Red Cedar Gathering Company

Arkansas Loop to Coyote Gulch Interconnect Carbon Dioxide Sequestration Pipeline Project

Aquatic Resources Delineation Report



Florida River

Prepared By:

Safety and Environmental Compliance Management Group Southern Ute Indian Tribe Growth Fund 65 Mercado Street, Suite 260 Durango, Colorado 81301

Executive Summary

In 2021, 2022, and 2023, the Southern Ute Indian Tribe Growth Fund's Safety and Environmental Compliance Management Group (SECMG) was requested by Red Cedar Gathering Company (RCG) to evaluate aquatic resources within the proposed alignment for their Arkansas Loop to Coyote Gulch Interconnect Carbon Dioxide (CO₂) Sequestration Pipeline Project (the project). The project entails construction of an 8-inch diameter steel pipeline within a 40-foot-wide to 50-foot-wide right-of-way (ROW) across both tribal trust and private (fee) lands.

The pipeline will capture and transport CO₂ gas from Red Cedar's Arkansas Loop/Simpson natural gas treating facility to an interconnect facility adjacent to the decommissioned Coyote Gulch natural gas treating facility, a distance of approximately 20 miles. The proposed project is located within the exterior boundaries of the Southern Ute Indian Reservation (Reservation) in La Plata County, Colorado.

The following Aquatic Resources Delineation (ARD) report discusses nine aquatic resources along the proposed 20-mile pipeline corridor that meet the 2023 definition of a *Waters of the U.S.* The aquatic resources identified within the project area are associated with two distinct types of channel forms: ephemeral/intermittent and perennial. The ephemeral/intermittent channel forms are further classified as high-gradient and moderate-gradient systems. The perennial Animas river has three types of associated wetlands; Freshwater Forested/Shrub, Palustrine Emergent, and Palustrine Scrub-Shrub. The aquatic resources identified in the project area are in stable condition with minimal anthropogenic or other influences affecting historical flow patterns or native reach, except as noted within the report.

Aquatic resources were delineated in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual, the 2008 Arid West Regional Supplement, and the 2008 Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region.

Table of Contents

Executive Summary	2
Introduction	1
Project Location	1
Delineation Methods	1
Existing Conditions	2
Aquatic Resources	2
References	16
Appendix A - Aquatic Resources Delineation Maps	1
Appendix B - Data Sheet	1

Acronyms and Abbreviations

ARD	Aquatic Resources Delineation
GPS	Global Positioning System
NMPM	New Mexico Principal Meridian
OHWM	ordinary high water mark
ROW	Right of Way
SUIT	Southern Ute Indian Tribe
SUGF	Southern Ute Growth Fund
ACOE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

Introduction

As mentioned, RCG proposes construction of an 8-inch diameter steel pipeline within a 40-foot to 50foot-wide ROW. The purpose of the project is to capture, transport, and ultimately sequester, CO₂ gas that is currently vented to the atmosphere. The proposed project would result in increased revenue to RCG, the Southern Ute Indian Tribe (SUIT or the Tribe), and its membership, and reduce CO₂ emissions in the area.

The pipeline will transport CO₂ gas from the Arkansas Loop/Simpson natural gas treating plant, located in the southeast quarter of Section 35, Township 33 North, Range 7 West, New Mexico Principal Meridian (NMPM), to an interconnect facility adjacent to the decommissioned Coyote Gulch natural gas treating facility located in the southeast quarter of Section 17, Township 32 North, Range 11 West, NMPM.

This ARD Report discusses *Waters of the United States* (U.S.) that occur within the proposed project area. The delineation of aquatic resources within the project area facilitates measures to minimizing impacts to these resources, while ensuring the project achieves its goals.

Project Location

The proposed project is located within the southwestern portion of La Plata County with a central latitude and longitude of 37.043947, -107.920519. The proposed pipeline begins (survey station 0+00) adjacent to the existing Coyote Gulch natural gas treating facility located in the southeast quarter of Section 17, Township 32 North, Range 11 West, NMPM, and terminates (survey station 1027+62) at the existing Arkansas Loop/Simpson natural gas treating facility located in the southwest quarter of Section 36, Township 33 North, Range 7 West, NMPM.

Delineation Methods

A variety of aquatic resources were observed, identified, and delineated within the project area by SECMG personnel on various dates between November 17, 2021, and May 4, 2023.

Ephemeral/intermittent drainages were delineated utilizing the standards set forth in the 2008 "A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States" drafted by US Army Engineer Research and Development Center (ERDC) Cold Regions Research and Engineering Laboratory (CRREL) as ERDC/CRREL TR-08-12. The OHWM delineation utilized the updated datasheet provided within the July 2010 "Updated Datasheet for Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States" (ERDC/CRREL TN-10-1).

Wetlands and perennial aquatic resources identified were delineated in accordance with the procedures set forth in the 2008 Arid West Regional Supplement to the 1987 Wetland Delineation Manual (Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). These aquatic resources were documented using the Wetland Delineation Form - Arid West Region Version 2.0.

In addition to the above-mentioned resources, the following methods were used to delineate and survey aquatic resources:

- Desktop aerial imagery review of the project area for years 1993, 2003, 2005, 2009, 2010, and 2015. Imagery sources included, Landsat, and Google Earth reviewed via ArcGIS Pro version 3.0.3 and Google Earth Pro[®].
- 2. Desktop review of soils, surface geology, and topographic maps of the project area via ArcMap 10.3 and ArcGIS 3.0.3
- Review of potential stream gauges within reach of the project area via USGS <u>http://waterwatch.usgs.gov/?m=real&r=co</u>.
- 4. Review of recent rainfall amounts and duration noted via Accuweather and the Community Collaborative Rain, Hail, and Snow Network (CoCoRaHS).
- 5. Formal delineations in the project area occurred in 2022 and 2023 and included GPS¹ data collection and completion of delineation data sheets.

Existing Conditions

Landscape Setting

The pipeline project travels generally east to west, from the Arkansas Loop/Simpson natural gas treating plant on the Mesa Mountains, dropping down through the Florida and Animas River valleys, and continuing onto the west side of the Southern Ute Reservation to a proposed pipeline interconnect facility in the Coyote Gulch area. Elevations range from 6,040 feet at the Animas River crossing to approximately 7,200 feet on the Mesa Mountains.

The predominant vegetation communities in the project area are piñon-juniper woodland and sagebrush shrubland. Other vegetation community components in the project area include irrigated agricultural land, semi-desert steppe, montane shrubland, and riparian woodland. Details of existing conditions in the project area can be found in the project-specific Biological Assessment completed by SECMG in February 2023.

Aquatic Resources

General Overview

The pipeline route crosses through two perennial channels, the Animas and Florida Rivers, in the eastcentral portion of the project area. The Animas River is an interstate water, and thus considered a "paragraph (a)(1) water". The Florida River is a tributary to the Animas River, meets both the relatively permanent and significant nexus standards, and is considered a "paragraph (a)(3) water" or "jurisdictional tributary". The pipeline route also crosses through several ephemeral/intermittent tributaries to the Animas and Florida Rivers, such as Cottonwood Canyon, Deer Canyon, and Gaines Canyon, which have been determined to meet the significant nexus standard and are thus also considered "jurisdictional tributaries".

Conditions on the west side of the Southern Ute Reservation and containing the western portion of the project are extremely arid. The proposed pipeline alignment crosses through several named and unnamed drainages that generally flow northwesterly towards McDermott Arroyo in the La Plata River watershed. These drainages, including Clyde Walker Canyon and Roberts Gulch, do not meet the relatively permanent or significant nexus standards, as they alone, or in combination with similarly

¹ GPS iSXBLUE II GNSS submeter receiver for iPad.

situated waters in the region, do not significantly affect the chemical, physical, or biological integrity of paragraph (a)(1) waters (ACOE 2023).

The ultimate receiving water for the entire project area is the San Juan River in New Mexico.

<u>Project Area</u>

An Overview Map series of the project is included in Appendix A. The proposed pipeline is generally located in southern La Plata County, Colorado within the exterior boundaries of the Southern Ute Indian Reservation. Also included in Appendix A is a map series shows each of the nine identified aquatic resources in the project area.

Hydrologic Conditions

The Animas River is the primary surface water resource in the project area. This interstate, perennial river exhibits year-round flows, and is primarily influenced by spring snowmelt, summer monsoonal storms, and irrigation return flows within the greater watershed. The Florida River exhibits relatively permanent flows and is a direct tributary to the Animas River. The Florida River is also influenced by spring snowmelt, summer monsoonal storms, and irrigation return flows.

Additional drainages identified within the Animas River watershed are "jurisdictional tributaries" because they meet the significant nexus standard. Flow volume, duration, and intensity of these drainages are in response to short-duration rain events. These drainages include Cottonwood, Cox, Deer, and Gaines Canyons, and two unnamed ephemeral washes.

The project area lies in the central portion of the Arid West region, in the more localized transitional zone between the San Juan Mountains to the north and the San Juan Basin to the south. Winter precipitation is generally snow, leading to very low discharge events in the spring in all but the larger river systems due to melting conditions. The majority of annual precipitation in the project area falls in the summer, driving the timing of low to moderate (5-10 year) discharge events capable of carrying the largest proportion of sediment over time. These dominant or effective discharges scour vegetation from within the channels and change channel geometry (ACOE 2008).

The limits of the active floodplain, indicated by textural and vegetative changes, and a pronounced change in surface elevation relative to the low terrace, was used to delineate the limits of the active floodplain in the ephemeral/intermittent channel systems within the project area.

<u>Results</u>

"Waters of the United States" identified in the proposed project area are listed in Table 1. A unique identification number was given to each water resource, as well as information regarding location, surface ownership, and civil survey stationing, which starts at the proposed pipeline interconnect facility adjacent to the Coyote Gulch natural gas treating facility in the west and ends at the tie-in point to the Arkansas Loop/Simpson natural gas treating facility in the east.

Name	ID	Latitude, Longitude	Surface Ownership	Civil Survey Station
	1a	37.0826, -107.8541	Fee	742+99.3
Gaines Canyon	1b	37.0826, -107.8545	Fee	741+72.4
	1c	37.0827, -107.8552	Fee	739+68.3
Florida River	2	37.0825, -107.8557	Fee	739+17.9
Unnamed I (trib. to Florida	3	37.0805, -107.8604	Fee	718+80.7
R.)				

Table 1. Waters of the United States Identified within the Proposed Project Area.

		1	I contraction of the second seco	1
Animas River	4	37.0713, -107.8750	Tribal Trust	651+99.1
Animas R. Wetlands (East)	5a	37.0713, -107.8747	Tribal Trust	653+05.1
Animas R. Wetlands (West)	5b	37.0710, -107.8763	Fee	647+38.5
Deer Canyon	6	37.0570, -107.9047	Tribal Trust	536+73.2
Cox Canyon	7	37.0412, -107.9226	Tribal Trust	458+77.98
Unnamed II (trib. to	8	37.0255, -107.9453	Tribal Trust	367+32.3
Cottonwood Canyon)				
Cottonwood Convon	9a	37.0242, -107.9530	Tribal Trust	343+54.35
Cottonwood Canyon	9b	37.0243, -107.9550	Tribal Trust	333+29.5

1a - 1c: Gaines Canyon

Gaines Canyon contains extremely varied terrain (i.e., is a high gradient system), with elevations in the watershed ranging from approximately 6,730 feet to 6,100 feet where it joins the Florida River. Gaines Canyon contains a type of compound channel characterized by a single, low-flow meandering channel inset into a wider braided channel network (see Photo 1 below). The substrate at the confluence with the Florida River is alluvium, having transitioned from bedrock in the headwaters of the watershed.

No surface water or saturated soils were observed within Gaines Canyon. In addition, no hydric vegetation was associated with the drainage. However, the drainage does exhibit a defined bed and bank, with a pronounced transition from the sandy-bottomed wash to sparsely vegetated upland containing big sagebrush (*Artemisia tridentata*), fendlerbush (*Fendlera* sp.), piñon pine (*Pinus edulis*), rabbitbrush (*Ericameria nauseosa*), and Utah juniper (*Juniperus osteosperma*).

The proposed pipeline alignment crosses through the Gaines Canyon drainage three times, resulting in impacts to approximately 144 square feet (0.003 acre) of temporary impacts. Gains Canyon is classified by Cowardin, et al. (1979) as Riverine – Intermittent – Stream Bed – Sand. No excavated material would be stored within this drainage during construction.



Photo 1. View upstream of Gaines Canyon drainage at crossing (ID: 1a). Photo taken 5/4/2023.

2: Florida River

The Florida River typically exhibits year-round flows, except in extreme or exceptional drought years. It is a tributary to the Animas River (a "paragraph (a)(1) interstate water") and meets the relatively permanent standard. It is thus considered a "jurisdictional tributary".

The Florida River channel is classified by Cowardin, et al. (1979) as Riverine – Upper Perennial – Unconsolidated Bottom. The west side of the river has been converted to agricultural use, with evidence of livestock grazing up to the bank of the river. In addition, the proposed pipeline follows an existing pipeline ROW through this area, overlapping previous disturbances from construction. There are isolated patches of cottonwood (*Populus* sp.) and coyote willow (*Salix exigua*) throughout the active floodplain and low terrace on the west side of the river. A fringe of coyote willow occurs on the east bank of the river, before quickly transitioning into sparsely vegetated upland habitat. However, no palustrine wetlands were delineated adjacent to the Florida River at the proposed pipeline crossing.

The proposed pipeline crosses the Florida River at a point measuring approximately 44 feet across from bank to bank and would result in approximately 2,200 square feet (0.05 acre) of temporary impacts to this resource. In addition, temporary fill within the river would be up to 39 cubic yards of material.



Photo 2. View south (down-river) of Florida River at proposed pipeline crossing (ID: 2). Photo taken 4/22/2022.

3: <u>Unnamed Drainage I</u>

The Unnamed Drainage I is a high gradient system originating on the Florida Mesa and joining the Florida River approximately 1,200 feet down-gradient of the proposed pipeline crossing. During a site visit on April 5, 2023, a small amount of water was impounded within the drainage above the existing dirt road (as shown in Photo 3). There is a culvert channeling flows within the drainage beneath the road, which may have been blocked at the time.

The drainage is mostly vegetated along the banks with coyote willow, however immediately transitioning to piñon-juniper woodland. This drainage is classified by Cowardin, et al., similarly to Gaines Canyon as Riverine – Intermittent – Stream Bed, however, exhibits a Rubble subclass. Temporary impacts to Unnamed Drainage I are 64 square feet (0.002 acre). No excavated material would be stored within this drainage during construction.



Photo 3. View upstream of Unnamed Drainage I crossing (ID: 3) from dirt road. Photo taken 4/5/2023.

4: Animas River

As mentioned previously, the Animas River is the primary surface water resource in the project area. This interstate water has its origin in the San Juan Mountains near Silverton, Colorado and flows southerly into the San Juan River in New Mexico. The river is evenly influenced by spring snowmelt and summer monsoonal storms within the watershed. Irrigation diversions and return flows also have an effect on the discharge within the river.

The Animas River channel is classified by Cowardin, et al. (1979) as Riverine – Upper Perennial – Unconsolidated Bottom. The proposed pipeline crosses the Animas River at a point measuring approximately 133 feet across from bank to bank. Construction activities would utilize the entire 40foot-wide ROW and a Temporary Use Area immediately to the north at the Animas River crossing, resulting in approximately 7,980 square feet (0.183 acre) of temporary impacts to this resource. Temporary fill within the river channel would be up to 118 cubic yards of material.



Photo 4. View east across Animas River at proposed pipeline crossing (ID: 4). Photo taken 4/22/2022.

5: Animas River Wetland Complex

Wetlands occur within the active floodplain of the Animas River and are classified by Cowardin, et al. (1979) as Freshwater Forested/Shrub, Open Water, Palustrine Emergent, and Palustrine Scrub-Shrub. The wetland complex on the west side of the river was delineated by SECMG in the fall of 2022. Figure 2 of the Aquatic Resources Delineation Maps shows three wetland test pit locations on the west side of the river that were in the delineation process. In addition, the wetland determination data forms are included in Appendix B. The proposed pipeline ROW overlaps 131 square feet (0.003 acre) of Open Water, 3,354 square feet (0.077 acre) of Palustrine Emergent Wetland, and 3,093 square feet (0.071 acre) of Palustrine Scrub-Shrub Wetland.

Access to the east side of the river was denied, and an informal delineation of Freshwater Forested/Shrub Wetland there was completed using aerial imagery resources and the U.S. Fish and Wildlife Service's Wetlands Mapper. Approximately 3,459 square feet (0.079 acre) of this type of wetland has been mapped within the proposed pipeline ROW. The Temporary Use Area through the Animas River overlaps approximately 1,350 square feet (0.031 acre) of Freshwater Forested/Shrub Wetland.



Photo 5. Representative photo of palustrine wetlands in the Animas River active floodplain.

6: Deer Canyon

Deer Canyon contains an ephemeral/intermittent compound channel within a much broader drainage and less of a gradient than the previously discussed Gaines Canyon system. The watershed is relatively small and drains the south flanks of Long Mountain into the Animas River near Bondad. The predominant anthropogenic influence in the watershed is natural gas development.

The delineation of the OHWM in Deer Canyon consisted of a desktop review using accessible technology such as online topographical base maps and aerial imagery since access to this site was restricted. The evaluation consisted of the drainage characteristics and indicators of successional flow patterns of the flood plain and active channel, as well as vegetative cover. The drainage through the project area flows from northwest to southeast. The active channel is dynamic with unconfined flow paths, resulting in a wide mosaic of low-flow channels, active and terrace floodplains. The active floodplain in Deer Canyon is heavily vegetated with a low flow channel that appears to be in flux based on Google Earth's historical imagery. Standing water was not identified. Figure 3 in the attached Aquatic Resources Delineation Maps shows a close-up view of the proposed pipeline crossing through Deer Canyon on an aerial imagery base map.

The proposed pipeline is sited adjacent to a previously constructed pipeline through Deer Canyon. The impacts of the previously constructed pipeline are clearly evident within the upland piñon-juniper woodland habitat, however native vegetation within the active floodplain of Deer Canyon has returned. The active floodplain in Deer Canyon at the proposed pipeline crossing is estimated to be 55 feet across, resulting in approximately 220 square feet (0.005 acre) of temporary disturbance to what is classified by Cowardin, et al. as Riverine – Intermittent – Streambed – Seasonally Flooded (R4SBC) wetland.

7: Cox Canyon

Cox Canyon flows north to south through the proposed pipeline ROW, eventually joining the Animas River near Cedar Hill. The channel is heavily vegetated with moderate scour and clear evidence of recent flows (see Photo 6 below). Surface water was not present at the time of evaluation, but evidence of temporary flooding and flowing water resulting from snowmelt and precipitation events within the watershed was observed.

The western bank abruptly transitions to upland vegetation consisting mostly of big sagebrush and the eastern bank has a less abrupt transition to the same desert scrub vegetation community. Identifiable vegetation within the channel consisted of patches of coyote willow, scattered sagebrush, and a dense ground cover of smooth brome (*Bromus inermis*) and forbs. No hydrophytic vegetation was present within the channel. The proposed pipeline is sited adjacent to a previously constructed pipeline through Cox Canyon located immediately up gradient. Evidence of the past pipeline construction included sloughing banks and reclamation of disturbances.

The delineation of the OHWM within Cox Canyon consisted of evaluating the drainage characteristics within the active floodplain, indicators of successional flow patterns (flood, low flow, and OHWM), and vegetative and sediment texture transitions. The OHWM delineation was based on large amounts of depositional litter and debris, oriented to the flow direction, which was at and above the OHWM. The limit of the active floodplain was observed by a pronounced change in surface elevation and a transition to upland sagebrush habitat. In addition, hydric soils and wetland hydrology are absent. The active floodplain was determined to be approximately 75 feet across at the proposed pipeline crossing. Therefore, the project would result in approximately 300 square feet (0.007 acre) of temporary disturbance to this resource, classified by Cowardin, et al., as Riverine – Intermittent – Streambed – Seasonally Flooded (R4SBC).



Photo 6. Looking northwest into Cox Canyon, upstream from proposed pipeline crossing.

8: <u>Unnamed Drainage II</u>

The Unnamed Drainage II flows from north to south through the proposed pipeline ROW and joins Cottonwood Canyon approximately 1,700 feet downstream of the proposed crossing. The proposed pipeline crossing is situated near the transition from high gradient to moderate gradient within the Unnamed Drainage II watershed. As in the previously discussed Deer Canyon crossing, the proposed pipeline is sited adjacent to a previously constructed pipeline and associated disturbances to piñonjuniper woodland and sagebrush scrub upland habitats. The active floodplain in Unnamed Drainage II, containing a form of compound channel, is nearly devoid of vegetation and consists of a sandy bottomed wash transitioning abruptly to upland habitat.

The delineation of the Unnamed Drainage II resource consisted of a cross section evaluation of the drainage within the proposed pipeline disturbance area. The evaluation consisted of documenting drainage characteristics, including indications of successional flow patterns (flood, low flow, and OHWM), vegetative transitions, and sediment texture transitions. Hydrophytic vegetation, hydric soil and wetland hydrology are absent in this drainage. The drainage enters the proposed ROW from a culvert under an existing oil and gas lease road, approximately 250 feet up gradient. This drainage flows

southwesterly for approximately 0.35 miles, where it joins Cottonwood Canyon. Cottonwood Canyon is a tributary to Cox Canyon, which discharges to the Animas River. The Cowardin classification of Unnamed Drainage II is R4SBA: Riverine, Intermittent, Streambed, Temporary Flooded.



Photo 7. Looking northwest into Unnamed Drainage II.

9a - 9b: Cottonwood Canyon

The delineation of Cottonwood Canyon (9a and 9b) also consisted of a cross section evaluation of the drainage within the proposed pipeline disturbance (Photos 8 and 9) area. Delineation of Cottonwood Canyon at 9a (station 343+54.35) displays similar OHWM features as the previously discussed Unnamed Drainage II and consisted of a similar evaluation of the drainage characteristics, indicators such as successional flow patterns (low flow, active and terrace floodplain, and OHWM), vegetative transitions and sediment texture transitions. However, delineation of Cottonwood Canyon at 9b where the ROW would parallel the drainage for approximately 85 feet displayed different characteristics. The active channel is dynamic with unconfined flow paths, resulting in a wide mosaic of low-flow channels, active and terrace floodplains. The drainage at this station also displays erosional and depositional features seemly in consistent flux, such as colluvial deposits, headcuts and channels separated by islands. Big sagebrush, shrubs and upland forbs and grasses dominate the upland areas and are scattered within the low flow channel and active flood plain. No hydrophytic vegetation, hydric soil or wetland hydrology is present in this drainage. The drainage enters the proposed ROW from a culvert under an existing oil and gas lease road, approximately 200 feet up gradient from ROW crossing at 9a. Cottonwood Canyon continues southeast for approximately 8 miles to discharge to the Animas River. The Cowardin classification is R4SBA: Riverine, Intermittent, Streambed, Temporary Flooded. Temporary impacts to Cottonwood Canyon would be approximately 400 square feet (0.009 acre)



Photo 8. Looking upstream at Cottonwood Canyon drainage crossing 9b.

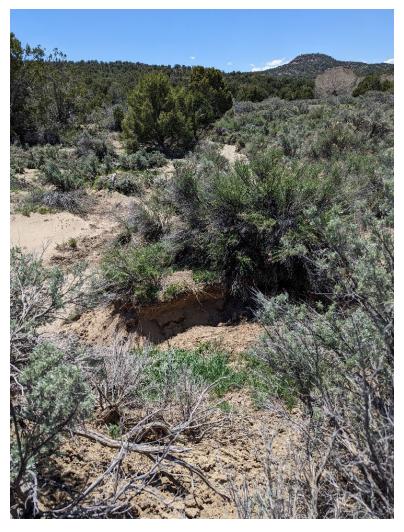


Photo 9. Looking upstream at Cottonwood Canyon drainage crossing 9a.

Table 1: Aquatic Resources within survey area.

Aquatic Resource	Aquatic Resource Classification		Aquatic Resource	Aquatic Resource
Name	Cowardin	Location	Impacts (Acres) *	Impacts (Linear feet)
1a Gaines Canyon	R4SBC	37.082613, - 107.854074	0.001	12
1b Gaines Canyon	R4SBC	37.082630, - 107.854505	0.001	12
1c Gaines Canyon	R4SBC	37.082660, - 107.855205	0.001	12
2 Florida River	R3UBH	37.082421, - 107.855780	0.051	44
3 Unnamed Ephemeral Wash and Wetlands	R4SBC	37.080493, - 107.860463	0.002	16

4 Animas River	R3UBH	37.071287, -	0.183	266
		107.875265		
5a East Animas	PFOA	37.0713, -	0.11	NA
Wetlands		107.8747		
5b West Animas	PABG, PEM1C,	37.070740, -	0.151	NA
Wetlands	PSS1A	107.876880		
	R4SBC	37.056984, -	0.005	55
6 Deer Canyon		107.90473		
	R4SBA	37.041204, -	0.007	75
7 Cox Canyon		107.922654		
8 Unnamed	R4SBA	37.025527, -	0.001	12
Ephemeral		107.945297		
Drainage				
9a Cottonwood	R4SBA	37.024229, -	0.008	85
Canyon		107.953305		
9b Cottonwood	R4SBA	37.024287, -	0.002	15
Canyon		107.955024		

*Trench will be dug to approximately 6 feet deep and 4 feet wide.

*All temporary fill material will be stored outside of OHWM except for Florida and Animas Rivers

Many biological and cultural resource surveys were conducted beginning in 2021 through 2023 to comply with National Environmental Policy Act (NEPA) and specifically Section 106 and Section 107 requirements for the proposed Grant of Easement for a pipeline ROW requested by Red Cedar Gathering Company for this project.

Pursuant to the NEPA for the federal action of obtaining a Grant of Easement for a pipeline ROW from the BIA, and in compliance with the Endangered Species Act (ESA), a Biological Assessment (BA) was completed for the proposed action. A letter of BA concurrence from the Southern Ute Indian Tribe's Department of Natural Resources, Division of Wildlife Resource Management, was issued on December 22, 2022. Additionally, due to the BA determination of *may affect, likely to adversely affect* the endangered New Mexico Meadow Jumping Mouse (NMMJM), ESA, Section 7 Consultation with the U.S. Fish and Wildlife Service (USFWS) was initiated by the BIA. The results of the consultation are outlined in the Biological Opinion (BO), included as Appendix F of the PCN. A cultural resources survey report was provided to the Southern Ute Indian Tribe, and subsequently the BIA, for concurrence, which was received April 18, 2023 (Appendix D of the PCN).

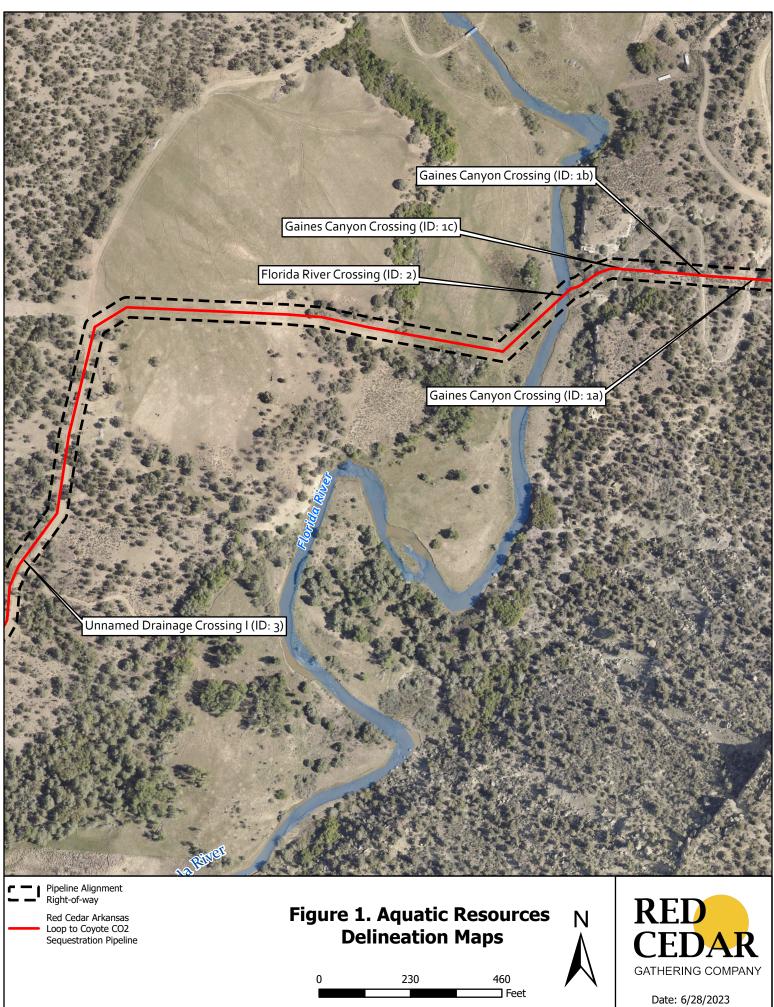
Finally, an Environmental Assessment (EA) has been prepared for the proposed action in compliance with the NEPA. The BIA is the lead federal "action" agency for the project, will review the EA and issue a *Finding of No Significant Impact* for proposed action, if appropriate.

References

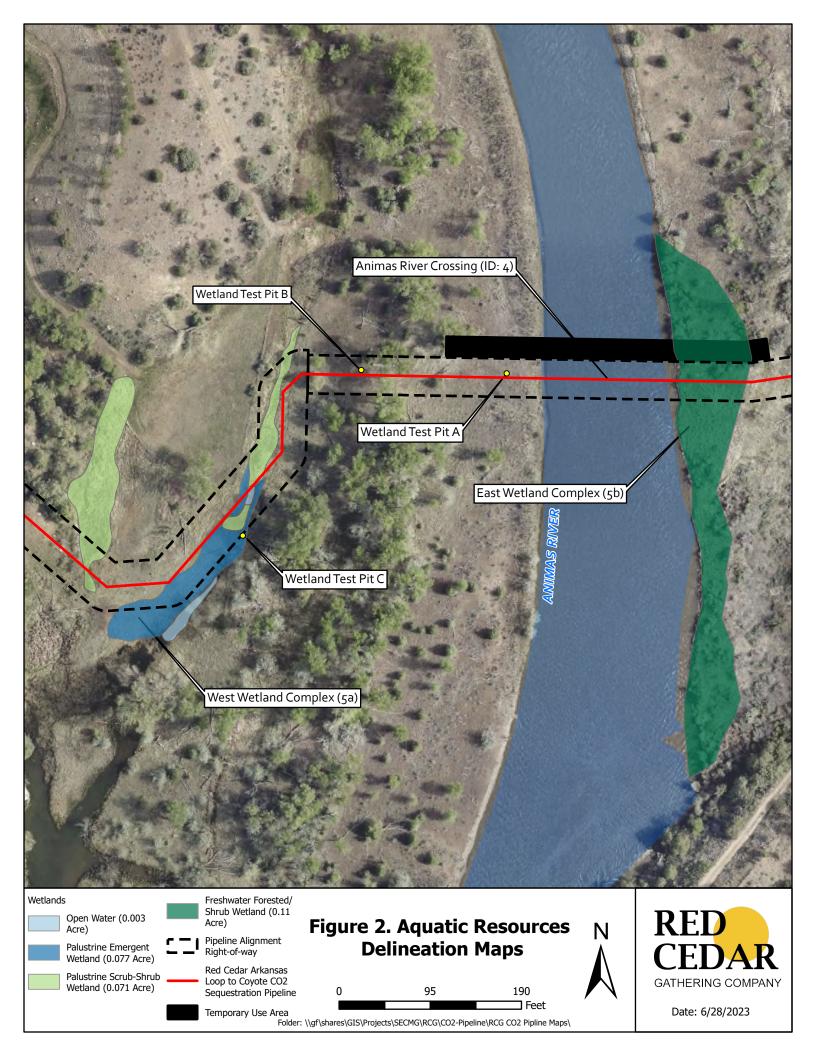
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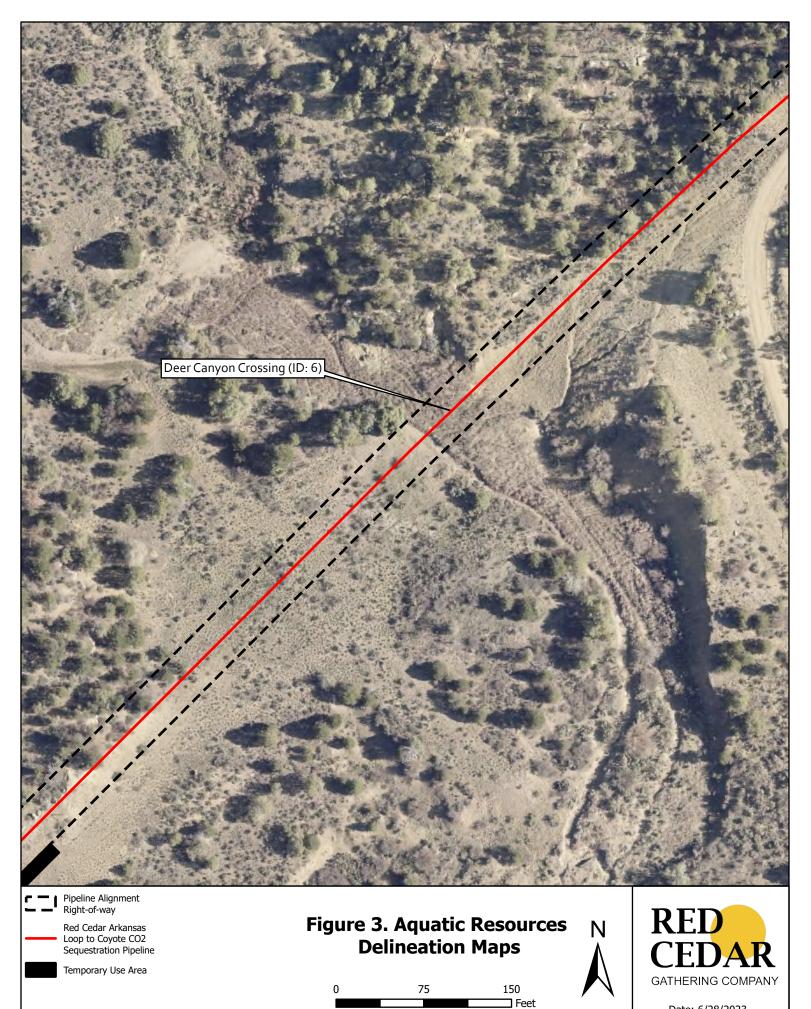
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Appendix A - Aquatic Resources Delineation Maps



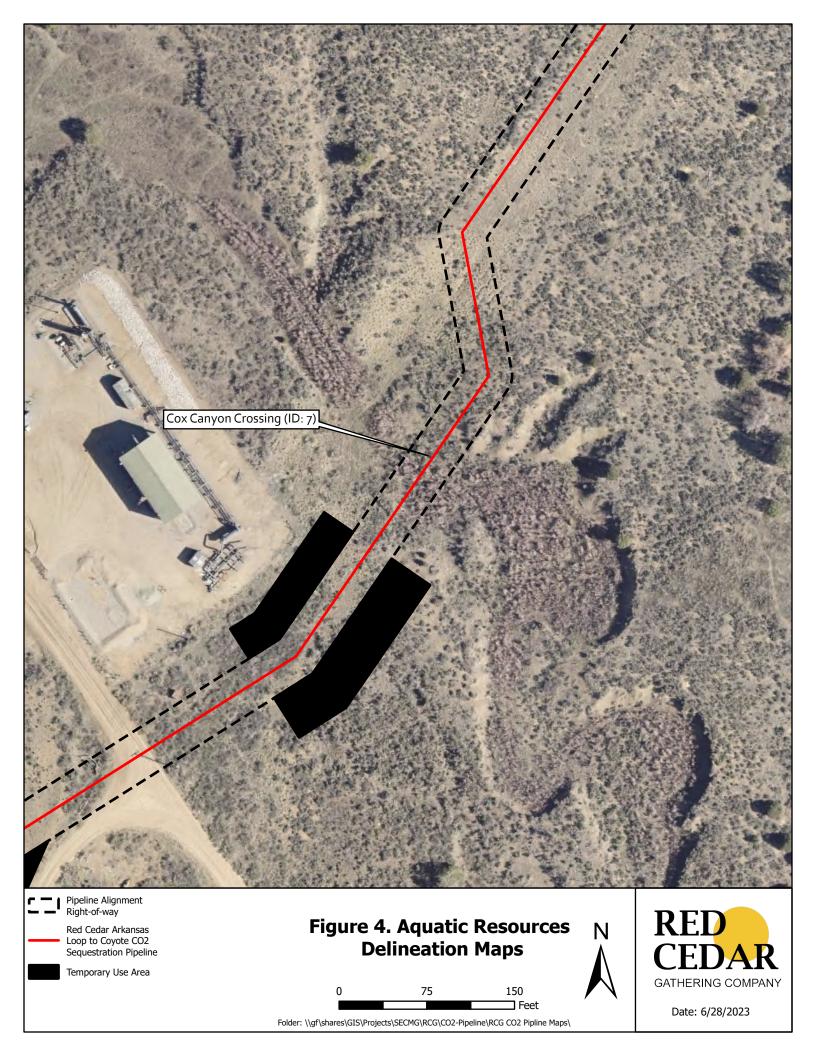
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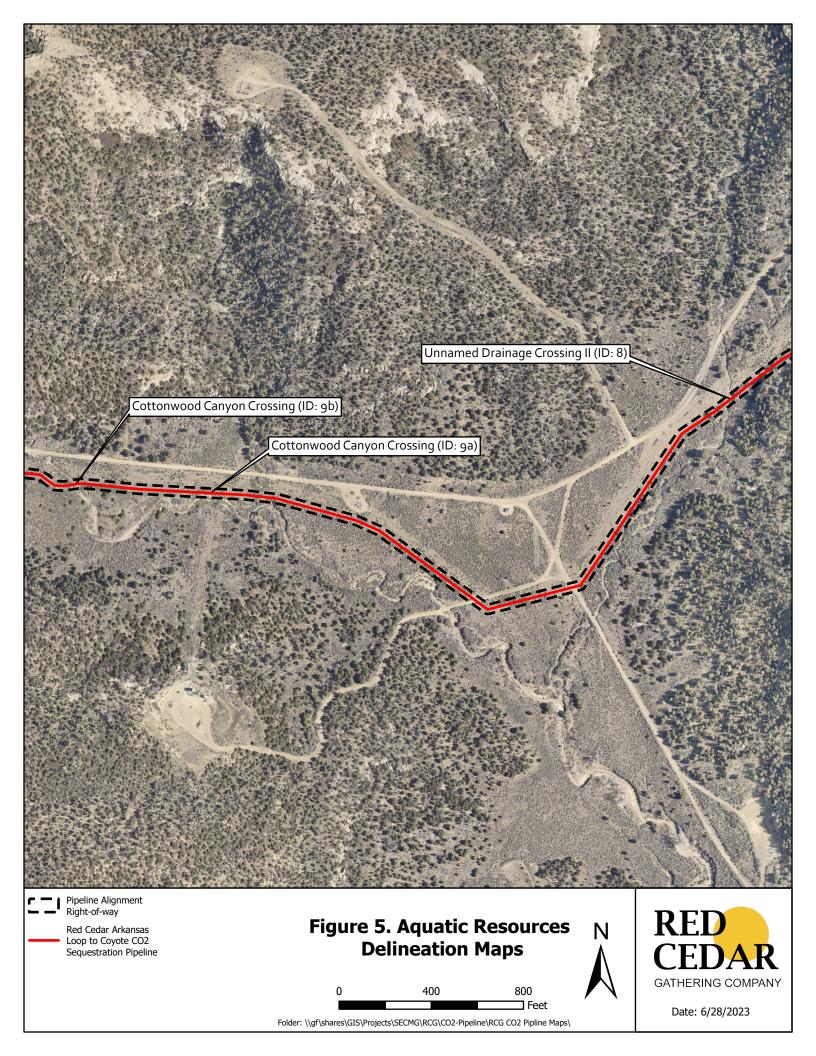




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Date: 6/28/2023





Appendix B - Data Sheets

Project: RCG CO2 PEPErence		: 11: 15 AM
Project Number: la,b,c		COLO.
Stream: GAINES CANYON Investigator(s): A. BAANCHARD, M. ZARKA	Photo begin file#: Photo	end file#:
Y \square Do normal circumstances exist on the site?	Location Details: $5W/4 = 5W$	1/4 3EC. 20 R9W, NMPM
$Y \square / N \checkmark$ Is the site significantly disturbed?		Datum:
Potential anthropogenic influences on the channel syst NATURAL GAS DEVELOPMENT HAVE BEEN CONSTRUCTED OVER, AND NUMEROUS WELL PADS EXE	em: WITHIN WATERSHI / THROUGH THE DI ST.	ED. ROTIS RAINAGE
Brief site description: SANDY BOTTOM W. VAREED TEADAIN. MODERATE WETHEN WATERSHED. UNDERE	NATURAL GAS » LOPED OTHER WS	× rrzemery Everspuert
✓Vegetation maps□Results✓Soils maps□Most re□Rainfall/precipitation maps□Gage h	er:	
Hydrogeomorphic F	loodplain Units	
Active Floodplain	OHWM Paleo Channel	
Procedure for identifying and characterizing the flood	plain units to assist in identifyin	ng the OHWM:
 Walk the channel and floodplain within the study area t vegetation present at the site. Select a representative cross section across the channel. I Determine a point on the cross section that is characteria a) Record the floodplain unit and GPS position. Describe the sediment texture (using the Wentworth floodplain unit. c) Identify any indicators present at the location. Repeat for other points in different hydrogeomorphic floodplate the OHWM and record the indicators. Record the indicators. 	Draw the cross section and label th stic of one of the hydrogeomorph class size) and the vegetation cha podplain units across the cross sec he OHWM position via:	ne floodplain units. nic floodplain units. racteristics of the
 Mapping on aerial photograph Digitized on computer 	GPS Other as is a superior	h dente a l
	Other: CIVEL ANANEY	ALAC

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project ID:	Cross section ID:	GC-1 Dat	e: 5-4-23	Time: IN: ISAM
Cross section dr		LOOSPLAIN LOW TERRACE		
OHWM				
GPS point:				
🗍 Change ii	n average sediment texture n vegetation species n vegetation cover	Other:	k slope	
Comments: SET SAND MAN TEARACE. THAN SURA THE TEXTUR WETT A	DIMENT TEXTURE REFX IN' ACTIVE ACTIVE FLOOD PLA ZOUNDENG, SPAC ALL AND VEGETA PRONOUNCED C	SHEFTS FROM FLOOD PLATEN TEN CONTATEN SELY NEAET TENE CHANGE HANGE IN SU	m a pr TO SSL TO SSL TTED CO S ARE LAFVICE EL	EDOMENTANTLY TEN LOW LESS VEGETAT W TERRACE. MARCE ENATION.
Floodplain unit:	Low-Flow Channel	Active Flood	plain	Low Terrace
GPS point:				
Characteristics of t Average sediment Total veg cover: _ Community succes	the floodplain unit: texture: <u>COAASE SAND</u> 5 % Tree: <u>%</u> S	Mid (herbace	o: <u>5</u> % eous, shrubs, sap eous, shrubs, ma	
Indicators:		 ☐, Soil developr ✓ Surface relief ☐ Other: ☐ Other: ☐ Other: ☐ Other: 		
	EVE FLOODPLAEN AFENC CULANGE E ELEVATION B . HIGH GRADIER RENGR.			CED CHANGE ENT LOW SUMPLY TO

Project: RCG CO2 REPELENE	Date: 5 - 4 - 2-3 Time: 11:45 AM
Project Number: Z Stream: FLORISA RIVER	Town:NAState:Core.Photo begin file#:Photo end file#:
Investigator(s): A. BLANCHARD, M. ZARHA	r noto begin me#. F noto end me#.
$Y \square Do normal circumstances exist on the site?$	Location Details: 5W/4 5W/4 5EC. 20 T33N, R9W, NMPM
$\mathbf{Y} \ \mathbf{v} \ \mathbf{v}$ / N $\ \mathbf{N}$ Is the site significantly disturbed?	Projection: Datum: Coordinates: 37.0825, -107.8557
Potential anthropogenic influences on the channel syst were DRAWAUS AND RETURN FLOU RESEDENTIAL DEVELOPMENTS W	em: PAIMAALY IRLEGATION ~S. AGREENETHER AND ITHEN WATCHED.
Brief site description: WEST BANK OF AN OONVERTED TO ERESULATED PA OROSSING CONTAENS CONFINENCE CLASS FLEVATION UP GAINES CANYO	VER HEAVELY GRAZED AND STURE. EAST BANK AT WITH GAINES CAMYON. QUECKLY V.
✓ Vegetation maps □ Results ✓ Soils maps □ Most results □ Rainfall/precipitation maps □ Gage h	per:
Hydrogeomorphic F	loodplain Units
Active Floodplain	, Low Terrace ,
Low-Flow Channels	OHWM Paleo Channel
Procedure for identifying and characterizing the flood	plain units to assist in identifying the OHWM:
 Walk the channel and floodplain within the study area to vegetation present at the site. Select a representative cross section across the channel. Determine a point on the areas section that is characteriated and the section of the section of the section. 	Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteria) Record the floodplain unit and GPS position.	site of one of the hydrogeomorphic hoodplain units.
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the
floodplain unit.	
c) Identify any indicators present at the location.	
4. Repeat for other points in different hydrogeomorphic fl	
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS
Digitized on computer	Other: CIVEL SURVEY DATA

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project ID: Cross section	ID: FL-1 Date: 5-4-23 Time: 11:45
Cross section drawing:	
	LOW FLOWS OHANNEL
OHWM	
GPS point: 37.0824, -107.8558	3
Indicators: Change in average sediment textur Change in vegetation species Change in vegetation cover	re Break in bank slope Other: Other: Other:
Comments: THE FLOREDA REVEN	2 WAS AT BANKFULL AND THE
ABOVE GPS POLNT IS O	N THE WEST BANK.
Floodplain unit: Low-Flow Chan	nel 🗹 Active Floodplain 🗌 Low Terrace
GPS point: <u>37.0822</u> , -107.856	
Characteristics of the floodplain unit: Average sediment texture: COARAGE SIN Total veg cover: 90 % Tree: 29 Community successional stage: 1 NA Early (herbaceous & seedlings)	
Indicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank Benches	 Soil development Surface relief Other: <u>AERIAL IMAGERY</u> Other: Other:
Comments: ALTHOUGH MEAN IN	Y DISTURRED. THE ZOUNDARY OF
ACTIVE FLOODPLATIN ON REVER WAS DOCUMENT SURPACE ELEVATEON DBS EMALERY.	Y DISTURRED, THE ZOUNDARY OF THE WEST "DDE DE THE FORDA ED BY A SHIGHT OHANGE IN ERVED ON STIE AND ON ARKETL

Arid West Ephemeral and Intermi		
Project: RCG CO2 PIPELINE	Date: 4-5-23	Time: 9:30 AM
Project Number: 3	Town: NA	State: Couo.
Stream: UNNAMED I	Photo begin file#:	Photo end file#:
Investigator(s): A. BLANCHARD, M. ZABKA	r	
$Y \square / N \square$ Do normal circumstances exist on the site?	Location Details: NG/ T	4 NE/4 SEC. 30 -33N, RQW, NMAM
$Y \square / N \checkmark$ Is the site significantly disturbed?	Projection: Coordinates: 37.080	Datum:
Potential anthropogenic influences on the channel syst	em: Ruran RE	DEDENTEALD
Potential anthropogenic influences on the channel syst AND AGRECULTURATE EMPROVEM		
Brief site description: JMANL DAAENAGE INTO FLOREDA REVER N 1200 AMOUNT DP WATER WAS ING.	FEET DOWNS	MEAM. SMALL
	ber: ecord: 7 of recent effective disch	
	s of flood frequency analy	
	ecent shift-adjusted rating	5
	eights for 2-, 5-, 10-, and	
	ecent event exceeding a 5	-year event
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain	Low Terrace	.1
		<u></u>
	/ /	
Low-Flow Channels	OHWM Paleo Cha	nnel
Procedure for identifying and characterizing the flood	plain units to assist in id	lentifying the OHWM:
1. Walk the channel and floodplain within the study area t vegetation present at the site.	o get an impression of th	e geomorphology and
2. Select a representative cross section across the channel. I	Draw the cross section and	d label the floodplain units
3. Determine a point on the cross section that is characteri		
a) Record the floodplain unit and GPS position.	, ,	1 I
b) Describe the sediment texture (using the Wentworth floodplain unit.	class size) and the vegeta	tion characteristics of the
c) Identify any indicators present at the location.		
4. Repeat for other points in different hydrogeomorphic fl		cross section.
5. Identify the OHWM and record the indicators. Record t	he OHWM position via:	
Mapping on aerial photograph	GPS	
Digitized on computer	Other:	

Project ID: Cross section ID: UNI -1 Date: 4-5-23, Time: 9-30 Am
Cross section drawing:
<u>OHWM</u>
GPS point:
Indicators: Change in average sediment texture Change in vegetation species Change in vegetation cover Change in vegetation cover
Comments: CLEAR CHANGE IN SURFACE ELEV. AND NEG. COMPOSETEDN FROM ACTINE FLOOD PLAEN TO UPLAND.
Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace
GPS point:
Characteristics of the floodplain unit: Average sediment texture: Total veg cover: % Tree: % Tree: % Shrub: % Herb: % Community successional stage: % NA Mid (herbaceous, shrubs, saplings) Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)
Indicators: Mudcracks Ripples Drift and/or debris Other: Presence of bed and bank Benches Other:

Arid West Ephemeral and Intermi	ttent Streams OHW	M Datasheet	
Project: RCG CO2 PEPELENE	Date: 10-11-22	Time: 2:00 pm	
Project Number: 4	Town: NA	State: Coro.	
Stream: ANIMAS RENER	Photo begin file#:	Photo end file#:	
Investigator(s): M. Zarbka	1		
$Y \checkmark / N \square$ Do normal circumstances exist on the site?	Location Details: Nw/4 Sw/4 SEC. 30 T33N, R9W, NMPM		
$Y \square / N \swarrow$ Is the site significantly disturbed?	Projection: Coordinates: 37.071		
Potential anthropogenic influences on the channel syst	em: Animas RE	WER VALLEY	
Potential anthropogenic influences on the channel syst IS HEAVELY DEVELOPED. ALTIO AT DURANGS FOR LOVE NEGHTING PROCESSES OF THE REWOR SYSTER		*	
Brief site description: Propones Proting CONSTRUCTED REPELLING THROUGH RELATED PISTUR BANCOS AC	C BEFED ADI ANIMAS REA CE EVEDENT (ACONT TO PREVEOUSE VER. EXENTENY PEPELENE SCAR).	
Checklist of resources (if available):			
🗹 Aerial photography 🗹 Stream gag			
	per: 29361500		
Topographic maps Period of r			
	of recent effective discl		
	s of flood frequency anal		
	ecent shift-adjusted ratin	-	
	eights for 2-, 5-, 10-, and	-	
	ecent event exceeding a :	5-year event	
Global positioning system (GPS)			
Hydrogeomorphic F			
Active Floodplain	Low Terrace	*	
5- 5- 6 6 6		The second second	
Low-Flow Channels	OHWM Paleo Chi	annel	
Procedure for identifying and characterizing the flood	nlain units to assist in i	dentifying the OHWM ·	
1. Walk the channel and floodplain within the study area t	-		
vegetation present at the site.			
 Select a representative cross section across the channel. I Determine a point on the cross section that is characteri 	Draw the cross section an stic of one of the hydrog	id label the floodplain units. eomorphic floodplain units.	
a) Record the floodplain unit and GPS position.			
b) Describe the sediment texture (using the Wentworth	class size) and the veget	ation characteristics of the	
floodplain unit.			
c) Identify any indicators present at the location.			
4. Repeat for other points in different hydrogeomorphic flo	odplain units across the	e cross section.	
5. Identify the OHWM and record the indicators. Record t			
Mapping on aerial photograph	GPS		
Digitized on computer	Other: CIVEL SUR	ver er er	

	FLOODPLAIN
ME	HIL RANKFULL
OPEN WATER	PALUPIRENE WERLANDS
<u>OHWM</u>	
GPS point:	
Indicators: Change in average sediment texture Change in vegetation species Change in vegetation cover	 Break in bank slope Other: Other:
Comments:	
Floodplain unit: Low-Flow Channel GPS point:	Active Floodplain Low Terrace
GPS point: Characteristics of the floodplain unit: Average sediment texture:	
GPS point: Characteristics of the floodplain unit: Average sediment texture: Total veg cover:% Tree:% Si Community successional stage:	hrub:% Herb:%
GPS point: Characteristics of the floodplain unit: Average sediment texture: Total veg cover:% Tree:% Si	
GPS point: Characteristics of the floodplain unit: Average sediment texture: Total veg cover:% Tree:% Si Community successional stage: NA Early (herbaceous & seedlings) Indicators: Mudcracks Ripples	hrub:% Herb:% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees) Soil development Surface relief
GPS point: Characteristics of the floodplain unit: Average sediment texture: Total veg cover:% Tree:% Si Community successional stage: NA Early (herbaceous & seedlings) Indicators: Mudcracks	hrub:% Herb:% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees) Soil development Surface relief Other: Other:
GPS point: Characteristics of the floodplain unit: Average sediment texture: Total veg cover:% Tree:% Si Community successional stage: NA Early (herbaceous & seedlings) Indicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank	hrub:% Herb:% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees) Soil development Surface relief

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: RCG COL	City/County: 10-11-22 Sampling Date: 10-11-22				
Applicant/Owner: RED CEDAR GATHERENG	State: Sampling Point:				
Investigator(s): M. ZAGILA	Section, Township, Range: <u>NW/4 SW/4 SEC. 30 T33N R9</u> W				
Landform (hillslope, terrace, etc.): FLOOD protection	_ Local relief (concave, convex, none): <u>こられてんべ に</u> Slope (%): <u>ひー \</u>				
Subregion (LRR): <u>D-INTERSOL JESERTS</u> Lat: 3	7.071334 Long: <u>-107.875402</u> Datum:				
Soil Map Unit Name: 50 - HESCAR FINE SAMD	Y wa many NWI classification:				
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes No (If no, explain in Remarks.)				
Are Vegetation $\underline{\checkmark}$, Soil \underline{N} , or Hydrology \underline{N} significantl	y disturbed? Are "Normal Circumstances" present? Yes No				
Are Vegetation \underline{N} , Soil \underline{N} , or Hydrology \underline{N} naturally p					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No					
Hydric Soil Present? Yes No	ls the Sampled Area within a Wetland? Yes No √				
Wetland Hydrology Present? Yes No					
Remarks: Samplies Actor IS.	NOT WITHEN A WETLAND.				

VEGETATION – Use scientific names of plants.

	Absolute	Dominant Indicator	Dominance Test worksheet:			
Tree Stratum (Plot size:) 1)	<u>_% Cover</u>	<u>Species?</u> <u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)		
23			Total Number of Dominant Species Across All Strata:	(B)		
4 Sapling/Shrub Stratum (Plot size:25 × 25)		_ = Total Cover	Percent of Dominant Species	(A/B)		
1. Salix exigua	100	V FACW	Prevalence Index worksheet:			
2.		/	Total % Cover of: Multiply by:			
3			OBL species b x1 =			
4			FACW species 5 x 2 = 10			
5			FAC species x 3 =			
	5	= Total Cover	FACU species 40 x 4 = 160			
<u>Herb Stratum</u> (Plot size: 25×25)			UPL species x 5 =			
1. Cicorium	20	Y FACU	Column Totals: 45 (A) 170	(B)		
2. Bromus inermis	30	Y FACU				
3		s	Prevalence Index = B/A =			
4			Hydrophytic Vegetation Indicators:			
5		······	Dominance Test is >50%			
6			Prevalence Index is ≤3.0 ¹			
7	_		Morphological Adaptations ¹ (Provide supportin	ıg		
8			data in Remarks or on a separate sheet)			
	40	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)	t .		
Woody Vine Stratum (Plot size:)						
1	. <u></u>		¹ Indicators of hydric soil and wetland hydrology mu be present, unless disturbed or problematic.	ist		
2						
and the second sec		= Total Cover	Hydrophytic Vegetation			
% Bare Ground in Herb Stratum % Cover	of Biotic Cr	rust0	Vegetation Present? Yes <u>No</u>			
Remarks: WEST BANK OF R	IN GA	Appena	ED VERY WELL			
REMARKS: WEST BANK OF REVER APPEARED VERY WELL DRAENED WETH SIGNAMIONNE OF BARE GROUND/ COBBLE.						
VEG. PRESENT DOGS NOT PASS DOMENANCE TEST OR						
PREVALENCE INDEX.						

US Army Corps of Engineers

SOIL

Sampling Point:

Profile Desc	ription: (Describe t	o the depth ne	eded to docu	nent the i	ndicator	or confirm	n the absence	of indicators.)
Depth	Matrix			x Features	4		_	
(inches)	<u>Color (moist)</u>		olor (moist)		Type'	_Loc ²		Remarks
0-10	107R 3/4	90	Constant and Constant of Const	- Carrier and Carrier		}	Bunkly.	10 YR 6/5 SANS (10%)
								ě
					. <u> </u>			
		<u> </u>						
¹ Type: C=Ce	oncentration, D=Deple	tion, RM=Red	uced Matrix, CS	- S=Covered	or Coate	d Sand Gr	ains. ² Loc	cation: PL=Pore Lining, M=Matrix.
	indicators: (Applica							for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Red	ox (S5)			1 cm M	Muck (A9) (LRR C)
Histic Ep	pipedon (A2)		Stripped Ma	atrix (S6)				Muck (A10) (LRR B)
Black Hi		-	Loamy Muc				Reduc	ed Vertic (F18)
	n Sulfide (A 4)	-	Loamy Gley		(F2)			arent Material (TF2)
	Layers (A5) (LRR C)	-	Depleted M	. ,			Other	(Explain in Remarks)
	ick (A9) (LRR D)	-	_ Redox Dark	•				
	I Below Dark Surface Irk Surface (A12)	(ATT) -	Depleted D Redox Dep		. ,		³ Indicators	of hydrophytic vegetation and
	lucky Mineral (S1)	-	Vernal Pool		0)			hydrology must be present,
	leyed Matrix (S4)	-		3 (1 0)				listurbed or problematic.
	ayer (if present):							I
Туре:								
Depth (ind	ches):						Hydric Soil	Present? Yes No
Remarks:	1	6 . 8. 8	- tan	8 87	v - Ì	<i>A</i>	-	
and the second				hanner formerer	132 5 13 T.J.	Sp T-E	- 16-7	T PET. NO NEY LOAM.
KEDOY	- TEATURE	CH 03	Sty Branching	Sint a	a na ana tana 1	er A	and a start	rey hoam .
HYDROLO	~~							
-	Irology Indicators:	a raquiradu ahu	ak ali that anal				Coord	adam (Indiantara (2 ar mara raquirad)
· · · ·	ators (minimum of on	e requirea; che						ndary Indicators (2 or more required)
	Water (A1)		Salt Crust					Vater Marks (B1) (Riverine)
	ter Table (A2)		Biotic Crus		(040)			ediment Deposits (B2) (Riverine)
Saturatio		-)	Aquatic In					brift Deposits (B3) (Riverine)
	arks (B1) (Nonriverin + Donosita (B2) (Non		— Hydrogen Oxidized F		• •	iving Dec		Prainage Patterns (B10)
	t Deposits (B2) (Non osits (B3) (Nonriveri		Presence	•	•	•		ory-Season Water Table (C2) Crayfish Burrows (C8)
	Soil Cracks (B6)	ne)		n Reduced	•	,		aturation Visible on Aerial Imagery (C9)
	on Visible on Aerial Im	agony (B7)	Thin Muck					shallow Aquitard (D3)
	ained Leaves (B9)	lagery (D7)	Other (Exp					AC-Neutral Test (D5)
Field Observ					nankoj		!	
Surface Wate		s No	Depth (in	choc).				
			Depth (in			1		
Water Table			7			ſ		D
Saturation Pr (includes cap		s No	Depth (in	cnes):			and Hydrolog	y Present? Yes No
	corded Data (stream g	auge, monitor	ng well, aerial (photos, pre	vious ins	pections),	if available:	
Remarks:		ξ	6. a	1 10	~ * ~ ?	(18 ²⁰⁾ ,	iA a =	X TS VEAN
	No were	HND H	PROVOL	Y (*		un ser se	v Vyd r	t IS VERY
VJ U	Ene LDA	SHED		and a second				
-			-					

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: RCG COZ	City/County:	A Pland	Sampling	Date: 10 - 11 - 2-2
Applicant/Owner: RED CEDAR GATHERING		State:	<u>C</u> ▷ Sampling	Point: <u>&</u>
Investigator(s): M. ZABICA	Section, Townshi	ip, Range: <u>//w//4</u>	Sw/ 4 SEC, 31	TS3N R9W
Landform (hillslope, terrace, etc.): FLOODP LAIN	Local relief (cond	cave, convex, none):	CONCANE	Slope (%): <u></u> + \
Subregion (LRR): D-INTERSOR DESERTS Lat: 37.	071333	Long: <u>- ヽぃ~</u>	. 875 921	Datum:
Soil Map Unit Name: 50 - PESCAR FINE SANDY	1 LOAM	NV	/I classification:	Left after a market
Are climatic / hydrologic conditions on the site typical for this time of ye	ar? Yes	No (If no, ex	plain in Remarks.)	1
Are Vegetation $\underline{\mathcal{N}}$, Soil $\underline{\mathcal{N}}$, or Hydrology $\underline{\mathcal{N}}$ significantly		Are "Normal Circum	stances" present? Y	es No
Are Vegetation, Soil, or Hydrology naturally pro	blematic?	(If needed, explain a	ny answers in Remai	ŕks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling po	oint locations, tra	ansects, importa	ant features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks: SAMPLED	AREA IS NOT	EN A WETLAND.

VEGETATION – Use scientific names of plants.

	Absolute		Indicator	Dominance Test	workshee	et:		
Tree Stratum (Plot size:)	<u>% Cover</u>	<u>Species?</u>		Number of Domin			1	
1. Populas angustifolia	- <u>Lerri I</u> 	<u> </u>	FACW	That Are OBL, FA	CW, or FA	.C:	((A)
2. Tunperus deopulorum	15	<u> </u>	FACH	Total Number of [Dominant			
3. Elaeagnus angustifolia	0	<u>– N</u>	FAC	Species Across A	II Strata:		3	(B)
4			·	Percent of Domin	ant Specie	s.		
Sanling/Chruh Stratum (Distaire)	40	= Total Co	over	That Are OBL, FA			0.33	(A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index	workoho	<u></u>		
1	•			Total % Cove			tiolu bu	
2								-
3	·		·	OBL species _ FACW species _				-
4	·			FAC species				-
0				FAC species _				-
Herb Stratum (Plot size:)		= Total Co	over	UPL species _				-
1. Machaeranthera Sp.	20	\checkmark	NL	Column Totals:			150	- (D)
2. Bromus inervis	16	Ý	FACU					. (D)
3		l		Prevalence	Index = B/	'A =	3.0	-
4				Hydrophytic Veg				
5				Dominance T	est is >50°	%		
6			<u></u>	Dominance T	ndex is ≤3.(0 ¹		
7				Morphologica	al Adaptatio	ons ¹ (Prov		ng
8					marks or o	•	. '	
	40	= Total Co	ver	Problematic H	Hydrophytic	c Vegetati	on ¹ (Explair	1)
Woody Vine Stratum (Plot size:)	•							
1				¹ Indicators of hydi be present, unless				ust
2				be present, unles:		or proble	mauc.	
		= Total Co	ver	Hydrophytic				
% Bare Ground in Herb Stratum <u>15</u> % Cover	of Biotic Cr	rust D		Vegetation Present?	Yes	No		
Domorka								
In the said in the second	BEE		WARC A	TED TO	0Ē	HYER	OF MY.	To Gam
BY PREVALENCE INDEX LISTED AND CONLO BE	1 ONC	S PON	a sin ath	EAD IL REE		N/	S NO	1
LESTED AND LUNLU BE	CON	un ki a l	KED T	nun ru	· Le Kan !	· · · · · · · · · · · · · · · · · · ·	Name of a	
PREV. INDEX OF 3.25.								

US Army Corps of Engineers

SOIL

C ~ m	nlina	Point:	
Sam	DHUD	PORD.	

rofile Desc	ription: (Describe to	o the dep	th needed to docum	nent the i	ndicator	or confirm	n the absence of in	dicators.)	
Depth	Matrix		Redox Features						
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u> Texture </u>	Remarks	S
0-10	10/2 3/2	90_	ina Derene Apinere et		and the second second	ر ماندىنىن	<u>Markey</u>		
	,								
	<u>_</u>								
				·	<u> </u>		<u></u>		
				·					
	oncentration, D=Deple	tion DM					2	. DI - Dara Lining	ManhAntrix
<i>.</i>	ndicators: (Applical	,	······································			u Sanu Gi		n: PL=Pore Lining, Problematic Hydri	*
Histosol			Sandy Redo		•		1 cm Muck	(A9) (LRR C)	
_ Histic Ep	pipedon (A2)		Stripped Ma	. ,				(A10) (LRR B)	
Black Hi	stic (A3)		Loamy Muc	ky Mineral	(F1)		Reduced V	ertic (F18)	
 Hydroge	n Sulfide (A4)		Loamy Gley	ed Matrix	(F2)		Red Parent	Material (TF2)	
_ Stratified	Layers (A5) (LRR C)		Depleted Ma	atrix (F3)			Other (Expl	ain in Remarks)	
_ 1 cm Mu	ck (A9) (LRR D)		Redox Dark	Surface (I	-6)				
_ Depleted	Below Dark Surface	(A11)	Depleted Da	ark Surface	e (F7)				
_ Thick Da	rk Surface (A12)		Redox Depr	essions (F	8)		³ Indicators of hy	drophytic vegetation	on and
Sandy M	lucky Mineral (S1)		Vernal Pool	s (F9)			wetland hydro	ology must be pres	ent,
_ Sandy G	leyed Matrix (S4)						unless disturt	ed or problematic.	
estrictive L	ayer (if present):								
Туре:									/
Depth (inc	hes):						Hydric Soil Pres	ent? Yes	No
emarks:	Tran Kans	Sect of		e Mar and a N	~ \	1 min a st	TicArt.	A. L. F. L. A.	UT DE
	A Contraction		san u		- شهر منه،	Celt Set	FEATUR	1 1 1 VI 2 VI -	

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Salt Crust (B11)	Water Marks (B1) (Riverine)
High Water Table (A2) Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)
Saturation (A3) Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres alon	g Living Roots (C3) Dry-Season Water Table (C2)
Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8)
Surface Soil Cracks (B6) Recent Iron Reduction in Til	led Soils (C6) Saturation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9) Other (Explain in Remarks)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous i	nonostione) if quallable:
Remarks: Sishituy DAMP AND COOL OBSERVED.	sos, No satura trani
V8797 1972	

WETLAND DETERMINATION DATA FORM – Arid West Region

//County: <u>LA Puara</u> Sampling Date: <u>10-11-22</u>
State: Sampling Point:
tion, Township, Range: N/2 SE/4 SEC. 25 T3EN RIOW
cal relief (concave, convex, none): <u>CONCAVE</u> Slope (%): <u>D-1</u>
270 851 Long: <u>-107,876329</u> Datum:
этт NWI classification: RЗИВН
Yes No (If no, explain in Remarks.)
urbed? Are "Normal Circumstances" present? Yes No
matic? (If needed, explain any answers in Remarks.)
mpling point locations, transects, important features, etc.
Is the Sampled Area within a Wetland? Yes No
ETHEN A WETLAND.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:) 1	Absolute <u>% Cover</u>		t Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:		(A)
23				Total Number of Dominant Species Across All Strata:		(B)
4		= Total C	over	Percent of Dominant Species That Are OBL, FACW, or FAC:	1,0	(A/B)
1				Prevalence Index worksheet:		
2				Total % Cover of:M	ultiply by:	_
3	. <u>. </u>			OBL species x 1 =	0	_
4			<u> </u>	FACW species 85 x 2 =	150	_
5				FAC species x 3 =	0	_
		= Total C	over	FACU species x 4 =	0	_
Herb Stratum (Plot size:)			Marrie D	UPL species x 5 =	0	
1. Phalank arundinacea	<u> </u>	<u></u>	(Acres	Column Totals: <u>85</u> (A)		 (B)
2. <u>Hapostis gicantez</u>		N	FACW			- ` /
3. Juhans are Hems	60		FACM	Prevalence Index = B/A =	2.0	_
4				Hydrophytic Vegetation Indicators	5:	
5				Dominance Test is >50%		
6				_ <u>√</u> Prevalence Index is ≤3.0 ¹		
7				Morphological Adaptations ¹ (Pro	ovide suppor	ting
8				data in Remarks or on a sep	arate sheet)	
	90	= Total Co	over	Problematic Hydrophytic Vegeta	ation ¹ (Explai	in)
Woody Vine Stratum (Plot size:)	ł	, rotar of				
1				¹ Indicators of hydric soil and wetland		nust
2				be present, unless disturbed or prob	lematic.	
		= Total Co	over	Hydrophytic		
% Bare Ground in Herb Stratum % Cover				Vegetation Present? Yes N	lo	
Remarks: HYDROPHYTEC VEG.	土つ	pres	E-MT	AT SAMPED	AREA	· .

DIL									ampling Point:	
	ription: (Describe to	the depth r	needed to docu	ment the i	ndicator o	r confirm	the absence			
Depth	Matrix			ox Features					,	
nches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
>-6	10/R 3/2	1	2.5 XR3/6	10	C	Mic	REASY	NERY	DENSE	ROOTMA
	1		1			dillo.	č	1		
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8				Mit		-F-1	Contract of	All and an		1
						Carrier .				· · · · · · · · · · · · · · · · · · ·
				10 M	1.14	-La-		1.		
								2		
vpe: C=Co	oncentration, D=Deplet	ion. RM=Re	duced Matrix. C	S=Covered	or Coated	Sand Gra	ins. ² Lo	cation: PL=	Pore Lining, M	1=Matrix.
	ndicators: (Applicab								matic Hydric	
⊿ Histosol			Sandy Red					Muck (A9) (L		
	pipedon (A2)		Stripped Ma					Muck (A10) (
Black His			Loamy Mud		l (F1)			ed Vertic (F		
	n Sulfide (A4)		Loamy Gle		. ,			arent Materi		
Stratified	Layers (A5) (LRR C)		Depleted M				Other	(Explain in F	Remarks)	
_ 1 cm Mu	ck (A9) (LRR D)		Redox Dark	surface (F6)					
_ Depleted	Below Dark Surface (A11)	Depleted D	ark Surface	e (F7)					
_ Thick Da	rk Surface (A12)		Redox Dep	ressions (F	-8)		³ Indicators	of hydrophy	tic vegetation	and
_ Sandy M	lucky Mineral (S1)		Vernal Poo	ls (F9)			wetland	hydrology m	nust be preser	nt,
	leyed Matrix (S4)						unless o	listurbed or p	problematic.	
estrictive L	ayer (if present):									
estrictive L Type:	ayer (if present):		_		2				/	
Type: Depth (inc		HYDR I PRES	C SOFL ENT AT	- I.A - 54	SDEC.	A TOR		1	Yes /	No
Type: Depth (inc emarks: Ef	PREMARY 1 SEPEDON)	HYDRE, PRES	ENT AT	- 1×	SDEC.	A TOR		1		No
Type: Depth (inc emarks: Ef	PREMARY 1 SEPEDON)	HUDRES PRES	ENT AT	- 1.A	JDEC.	A TOR		1		No
Type: Depth (inc emarks: Eff DROLO(PREMARY 1 SEPEDON)	HYDRES PRES	ENT AT	- 1.N	JDEC.	A TOR		1		No
Type: Depth (inc emarks: Eff TDROLOG	PREMARY / SEPEDON)				JDEC. tmph	A TOR	r AI HREA	- (+-1		
Type: Depth (inc emarks: Eff TDROLOG	PRIMARY PRIMARY SPEDON) GY Irology Indicators: ators (minimum of one			у)	JDEC. tmph	A TOR	AZEA	- (++ s	STI C	e required)
Type: Depth (inc emarks: / / / / / / / / / / / / / / / / / /	PRIMARY PRIMARY SPEDON) GY Irology Indicators: ators (minimum of one		neck all that appl	<u>y)</u> (B11)	JDEC tmph	A TOR	2 A1 14254 <u>Secon</u> V	ndary Indical	tors (2 or mor	e required)
Type: Depth (inc emarks: DROLOO etland Hyd imary Indic _ Surface V	PRIMARY PRIMARY STPEDON GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2)		neck all that appl Salt Crust	y) (B11) st (B12)		A TOR	A1 A2 = A1 A2 = A1 Second V S	ndary Indical Vater Marks Sediment De	tors (2 or mor (B1) (Riverin	e required) e) iverine)
Type: Depth (inc emarks: EF(DROLO(etland Hyd imary Indic Surface V High Wat Saturatio	PRIMARY PRIMARY STPEDON GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2)	required; ch	neck all that appl Salt Crust Biotic Crus	y) (B11) st (B12) vertebrates	s (B13)	A TOR	A1 A2 EA Secondary V Second	ndary Indical Vater Marks Sediment De	tors (2 or mor (B1) (Riverin posits (B2) (R s (B3) (Riveri n	e required) e) iverine)
Type: Depth (inc emarks: /DROLOC etland Hyd imary Indic / Surface V High Wat / Saturatio _ Water Mater	thes): PRIMARY SF = DON GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) n (A3)	required; ch	neck all that appl Salt Crust Biotic Crus Aquatic In Hydrogen	y) (B11) st (B12) vertebrates Sulfide Od	s (B13) lor (C1)		A1 Secon V S C C	ndary Indica Nater Marks Sediment De Drift Deposits Drainage Pat	tors (2 or mor (B1) (Riverin posits (B2) (R s (B3) (Riveri n	e required) e) iverine) 1e)
Type: Depth (inc emarks: CDROLOO etland Hyd imary Indic Surface N Saturatio Saturatio Water Ma Sedimen	PRIMARY PRIMARY SPEDON SY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrivering	required; cł	neck all that appl Salt Crust Biotic Crus Aquatic In Hydrogen Oxidized F	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher	s (B13) lor (C1)		A 1 A 2 5 A Secon V S C C C C C C	ndary Indica Nater Marks Sediment De Drift Deposits Drainage Pat	tors (2 or mor (B1) (Riverin posits (B2) (R is (B3) (Riverin terns (B10) Water Table ((e required) e) iverine) 1e)
Type: Depth (inc emarks: EFC TOROLOO Tetland Hyd imary Indic Surface N High Wat Saturatio Saturatio Water Ma Sedimen Drift Dep	PRIMARY PRIMARY SPEDON GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) (Nonrivering t Deposits (B2) (Nonrivering osits (B3) (Nonrivering	required; cł	neck all that appl Salt Crust Biotic Crus Aquatic In Hydrogen Cxidized F	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced	s (B13) lor (C1) res along Li	iving Roots	<u>Secon</u> V S C s (C3) C	ndary Indica Nater Marks Sediment De Drift Deposits Drainage Pat Dry-Season V Crayfish Burr	tors (2 or mor (B1) (Riverin posits (B2) (R 6 (B3) (Riverin terns (B10) Nater Table (ows (C8)	e required) e) iverine) ne) C2)
Type: Depth (inc emarks: //DROLOO //etland Hyd //etland Hyd // Saturatio // Saturatio	PREMARY PREMARY SPEDON GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) n (A3) arks (B1) (Nonriverine t Deposits (B2) (Nonri	required; ch e) verine) e)	neck all that appl Salt Crust Biotic Crus Aquatic In Hydrogen Cxidized F	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduce n Reductio	s (B13) lor (C1) res along Li d Iron (C4) on in Tilled	iving Roots	<u>Secon</u> V S U s (C3) C S	ndary Indica Nater Marks Sediment De Drift Deposits Drainage Pat Dry-Season V Crayfish Burr	tors (2 or mor (B1) (Riverin posits (B2) (R 6 (B3) (Riveri terns (B10) Water Table (ows (C8) sible on Aeria	e required) e) iverine) 1e)
Type: Depth (inc emarks: /DROLOO etland Hyd imary Indic / Surface V High Wai / Saturatio / Surface S / Inundatio	$\frac{P_{R \pm m + 2}}{P_{R \pm m + 2}}$	required; ch e) verine) e)	neck all that appl Salt Crust Biotic Crus Aquatic In Hydrogen Oxidized F Presence Recent Iro	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduce n Reductic Surface ((s (B13) lor (C1) res along Li d Iron (C4) on in Tilled C7)	iving Roots	<u>Secon</u> <u>Secon</u> V S C s (C3) C S S	ndary Indica Nater Marks Sediment Deposits Drainage Pat Dry-Season V Crayfish Burr Saturation Vis	tors (2 or mor (B1) (Riverin posits (B2) (R s (B3) (Riverin terns (B10) Water Table (ows (C8) sible on Aeria tard (D3)	e required) e) iverine) ne) C2)
Type: Depth (inc emarks: /DROLOO /etland Hyd / Saturatio / Saturatio / Saturatio / Saturatio / Saturatio / Saturatio / Saturatio / Surface S / Inundatic / Water-St	PRIMARY Strains Mater (A1) ter Table (A2) n (A3) arks (B1) (Nonrivering to Deposits (B2) (Nonri soils (B3) (Nonrivering Soil Cracks (B6) on Visible on Aerial Ima ained Leaves (B9)	required; ch e) verine) e)	neck all that appl Salt Crust Biotic Crus Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduce n Reductic Surface ((s (B13) lor (C1) res along Li d Iron (C4) on in Tilled C7)	iving Roots	<u>Secon</u> <u>Secon</u> V S C s (C3) C S S	ndary Indica Nater Marks Sediment Dep Drift Deposits Drainage Pat Dry-Season V Crayfish Burr Saturation Vis Shallow Aquit	tors (2 or mor (B1) (Riverin posits (B2) (R s (B3) (Riverin terns (B10) Water Table (ows (C8) sible on Aeria tard (D3)	e required) e) iverine) ne) C2)
Type: Depth (inc emarks: /DROLOO /etland Hyd imary Indic / Surface V / High Wat / Saturatio / Saturatio / Water Ma / Sedimen _ Drift Dep _ Surface S _ Inundatio / Water-St eld Observ	The shear is the	required; cł e) verine) e) ugery (B7)	heck all that appl Salt Crust Biotic Crus Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced n Reductio s Surface ((blain in Ref	s (B13) lor (C1) res along Li d Iron (C4) on in Tilled C7)	iving Roots	<u>Secon</u> <u>Secon</u> V S C s (C3) C S S	ndary Indica Nater Marks Sediment Dep Drift Deposits Drainage Pat Dry-Season V Crayfish Burr Saturation Vis Shallow Aquit	tors (2 or mor (B1) (Riverin posits (B2) (R s (B3) (Riverin terns (B10) Water Table (ows (C8) sible on Aeria tard (D3)	e required) e) iverine) ne) C2)
Type: Depth (inc emarks: CDROLOO Tetland Hyd imary Indic Surface V High Wat Saturatio Saturatio Water Ma Sedimen Drift Dep Surface S Inundatic Water-St eld Observ urface Water	PRIMARY PRIMARY SPEDON GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) (Nonriverine to Deposits (B2) (Nonriverine Soil Cracks (B6) on Visible on Aerial Ima ained Leaves (B9) vations: er Present? Yes	required; cf e) verine) e) ugery (B7)	neck all that appl Salt Crust Biotic Crus Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced in Reductio Surface ((olain in Rei ches):	s (B13) lor (C1) res along Li d Iron (C4) on in Tilled C7)	iving Roots	<u>Secon</u> <u>Secon</u> V S C s (C3) C S S	ndary Indica Nater Marks Sediment Dep Drift Deposits Drainage Pat Dry-Season V Crayfish Burr Saturation Vis Shallow Aquit	tors (2 or mor (B1) (Riverin posits (B2) (R s (B3) (Riverin terns (B10) Water Table (ows (C8) sible on Aeria tard (D3)	e required) e) iverine) ne) C2)
Type: Depth (inc emarks: CDROLOO Tetland Hyd imary Indic Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Surface S Inundatic Water-St eld Observ urface Wate fater Table F	PREMARY PREMARY SPEDON GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) (Nonriverine soits (B2) (Nonri Soil Cracks (B6) on Visible on Aerial Ima ained Leaves (B9) rations: er Present? Yes	required; cf e) verine) e) ngery (B7)	neck all that appl Salt Crust Biotic Crus Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp Depth (in Depth (in	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced in Reductio Surface ((blain in Ref ches): ches):	s (B13) lor (C1) res along Li d Iron (C4) on in Tilled C7)	iving Roots Soils (C6)	A 1 A 2 E A 1 A 3 E A 1 A 1 A 1 A 2 E A 1 A 1 A 1 A 2 E A 1 A 1 A 1 A 2 E A 1 <pa 1<="" p=""> A 1 A 1 A 1 A</pa>	ndary Indica Nater Marks Sediment De Drift Deposits Drainage Pat Dry-Season V Crayfish Burr Saturation Vis Shallow Aqui AC-Neutral	tors (2 or mor (B1) (Riverin posits (B2) (R is (B3) (Riverin terns (B10) Water Table (f ows (C8) sible on Aeria tard (D3) Test (D5)	e required) e) iverine) ne) C2) I Imagery (C9)
Type: Depth (inc emarks: CDROLOO Tetland Hyd imary Indic Surface V High Wai Saturatio Water Ma Sedimen Drift Dep Surface S Inundatio Water-St eld Observ urface Wate faturation Pro	PREMARY PREMARY SPEDON GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) n (A3) arks (B1) (Nonriverine to Deposits (B2) (Nonri soits (B3) (Nonriverine Soil Cracks (B6) on Visible on Aerial Ima ained Leaves (B9) rations: er Present? Yes Present? Yes	required; cf e) verine) e) ngery (B7)	neck all that appl Salt Crust Biotic Crus Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced in Reductio Surface ((blain in Ref ches): ches):	s (B13) lor (C1) res along Li d Iron (C4) on in Tilled C7)	iving Roots Soils (C6)	<u>Secon</u> <u>Secon</u> V S C s (C3) C S S	ndary Indica Nater Marks Sediment De Drift Deposits Drainage Pat Dry-Season V Crayfish Burr Saturation Vis Shallow Aqui AC-Neutral	tors (2 or mor (B1) (Riverin posits (B2) (R is (B3) (Riverin terns (B10) Water Table (f ows (C8) sible on Aeria tard (D3) Test (D5)	e required) e) iverine) ne) C2)
Type: Depth (inc emarks: //DROLOO //etland Hyd rimary Indic // Surface V // High Wat // Saturatio // Saturatio // Water Ma // Sedimen Drift Dep Surface S Inundatic // Water-St eld Observ // urface Water // aturation Principudes cap	PREMARY PREMARY SPEDON GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) n (A3) arks (B1) (Nonriverine to Deposits (B2) (Nonri soits (B3) (Nonriverine Soil Cracks (B6) on Visible on Aerial Ima ained Leaves (B9) rations: er Present? Yes Present? Yes	required; cf e) verine) e) ngery (B7) No No	neck all that appl Salt Crust Biotic Crus Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp Lepth (in Depth (in	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduced in Reductio Surface ((olain in Rei ches): ches): ches):	s (B13) lor (C1) res along Li d Iron (C4) on in Tilled C7) marks)	iving Roots Soils (C6) - - - -	A 2 A 2 A 2	ndary Indica Nater Marks Sediment De Drift Deposits Drainage Pat Dry-Season V Crayfish Burr Saturation Vis Shallow Aqui AC-Neutral	tors (2 or mor (B1) (Riverin posits (B2) (R is (B3) (Riverin terns (B10) Water Table (f ows (C8) sible on Aeria tard (D3) Test (D5)	e required) e) iverine) ne) C2) I Imagery (C9)
Type: Depth (inc emarks: //DROLOO //etland Hyd //or for the for	Ches):	required; ch e) verine) e) gery (B7) No No No No	neck all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp Depth (in Depth (in Depth (in Depth (in	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduce n Reductic Surface ((blain in Rei ches): ches): ches): photos, pre	s (B13) lor (C1) res along Li d Iron (C4) on in Tilled C7) marks) 6 t 0 t evious inspe	iving Roots Soils (C6)	A 2 C A 2 A 2 C A 2 A 2 C A 2 Second S	ndary Indica Nater Marks Sediment Deposits Drainage Pat Dry-Season V Crayfish Burr Saturation Vis Shallow Aquit AC-Neutral y Present?	tors (2 or mor (B1) (Riverin posits (B2) (R s (B3) (Riveri terns (B10) Water Table (f ows (C8) sible on Aeria tard (D3) Test (D5) Yes	e required) e) iverine) ne) C2) I Imagery (C9)
Type: Depth (inc emarks: CDROLOO etland Hyd imary Indic Surface V High War Saturatio Water Ma Saturatio Water Ma Sedimen Drift Dep Surface S Inundatic Water-St eld Observ Inface Water ater Table R ater Table R ater Table R ater Table R	Ches):	required; ch e) verine) e) gery (B7) No No No No	neck all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp Depth (in Depth (in Depth (in Depth (in	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduce n Reductic Surface ((blain in Rei ches): ches): ches): photos, pre	s (B13) lor (C1) res along Li d Iron (C4) on in Tilled C7) marks) 6 t 0 t evious inspe	iving Roots Soils (C6)	A 2 C A 2 A 2 C A 2 A 2 C A 2 Second S	ndary Indica Nater Marks Sediment Deposits Drainage Pat Dry-Season V Crayfish Burr Saturation Vis Shallow Aquit AC-Neutral y Present?	tors (2 or mor (B1) (Riverin posits (B2) (R s (B3) (Riveri terns (B10) Water Table (f ows (C8) sible on Aeria tard (D3) Test (D5) Yes	e required) e) iverine) ne) C2) I Imagery (C9)
Type: Depth (inc emarks: DROLOO etland Hyd imary Indic Surface V High War Saturatio Water Ma Sedimen Drift Dep Surface S Inundatic Water-St eld Observ urface Water ater Table F aturation Pri cludes cap escribe Rec	PREMARY PREMARY SPEDON GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) (Nonriverine Soil Cracks (B6) on Visible on Aerial Ima ained Leaves (B9) vations: er Present? Yes Present? Yes eilary fringe)	required; ch e) verine) e) gery (B7) No No No No	neck all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp Depth (in Depth (in Depth (in Depth (in	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduce n Reductic Surface ((blain in Rei ches): ches): ches): photos, pre	s (B13) lor (C1) res along Li d Iron (C4) on in Tilled C7) marks) 6 t 0 t evious inspe	iving Roots Soils (C6)	A 2 C A 2 A 2 C A 2 A 2 C A 2 Second S	ndary Indica Nater Marks Sediment Deposits Drainage Pat Dry-Season V Crayfish Burr Saturation Vis Shallow Aquit AC-Neutral y Present?	tors (2 or mor (B1) (Riverin posits (B2) (R s (B3) (Riveri terns (B10) Water Table (f ows (C8) sible on Aeria tard (D3) Test (D5) Yes	e required) e) iverine) ne) C2) I Imagery (C9)
Type: Depth (inc emarks: CDROLOO etland Hyd imary Indic Surface V High War Saturatio Water Ma Saturatio Water Ma Sedimen Drift Dep Surface S Inundatic Water-St eld Observ Inface Water ater Table R ater Table R ater Table R ater Table R	Ches):	required; ch e) verine) e) gery (B7) No No No No	neck all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp Depth (in Depth (in Depth (in Depth (in	y) (B11) st (B12) vertebrates Sulfide Od Rhizospher of Reduce n Reductic Surface ((blain in Rei ches): ches): ches): photos, pre	s (B13) lor (C1) res along Li d Iron (C4) on in Tilled C7) marks) 6 t 0 t evious inspe	iving Roots Soils (C6)	A 2 C A 2 A 2 C A 2 A 2 C A 2 Second S	ndary Indica Nater Marks Sediment Deposits Drainage Pat Dry-Season V Crayfish Burr Saturation Vis Shallow Aquit AC-Neutral y Present?	tors (2 or mor (B1) (Riverin posits (B2) (R s (B3) (Riveri terns (B10) Water Table (f ows (C8) sible on Aeria tard (D3) Test (D5) Yes	e required) e) iverine) ne) C2) I Imagery (C9)

A NAME

Project Number: 6Town: NA State: $CODO$.Stream: DEEX CANYONPhoto begin file#:Photo end file#:Investigator(s):M. ZAOKAPhoto begin file#:Photo end file#:Y ∇ / N \Box Do normal circumstances exist on the site?Location Details: $NE/4 = SN/4 = SEC. 3E$ T $33N, RION, NMEM$
Investigator(s): M . ZABKA V Γ /(N Γ Do normal circumstances exist on the site? Location Details: $N \in [4] \Rightarrow N/4 \leq c \leq .3 \leq$
VET IN De normal ainsympton and avist on the site? Location Details: NE/4 SW/4 SEC. 35
Dusiastiant Datum
Potential anthropogenic influences on the channel system: NATURAL GAS DEVELOPME
WITHIN MATERSHED.
Brief site description: MODERATE ORADIENT SYSTEM, TRIBUTARY TO ANEMAS. R. AUTENE FLOOD PLAIN HEAVELY VEGETATED WITH SAMEY BOTTOMED WASH CHANNEL.
Checklist of resources (if available): ✓ ✓ Aerial photography ✓ ✓ Dates: ✓<
Hydrogeomorphic Floodplain Units
Active Floodplain
Low-Flow Channels OHWM Paleo Channel
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:
1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
 Select a representative cross section across the channel. Draw the cross section and label the floodplain units. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units. a) Record the floodplain unit and GPS position.
b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
 5. Identify the OHWM and record the indicators. Record the OHWM position via: ✓ Mapping on aerial photograph □ GPS
$\square Digitized on computer \square Other: Civin Survey DATA$

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project ID: Cross section ID: DR-1 Date: 6-2-23 Time: 12:20 PM
Cross section drawing: (NORTHWEST) ACTIVE FLOOD PLAIN (55')
UPLAND AR AND AR AND
Low Even
OHWM
GPS point:
Indicators: Change in average sediment texture Change in vegetation species Change in vegetation cover Other:
Comments: pronounces andance in surface ever. From ACTIVE FLOOD PLAIN TO UPLAND.
Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace
GPS point: 37.0571, -107.9046 (NE); 37.0570, -107.9048 (SW)
Characteristics of the floodplain unit: Average sediment texture: 7 Total veg cover: 60 % Tree: % Shrub: 45 % Herb: 15 % Community successional stage: NA Mid (herbaceous, shrubs, saplings) Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)
Indicators: Soil development Mudcracks Soil development Ripples Surface relief Drift and/or debris Other: Presence of bed and bank Other: Benches Other:
Comments:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet		
Project: CO2 PEPE-ENE	Date: 5-4-23 Time: 2:45 pm	
Project Number: 7	Town: NA State: COLO.	
Stream: Cox Cmmyon	Photo begin file#: Photo end file#:	
Stream: Con Cunyon Investigator(s): M. ZABYA, A. BUANCHARS		
$Y \swarrow / N \square$ Do normal circumstances exist on the site?	Location Details: $5E/4$ $5w/4$ $5EC.3$ T32N, RIDW, NMPM Projection: Datum:	
$Y \square / N \checkmark$ Is the site significantly disturbed?	Projection: Datum: Coordinates: 37.0412, -107.9226	
Potential anthropogenic influences on the channel system: Compressor STRTION ON WEST BANK. DIL + GAS SEVELOPMENT THRONGONT AREA.		
Brief site description: No TRUE DEFENED ENEDERCE OF RECENT STORM S MULTEPLE ONTANNELS EN BOTTO	BED + BANK FEATURES, URGE FLOW (DEBRES, ETC.). ON OF BRAINAGE.	
Checklist of resources (if available):		
Aerial photography 🗌 Stream gag	ge data	
Dates: Gage num		
Topographic maps Period of r		
	y of recent effective discharges	
	s of flood frequency analysis	
	ecent shift-adjusted rating	
	neights for 2-, 5-, 10-, and 25-year events and the	
	ecent event exceeding a 5-year event	
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain	Low Terrace	
	مقد	
the the the	en e	
Low-Flow Channels	OHWM Paleo Channel	
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:		
1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.		
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.		
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.		
a) Record the floodplain unit and GPS position.		
b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the		
floodplain unit.		
c) Identify any indicators present at the location.		
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.		
5. Identify the OHWM and record the indicators. Record the OHWM position via:		
Mapping on aerial photograph GPS		
\Box Digitized on computer $$	Other: CINEL GURNEY DATA	

Project ID: Cross section ID	: CX - 1 Date: 5-4-23 Time: 2:45 Pm
$\frac{Cross section drawing: (south GAST)}{Cross section drawing: (south GAST)}$	15 KALE
SAGE GRASSES	Willing the
	fnn 625
OHWM	
GPS point:	
Indicators: Change in average sediment texture Change in vegetation species Change in vegetation cover	 Break in bank slope Other: Other:
Comments:	
Eloodulain unit	Active Floodplain Low Terrace
Floodplain unit: Low-Flow Channel	
GPS point: 37. 0413, -107.9226 (NE);	37.0411, -107.9227 (SW)
Characteristics of the floodplain unit: Average sediment texture: MED FINC Total veg cover: 50 % Tree: % Community successional stage: % NA Early (herbaceous & seedlings)	
Indicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank Benches	 Soil development Surface relief Other: Other: Other: Other:
PRONOUNCED CHANGE IN	CLEARLY IDENTIFIED BY J SURFACE ELEN. AND CHANGE A OTIVE FLODPPLAIN MEASURED
IN NEG COMPOSITION.	A OFENC FLODD PLAEN MEASURED
75 ACROSS.	

Project: RCG CO2 PIPELINE Project Number: 8	Date: 6 - 2 - 2 - 3 Town: NA	Time: 12:30 pm State: COLO,
Stream: UNNAMED II	Photo begin file#:	1
Investigator(s): M. Zweska	-	
$Y \square / N \square$ Do normal circumstances exist on the site?	Location Details: 5w/ TZ2N, R9w	4 50/4 500.9 1, NMPM
$Y \square / N \checkmark$ Is the site significantly disturbed?	Projection: Coordinates: 37.025	Datum: 5, -107.9453
Potential anthropogenic influences on the channel system: NATURAL GAS AEVENOPMENT IN WATERSHED.		
Brief site description: HIGH CRADEENT CHAMPON. FATERLY INCESED CHAN SANDY BOTTOMED WASH.	SYSTEM TRE NEL WITH A	NARAOW
Checklist of resources (if available): Stream gage data Aerial photography Gage number: Dates: vAR < 0.5		
Hydrogeomorphic F	loodplain Units	
Active Floodplain	OHWM Paleo Char	nnel
Procedure for identifying and characterizing the flood	plain units to assist in id	entifying the OHWM:
 Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site. Select a representative cross section across the channel. Draw the cross section and label the floodplain units. 		
 3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units. a) Record the floodplain unit and GPS position. b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit. c) Identify any indicators present at the location. 		
 4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section. 5. Identify the OHWM and record the indicators. Record the OHWM position via: Mapping on aerial photograph GPS 		
	Other: OIVIL AURO	- cy and the

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project ID: Cross section ID:	UNII-1 Date: 6-2-23 Time: 12-30 Pm
Cross section drawing: (NORTHEAST)	4 HE HANNEL
	FLOW
<u>OHWM</u>	
GPS point: Indicators: Change in average sediment texture	Break in bank slope
Change in vegetation species Change in vegetation cover	Other: Other:
Floodplain unit: Low-Flow Channel	Active Floodplain Low Terrace
GPS point:	
Characteristics of the floodplain unit: Average sediment texture: Co.445 C Total veg cover: 10 % Tree: % S Community successional stage: NA NA Early (herbaceous & seedlings) S	
Indicators: ☐ Mudcracks ☐ Ripples ☐ Drift and/or debris ✓ Presence of bed and bank ☐ Benches	 Soil development Surface relief Other: Other: Other: Other:
Comments: VERY BRONDANCES	CHANGE EN SURFACE ELEV.
FROM ACTIVE FLOOSPLA	ESN TO UP MARIA.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet		
Project: CO2 ARK TO COYOTE Project Number: 96 Stream: COTTONWOOD WASH Investigator(s): A. BLANCHARD, M. ZABKA	Date: 5/4/23 Town: Photo begin file#:	Time: State: Photo end file#:
$Y \times / N \square$ Do normal circumstances exist on the site?	Location Details: STATION CROSSING	6 TR 3+ 2 4
$V \square / N \square$ Is the site significantly disturbed? Projection: $MMPA$ Datum: $MA = \frac{1}{3}$ Coordinates: $\frac{37.024299}{-107.955040}$		Datum: 🗚 📆
Potential anthropogenic influences on the channel syst. Cont watter chokens of state Am, on AC	em:	, ,
Brief site description: TYPICAL ARD WEST EPH PORPENSIONLAR TO CHAMMER, WHITEH IS ~ 13	tomothe which, p is which them a	IL WALS (18055 What the extension
Vegetation mapsResultsSoils mapsMost ruleRainfall/precipitation mapsGage h	ber: ecord: 7 of recent effective disc 8 of flood frequency ana ecent shift-adjusted ratir	lysis ng d 25-year events and the
Hydrogeomorphic Floodplain Units		
Active Floodplain	OHWM Paleo Ch	
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:		
 Walk the channel and floodplain within the study area to vegetation present at the site. Select a representative cross section across the channel. If 3. Determine a point on the cross section that is characteria a) Record the floodplain unit and GPS position. Describe the sediment texture (using the Wentworth floodplain unit. Identify any indicators present at the location. Repeat for other points in different hydrogeomorphic flips. Identify the OHWM and record the indicators. Record the indicators. Record the indicators. Record the indicators area indicators. Record the indicators. Record the	Draw the cross section an stic of one of the hydrog class size) and the veget oodplain units across the	nd label the floodplain units. geomorphic floodplain units. tation characteristics of the e cross section.

Project ID:	Cross section ID:	Date:	Time:
Cross section draw (articiant cons TECAR	ATTING OD RAPIN	- SADE BRUEH CHRINGLAND - LOW TROPPALE	
OHWM		······	
GPS point: 37,0747	99 107.9<5040		
Indicators:	verage sediment texture regetation species regetation cover	 Break in bank slope Other: Other: 	
Par in	DE PRAN CONTRA NOVE SPERIORAN NOVE SPERIORAN	O HANNA THE O HARAN	
SOIL PILES	s can be stated a	ATE THE OF Other	
Eleadalain mitt			I T
Floodplain unit: GPS point: <u>37. 0242</u>	Low-Flow Channel - Noveg in Low From Mrt Senson From 197, - 107.955040	X Active Floodplain 55 % VEG IN ARTICE FLOOR RAN CHERE INF	Low Terrace ~ 40% web rate w Low Front Terrace . Five Sut
Total veg cover: <u>4</u> Community succession NA	xture: <u>FNE SAND</u> SILT 2 % Tree: <u>5</u> % Shru	ıb: <u>30</u> % Herb: <u>5</u> % X Mid (herbaceous, shrubs, sapl X Late (herbaceous, shrubs, mat	e .
Indicators: Muderacks Ripples Drift and/or Presence of Benches	debris bed and bank	 Soil development Surface relief Other: Other: Other: Other: 	
	, ARTR FRIMA, QUGA, ALM		
other: Brome,	LUPINE, (LOUDE, RIGEBRASS		

Project: CO2 FIPETIVE	ittent Streams OHW Date: 5/4/23	
Project Number: 96	Town: NA	
Stream: Corronwood (9B)	Photo begin file#:	
Investigator(s): M. ZOBKA, A. BLANCHARS		
$Y \checkmark / N \square$ Do normal circumstances exist on the site?	Location Details: 37	7.024287, 7.955024
$Y \square / N \checkmark$ Is the site significantly disturbed?	Projection: Coordinates:	Datum:
Potential anthropogenic influences on the channel sy AS ACENT ROAD - LOW WATE	stem: R CROSSENZ	up STREAM.
Brief site description: Corronwood DRASS WASH. THE AREA WITTEN THE VEG. IMMED SATE TRANS STOON	NAGE IS AN E	PHEMERAL PRY
WASH. THE AREA WITHEN THE	E OHWM IS NO	EGRLY DEVOED of
VEG. IMMEDEATE TRANSETEON	10 Milde Brooks II	
Checklist of resources (if available):		
Aerial photography Stream ga	ge data	
/ Dates: Gage num	-	
✓ Topographic maps Period of	record:	
	ry of recent effective disc	harges
Vegetation maps Results of flood frequency analysis		
	recent shift-adjusted ratin	
	heights for 2-, 5-, 10-, an	-
	recent event exceeding a	5-year event
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic		
Active Floodplain	Low Terrace	÷
		all at
		1 P
	enter he	
the phone of the second	and the second se	
the second se		
Low-Flow Channels	OHWM Paleo Ch	
Procedure for identifying and characterizing the floo 1. Walk the channel and floodplain within the study area	dplain units to assist in	identifying the OHWM:
Procedure for identifying and characterizing the floo1. Walk the channel and floodplain within the study area vegetation present at the site.	dplain units to assist in to get an impression of t	identifying the OHWM: he geomorphology and
 Procedure for identifying and characterizing the floo 1. Walk the channel and floodplain within the study area vegetation present at the site. 2. Select a representative cross section across the channel 	dplain units to assist in to get an impression of t . Draw the cross section a	identifying the OHWM: he geomorphology and nd label the floodplain units.
 Procedure for identifying and characterizing the floo 1. Walk the channel and floodplain within the study area vegetation present at the site. 2. Select a representative cross section across the channel 3. Determine a point on the cross section that is character 	dplain units to assist in to get an impression of t . Draw the cross section a	identifying the OHWM: he geomorphology and nd label the floodplain units.
 Procedure for identifying and characterizing the floo 1. Walk the channel and floodplain within the study area vegetation present at the site. 2. Select a representative cross section across the channel 3. Determine a point on the cross section that is character a) Record the floodplain unit and GPS position. 	dplain units to assist in to get an impression of t . Draw the cross section a ristic of one of the hydrog	identifying the OHWM: he geomorphology and nd label the floodplain units. geomorphic floodplain units.
 Procedure for identifying and characterizing the floo 1. Walk the channel and floodplain within the study area vegetation present at the site. 2. Select a representative cross section across the channel 3. Determine a point on the cross section that is character a) Record the floodplain unit and GPS position. b) Describe the sediment texture (using the Wentworth) 	dplain units to assist in to get an impression of t . Draw the cross section a ristic of one of the hydrog	identifying the OHWM: he geomorphology and nd label the floodplain units. geomorphic floodplain units.
 Procedure for identifying and characterizing the floo 1. Walk the channel and floodplain within the study area vegetation present at the site. 2. Select a representative cross section across the channel 3. Determine a point on the cross section that is character a) Record the floodplain unit and GPS position. b) Describe the sediment texture (using the Wentworth floodplain unit. 	dplain units to assist in to get an impression of t . Draw the cross section a ristic of one of the hydrog	identifying the OHWM: he geomorphology and nd label the floodplain units. geomorphic floodplain units.
 Procedure for identifying and characterizing the floo 1. Walk the channel and floodplain within the study area vegetation present at the site. 2. Select a representative cross section across the channel 3. Determine a point on the cross section that is characterized a) Record the floodplain unit and GPS position. b) Describe the sediment texture (using the Wentworth floodplain unit. c) Identify any indicators present at the location. 	dplain units to assist in to get an impression of t . Draw the cross section a ristic of one of the hydrog n class size) and the vege	identifying the OHWM: he geomorphology and nd label the floodplain units. geomorphic floodplain units. tation characteristics of the
 Procedure for identifying and characterizing the floo 1. Walk the channel and floodplain within the study area vegetation present at the site. 2. Select a representative cross section across the channel 3. Determine a point on the cross section that is character a) Record the floodplain unit and GPS position. b) Describe the sediment texture (using the Wentworth floodplain unit. c) Identify any indicators present at the location. 4. Repeat for other points in different hydrogeomorphic 	dplain units to assist in to get an impression of t . Draw the cross section a ristic of one of the hydro n class size) and the vege floodplain units across th	identifying the OHWM: he geomorphology and nd label the floodplain units. geomorphic floodplain units. tation characteristics of the e cross section.
 Procedure for identifying and characterizing the floo 1. Walk the channel and floodplain within the study area vegetation present at the site. 2. Select a representative cross section across the channel 3. Determine a point on the cross section that is characterized a) Record the floodplain unit and GPS position. b) Describe the sediment texture (using the Wentworth floodplain unit. c) Identify any indicators present at the location. 	dplain units to assist in to get an impression of t . Draw the cross section a ristic of one of the hydro n class size) and the vege floodplain units across th	identifying the OHWM: he geomorphology and nd label the floodplain units. geomorphic floodplain units. tation characteristics of the e cross section.

Project ID: Cross section ID:	Date: 5-4-23 Time:
Cross section drawing:	
OHWM	
GPS point:	
Indicators: Change in average sediment texture Change in vegetation species Change in vegetation cover	Other: Other:
Comments: OHWM INDECATED BY UPPER LIMIT OF SAND-SI	BREAK EN BANK SLOPE AND EZED PARTECLES.
Floodplain unit: Low-Flow Channel	Active Floodplain Low Terrace
GPS point:	
Characteristics of the floodplain unit: Average sediment texture: Total veg cover: % Tree: Community successional stage: NA Early (herbaceous & seedlings)	 b:% Herb:% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees)
Indicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank Benches	 Soil development Surface relief Other:
Comments:	

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