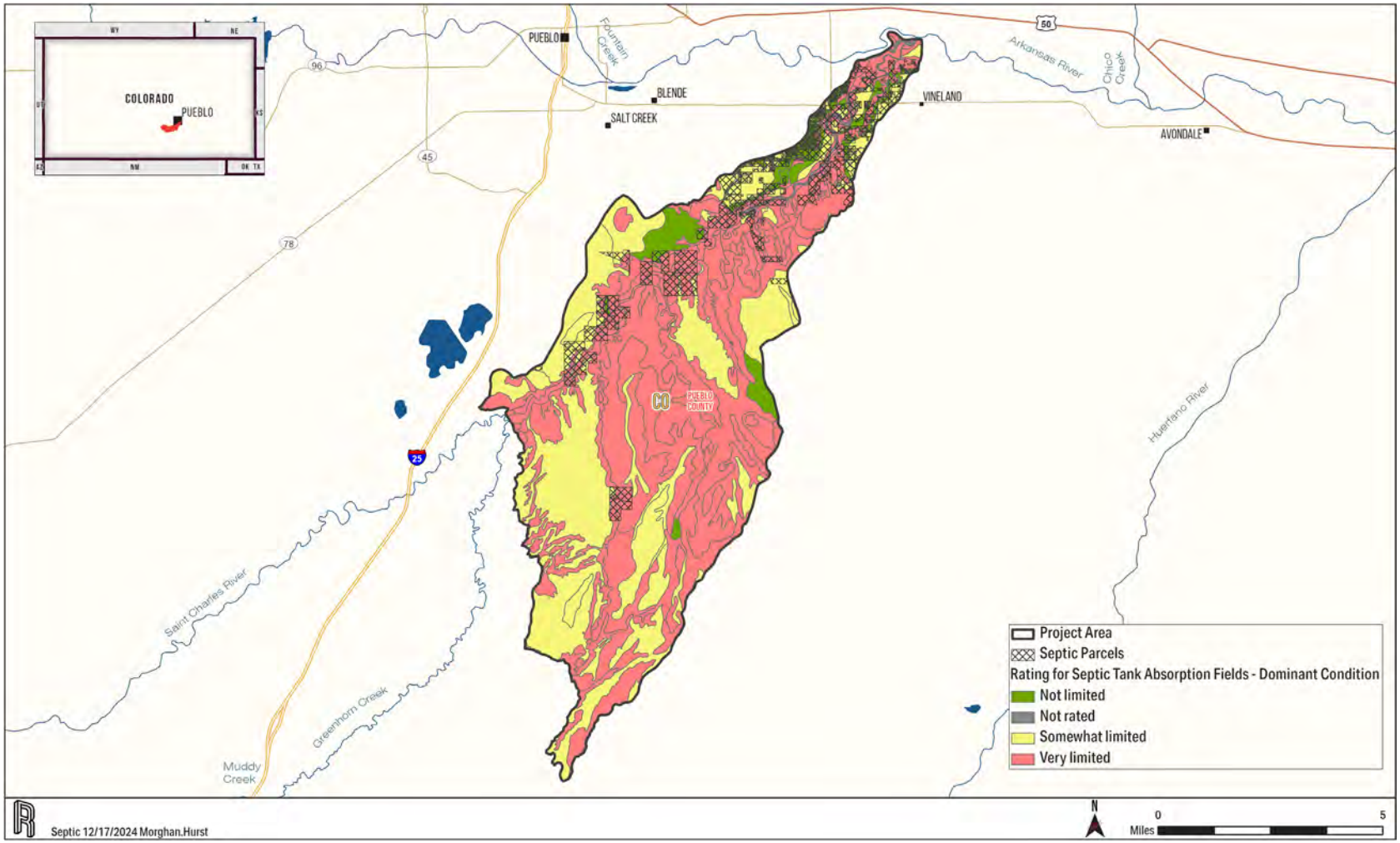


Figure 2-7. Onsite Wastewater Treatment Systems (OWTS) Parcels and Rating for Septic Absorption Fields

3.0 EXISTING WATERSHED PLANS AND OTHER RELATED PLANS AND PROJECTS

There have been many accomplishments within the project area due to the local planning and implementation efforts with community, state, and federal partners. Projects outlined on the Pueblo County Planning & Zoning Division website are listed in Table 3-1.

Table 3-1. Watershed Planning and Major Projects in the Saint Charles River HUC12

Project Type	Name	Year Completed
Planning	Pueblo County Sustainability Plan	2012
Planning	Pueblo Community Energy Plan	2020
Planning	PACOG: Pueblo Regional Bicycle & Pedestrian Master Plan	2020
Planning	Pueblo River Trails Extension & Master Plan Update	2021
Planning	Wetland Potential Conservation Areas	Ongoing
Planning	FEMA National Flood Insurance Study	Ongoing
Policy	Right to Farm & Ranch Policy	2002
Policy	State Engineer's Action on Proposed Water Supplies for Land Use	2005
Other	Pueblo County Census of Agriculture	2017
Other	Survey of Critical Biological Resources	2003

Watershed plans and sampling plans exist throughout the areas contributing to the Saint Charles River Watershed in Pueblo County, summarized below. Saint Charles River planning project documents can be found at the following links. PACOG will evaluate additional planning documents for the Saint Charles River over the coming 2025 calendar year.

- 2023 Saint Charles Basin Sampling and Analysis Plan
- 2020 Water Quality Management Plan

3.1 SAINT CHARLES BASIN SAMPLING AND ANALYSIS PLAN

The objective of the Sampling and Analysis Plan (SAP) is to guide direct stream sampling of the Saint Charles River Outlet Watershed. This sampling will gather data to characterize the watershed, which is essential for developing effective management strategies to achieve water quality goals. PACOG stakeholders identified two major sources of nonpoint source (NPS) pollution in the Saint Charles River Outlet Watershed:

1. Fertilizers, herbicides, insecticides, and salts from irrigation and agricultural processes.
2. Bacteria and nutrients from livestock, pet waste, and faulty septic systems (Onsite Water Treatment Systems, OWTS).

This monitoring aims to assess the impact of these NPS pollutants on water quality and develop a comprehensive watershed inventory. PACOG uses several decision criteria to define load reduction objectives and other goals for the Saint Charles River Outlet Watershed. These criteria help evaluate strategies to achieve desired water quality:

1. **Water Quality Standards**: Assess standards set by regulatory bodies, determining acceptable pollutant levels for parameters such as dissolved oxygen, nutrients, and sediment.
2. **Environmental Impacts**: Evaluate the effects of current pollutant levels on aquatic life, ecosystems, and human health.
3. **Feasibility**: Assess the practicality of implementing measures to reduce pollutants, considering available technologies and best management practices.
4. **Compliance**: Ensure adherence to federal, state, and local regulations regarding water quality standards and pollutant limits.
5. **Cost**: Evaluate the costs of implementing pollutant reduction measures against the anticipated benefits.
6. **Stakeholder Input**: Consider perspectives from environmental groups, local communities, industries, and governmental agencies on pollutant reduction strategies.
7. **Long-term Monitoring**: Establish ongoing monitoring plans to assess the effectiveness of implemented measures and adjust strategies based on data and changing conditions.

The outcomes of the sampling and analysis activities for the Saint Charles River Outlet Watershed include establishing baseline pollutant levels, identifying NPS pollution, and selecting appropriate BMPs. PACOG will collaborate with stakeholders to determine the most suitable BMPs and set pollutant reduction goals. These practices will be implemented, and their effectiveness monitored over time, with adjustments made as necessary to achieve the desired pollutant load reductions.

Overall, these efforts aim to improve water quality by enhancing clarity, reducing pollutants, and supporting healthier aquatic habitats. The plan also seeks to restore and preserve the watershed ecosystem, promoting biodiversity and environmental health. Achieving compliance with water quality standards demonstrates successful regulatory adherence and contributes to public health by providing safer water for various uses. Economic benefits include enhanced recreational opportunities, increased property values, and support for industries reliant on clean water. Stakeholder engagement and satisfaction are fostered through collaborative efforts, and long-term sustainability is ensured through ongoing monitoring and adaptive management practices.

3.2 WATER QUALITY MANAGEMENT PLAN

The Water Quality Management plan provides a comprehensive overview of the water quality management efforts for the Saint Charles River Outlet Watershed. The purpose of the plan is rooted in the requirements of Section 208 of the Federal Clean Water Act, which aims to protect and enhance the nation's waters. The 2019 update of the Pueblo Water Quality Management Plan builds on the original plan from 1977 and its subsequent updates, reflecting ongoing efforts to address water quality issues

in the region. The plan outlines strategies for pollution control, habitat restoration, and community engagement to ensure sustainable water management.

The Water Quality Management plan outlines the strategic goals and policies guiding the plan. It emphasizes the importance of coordinated efforts among local governments, community organizations, and residents to achieve water quality goals. The plan sets out specific objectives for reducing pollutant loads, protecting water resources, and ensuring compliance with environmental regulations. It also highlights the need for adaptive management practices to respond to changing conditions and new information.

The Water Quality Management plan describes the organizational structure and roles of various stakeholders involved in implementing the plan. PACOG serves as the lead planning agency, coordinating efforts with local governments, environmental groups, and other stakeholders. The framework ensures that all parties are engaged in the decision-making process and that their input is considered in developing and implementing water quality management strategies. This collaborative approach is essential for achieving the plan's goals and ensuring long-term sustainability.

Overall, the Water Quality Management plan provides a roadmap for improving and maintaining water quality in the Saint Charles River Outlet Watershed. It emphasizes the importance of data collection and analysis, stakeholder collaboration, and adaptive management practices. By addressing nonpoint sources of pollution, the plan aims to enhance water quality, protect public health, and support economic development in the region.

4.0 STANDARDS AND IMPAIRMENTS

Impairment locations throughout the project area are shown in Figure 4-1. Impaired stream segments in the project area are shown in Table 4-1, with impairments of chromium-VI and manganese. Maps and box plots of each impaired parameter are included in Appendices B and C, respectively [CDPHE, 2024].

The parameters of concern associated with agriculture runoff are nutrients, sediment, *E. coli*., metals and pesticides. The parameters of concern associated with OWTS include emerging contaminants and per- and polyfluoroalkyl substances (PFAS). Contaminants of emerging concern are the different types of chemicals (e.g., medication, personal care products, home cleaning products, lawn care products, and agricultural products, such as insecticides and herbicides) that end up in waterbodies but are not generally treated in wastewater facilities. PFAS is not included in this report. Some emerging contaminants are treated by drinking water and/or wastewater facilities, but these chemicals are not well regulated or understood. A new EPA limit for PFAS of 4 parts per trillion was released in 2024 [EPA, 2024b].

Water quality standards for parameters of concern are based on beneficial-use tiers. For more information on these standards and tiers, visit the CDPHE's Water Quality Control Commission's 5 Codes of Colorado Regulation (CCR) 1002-31 website, last updated June 14, 2023. Access the CDPHE's Water Quality Control Commission Regulation No. 32 website, last updated December 31, 2023, for information on classifications and numeric standards for Arkansas River Basin (5 CCR 1002-32).

The beneficial-use tiers for the Saint Charles River Outlet are as follows:

- Agriculture
- Domestic Water Supply
- Aquatic Life
- Recreation

Figure 4-1. Impaired Waterbodies.

Table 4-1. Clean Water Act Section 303(d)-Impaired Waterbodies Summary

Impairment I.D./ HUC	Aquatic Life Tier/ Recreation Tier	Description	Aquatic Life Impairments	Recreation Impairment	Water Supply Impairment
COARMA06b_A/ 110200021201	Class 2 Warm Water/ Existing Use	Mainstem of the Saint Charles River from the confluence with Edison Arroyo to the confluence with the Arkansas River. Impaired without a TMDL completed.	N/A	N/A	Chromium VI (T) Manganese (D)

D = dissolved
T = total
TMDL = total maximum daily load

5.0 SOURCE ASSESSMENT

Only NPS pollutants are addressed in this report. Outside of MS4-permitted areas, NPSs of nutrients are generally related to runoff from cropland, pastureland, developed land, and other similar lands. NPSs of sediment consist of sediment contributions through wash off, as well as bed and bank erosion during high flows. Sometimes sources are from natural causes. Natural causes are the physical, chemical, or biological conditions that would exist in a waterbody in the absence of measurable impacts from human activity or influence.

5.1 NUTRIENTS AND SEDIMENT

The EPA's Pollutant Load Estimation Tool (PLET) was used to estimate nutrient and sediment loads from different land uses in the Saint Charles River HUC 12 (110200021201) and later to evaluate load reductions that would result from the implementation of various BMPs [EPA, 2022].

For the Saint Charles River HUC 12 the following inputs to the PLET model were included:

- Watershed land-use areas (acres)
  - Urban (non-MS4)
  - Cropland
  - Pastureland
  - Other (all other land uses)
- Prominent hydrologic soil group (A-D)
- Average annual rainfall (inches)
- Rain days/year
- Number of agricultural animals
  - Beef cattle
  - Swine
  - Sheep
  - Horse
  - Chicken
  - Turkey
  - Duck
- Number of septic systems
- Population per septic system
- Septic rate failure
- Urban land-use distribution
- Irrigated cropland

Sediment erosion can be estimated in PLET; however, gullies and streambank erosion were not included because of a lack of data. Wildlife density (animals per square mile) was also not included because of a lack of data and because wildlife is considered a natural source.

Source assessment modeling results for the Saint Charles River Outlet watershed is summarized using the following categories: urban areas (excluding permitted MS4 areas), cropland, pastureland, forest (including scrub/shrub), feedlots, and a combination of all other land uses. The other land uses consist of barren, herbaceous, and wetlands, which typically are not the highest contributors per acre; therefore, BMP planning does not generally focus on these land uses even though they can make up a fairly large portion of the area. Because this is a NPS plan, permitted MS4s, which have limits to meet, are exempt from inclusion in this plan. Table 5-1 shows the percentage of each land-use in the Saint Charles River Outlet Watershed. Table 5-2 shows the estimated pollutant loading from sources in the Saint Charles River Outlet Watershed.

Table 5-1. Land Cover

HUC10	Description	Area (acres)	Urban Non-MS4 (%)	Cropland (%)	Pastureland (%)	Forest (%)	Feedlots (%)	Other Land Uses (%)
110200021201	Saint Charles River Outlet	36,846	2.9	2.36	85.76	8.98	<1	0

Table 5-2. Pollutant Loading Sources

Source	Nitrogen Load (lb./yr)	Phosphorus Load (lb./yr)	BOD Load (lb./yr)	Sediment Load (ton/yr)
Urban	1,336.6	206.1	5,133.9	30.8
Cropland	862.3	195.6	1,787.8	81.8
Pastureland	38,066.4	4,535.2	116,940.7	1,693.8
Forest	1,587.2	150.4	404.3	13.3
Feedlots	268.6	53.7	358.1	0
Septic	149.5	58.6	610.5	0
Total	42,270.6	5,199.6	125,235.2	1,819.6

Error! Not a valid bookmark self-reference.and Figure 5-2 depict nitrogen and phosphorus loading sources by percentage. For both nutrient sources, pastureland contributes the largest annual load by orders of magnitude.

Figure 5-1. Nitrogen Load by Source.

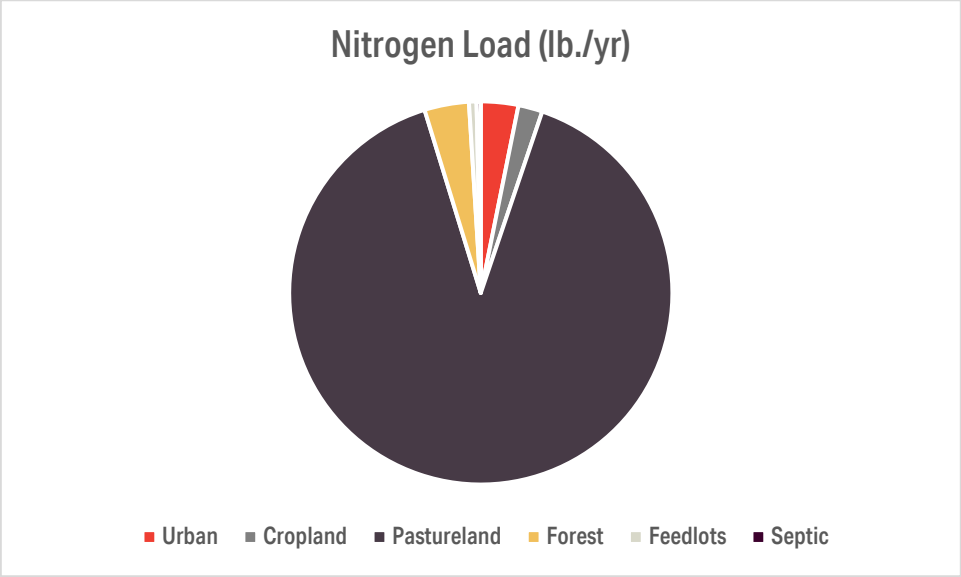
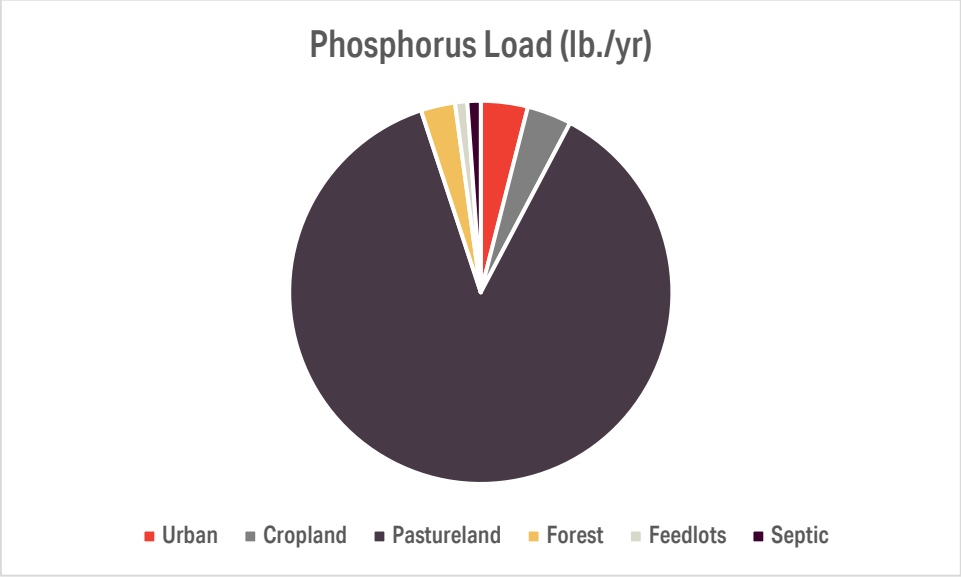


Figure 5-2. Phosphorus Load by Source.



Atmospheric deposition is also a source of nutrients. EPA's Clean Air Status and Trends Network (CASTNET) and the National Atmospheric Deposition Program (NADP) monitor nitrogen deposition (ammonia and nitrate) at locations throughout the United States. PACOG plans to use the SPARROW model published by the U.S. Geological Survey (USGS) to estimate the amount of nitrogen delivered to the stream from atmospheric deposition [USGS, 2019].

5.2 E. COLI

Bacteria comes from the intestines of humans and warm-blooded animals. NPSs of bacteria consist primarily of waste that is transported through wash off from cropland, pastureland, and developed land, as well as septic systems and direct defecation from livestock and wildlife. For the purposes of this project, bacteria from wildlife are assumed to be a natural background source and are not included in the assessment.

E. coli from human and animal waste are dispersed throughout the landscape, spread by humans, and/or treated in facilities. Once *E. coli* are in the environment, their accumulation on land and delivery to the stream are affected by die-off and decay, surface imperviousness, detention time, ultraviolet exposure, and other mechanisms. Quantifying *E. coli* sources using PLET is not recommended [Tetra Tech, Inc., 2022], so an assessment of bacteria production within the watershed was completed. This assessment included humans (Wastewater Treatment Plants [WWTPs] and Onsite Wastewater Treatment Systems [OWTSs]), and livestock (cattle, horses, poultry, sheep, and hogs); however, wildlife was not included because wildlife was assumed to be a natural source of bacteria. Publicly owned WWTPs are highly regulated and are not a significant source of *E. coli*. In some cases, WWTPs even provide dilution from other sources. OWTS contributions are largely dependent on soil and geology in an area, as well as their proximity to a waterbody. Additionally, point sources are not a focus of this study; therefore, WWTP estimates were added primarily as a comparison to the production of bacteria sent to an OWTS.

Livestock contribute *E. coli* loads directly by defecating in streams and indirectly by defecating on cropland or pastures where *E. coli* can wash off during precipitation events, snowmelt, or irrigation. Spreading livestock manure on cropland or pasture also contributes *E. coli* to waterbodies. The livestock in the project area mainly consists of cattle, poultry, hogs, horses, sheep, and goats, which are grazed and/or confined, and manure is spread on crops and pastures.

Pet waste is another potential source of *E. coli*. Pet waste is often left in yards, in parks, and along trails, and can be carried with stormwater to local storm drains and waterbodies.

Natural background sources are inputs that would be expected under natural, undisturbed conditions and include *E. coli* loading from wildlife in the area. Wildlife (e.g., waterfowl and large-game species) also contribute *E. coli* loads directly by defecating while wading or swimming in a stream and indirectly by defecating on lands that produce watershed runoff during precipitation events.

A GIS-based assessment was completed to estimate livestock, wildlife, human, and pet populations. Animal populations were multiplied by average excretion rates from scientific literature to estimate the amount of *E. coli* produced by each source type. The reported literature values for fecal coliform excretion were converted to *E. coli* excretion by using a fecal coliform to *E. coli* ratio of 200:126 most

probable number (mpn) per 100 milliliters (mL). The loads produced by humans are usually treated by WWTPs and OWTSs.

Annual excretion estimates for livestock (excluding hogs) and wildlife were obtained from "BSLC: A Tool for Bacteria Source Characterization for Watershed Management" [Zeckoski et al., 2005], and bacteria estimates for humans and hogs were obtained from *Wastewater Engineering: Treatment, Disposal, and Reuse* [Metcalf and Eddy, 1991]. Annual excretion rates for dogs and cats were sourced from *Identification and Evaluation of Nutrient and Bacterial Loadings to Maquoit Bay, New Brunswick and Freeport, Maine* [Horsley and Witten, Inc., 1996]. Literature values for bacteria excretion rates are estimates and do not represent all sources and dynamics of bacteria in a natural system. Table 5-6 provides the literature rates of *E. coli* (converted from fecal coliform) produced by each animal per day, as well as the respective sources.

Table 5-3. *E. coli* Production Rates From Literature Sources

Category	Subcategory	*E. coli* Production Rate (cfu/head/day)	Source
Humans	WWTP	1,260,000,000	Metcalf and Eddy, 1991
Humans	OWTS	1,260,000,000	Metcalf and Eddy, 1991
Pets	Cats	3,150,000,000	Horsley and Witten, Inc., 1996
Pets	Dogs	3,150,000,000	Horsley and Witten, Inc., 1996
Livestock	Cattle	20,790,000,000	Zeckoski et al., 2005
Livestock	Horses	26,460,000,000	Zeckoski et al., 2005
Livestock	Poultry	58,590,000	Zeckoski et al., 2005
Livestock	Sheep	7,560,000,000	Zeckoski et al., 2005
Livestock	Goats	17,640,000,000	Zeckoski et al., 2005
Livestock	Hogs	5,607,000,000	Metcalf and Eddy, 1991
Wildlife	Deer	220,500,000	Zeckoski et al., 2005
Wildlife	Ducks	1,512,000,000	Zeckoski et al., 2005
Wildlife	Geese	504,000,000	Zeckoski et al., 2005

cfu/head/day = colony-forming units per head per day

Livestock numbers were obtained from the PLET database. Livestock counts available in PLET included cattle, horses, poultry, sheep, and hogs. PLET animal data are from the U.S. Department of Agriculture (USDA) National Agricultural Statistics Service, for which county animal data are summarized at the HUC12 level based on the pastureland area weighted ratio [EPA, 2022].

Hogs and poultry are typically kept in a total confinement facility, with their manure collected in a liquid manure storage area and later spread and/or incorporated on or into agricultural land. Grazed animals can also be kept in sheltered areas but are more likely to be pastured or have access to waterbodies than hogs and poultry. Along the Saint Charles River, grazed cattle have direct access to the river. Manure that has been incorporated or spread into or on agricultural fields can contribute *E. coli* to waterways, but incorporation decreases the likelihood of transport. Livestock numbers include both animal feeding operations (AFOs) and concentrated animal feed operations (CAFOs); both are relevant because manure

is applied to croplands and pasturelands and reaches surface waters even when the manure comes from a zero-runoff feedlot.

Bacteria within wastewater in urban areas with a WWTP were assumed to be treated by an OWTS not a WWTP.

People using an OWTS were estimated by using the Pueblo County OWTS permit count within the Saint Charles River Outlet and multiplying the total by 3, which is the number of individuals assumed to be on each OWTS. This evaluation represents all OWTSs, including compliant systems.

Pet populations were estimated by calculating the number of households from the 2020 U.S. Census Block Centroid Population points within each applicable impairment drainage area and assuming 0.58 dogs (36.5 percent of households times 1.6 dogs per household) and 0.64 cats (30.4 percent of households times 2.1 cats per household) per household [American Veterinary Medical Association, 2016].

Table 5-4 summarizes the number of animals, estimated *E. coli* produced, and percent of the total *E. coli* from each animal type within the Saint Charles River Outlet. These estimates provide watershed managers with the relative magnitudes of total production by source and do not account for treatment by WWTPs or OWTSs, wash off, delivery, instream growth, or die-off dynamics that occur with *E. coli* and substantially affect their delivery to surface waters. Because of water treatment, far less *E. coli* are generally discharged from WWTPs than what is produced and sent to them.

Several factors affect whether *E. coli* reach a stream. The analysis illustrates that across the entire project area, the amount of *E. coli* produced by livestock is substantially greater than the *E. coli* produced by humans or pets.

Table 5-4. Estimated Number of Animals, *E. coli* Produced, and Percent of *E.* coli Produced in Outlet Saint Charles River

Category	Subcategory	Count	*E. coli* Production Rate (cfu/head/day)	Total *E. coli* Produced (cfu/day)	Total *E. coli* Produced (%)
Humans	WWTP	0	1,260,000,000	0	0.0
Humans	OWTS	1992	1,260,000,000	2.50992E+12	13.5
Pets	Cats	499.2	3,150,000,000	1.57248E+12	8.5
Pets	Dogs	1248	3,150,000,000	3.9312E+12	21.2
Livestock	Cattle	403	20,790,000,000	8.37837E+12	45.2
Livestock	Horses	70	26,460,000,000	1.8522E+12	10.0
Livestock	Poultry	80	58,590,000	4687200000	0.0
Livestock	Sheep	31	7,560,000,000	2.3436E+11	1.3
Livestock	Goats	0	17,640,000,000	0	0.0
Livestock	Hogs	13	5,607,000,000	72891000000	0.4

5.3 HEAVY METALS

Heavy metal sources are typically from abandoned mines, runoff from developed areas, and contributions from soils. Heavy metals that can be sourced from irrigation on Shale areas (selenium and arsenic) would also benefit from changing irrigation practices. Flood irrigation typically results in substantial irrigation return flows, which can be high in selenium or arsenic when soils in the irrigated fields have high selenium or arsenic content. The conversion to more modern center-pivot and side-roll sprinkler systems would help decrease the volume of selenium- or arsenic-rich return flows entering waterbodies [Hawley and Rodriguez-Jeangros, 2021].

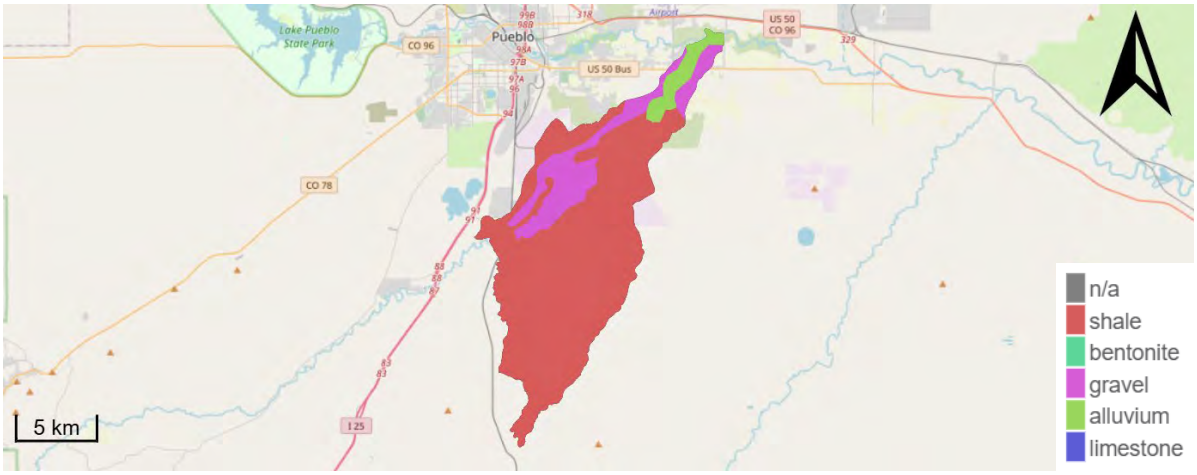


Figure 5-3. Geology

Table 5-5. Irrigation practices

Irrigation Practice	Area, acres	Percent
Drip Irrigation	63.7	3.7
Flood	1652.3	96.1
Sprinkler	4.7	<1
Total Acres	1719.6	100

12.0 MONITORING BEST MANAGEMENT PRACTICE EFFECTIVENESS

12.1 MONITORING PLAN

Monitoring should be completed before and after implementing BMPs to evaluate the effectiveness of priority practices. Monitoring BMP effectiveness (up- and downstream of BMPs) helps evaluate the adequacy of the implementation strategies targeted to reduce loads or transport. BMP effectiveness data will improve the understanding of implementation and management measures. More information about monitoring NPSs is included on EPA's Nonpoint Source Monitoring: TechNOTES webpage. Existing water quality monitoring occurring as a part of this 9-Element Watershed Plan is available on EPA's Water Quality Portal under the organization name PACOG_WQX.

Additional monitoring and evaluation efforts should occur within the communities that are the most likely to become MS4 areas. Monitoring sites up- and downstream of areas where storm drains and tributaries enter the Saint Charles River would help evaluate contributions. Monitoring locations in storm drains throughout urbanized areas where two possible sources come together would also help isolate sources of pollution. A detailed monitoring plan that identifies the locations of additional monitoring sites should be compiled.

Continuous discharge data across a broad range of flows are helpful for calculating loads. Future monitoring should include instantaneous discharge measurements at water quality sampling areas. Continuous stage recorders should be installed at key locations in the watershed and stage-discharge relationships should be developed to convert continuous stage data to continuous flow data. Relatively low-cost, low-maintenance technologies are available to record continuous stage data. Instantaneous and continuous flow data will increase the accuracy of future load calculations and the evaluation of BMPs and implementation practices.

A Sampling and Analysis Plan was generated with input from the Colorado Department of Public Health and Environment (CDPHE). The goal of this monitoring is to determine nonpoint source pollution impacts to the Saint Charles River.

Two sites were selected, identified as Upper (Beulah) and Lower (Santa Fe). The upstream site acts as a control site; this is close to the headwaters of the Saint Charles River. However, this site is impacted by agriculture. The downstream site is located close to the convergence with the Arkansas River.

Table 12-1. Sample Site Locations.

Name	Description	Latitude/ Longitude
Upper (Beulah)	South of Beulah, County Road 230 S crossing of the Saint Charles River.	38.03110813389672, -104.9438017935073
Lower (Santa Fe)	Santa Fe Drive crossing of the Saint Charles River (Saint Charles River at Business Route 50)	38.24479680321068, -104.48747369550742

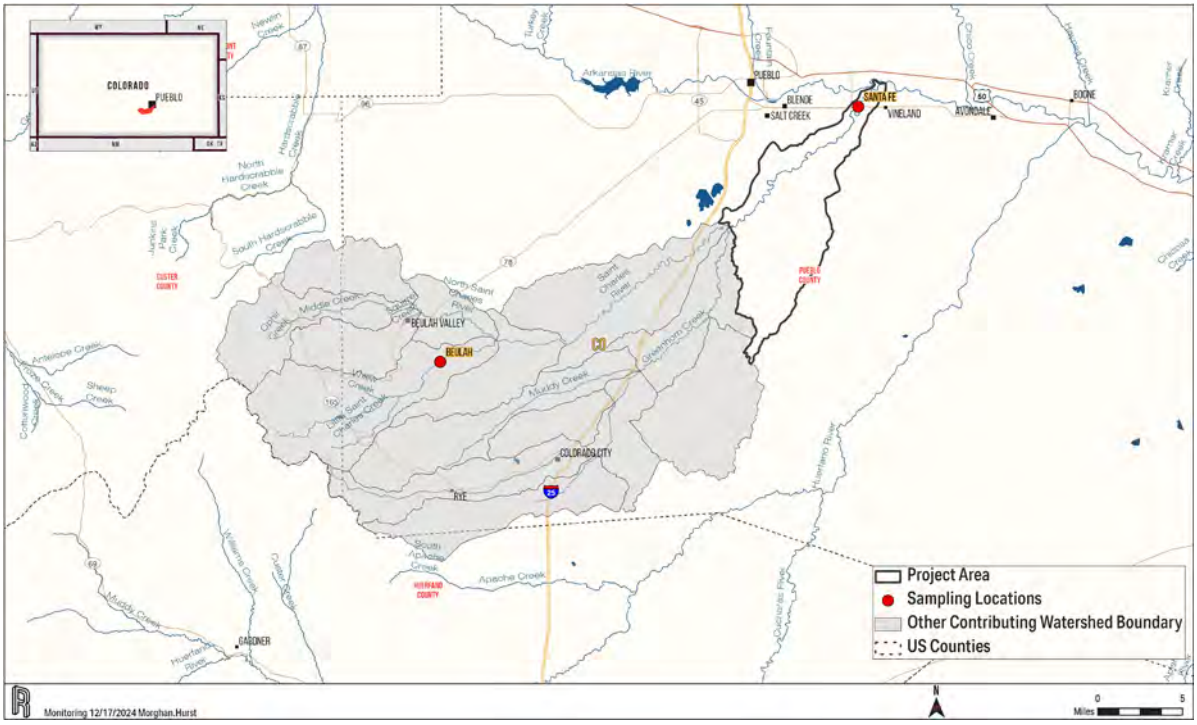
The anticipated nonpoint source pollution impacts include failed on site wastewater treatment systems and agriculture.

Identification of failed onsite wastewater treatment systems can be challenging. To mitigate this, PACOG partnered with foremost wastewater experts at CU Boulder CEMS – Dr. Earl Michael Thurman and Dr. Imma Ferrer. Dr. Thurman and Dr. Ferrer test for 130 organic constituents which indicate both wastewater and agricultural impacts to water quality.

Sampling is conducted quarterly. Colorado waterways experience significant fluctuations in flow throughout the year, so these quarterly sampling events help indicate whether contaminant loading is coming from baseflow (groundwater impacted) or surface runoff.

Karl Mauch provided groundwater sampling data that was also tested at the CU Boulder CEMS laboratory by Dr. Thurman and Dr. Ferrer. These well sites across the project area provide insight to where these constituents are coming from. So far, four samples have been taken at each site.

This SAP will continue to provide a good measure of water quality along the Saint Charles River, and moreover, it will clearly indicate efficacy of CMs installed as a result of this 9 Element Watershed Plan.



12.2 MONITORING RESULTS

Quarterly samples were collected and analyzed in 2024.

12.2.1 Q1 KEY FINDINGS

- Most sample results were extremely low or not detected, which demonstrates the water was conducive to a healthy river for constituents tested.
- One result of note was conductivity at the Lower site. The result of 1918 uS/cm was checked twice. The reason for this higher result is unknown. No other constituents sampled indicated the reason for the rise in *conductivity* from the Upstream site to the Downstream. Salinity and TDS were calculated based on conductivity.
- pH was stable across the sites. It is within the acceptable range for healthy rivers.
- DO levels are very good for supporting fish populations.
- E. coli was not detected at the Upstream site but was measured in low quantities at the Downstream site. This is well under the safe limit for swimming.
- Clarithromycin was present in higher concentration at the Upstream site than the Downstream. This is an antibiotic used in humans and animals and was likely being administered to nearby cattle at the time of sampling. This low concentration is not a cause for concern.
- 4- and 5-methyl-benzotriazole and benzotriazole are in the same family of chemicals and could be coming from the same source. These chemicals are anticorrosive and have many uses. They can be present in car tires and are often used in dishwashing pods. They could also be coming from nearby industry or septic fields. 4- and 5-methyl-benzotriazole are usually present in equal concentrations, so it possible that:
  1) only 4-methyl is being used at a nearby factory
  2) the compound has been in the water for some time from failed septic fields and the 5-methyl is mostly degraded since it degrades faster than 4-methyl. If the 4-methyl-benzotriazole is detected at similar concentrations in future samples, further investigation should be conducted to trace the source.
- Chromium VI, phosphorus, and nitrogen and nitrogen species were not detected at the Upstream site.
- *Total* Selenium was detected at the Downstream site at a concentration of .0364 mg/L. The *Dissolved* Selenium Regulation 32 acute threshold is .0184 mg/L. Dissolved selenium was not measured.
- Other compounds in low concentrations:
  - Prometon, detected at the Downstream site, is an herbicide that is only used under asphalt road construction. This was detected at a low concentration and is not a cause for concern.
  - Diphenhydramine was detected only at the Upstream site. This drug has animal uses and adsorbs well to soil. It is possible that it has been present for some time.

12.2.2 Q2 KEY FINDINGS

- Quarter 2 results were more in line with what is generally expected from an upstream "control" site and a downstream site. Where detected, most constituents were present in higher concentrations at the Downstream site.
- Most sample results were extremely low or not detected, which demonstrates the water was conducive to a healthy river for constituents tested.
- Two exceedances of the Regulation 32 occurred.
  - E. coli was 649 mpn/100 mL at the Downstream site. This exceeds the acute standard.
  - Total iron concentration was 5.05 mg/L. This exceeds the chronic standard of 1 mg/L. Note that a chronic exceedance means that the concentration remains above the standard for all samples within a 30-day period. This exceedance is a single point in time.

- Conductivity readings at both the Upstream and Downstream sites were within the healthy range.
- pH was stable and within the healthy range across both sites.
- Clarithromycin was not detected in Q2.
- 4- and 5-methyl -benzotriazole and benzotriazole were not detected at the Upstream site. They were still present at the Downstream site, though generally in lower concentrations. PACOG should consider investigating the source of these constituents as part of the 9-Element Watershed Plan analysis.
- Chromium VI was not detected.
- Dissolved selenium was detected in low concentration at the Downstream site.
- Caffeine was detected at levels typical of surface waters Downstream of wastewater plant discharge per a 2015 study: Detection of Caffeine in the Streams and Rivers within the San Diego Region . Because this was also present at the Upstream location, this may be indicative of failed OWTS's.
- Other compounds in low concentrations:
    - Prometon (herbicide under roadways)
    - 2,4-D (common herbicide)
    - Atrazine (agricultural herbicide)
    - Carbamazepine
    - DEET (herbicide)
    - Fexofenadine (pharmaceutical)
    - Lamotrigine (pharmaceutical)
    - Deethylatrazine (metabolite of atrazine)
    - Hydroxyatrazine (metabolite of atrazine)
    - Metolachlor (herbicide)

12.2.3 Q3 KEY FINDINGS

- Three Regulation 32 exceedances occurred in Q3.
    - The Upstream and Downstream sites exceeded the E. coli chronic standard of 126 mpn/100 mL.
        - The Upstream (control) site was 1203 mpn/100 mL. During the sample visit, cattle were observed defecating in the river. The cattle use this portion of the Saint Charles River as a water source and occasional spikes in E. coli are expected.
        - The Downstream site result was 160 mpn/100mL. This is lower than the June results, but still exceeds the standard. Agricultural and wastewater impacts are presumed.
    - The Downstream site sulfate result was 964 mg/L. This exceeds the chronic standard of 250 mg/L.
    - The Downstream site dissolved selenium result was 20.1 ug/L. This exceeds the acute standard of 18.4 ug/L.
- Benzotriazoles (4-methyl-, 5-methyl-, and benzotriazole) were similar to June results and lower than March results.
- 2,4-D was low or undetectable.
- Caffeine was not detectable at either sample site.
- Specific conductivity was very similar to March results; the Downstream site was 1919 uS/cm and the Upstream site 88.9 uS/cm. This is most likely due to groundwater impacts during low flows.
- Dissolved oxygen has remained in a healthy river range throughout the year.

Figure 12-2. Q1-Q3 Water Quality Exceedances

Site	Date	Time	Analyte	Result	Units	Speciation	Sample Fracti	Method	RL	MDL
Downstream	3/7/2024	11:30	Selenium (Total mg/L)	0.0364	mg/L		Total	EPA 200.8	0.0008	0.00008
Downstream	6/12/2024	11:30	E. coli	649	mpn/100mL			Colilert	1	1
Downstream	6/12/2024	11:30	Aluminum	4.26	mg/L		Total	EPA 200.8	0.001	0.00003
Downstream	6/12/2024	11:30	Iron	5.05	mg/L		Total	EPA 200.7	0.005	0.0005
Upstream	6/12/2024	10:20	Aluminum	0.199	mg/L		Total	EPA 200.8	0.001	0.00003
Upstream	9/16/2024	11:00	E. coli	1203	mpn/100mL			Colilert	1	1
Downstream	9/16/2024	13:00	E. coli	160	mpn/100mL			Colilert	1	1
Downstream	9/16/2024	13:00	Sulfate	964	mg/l			EPA 300.0	1	0.012
Downstream	9/16/2024	13:00	Selenium	0.0201	mg/l		Dissolved	EPA 200.8	0.0008	0.00008

Orange=Chronic standard exceedance; Red=Acute standard exceedance

Note: Chronic standard exceedances only count when the threshold is exceeded for 30 days or more. None of our samples exceeded the chronic standard at two consecutive sample visits.

Figure 12-3. March-September 2,4-D

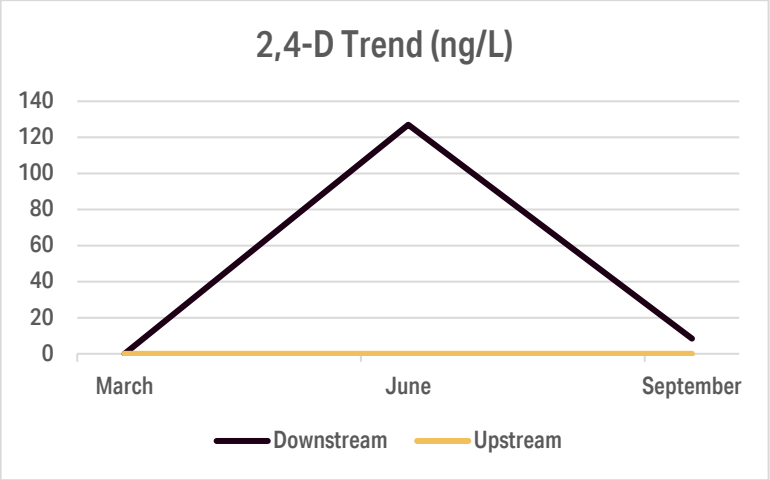


Figure 12-4. March-September Benzotriazoles

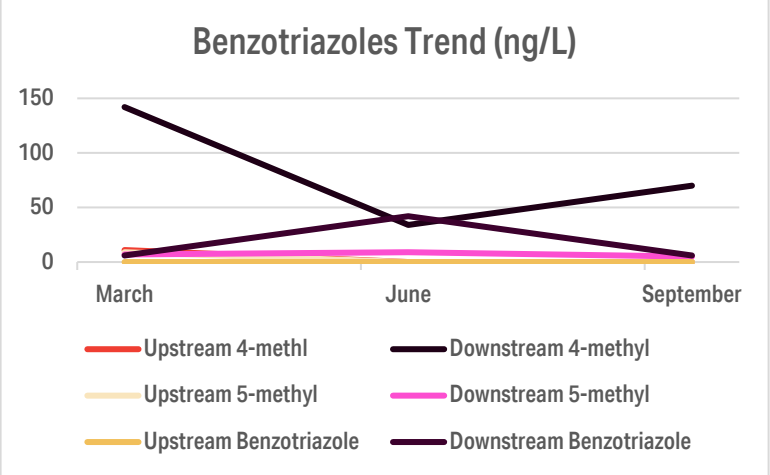
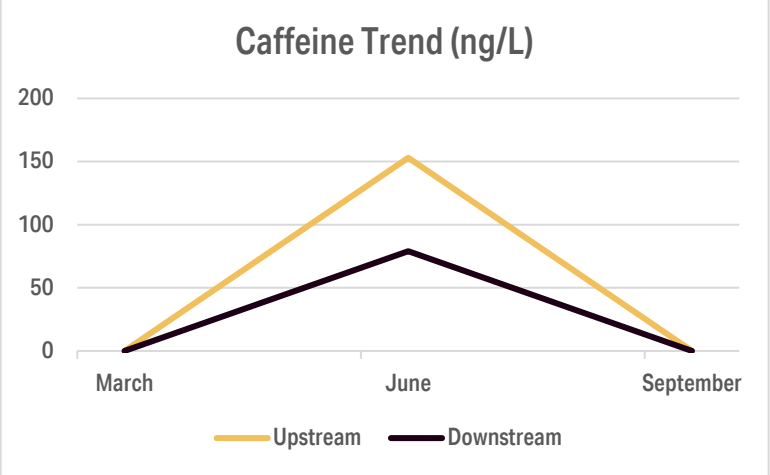


Figure 12-5. March-September Caffeine



12.2.4 Q4 KEY FINDINGS

- Quarter 4 samples were collected on November 18th in an effort to include all 2024 results in the 9-Element Watershed Plan Annual Report to CDPHE and to be available to report to EPAC at the December meeting.
- At this time, probe results and Colorado Analytical lab results are available for reporting.
    - The CU Boulder Environmental Mass Spectrometry Laboratory has experienced a technical issue with the mass spectrometer and results are expected in late December. The samples are frozen until the mass spectrometer is functional.
- Sulfate exceeded the Chronic standard for the second sample visit in a row at the Downstream site. This may be indicative of a true chronic exceedance. More frequent sample analysis is needed.
- Dissolved selenium exceeded the acute standard at the Downstream site for the second sample visit in a row.
- Total aluminum and total iron were low at both sites.
- As temperatures drop, E. coli levels dropped significantly. However, there is still a MWAT exceedance occurring at the Downstream site for three sample visits in a row.
- Dissolved oxygen levels are excellent at both sites.
- Specific Conductivity was 1628 uS/cm at the Downstream site. This indicates continued impact from groundwater infiltration.

Figure 12-6. 2024 Sulfate

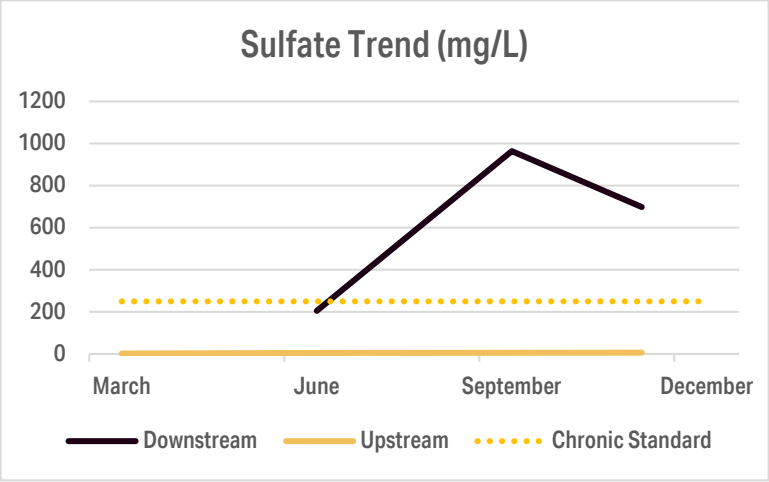


Figure 12-7. 2024 Dissolved Selenium

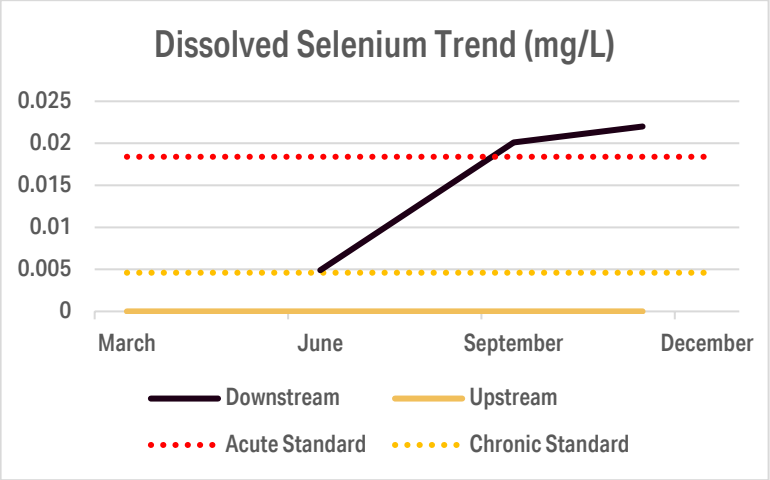


Figure 12-8. 2024 Total Aluminum

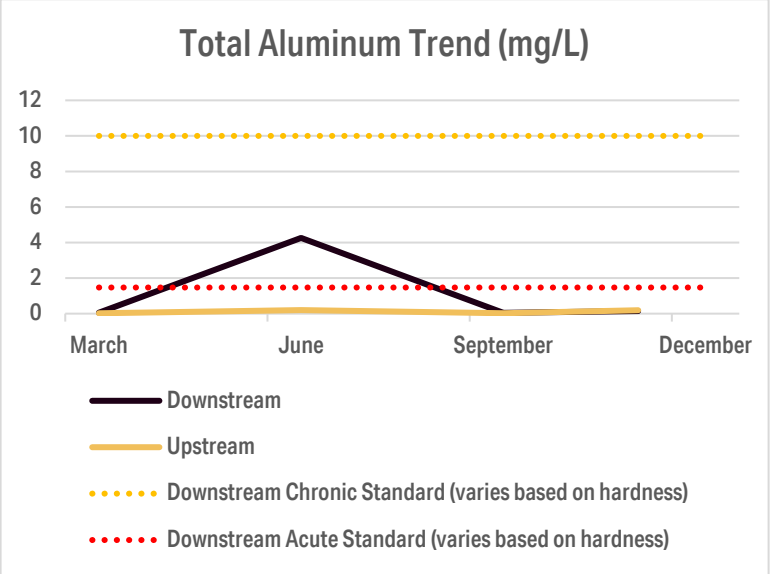


Figure 12-9. 2024 Total Iron

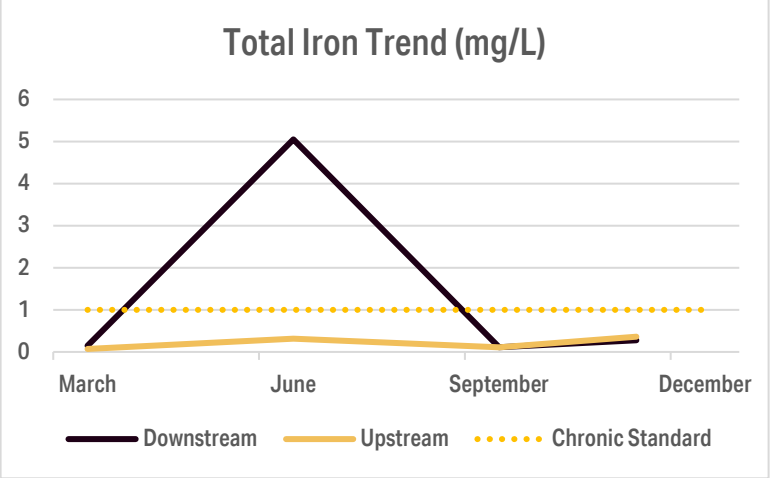


Figure 12-10. 2024 E. coli

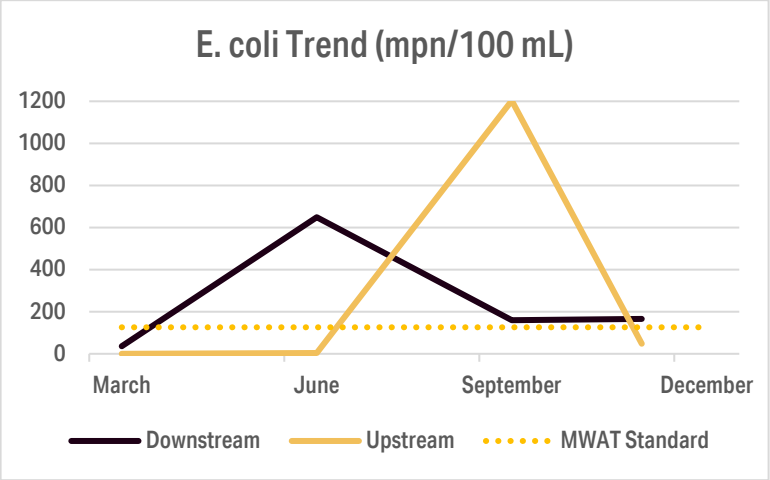


Figure 12-11. 2024 Dissolved Oxygen

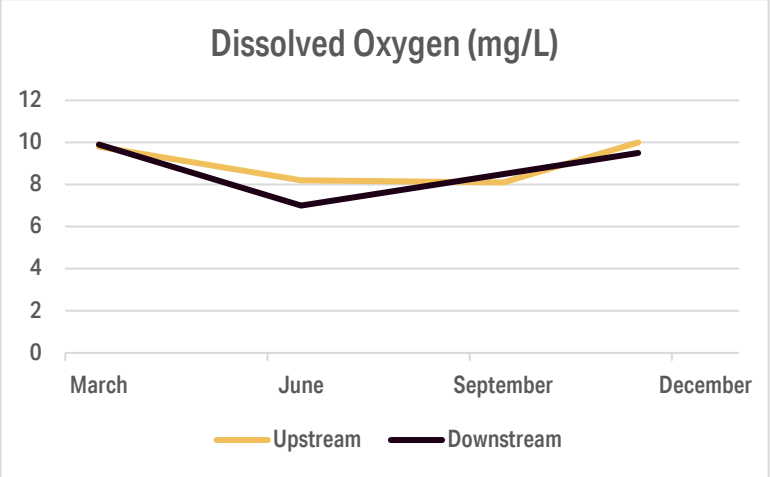


Figure 12-12. 2024 Specific Conductivity