STATE OF COLORADO

DEPARTMENT OF TRANSPORTATION

Region 3, Environment

222 South 6th Street, Rm. 317 Grand Junction, Colorado 80501 (970) 683-6255 | Fax (970) 683-6227



SH 92 Stengel's Hill Reconstruction CDOT Federal Aid Project Number STA 092A-024; SA 17772

SH 92 MP 13.80 to 15.50 (Delta County)

Wetland Delineation Report



March 21, 2013

Prepared for submittal to:

U.S. Army Corps of Engineers, Sacramento District Colorado West Regulatory Branch 400 Rood Avenue, Rm. 224 Grand Junction, CO 81501-2563

INTRODUCTION

The following Wetland Delineation Report is provided as support to complete the Categorical Exclusion for CDOT project STA 092A-024 (17772), known as SH 92 Stengel's Hill Reconstruction. The project is located on SH 92 between mileposts 13.80-15.50 in Delta County west of Rogers Mesa and south of Redlands Mesa (see attachments for maps, photos, project plan sheets showing surveyed wetland locations, and completed wetland data forms).

PURPOSE

The project involves reconstruction and minor widening of SH 92 from milepost (MP) 13.80 to MP 15.50 in Delta County, an area referred to as Stengel's Hill. The project also includes construction of a new grade separated railroad crossing where SH 92 intersects the grade of the Union Pacific Railroad (UPRR), which will involve a slight shift in the alignment of the highway to the north.

METHODS

The wetland delineation was performed by Paula Durkin, a certified Professional Wetland Scientist (PWS #1225, issued on 8/16/1999) with the CDOT Region 3 Grand Junction office (Environmental Unit). Wetlands were delineated and mapped on 9/19/11 and 9/20/11.

All wetlands were delineated in accordance with the Corps of Engineers 1987 Wetland Delineation Manual (Environmental Laboratory 1987) and the 2008 Arid West Manual. A routine determination was completed due to obvious wetland boundaries. With the exception of certain wetlands, for each wetland polygon, two paired data points are typically recorded on Wetland Determination Data Forms to document the wetland/upland boundary. Due to the atypical boundaries of Wetland #1, five paired data points were recorded. These are attached as an addendum to this report.

Each flagged wetland boundary was surveyed as one polygonal unit using a Trimble ProXH receiver for sub-foot post-processing accuracy and instant determination of wetland size and coordinate locations. The wetland data was then imported into the project's topo files in MicroStation Vers. 8, which were then incorporated into the design plans. Future final analyses will take into consideration avoidance and minimization measures and to calculate potential wetland impacts. These analyses have not yet been determined, however unavoidable impacts are expected and CDOT will coordinate with the U.S. Army Corps of Engineers and submit a Preconstruction Notification for a Nationwide Permit 14 for Linear Transportation Projects.

WETLANDS AND WATERS OF THE U.S. DESCRIPTION (RESULTS)

The wetland delineation was limited only to potential wetland areas north of SH 92 between MP 13.8 and MP 15.50 and an area 42.3 acres in size. Within this area, 2.31 acres were delineated as five separate wetland polygons.

The largest wetland (Wetland #1) is on BLM land and straddles a portion of CDOT's Right-of-Way (ROW) and private property. The remaining wetlands are on private property and a portion of CDOT ROW. The wetlands as depicted on the attached topo map and aerial photos (Figures 1 - 3) are shown as an approximation for orientation purposes. The actual surveyed wetlands including data points and photo points are shown on detailed project plan sheets on Figures 4-6. Photos of each wetland are provided in Figures 7-17. Table 1 summarizes the generalized wetland characteristics and site details of each.

The dominant wetland class for each wetland is Palustrine Emergent (PEM). Two of the wetlands (#1 and #2), including the largest one on BLM land are likely the only jurisdictional wetlands as they directly abut two separate jurisdictional waters of the US, an unnamed creek and Big Gulch. Both are tributaries to the North Fork of the Gunnison River, which is located approximately one mile to the south. From the outermost limits of each wetland at the upland interface, there is an unbroken surface connection to a small creek approximately one to two feet wide that historically flowed intermittently, and now have perennial flows due to irrigation runoff. Most creeks in the area are excavated for additional water storage and used as stockponds, many of which can be seen on the 7.5' topographic map dating back to 1955.

Wetlands 3-5 are likely not jurisdictional as they are located on vegetated swales associated with irrigation runoff from an unlined ditch that may be traced to Stingley Gulch but otherwise have no direct connection to any relatively permanent waters of the US.

Wetland #1. Wetland #1 (data forms 1-1 to 1-5) is located for the most part on BLM land north of SH 92 between MP 14.6 and 14.7, approximately 0.1 mile east of the UPRR at-grade crossing and west of Hidden Springs Road. The wetland continues up the drainage, but the delineated portion for project purposes is 1.04 acres. The main channel is a small single-threaded channel originating from the steeper hills and mesas to the north, northwest and sloping gently through the project area. It consists of a large, marshy wetland complex that in September had still retained its marsh-like characteristics aside from drier margins that are evidently wetter in early summer as indicated by the salt-crusted soils that are slightly alkaline, non-porous, and slowly permeable. The dominant vegetation reflects the alkaline and aridic characteristics of the soils and the region. Common plant species include Distichlis spicata – FAC, Chenopodium chenopodioides - FACW, and Glaux maritimum - FACW, which are common particularly around the drier margins of the wetland. Toward the wetter central drainage of the wetland, inland saltgrass thrives along with mosaic complexes of Typha latifolia-OBL and Muhlenbergia asperifolia-FACW. Future functional analyses will be completed closer to the permitting stage for the project and will likely result in a high grade, close to, if not equivalent to the reference standard for this wetland type, and at the very least, highly functioning and retaining most of its natural functions.

<u>Wetland #2</u>. Wetland #2 (data form 2-1) is located at the bottom of Big Gulch at MP 15.0. It is regularly grazed and trampled by horses, which is reflected in its monotypic vegetation community dominated by an invasive and introduced grass, *Phalaris arundinacea* – FACW. Characteristic of this species is that it forms extensive single-species stands in wetlands.

Table 1
Wetland Characteristics and Site Details

Wetland ID	haracteristics and Site I Location	Watershed	Dominant	Hydric Soil	Wetland
and Size	Location	LRR	Hydrophytic	Indicators	Hydrology
and Size		LININ	Vegetation	maicators	Indicators
#1	Adjacent to an unnamed	North Fork Gunnison	PEM	Chipeta	Primary:
(1.04 AC)	intermittent creek on BLM	Watershed	I LIVI	Series/Badlands	Surface Water (A1)
, ,	lands for the most part	(HUC: 14020004)	Distichlis spicata FAC	,	Saturation (A3)
			Chenopodium	Chipeta silty	Salt Crust (B11)
	38.47521, -107.49287	D- Interior Deserts	chenopodioides-FACW	clay formed on	Secondary:
	T. 14S., R. 93W.,NE ¼ NE ¼		Glaux maritimum-FACW Typha latifolia-OBL	slope alluvium	Drainage Patterns (B10)
	Sect 31		Muhlenbergia asperifolia-	Redox Dark	Saturation Visible on
			FACW	Surface (F6)	Aerial Imagery (C9)
#2	Adjacent to Big Gulch	North Fork Gunnison	PEM	Utaline Series	Primary:
(0.34 AC)	Aujacent to big Guich	Watershed	PEIVI	Otaline Series	Surface Water (A1
(0.0.1.1.0)	38.47571, -107.49099	(HUC: 14020004)	Phalaris arundinacea-FACW	Silty clay loams	Saturation (A3)
				derived from	Secondary:
	T. 14S., R. 93W.,NE ¼ NE ¼	D- Interior Deserts		basalt formed	Drainage Patterns
	Sect 31			on mesas high terraces, and	(B10) Saturation Visible on
				fan remnants	Aerial Imagery (C9)
					1017(117
				Hydrogen	
				Sulfice (A4)	
#3	Vegetated swale around a	North Fork Gunnison	PEM	Utaline Series	Primary:
(0.26 AC)	stockpond, irrigation related	Watershed			Surface Water (A1
		(HUC: 14020004)	Distichlis spicata FAC	Silty clay loams	Saturation (A3)
	38.47592, -107.49023	D- Interior Deserts	Polypogon monspeliensis- FACW	derived from basalt formed	Secondary: Drainage Patterns
	T. 14S., R. 93W.,NW ¼ NW	D- IIIterioi Deserts	FACVV	on mesas high	(B10)
	1/4 Sect 32			terraces, and	Saturation Visible on
				fan remnants	Aerial Imagery (C9)
				Daday Dady	
				Redox Dark Surface (F6)	
#4	Vegetated swale related to	North Fork Gunnison	PEM	Utaline Series	Primary:
(0.66 AC)	irrigation runoff from Stingley Gulch	Watershed (HUC: 14020004)	Distichlis spicata FAC	Silty clay loams	Surface Water (A1 Saturation (A3)
	Sungrey Sursin	(1.00.1102000.)	Muhlenbergia asperifolia-	derived from	Secondary:
	38.47595, -107.49016	D- Interior Deserts	FACW	basalt formed	Drainage Patterns
	T 446 B 6004 ANALYANA			on mesas high	(B10)
	T. 14S., R. 93W.,NW ¼ NW ¼ Sect 32			terraces, and fan remnants	Saturation Visible on
	/4 JCUL JZ			ian reilliants	Aerial Imagery (C9)
				Redox Dark	
				Surface (F6)	
#5	Irrigation ditch	North Fork Gunnison	PEM	Utaline Series	Primary:
(0.01 AC)		Watershed			Surface Water (A1
	38.48022, -107.48549	(HUC: 14020004)	Typha latifolia	Silty clay loams	Saturation (A3)
	T 14C D 03W CM1/CM1/	D. Interior December	Distichlis spicata FAC	derived from	Secondary:
	T. 14S., R. 93W.,SW ¼ SW ¼ Sect 29	D- Interior Deserts		basalt formed on mesas high	Drainage Patterns (B10)
	3000 23			terraces, and	Saturation Visible on
				fan remnants	Aerial Imagery (C9)
				Date 5	
				Redox Dark Surface (F6)	
				Surface (10)	
Total: 2.31 AC					

The soils along Big Gulch are saturated to the surface, black in color (2.5/N), non-porous and slowly permeable. They have a strong sulfidic odor.

<u>Wetlands #3-5</u>. Wetland #3 (data form 3-1), Wetland #4 (data form 4-1) and Wetland #5 (data form 5-1) are associated with irrigation runoff and have no direct connection to any naturally occurring stream or creek. They can best be described as vegetated swales. They aren't high value wetlands but are functional and the hydrology is not likely to change in the near future. Distichlis persists throughout each wetland. Wetland #3 also includes Polypogon monspeliensis — FACW, while Wetland #5 is largely dominated by Typha, while, Wetland #4 is a larger complex (0.66 acres) and retains a certain amount of value for wildlife species in the area.

CONCLUSION

All wetlands in the project area were delineated in accordance with the 1987 Corps Wetland Delineation Manual and the 2008 Arid West Supplement. Boundaries were flagged in the field and surveyed by GPS with sub-foot accuracy. As depicted on the project's design sheets the wetland boundaries are an accurate depiction of this valuable resource. No other wetlands or Waters of the U.S. were identified within or adjacent to the project area.

Future work will include a formal functional assessment of the wetlands using CDOT's FACWet methodology and an analysis of impacts for future 404 permitting needs under the Clean Water Act. Additional work will also include preparation of a Wetland Finding for Federal Highways (FHWA). For permitting purposes and to streamline permitting, CDOT will likely mitigate for all temporal and permanent impacts to wetlands regardless of jurisdiction and will seek authorization for work based on a preliminary JD versus an approved JD. Mitigation for all impacts will also support FHWA and CDOT's policy of *No Net Loss of Wetlands*. This will likely be completed at WetBank Gunnison upon the Corps approval.

REFERENCES

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. US Fish and Wildlife Service, FWS/OBS-79/31.

Environmental Laboratory. 1987. *Corps of Engineers Wetland Delineation Manual*, Technical Report Y-87-1. U.S. Army Engineers Waterways Experiment Station, Vicksburg, MS.

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Lichvar, R.W. 2012. The National Wetland Plant List. ERDC/CRREL TR-12-11. Hanover, NH: U.S. Army Corps of Engineers, Cold Regions Research and Engineering Laboratory. http://acwc.sdp.sirsi.net/client/search/asset:asset?t:ac=\$N/1012381

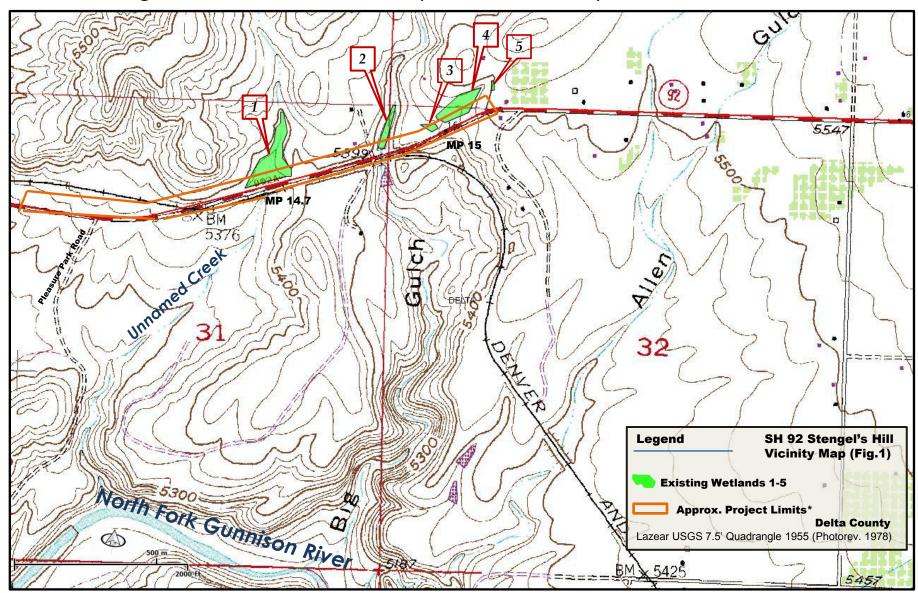
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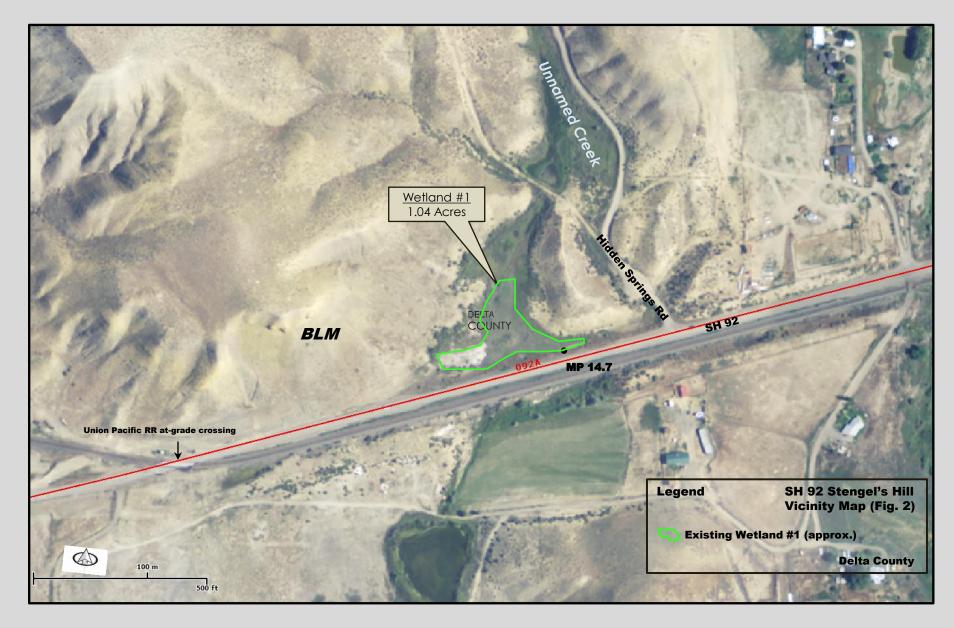
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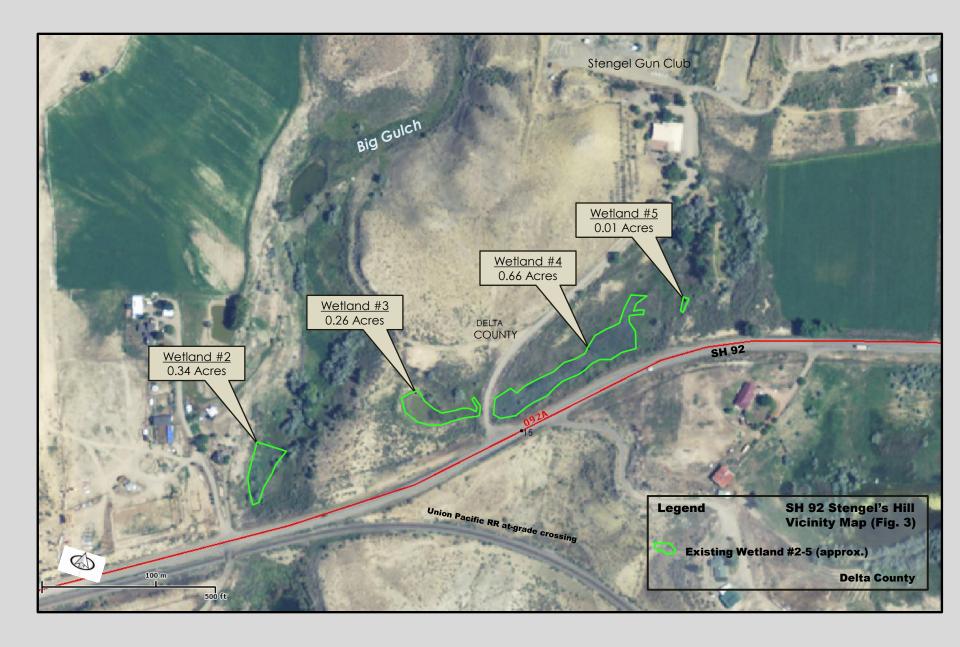
_____. 1974. Hydrologic Unit Code Map for Colorado. Denver Federal Center, Denver, CO.

SH92 Stengel's Hill Reconstruction (MP 13.80-15.50)



Project limits: Edge of oil on south side of highway to no more than 100 ft. north of the highway (varies).





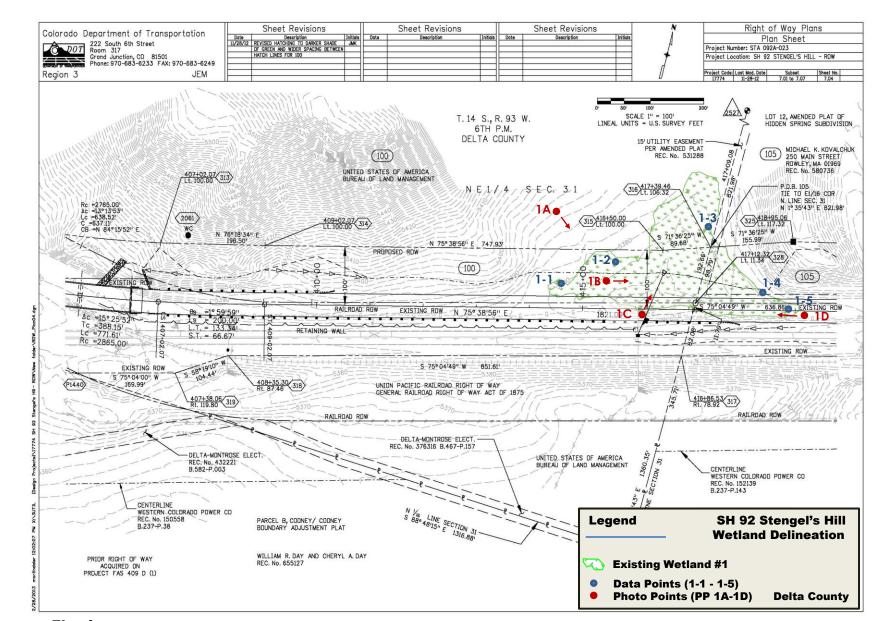


Fig. 4

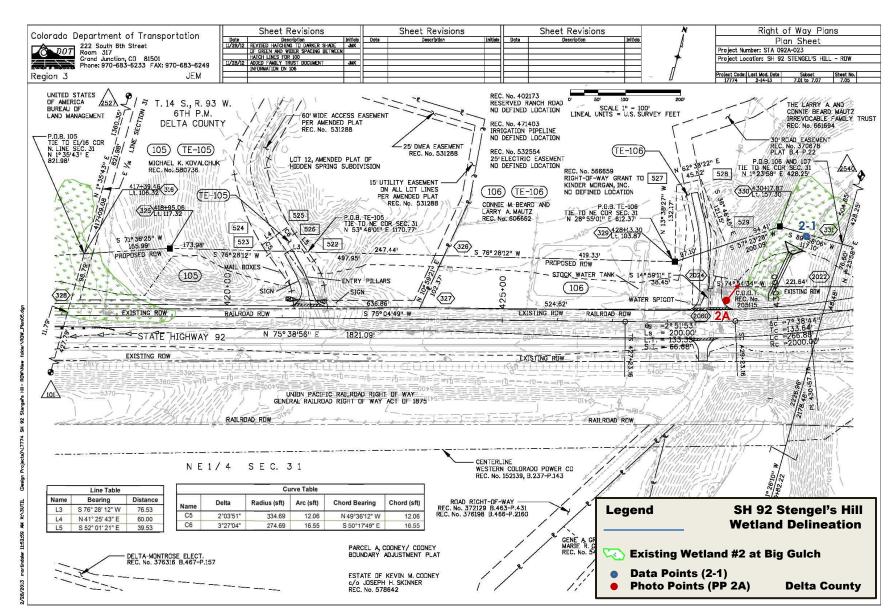


Fig. 5

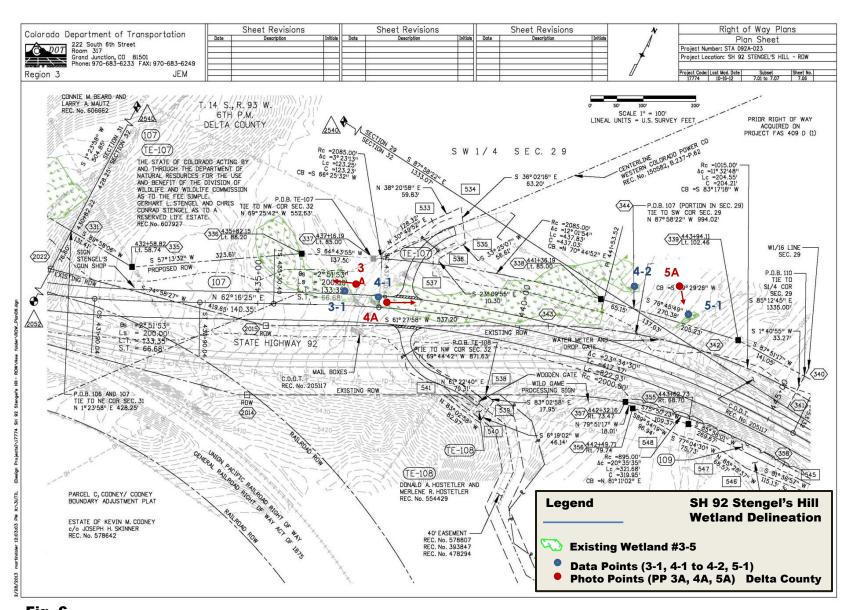


Fig. 6

Wetland Photos (Figures 7-17)

Photopoint 1A for Wetland #1 on BLM Property and CDOT's new proposed ROW.



Fig. 7

Photopoint 1B for Wetland #1 on BLM Property.



Fig. 7

Photopoint 1C for Wetland #1 on BLM Property.



Fig. 8

Photopoint 1D for Wetland #1 on BLM Property.



Fig. 9





Pit 1-5

Pit 1-1 Pit 1-2







Pit 1-3

Fig. 10

Pit 1-4
Wetland #1 Soil Pits
See Figure 4 for data point locations.

11

Photopoint 2A for Wetland #2 at Big Gulch on private property and on CDOT's new proposed ROW.



Fig. 11

Wetland #2 Soil Pit

See Figure 5 for data point location.





Northern Leopard Frog (Rana pipiens) hiding in the reedgrass.

Fig. 12 Pit 2-1

Photopoint 3A for Wetland #3 on private property and on part of CDOT's new proposed ROW.



Fig. 13

Wetland #3 and Soil Pit

See Figure 5 for data point location.





Pit 3-1

Fig. 14

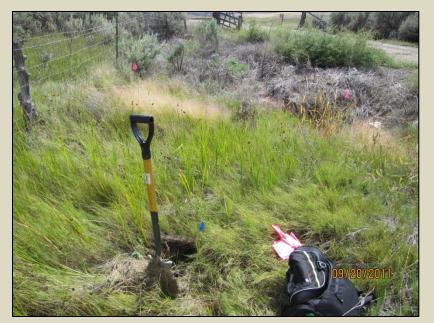
Photopoint 4A for Wetland #4 on private property and on part of CDOT's new proposed ROW.



Fig. 15

Wetland #4 and Soil Pit

See Figure 6 for data point locations.





Wetland 4-1 Pit 4-1



View looking east from 4-2.

Fig. 16

Photopoint 5A for Wetland #5 on private property and on part of CDOT's new proposed ROW.

See Figure 6 for location. Area is not within project limits.





Pit 5-1

Fig. 17

Project/Site: SH 92 Stengel's Hill	_	City/County	y: Delta		Samp	pling Date	9/19/20	11
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Samp	oling Poin	t: W1-1	
Investigator(s): Paula Durkin		Section, To	ownship, Ra	nge: NE 1/4 NE 1/4	4 Sect. 31	, T. 14S	, R. 93W	
Landform (hillslope, terrace, etc.): slope	_	Local relie	f (concave,	convex, none): conc	ave	S	Slope (%):	1
Subregion (LRR): D - Interior Deserts	Lat: 38	.47521		Long: 107.49287		De	atum: NA	D83
Soil Map Unit Name: 23 - Chipeta silty clay, 3 to 30	percent slop	pes		NWI clas	ssification:	PEM		
Are climatic / hydrologic conditions on the site typical for		_	No ((If no, explain	in Remark	(s.)		
Are Vegetation Soil or Hydrology	significantly	disturbed?	Are '	"Normal Circumstanc	es" presen	t? Yes (No.	·C
Are Vegetation Soil or Hydrology	naturally pro	oblematic?	(If ne	eded, explain any an	swers in R	Remarks.)		
SUMMARY OF FINDINGS - Attach site ma	p showing	samplin	g point lo	ocations, transe	cts, imp	ortant 1	features	, etc.
Hydrophytic Vegetation Present? Yes 6	No 🕝							
Hydric Soil Present? Yes 6	No @	ls ti	he Sampled	l Area				
Wetland Hydrology Present? Yes	No (hin a Wetla		(e)	No C		
Remarks: SW edge of a large wetland complex, r Gunnison River.	narshy; adj t	to an unna	med intern	nittent creek about	1 mile no	orth of th	e North I	Fork
VEGETATION								
Trong Standard (Ulan asignatific marrows)	Absolute	Dominant Species?		Dominance Test v				
Tree Stratum (Use scientific names.) 1.	% Cover	Species?	Status	Number of Domina That Are OBL, FAC			2	(A)
2.					·		2	, ,
3.				 Total Number of Do Species Across All 			2	(B)
4.				- ' - Percent of Domina			_	
Total Co	over: %	4		That Are OBL, FAC			00.0%	(A/B)
Sapling/Shrub Stratum 1.				Prevalence Index	workshee	et:		
2.				Total % Cover			tiply by:	_
3.				OBL species	141	x 1 =	0	
4.		· 		FACW species	30	x 2 =	60	
5				FAC species	70	x 3 =	210	
Total Co	ver: %			FACU species		x 4 =	0	
Herb Stratum	70	Van	7.0	UPL species		x 5 =	0	(D)
Distichlis spicata Chenonodium chenonodioides	$-\frac{70}{30}$	Yes Yes	FACW	Column Totals:	100	(A)	270	(B)
2. Chenopodium chenopodioides 3.		1 68	FACW	Prevalence in	ndex = B/A	A =	2.70	
4.		-		Hydrophytic Vege	tation Ind	licators:		
5.				X Dominance Te	est is >50%	5		
6.				× Prevalence Inc				
7.				Morphological data in Ren				ing
8.				Problematic H				n)
Total Co Woody Vine Stratum	ver: 100%				, p ,			´
1.				¹ Indicators of hydr	ic soil and	wetland	hydrology	must
2.	-			be present.				
Total Co	ver: %			Hydrophytic				
% Bare Ground in Herb Stratum 10 % % Co	ver of Biotic C	Crust	%	Vegetation Present?	Yes 📵	No	C	
Remarks: Closer to the main primary channel are				1			<u>` </u>	
Closer to the main primary channel are	: турпа таш	olia (OBL	and Mun	ilettoergia asperitoi	na (PAC)	, , , .		

US Army Corps of Engineers

Profile Des	scription: (Describ	e to the dep	th needed to docu	ment the	Indicator o	or confirm	n the abs	sence of indicato	ors.)	
Depth	Matrix			x Feature		1002	Textu	.ro3	Remark	e
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²			Remark	
0-12	2.5Y 6/2						silty clay	loam		
	2.5Y 4/1	30								
					_					
-										
										
				-						
¹ Type: C=	Concentration, D=D	epletion, RM	=Reduced Matrix. /, Loam, Sandy Clay					Channel, M=Matri Clay Loam, Silt Lo		Sand, Sand,
			Rs, unless otherwis		andy Loam	Clay Lua		ators for Problem		
Hydric Soil Histose		able to all LN	Sandy Red					1 cm Muck (A9) (1	-	•
	Epipedon (A2)		Stripped M					2 cm Muck (A10)		
	Histic (A3)		Loamy Mu	cky Miner	al (F1)			Reduced Vertic (F	18)	
Hydrog	gen Sulfide (A4)		Loamy Gle	yed Matri	k (F2)			Red Parent Mater		
I 🗀	ed Layers (A5) (LR	RC)	Depleted N					Other (Explain in	Remarks)	
	Muck (A9) (LRR D)	(844)	Redox Da		` '					
і Ш	ed Below Dark Surf	ace (A11)	Depleted [Redox De							
	Dark Surface (A12) Mucky Mineral (S1	١	Vernal Poo		(10)		⁴Indi	cators of hydroph	ytic vegetation a	nd
1 🗀 -	Gleyed Matrix (S4)		vernari or	310 (1 0)				etland hydrology	-	
	Layer (if present)									
Type:										
Depth (i	inches):						Hydri	ic Soll Present?	Yes 📵	No C
Remarks: (Chipeta Series/Ba	dlands			_					
	•									
HYDROL	OGY									
	lydrology Indicato	re'						Secondary Indica	ators (2 or more	required)
1	dicators (any one in		Ficient\						(B1) (Riverine)	
		ulcalor is sur		+ (B11)		-			eposits (B2) (Riv	
	æ Water (A1) Vater Table (A2)		Salt Crus Biotic Crus						s (B3) (Riverine	
등 Satura				nvertebrat	es (B13)			Drainage Pa		•
[]	Marks (B1) (Nonriv	rerine)		n Sulfide C				Dry-Season	Water Table (C	2)
	ent Deposits (B2) (I				eres along	Living Ro	ots (C3)	Thin Muck S	urface (C7)	
	eposits (B3) (Nonri				ed Iron (C4			Crayfish Bur	rows (C8)	
L	ce Soil Cracks (B6)	,			tion in Plow		(C6)	Saturation V	isible on Aerial I	magery (C9)
🗀	ation Visible on Aeri	al Imagery (E		oplain in R				Shallow Aqu	itard (D3)	
Water	-Stained Leaves (B	9)						FAC-Neutra	Test (D5)	
Field Obs			-			$\neg \neg$				
Surface W	ater Present?	Yes 🕝	No C Depth (i	nches):	0-2					
Water Tab	le Present?	Yes 🕝	No C Depth (i	nches):	0-8					
Saturation	Present?	Yes 🕝	No C Depth (i	nches):	0-12	–				NI= C
(includes o	capillary fringe)			·—				drology Present	Yes (No (
4		am gauge, m	onitoring well, aeria	ı pnotos, p	revious ins	pections),	, ii avalla	DIC.		
	otos, topo maps									
Remarks:	Saturation varies	throughout	the complex.							
US Army Con	rps of Engineers			_						

Project/Site: SH 92 Stengel's Hill		City/C	ounty: Delta		Sarr	npling Dat	e: <u>9/19/20</u>	11
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Sam	npling Poi	nt: W1-2	
Investigator(s): Paula Durkin		Section	on, Township, Ra	/4 Sect. 3	1, T. 14	s, R. 93W		
Landform (hilislope, terrace, etc.): slope		Local	relief (concave,	convex, none): cone	cave		Slope (%):	I
Subregion (LRR): D - Interior Deserts	Lat: 38	.4752	8	Long: 107.4925	1	D	atum: NAI	D83
Soil Map Unit Name: 23 - Chipeta silty clay, 3 to 30	percent slo	pes		NWI cla	assification	PEM		
Are climatic / hydrologic conditions on the site typical for t			es 6 No ((If no, explain	n in Remar	 ks.)		
Are Vegetation Soil or Hydrology	significantly			"Normal Circumstan	ces" prese	nt? Yes	No	\subset
Are Vegetation Soil or Hydrology	naturally pro	oblema	itic? (If ne	eded, explain any a	nswers in	Remarks.)	
SUMMARY OF FINDINGS - Attach site map				ocations, transe	ects, imp	oortant	features	, etc.
Hydrophytic Vegetation Present? Yes (No 🕞							
Hydric Soil Present? Yes 6	No (Is the Sampled	l Area				
Wetland Hydrology Present? Yes	No (within a Wetlan		•	No C		
Remarks: West edge of a large wetland complex, Gunnison River.	marshy; ad	j to an	unnamed inter	rmittent creek abo	ut I mile	north of	the North	FOTK
VEGETATION								
Tree Stratum (Use scientific names.) 1.	Absolute % Cover		nant Indicator ies? Status	Number of Domina That Are OBL, FA	ant Specie	s	2	(A)
2. 3.				Total Number of D Species Across A			2	(B)
4.				Percent of Domina	ant Species	S		
Total Co	ver: %			That Are OBL, FA	CW, or FA	C:	100.0%	(A/B)
1.				Prevalence Index	c workshe	et:		
2.				Total % Cove	r of:	Mu	tiply by:	-
3.				OBL species		x 1 =	0	
4.				FACW species	30	x 2 =	60	
5				FACIL appeies	70	x3=	210	
Total Cov	ver: %			FACU species UPL species		x4= x5=	0	
1. Distichlis spicata	70	Yes	FAC	Column Totals:	100	(A)	0 270	(B)
2. Glaux maritimum	30	Yes	FACW	-	700	-		(5)
3.				Prevalence i			2.70	
4.				Hydrophytic Veg				
5.				➤ Dominance T				
6.				Prevalence In Morphologica			ide sunnorti	ina
7. 8.				data in Re	marks or o	n a sepai	ate sheet)	
Total Cov	ver: 100%			Problematic F	lydrophytic	: Vegetati	on¹ (Explair	1)
Woody Vine Stratum	100%			4				
1				¹ Indicators of hyd be present.	ric soil and	a wetland	nyarology	must
2. Total Cov W Bare Ground in Herb Stratum 0 % % Cov	ver: %	Crust		Hydrophytic Vegetation Present?	Yes @	No.		
Remarks:								

Sampling Point:	<u>W1-2</u>
4 1	

er	١II	п
JU	/11	Ь

		e to the de				or commi	n the absence of indicator	9./
Depth (inches)	Matrix Color (moist)	%	Color (moist	Redox Feature %	∌s Type¹	Loc ²	Texture ³	Remarks
0-12	2.5Y 6/2	50	7.5YR 4/4	20	С	RC	silty clay loam	
	2.5Y 4/1	50						
	2.51 7/1							
¹Type: C=	Concentration, D=De	epletion, RN	/=Reduced Matr	ix. ² Locatio	on: PL=Pon	Elining, R	C=Root Channel, M=Matrix	am, Silt, Loamy Sand, Sand.
	res: Clay, Silty Clay Indicators: (Applica					i, Clay Lua	Indicators for Problema	tle Hydric Soils:
Hydric Soil		ible to all Li		Redox (S5)			1 cm Muck (A9) (L	
	Epipedon (A2)		Stripp	ed Matrix (S6)			2 cm Muck (A10) (I	
	Histic (A3)			Mucky Mine			Reduced Vertic (F1	•
	gen Sulfide (A4)	. 0\		/ Gleyed Matr led Matrix (F3			Red Parent Materia Other (Explain in R	
	ied Layers (A5) (LRF vluck (A9) (LRR D)	(0)		Dark Surface				,
	ted Below Dark Surfa	ace (A11)	~ 3	ted Dark Surf				
Thick I	Dark Surface (A12)		1 1	Depressions	(F8)		At the state of headenship	tie vegetation and
	Mucky Mineral (S1)		Verna	Pools (F9)			⁴Indicators of hydrophy wetland hydrology n	
	Gleyed Matrix (S4) e Layer (if present):		- · · · · · · · ·				Wooding Hydrology II	
Type:	e Layer (II present):							
Depth (inches):						Hydric Soil Present?	Yes (No (
	Chipeta Series/Ba	dlands			_			
	Chipota Box 100/24							
LIVEROL	007							
HYDROL							Secondary Indicat	tors (2 or more required)
	lydrology Indicator		fficient)					(B1) (Riverine)
	dicators (any one inc	ilcator is su		Crust (B11)				posits (B2) (Riverine)
<u> </u>	ce Water (A1) Water Table (A2)		(F.2)	c Crust (B12)			<u> </u>	(B3) (Riverine)
	ation (A3)			atic Invertebra			Drainage Pat	terns (B10)
	Marks (B1) (Nonriv		·					
ıı Water		erine)	Hyai	ogen Sulfide	Oddi (CT)		Dry-Season \	Vater Table (C2)
I 🗀	nent Deposits (B2) (N	-) 🗍 Oxid	ized Rhizospl	heres along		oots (C3) Thin Muck Su	ırface (C7)
Sedim		lonriverine	e) Oxid	ized Rhizospl ence of Redu	heres along iced Iron (C	4)	oots (C3) Thin Muck Su Crayfish Burn	urface (C7) ows (C8)
Sedim Drift D Surfac	nent Deposits (B2) (Nonriv Deposits (B3) (Nonriv de Soil Cracks (B6)	lonriverine verlne)	Oxid	ized Rhizospl ence of Redu ent Iron Redu	heres along iced Iron (C ction in Plo	4)	oots (C3) Thin Muck Su Crayfish Burr (C6) Saturation Vi	urface (C7) ows (C8) sible on Aerial Imagery (C9)
Sedim Drift D Surfac	nent Deposits (B2) (No Deposits (B3) (Nonriv ce Soil Cracks (B6) ation Visible on Aeria	lonriverine verlne) al Imagery (Oxid	ized Rhizospl ence of Redu	heres along iced Iron (C ction in Plo	4)	oots (C3) Thin Muck St Crayfish Burr (C6) Saturation Vi	urface (C7) ows (C8) sible on Aerial Imagery (C9) tard (D3)
Sedim Drift D Surfac Inunda Water	nent Deposits (B2) (Nonriv Deposits (B3) (Nonriv De Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9	lonriverine verlne) al Imagery (Oxid	ized Rhizospl ence of Redu ent Iron Redu	heres along iced Iron (C ction in Plo	4)	oots (C3) Thin Muck Su Crayfish Burr (C6) Saturation Vi	urface (C7) ows (C8) sible on Aerial Imagery (C9) tard (D3)
Sedim Drift D Surfact Inunda Water	nent Deposits (B2) (Nonriversits (B3) (Nonriversits (B6)) (Ronriversits (B6)) atton Visible on Aerial-Stained Leaves (B9)	lonriverine verine) al Imagery (Pres Reco	ized Rhizospi ence of Redu ent Iron Redu er (Explain in I	heres along iced Iron (C ction in Plo Remarks)	4)	oots (C3) Thin Muck St Crayfish Burr (C6) Saturation Vi	urface (C7) ows (C8) sible on Aerial Imagery (C9) tard (D3)
Sedim Drift D Surface Inunda Water Field Obs	nent Deposits (B2) (Nonriversits (B3) (Nonriversits (B3) (Nonriversits (B6)) ation Visible on Aerial-Stained Leaves (B9) ervations:	Ionriverine verine) al Imagery (i)	Pres Reco B7) Othe	ized Rhizospi ence of Redu ent Iron Redu er (Explain in I	heres along need Iron (C ction in Plo Remarks)	4)	oots (C3) Thin Muck St Crayfish Burr (C6) Saturation Vi	urface (C7) ows (C8) sible on Aerial Imagery (C9) tard (D3)
Sedim Drift D Surfac Inunda Water Field Obs Surface W Water Tab	nent Deposits (B2) (Nonrivole Soil Cracks (B6) ation Visible on Aeria-Stained Leaves (B9 ervations:	Ionriverine verine) al Imagery () Yes (Yes (Pres Reco B7) Othe	ized Rhizospi ence of Redu ent Iron Redu er (Explain in I	heres along iced Iron (C ction in Plo Remarks)	4) wed Soils	oots (C3)	urface (C7) ows (C8) sible on Aerial Imagery (C9) tard (D3) Test (D5)
Sedim Drift D Surface Inunda Water Field Obs Surface W Water Tab Saturation (includes of	nent Deposits (B2) (Nonriversity (B3) (Nonriversity (Nonriversit	Ionriverine verine) al Imagery () Yes (Yes (Yes (No C Dep	ized Rhizospi ence of Redu ent Iron Redu er (Explain in I oth (inches): oth (inches):	heres along iced Iron (C ction in Plo Remarks) 0 12 1	4) wed Soils	oots (C3) Thin Muck St. Crayfish Burr (C6) Saturation Vi Shallow Aqui FAC-Neutral	urface (C7) ows (C8) sible on Aerial Imagery (C9) tard (D3) Test (D5)
Sedim Drift D Surface Inunda Inunda Water Field Obs Surface W Water Tab Saturation (includes of Describe F	nent Deposits (B2) (Nonrivole Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9) ervations: Vater Present? Present? Capillary fringe) Recorded Data (streat	Ionriverine verine) al Imagery () Yes (Yes (Yes (No C Dep	ized Rhizospi ence of Redu ent Iron Redu er (Explain in I oth (inches): oth (inches):	heres along iced Iron (C ction in Plo Remarks) 0 12 1	4) wed Soils	oots (C3) Thin Muck St. Crayfish Burr (C6) Saturation Vi Shallow Aqui FAC-Neutral	urface (C7) ows (C8) sible on Aerial Imagery (C9) tard (D3) Test (D5)
Sedim Drift D Surfac Inunda Inunda Water Field Obs Surface W Water Tab Saturation (includes of Describe F aerial pho	nent Deposits (B2) (Nonriversity (B3) (Nonriversity (Nonriversit	Ionriverine verine) al Imagery () Yes (Yes (Yes (No C Dep	ized Rhizospi ence of Redu ent Iron Redu er (Explain in I oth (inches): oth (inches):	heres along iced Iron (C ction in Plo Remarks) 0 12 1	4) wed Soils	oots (C3) Thin Muck St. Crayfish Burr (C6) Saturation Vi Shallow Aqui FAC-Neutral	urface (C7) ows (C8) sible on Aerial Imagery (C9) tard (D3) Test (D5)
Sedim Drift D Surface Inunda Inunda Water Field Obs Surface W Water Tab Saturation (includes of Describe F	nent Deposits (B2) (Nonrivole Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9) ervations: Vater Present? Present? Capillary fringe) Recorded Data (streat	Ionriverine verine) al Imagery () Yes (Yes (Yes (No C Dep	ized Rhizospi ence of Redu ent Iron Redu er (Explain in I oth (inches): oth (inches):	heres along iced Iron (C ction in Plo Remarks) 0 12 1	4) wed Soils	oots (C3) Thin Muck St. Crayfish Burr (C6) Saturation Vi Shallow Aqui FAC-Neutral	urface (C7) ows (C8) sible on Aerial Imagery (C9) tard (D3) Test (D5)
Sedim Drift D Surfac Inunda Inunda Water Field Obs Surface W Water Tab Saturation (includes of Describe F aerial pho	nent Deposits (B2) (Nonrivole Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9) ervations: Vater Present? Present? Capillary fringe) Recorded Data (streat	Ionriverine verine) al Imagery () Yes (Yes (Yes (No C Dep	ized Rhizospi ence of Redu ent Iron Redu er (Explain in I oth (inches): oth (inches):	heres along iced Iron (C ction in Plo Remarks) 0 12 1	4) wed Soils	oots (C3) Thin Muck St. Crayfish Burr (C6) Saturation Vi Shallow Aqui FAC-Neutral	urface (C7) ows (C8) sible on Aerial Imagery (C9) tard (D3) Test (D5)
Sedim Drift D Surfac Inunda Inunda Water Field Obs Surface W Water Tab Saturation (includes of Describe F aerial pho	nent Deposits (B2) (Nonrivole Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9) ervations: Vater Present? Present? Capillary fringe) Recorded Data (streat	Ionriverine verine) al Imagery () Yes (Yes (Yes (No C Dep	ized Rhizospi ence of Redu ent Iron Redu er (Explain in I oth (inches): oth (inches):	heres along iced Iron (C ction in Plo Remarks) 0 12 1	4) wed Soils	oots (C3) Thin Muck St. Crayfish Burr (C6) Saturation Vi Shallow Aqui FAC-Neutral	urface (C7) ows (C8) sible on Aerial Imagery (C9) tard (D3) Test (D5)
Sedim Drift D Surfac Inunda Inunda Water Field Obs Surface W Water Tab Saturation (includes of Describe F aerial pho	nent Deposits (B2) (Nonrivole Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9) ervations: Vater Present? Present? Capillary fringe) Recorded Data (streat	Ionriverine verine) al Imagery () Yes (Yes (Yes (No C Dep	ized Rhizospi ence of Redu ent Iron Redu er (Explain in I oth (inches): oth (inches):	heres along iced Iron (C ction in Plo Remarks) 0 12 1	4) wed Soils	oots (C3) Thin Muck St. Crayfish Burr (C6) Saturation Vi Shallow Aqui FAC-Neutral	urface (C7) ows (C8) sible on Aerial Imagery (C9) tard (D3) Test (D5)

Project/Site: SH 92 Stengel's Hill		City/Cou	nty: Delta		Sampli	ng Date: 9/1	9/2011	
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Sampli	ng Point: W	V1-3	
Investigator(s): Paula Durkin		Section,	Township, Ra	nge: NE 1/4 NE 1/4	Sect. 31,	T. 14 S, R . 9	3W	
Landform (hilislope, terrace, etc.): slope		Local re	lief (concave,	convex, none): conce	ive	Slope	(%): 1	
Subregion (LRR): D - Interior Deserts	Lat: 38	.47538		Long: 107.49256		Datum:	NAD83	3
Soil Map Unit Name: 23 - Chipeta silty clay, 3 to 30 pe	rcent slo	pes		NWI clas	sification: P	'E M		
Are climatic / hydrologic conditions on the site typical for this	time of ye	ar? Yes	No €	(If no, explain	in Remarks.	_)		
Are Vegetation Soil or Hydrology si	gnificantly	disturbed	d? Are "	'Normal Circumstance	es" present?	Yes 🕝	No C	
	aturally pro	oblematic	? (If ne	eded, explain any an	swers in Rei	marks.)		
SUMMARY OF FINDINGS - Attach site map s	howing	sampl	ing point lo	ocations, transec	cts, impo	rtant featu	ıres, e	tc.
Hydrophytic Vegetation Present? Yes (No							-	
	6	ls	the Sampled	Area				
	6		ithin a Wetlar		No			
Remarks: NE edge of a large wetland complex, mars	shy; adj t	o an unr	amed interm	nittent creek about	mile nort	h of the Nor	rth Fork	<u> </u>
Gunnison River.								
VEGETATION			-					
	Absolute		nt Indicator	Dominance Test w	orksheet:			
·	% Cover	Species	? Status	Number of Domina		0	(4)	
1				That Are OBL, FAC	VV, OF FAC:	2	(A)	'
3.	-			 Total Number of Do Species Across Ali 		2	(B)	,
4.				1		4	(-)	·
Total Cover	%			 Percent of Dominar That Are OBL, FAC 		100.0	% (A/	в)
Sapling/Shrub Stratum				Prevalence Index	worksheet:			
1. 2.				Total % Cover		Multiply by	v:	
3.				OBL species		<1=	0	
4.				FACW species	31	(2=	62	
5.				FAC species	70	3 =	210	
Total Cover:	%			FACU species	1	(4 =	4	
Herb Stratum				UPL species	>	c 5 =	0	
1. Distichlis spicata	70	Yes	FAC	Column Totals:	102	A)	276	(B)
Muhlenbergia asperifolia Cirsium arvense	30	Yes No	FACW FACU	Prevalence In	dex = B/A =	= <i>:</i>	2.71	
4. Chenopodium chenopodioides	1	No	FACW	Hydrophytic Vege	tation Indic			\dashv
5.		140	- Inch	X Dominance Tes	st is >50%			
6.				× Prevalence Ind	ex is ≤3.0 ¹			
7.				Morphological	Adaptations	¹ (Provide sup ı separate sh	oporting	
8.	_			Problematic Hy		-		
Total Cover: Woody Vine Stratum	102%					•		
1.				¹ Indicators of hydric	soil and w	etland hydro	logy mu	st
2.				be present.				
Total Cover:	%			Hydrophytic				
% Bare Ground in Herb Stratum 0 % % Cover	of Biotic C	Crust	%	Vegetation Present?	Yes 📵	No (
Remarks:				L				\dashv

Profile Des	scription: (Describ	e to the dep	th needed to	document the	indicator	or confirm	n the abs	ence of indicato	rs.)	
Depth	Matrix			Redox Feature	es				Remark	•
(inches)	Color (moist)	%	Color (mois	st) %	Type ¹	Loc ²	Textu		Kemark	5
0-12	2.5Y 6/2						silty clay	loam		
	2.5Y 4/1	80								
									_	
		7			-					
¹ Type: C=0	Concentration, D=D	epletion. RM=	Reduced Mat	rix. ² Locatio	n: PL=Pore	Lining, R	C=Root C	Channel, M=Matrix	K.	
³ Soil Textur	res: Clay, Silty Clay	, Sandy Clay	, Loam, Sand	/ Clay Loam, S	andy Loam	, Clay Loa	ım, Silty C	Clay Loam, Silt Lo	am, Silt, Loamy	Sand, Sand.
Hydric Soil	Indicators: (Applica	able to all LRI	Rs, unless oth	erwise noted.)				ators for Problems		4 5:
Histoso				Redox (S5)				cm Muck (A9) (L cm Muck (A10) (
	Epipedon (A2) Histic (A3)			oed Matrix (S6) ny Mucky Miner				Reduced Vertic (F		
	gen Sulfide (A4)			y Gleyed Matri				Red Parent Materi		
L ' '	ed Layers (A5) (LRF	R C)	Deple	eted Matrix (F3)			Other (Explain in F	Remarks)	
111	fuck (A9) (LRR D)			x Dark Surface	, ,					
	ed Below Dark Surfa Dark Surface (A12)	ace (A11)		eted Dark Surfa x Depressions						
1 L_J	Mucky Mineral (S1))		al Pools (F9)	(10)		⁴Indic	ators of hydrophy	tic vegetation a	ind
1 🗀 -	Gleyed Matrix (S4)			,			W	etland hydrology r	nust be presen	t
Restrictive	Layer (if present)	:						-		
Type:							ŀ		_	
Depth (i							Hydri	Soil Present?	Yes (•	No (
Remarks: (Chipeta Series/Ba	dlands								
HYDROL	OGY									
Wetland H	ydrology Indicator	's:						Secondary Indica		
Primary Inc	dicators (any one inc	dicator is suffi	cient)						(B1) (Riverine	
1 (2)	e Water (A1)		Salt	Crust (B11)					posits (B2) (Riv	•
	Vater Table (A2)			ic Crust (B12)	(7.40)				s (B3) (Riverine	•)
Satura			·	atic Invertebra				Drainage Pat	uems (B10) Water Table (C	2)
1 🖳	Marks (B1) (Nonriv	-		rogen Sulfide (dized Rhizosph		Livina Ro	ots (C3)	Thin Muck S	-	-,
🖳	ent Deposits (B2) (Neposits (B3) (Ne			sence of Redu	_	_	010 (00)	Crayfish Burr		
I 🖳	e Soil Cracks (B6)	voi,		ent Iron Reduc			(C6)		sible on Aerial	magery (C9)
1 🖳	ation Visible on Aeria	al Imagery (B	7) 🕇 Oth	er (Explain in F	lemarks)			Shallow Aqui	tard (D3)	
Water-	-Stained Leaves (B9	9)					_	FAC-Neutral	Test (D5)	
Field Obse	ervations:									
Surface Wa	ater Present?	-	_	pth (inches):	- 8	_				
Water Tabl		Yes 🕝	•	pth (inches):	12	_				
Saturation	Present? apillary fringe)	Yes 🕡	No C De	pth (inches):	6	Wet	land Hyd	rology Present?	Yes (No C
Describe R	Recorded Data (stream	am gauge, mo	onitoring well,	aerial photos, p	orevious ins	pections),	, if availat	ole:		
aerial pho	tos, topo maps									
Remarks:										
US Army Cor	ps of Engineers									

Project/Site: SH 92 Stengel's Hill		City/Coun	ty: Delta		Samp	oling Date:	9/19/20	11
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Samp	oling Point:	W1-4	
Investigator(s): Paula Durkin		Section, T	ownship, Ra	nge: NE 1/4 NE 1/	/4 Sect. 31	, T. 14S,	R. 93W	
Landform (hillslope, terrace, etc.): slope	_	Local relie	ef (concave,	convex, none): cond	cave	Slo	pe (%):]	1
Subregion (LRR): D - Interior Deserts	Lat: 38	.47530		Long: 107.49239	9	Datu	ım: NAI	D83
Soil Map Unit Name: 23 - Chipeta silty clay, 3 to 30 pe	ercent slo	pes		NWI cla	assification:	PEM		
Are climatic / hydrologic conditions on the site typical for this			No ((If no, explain	n in Remark	s.)		
		disturbed		'Normal Circumstand	ces" present	t? Yes 🌀	No	\cap
	_	oblematic?		eded, explain any a	nswers in R	emarks.)		
SUMMARY OF FINDINGS - Attach site map s	• •			ocations, transe	cts, imp	ortant fe	atures	, etc.
Hydrophytic Vegetation Present? Yes (N	· @						_	
	0	Ist	the Sampled	l Area				
	0		hin a Wetlar		(● N	10 C		
Remarks: E edge of a large wetland complex, marsh	y; adj to	an unnam	ed intermit	tent creek about 1	mile north	of the N	orth For	:k
Gunnison River.								
VEGETATION								
To Charles (Handard Manager)	Absolute		Indicator	Dominance Test				
Tree Stratum (Use scientific names.) 1.	% Cover	Species?	Status	Number of Domina That Are OBL, FA				(A)
2.					•			٠,
3.				 Total Number of D Species Across Al 		,	1	(B)
4.				1 '			•	`
Total Cover	r: %			 Percent of Domina That Are OBL, FA 			0.0%	(A/B)
Sapling/Shrub Stratum 1.				Prevalence Index	workshee	t:		
2.				Total % Cove		 Multip	ly by:	
3.				OBL species	190	x 1 =	0	
4.				FACW species	40	x 2 =	80	
5.				FAC species	60	x 3 =	180	
Total Cover	: %			FACU species		x 4 =	0	
Herb Stratum	60	37	74.5	UPL species		x 5 =	0	ر ا
1. Distichlis spicata 2. Chenopodium chenopodioides	60	Yes No	FACW	Column Totals:	100	(A)	260	(B)
2. Chenopodium chenopodioides 3.		<u>NU</u>	FACW	Prevalence I	ndex = B/A	\ =	2.60	
4.				Hydrophytic Veg	etation Indi	icators:		-
5.				X Dominance To				
6.				× Prevalence In				
7.				Morphological	l Adaptation marks or on	ıs¹ (Provide ı a separat∉	supporti sheet)	ing
8.				Problematic H				n)
Total Cover Woody Vine Stratum	100%							
1.				¹ Indicators of hydi be present.	ric soil and	wetland hy	/drology	must
2				<u> </u>				
Total Cover	: %			Hydrophytic Vegetation				
% Bare Ground in Herb Stratum 10 % % Cover	of Biotic C	Crust	%	Present?	Yes 📵	No (
Remarks:							· ·	

				ment the i		or confirm	the absence of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	% reatures	Type	Loc ²	Texture ³ Remarks
0-12	2.5Y 6/2	50					silty clay loam
0-12		50					only only some
	2.5Y 4/1						
	-						
	-,						
¹ Type: C=	Concentration, D=D	enletion RM=	Reduced Matrix	² I ocation	: PL=Pore	Lining, RO	C=Root Channel, M=Matrix.
³ Soil Textu	res: Clay, Silty Clay	, Sandy Clay,	Loam, Sandy Cla				m, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.
	Indicators: (Applic						Indicators for Problematic Hydric Soils:
Histos			Sandy Red				1 cm Muck (A9) (LRR C)
1 III	Epipedon (A2)		Stripped N				2 cm Muck (A10) (LRR B)
	Histic (A3)			icky Minera			Reduced Vertic (F18) Red Parent Material (TF2)
1 🗀 ' '	gen Sulfide (A4) ed Layers (A5) (LRI	B C)		eyed Matrix Vatrix (F3)	(FZ)		Other (Explain in Remarks)
	/uck (A9) (LRR D)	(0)		rk Surface	(F6)		
	ed Below Dark Surf	ace (A11)	7.3	Dark Surfac	-		
Thick I	Dark Surface (A12)			pressions (F8)		4
	Mucky Mineral (S1)		Vernal Po	ols (F9)			Indicators of hydrophytic vegetation and
	Gleyed Matrix (S4)						wetland hydrology must be present.
İ	e Layer (if present)	:					
Type:							Hydric Soil Present? Yes (No (
Depth (i	·	11 1_					nyunc son Flesentr Tes (* 110 (
Remarks: (Chipeta Series/Ba	alanas					
			_				
HYDROL	OGY				,		
Wetland H	lydrology Indicator	's:					Secondary Indicators (2 or more required)
Primary Inc	dicators (any one in	dicator is suffic	zient)				Water Marks (B1) (Riverine)
X Surfac	e Water (A1)		Salt Crus	st (B11)			Sediment Deposits (B2) (Riverine)
	Vater Table (A2)			⊔st (B12)			Drift Deposits (B3) (Riverine)
انتا	ation (A3)			nvertebrate			Drainage Patterns (B10)
🖳	Marks (B1) (Nonriv	•	ш	n Sulfide O			Dry-Season Water Table (C2)
ابا ا	ent Deposits (B2) (N	-		Rhizosphe			ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8)
l '	eposits (B3) (Nonri	verine)		of Reduct	•	-	
l 🖳	ce Soil Cracks (B6)	-l (ron Reduct		ved Solis (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
	ation Visible on Aeria -Stained Leaves (B9) U Other (E	xplain in Re	oritains)		FAC-Neutral Test (D5)
Field Obs		"				- T	1710 11000001 1001 (20)
	ater Present?	Yes C	No 🌘 Depth (i	nches):	0		
	le Present?	-	No C Depth (i		16	\dashv	
l		•		· —			
Saturation (includes c	apillary fringe)	-					and Hydrology Present? Yes 📵 No 🤇
Describe F	Recorded Data (stream	am gauge, mo	nitoring well, aeria	l photos, p	revious in	spections),	if available:
aerial pho	otos, topo maps						
Remarks:	_						
US Army Cor	rps of Engineers	-					

Project/Site: SH 92 Stengel's Hill		City/C	ounty: Delta		Sam	pling Dat	e: <u>9/19/20</u>	11
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Sam	pling Poi	nt: W1-5	
Investigator(s): Paula Durkin		Section	n, Township, Ra	ange: NE 1/4 NE 1	/4 Sect. 3	1, T. 148	s, R. 93W	
Landform (hillslope, terrace, etc.): slope		Local	relief (concave,	convex, none): conv	cave		Slope (%):	1
Subregion (LRR): D - Interior Deserts	Lat: 38	.4752	9	Long: 107.4923	2	D	atum: NAI	D83
Soil Map Unit Name: 23 - Chipeta silty clay, 3 to 30 j	ercent slo	pes		NWI cla	assification	PEM		
Are climatic / hydrologic conditions on the site typical for the			es (No ((If no, explain	n in Remar	ks.)		
Are Vegetation Soil or Hydrology	significantly			"Normal Circumstan	ces" presei	nt? Yes	No	C
Are Vegetation Soil or Hydrology	naturally pro			eeded, explain any a	nswers in I	Remarks.)	
SUMMARY OF FINDINGS - Attach site map			•					, etc.
	No 🜀							
	No (Is the Sample	d Area				
1 -	No @		within a Wetla		•	No C		
Remarks: E edge of a large wetland complex, mar-	shy; adj to	an uni	named intermi	ttent creek about 1	mile nor	th of the	North For	rk
Gunnison River.								
VEGETATION					<u> </u>			
VEGETATION				T. D		4:		
Tree Stratum (Use scientific names.)	Absolute % Cover	Spec	nant Indicator ies? Status	Dominance Test Number of Domin				
1.				That Are OBL, FA			1	(A)
2.				Total Number of D	Ominant			
3.				Species Across A			1	(B)
4.				Percent of Domina	ant Species	3		
Total Cov	er: %			That Are OBL, FA			100.0%	(A/B)
Sapling/Shrub Stratum 1.				Prevalence Index	workshe	et:		
2.				Total % Cove			tiply by:	
3.				OBL species	480	x 1 =	0	_
4.				FACW species		x 2 =	0	
5.				FAC species	100	x 3 =	300	
Total Cove	er: %			FACU species		x 4 =	0	
Herb Stratum	400	37		UPL species		x 5 =	0	
1. Distichlis spicata 2.		Yes	FAC	_ Column Totals:	100	(A)	300	(B)
3.				Prevalence	index = B/	A =	3.00	
4.				Hydrophytic Veg	etation Inc	licators:		
5.				X Dominance T	est is >50%	6		
6.				× Prevalence In	dex is ≤3.0)1		
7.				Morphologica	I Adaptatio marks or o			ing
8.				Problematic			-	n)
Total Cove	er: 100%			- I I TODICINATION	iyai opiiyaa	, vogowa	on (Explain	"
Woody Vine Stratum 1.				¹ Indicators of hyd	ric soil and	wetland	hydrology	must
2.	_			be present.				
Total Cov	er: %			Hydrophytic				
		· · · · · · ·	0.4	Vegetation	Yes (No		
	er of Biotic C	, ust	<u></u>	Present?	162 (140		
Remarks:								

Phonodic .			pui needed t	Redox Feature			m the absence of indicators.)				
Depth Matrix (inches) Color (moist)		%			x reatures % Type ¹ Lo		Texture ³ Remarks				
0-12	2.5Y 6/2	70	2.5Y 6/6				silty clay loam				
0-12	2.5Y 4/1	30	2.01 0.0		· —	RC					
·	2.31 4/1				· ——						
			-								
¹ Type: C=0	Concentration, D=De	pletion, R	/I=Reduced M	atrix. ² Location	on: PL≖Por	Lining, R	RC=Root Channel, M=Matrix.	d Cand			
						, Clay Loa	am, Silty Clay Loam, Silt Loam, Silt, Loamy Sand Indicators for Problematic Hydric Soils:	u, Sano.			
	Indicators: (Applical	ble to all L		therwise noted.) dy Redox (S5)			1 cm Muck (A9) (LRR C)				
Histoso	Epipedon (A2)			pped Matrix (S6))		2 cm Muck (A10) (LRR B)				
	Histic (A3)			my Mucky Mine			Reduced Vertic (F18)				
Hydrog	gen Sulfide (A4)			ımy Gleyed Matr			Red Parent Material (TF2)				
	ed Layers (A5) (LRR	C)		oleted Matrix (F3			Other (Explain in Remarks)				
	Muck (A9) (LRR D)	oo (A11)	9.4	dox Dark Surface pleted Dark Surfa							
	ed Below Dark Surfa Dark Surface (A12)	CO (A11)		dox Depressions							
1 📖	Mucky Mineral (S1)			nal Pools (F9)	· - /		⁴ Indicators of hydrophytic vegetation and				
Sandy	Gleyed Matrix (S4)						wetland hydrology must be present.				
Restrictive	Layer (if present):										
Type:								_			
	Depth (inches): Hydric Soil Present? Yes 6 No C										
Remarks: Chipeta Series/Badlands											
HYDROL	OGY										
Wetland H	ydrology Indicators	i:					Secondary Indicators (2 or more requi	red)			
Primary Inc	dicators (any one indi	cator is su		Water Marks (B1) (Riverine)							
		Cator is su	mcient)				Water Marks (B1) (Riverine)				
X Surfac	e Water (A1)	Cator is su		alt Crust (B11)			Sediment Deposits (B2) (Rivering				
	e Water (A1) Vater Table (A2)	Cator is su	Sa	otic Crust (B12)			Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)				
High V	Vater Table (A2) tion (A3)		Si Bi	otic Crust (B12) quatic Invertebra	tes (B13)		Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)				
High V Satura Water	Vater Table (A2) tion (A3) Marks (B1) (Nonrive	rine)	Si Bi Ai	otic Crust (B12) quatic Invertebra ydrogen Sulfide	ites (B13) Odor (C1)	Living Do	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)				
High V X Satura Water Sedim	Vater Table (A2) ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (No	rine) onriverine	Sa Bi Aa Hi	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl	ites (B13) Odor (C1) neres along		Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)				
High V X Satura Water Sedim Drift D	Vater Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive	rine) onriverine	Si Bi Ai Hy	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu	ites (B13) Odor (C1) neres along ced Iron (C	4)	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)	a)			
High V Satura Water Sedim Drift D Surface	Vater Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6)	rine) onriverine erine)	Si Bi Ai Hi Pi R	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Redu	ites (B13) Odor (C1) neres along ced Iron (C ction in Plo	4)	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Image	a)			
High V Satura Water Sedim Drift D Surface Inunda	Vater Table (A2) Ation (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) ation Visible on Aerial	erine) onriverine erine) I Imagery (Si Bi Ai Hi Pi R	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu	ites (B13) Odor (C1) neres along ced Iron (C ction in Plo	4)	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)	a)			
High W Satura Water Sedim Drift D Surface Inunda	Vater Table (A2) Ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) Ition Visible on Aerial Stained Leaves (B9)	erine) onriverine erine) I Imagery (Si Bi Ai Hi Pi R	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Redu	ites (B13) Odor (C1) neres along ced Iron (C ction in Plo	4)	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Image Shallow Aquitard (D3)	a)			
High W Satura Water Sedim Drift D Surfac Inunda Water-	Vater Table (A2) Ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) Ition Visible on Aerial -Stained Leaves (B9) ervations:	erine) onriverine erine) I Imagery (Si Si Si Si Si Si Si Si	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Reducther (Explain in I	ites (B13) Odor (C1) neres along ced Iron (C ction in Plo	4)	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Image Shallow Aquitard (D3)	a)			
High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse	Vater Table (A2) Ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present?	erine) onriverine erine) I Imagery (Si Bi Ai Hi O Pi Ri B7) O	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Redu	ites (B13) Odor (C1) neres along ced Iron (C ction in Plot Remarks)	4)	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Image Shallow Aquitard (D3)	a)			
High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse	Vater Table (A2) Ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) Ition Visible on Aerial -Stained Leaves (B9) ervations: ater Present?	erine) conriverine erine) I Imagery (Yes (Sa Bi Ai Hi Pi R B7) O	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Redu ther (Explain in I	ttes (B13) Odor (C1) neres along ced Iron (C ction in Plor Remarks)	4) wed Soils	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Oots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5)	ery (C9)			
High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse Surface W Water Tabl Saturation (includes c	Vater Table (A2) Ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? le Present? Present? apillary fringe)	erine) conriverine erine) I Imagery (Yes (Yes (Yes (Yes (Si Si Si Si Si Si Si Si	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Reducther (Explain in f	ottes (B13) Odor (C1) neres along ced Iron (C ction in Plor Remarks) 0 8 1	4) wed Soils	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Oots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5)	a)			
High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse Surface Water Table Saturation (includes c Describe R	Vater Table (A2) Ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? le Present? Present? apillary fringe) Recorded Data (streat	erine) conriverine erine) I Imagery (Yes (Yes (Yes (Yes (Si Si Si Si Si Si Si Si	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Reducther (Explain in f	ottes (B13) Odor (C1) neres along ced Iron (C ction in Plor Remarks) 0 8 1	4) wed Soils	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Oots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5)	ery (C9)			
High W Satura Water Sedim Drift D Surface Inunda Water Field Obse Surface Water Table Saturation (includes c Describe R aerial pho	Vater Table (A2) Ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? le Present? Present? apillary fringe)	erine) conriverine erine) I Imagery (Yes (Yes (Yes (Yes (Si Si Si Si Si Si Si Si	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Reducther (Explain in f	ottes (B13) Odor (C1) neres along ced Iron (C ction in Plor Remarks) 0 8 1	4) wed Soils	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Oots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5)	ery (C9)			
High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse Surface Water Table Saturation (includes c Describe R	Vater Table (A2) Ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? le Present? Present? apillary fringe) Recorded Data (streat	erine) conriverine erine) I Imagery (Yes (Yes (Yes (Yes (Si Si Si Si Si Si Si Si	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Reducther (Explain in f	ottes (B13) Odor (C1) neres along ced Iron (C ction in Plor Remarks) 0 8 1	4) wed Soils	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Oots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5)	ery (C9)			
High W Satura Water Sedim Drift D Surface Inunda Water Field Obse Surface W Water Table Saturation (includes c Describe R aerial pho	Vater Table (A2) Ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? le Present? Present? apillary fringe) Recorded Data (streat	erine) conriverine erine) I Imagery (Yes (Yes (Yes (Yes (Si Si Si Si Si Si Si Si	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Reducther (Explain in f	ottes (B13) Odor (C1) neres along ced Iron (C ction in Plor Remarks) 0 8 1	4) wed Soils	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Oots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5)	ery (C9)			
High W Satura Water Sedim Drift D Surface Inunda Water Field Obse Surface W Water Table Saturation (includes c Describe R aerial pho	Vater Table (A2) Ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? le Present? Present? apillary fringe) Recorded Data (streat	erine) conriverine erine) I Imagery (Yes (Yes (Yes (Yes (Si Si Si Si Si Si Si Si	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Reducther (Explain in f	ottes (B13) Odor (C1) neres along ced Iron (C ction in Plor Remarks) 0 8 1	4) wed Soils	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Oots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5)	ery (C9)			
High W Satura Water Sedim Drift D Surface Inunda Water Field Obse Surface W Water Table Saturation (includes c Describe R aerial pho	Vater Table (A2) Ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) ation Visible on Aerial -Stained Leaves (B9) ervations: ater Present? le Present? Present? apillary fringe) Recorded Data (streat	erine) conriverine erine) I Imagery (Yes (Yes (Yes (Yes (Si Si Si Si Si Si Si Si	otic Crust (B12) quatic Invertebra ydrogen Sulfide xidized Rhizospl resence of Redu ecent Iron Reducther (Explain in f	ottes (B13) Odor (C1) neres along ced Iron (C ction in Plor Remarks) 0 8 1	4) wed Soils	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Oots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Image Shallow Aquitard (D3) FAC-Neutral Test (D5)	ery (C9)			

Project/Site: SH 92 Stengel's Hill	City/Count	y: Delta		Sampling Date: 9/20/2011					
Applicant/Owner: CDOT, Region 3 Environmental		State: CO	— Sampling Po	Sampling Point: W2-1					
Investigator(s): Paula Durkin Section, Township, Range: NE 1/4 NE 1/4 Sect. 31, T. 14S, R. 93W									
Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): concave Slope (%): 1									
Subregion (LRR): D - Interior Deserts	Lat: 38.47571		Long: 107.49099		Datum: NAD83				
Soil Map Unit Name: 80 - Utaline-Torriorthents complex NWI classification: PEM									
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)									
Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes 6 No C									
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)									
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.									
Hydrophytic Vegetation Present? Yes	No C								
	. 1	he Sampled	l Area						
		hin a Wetiai		No C					
Remarks: Wetland at bottom of Big Gulch; 1.3 mile	s north of N. Fork (Junnison R	Liver.						
VEGETATION									
	Absolute Dominant	Indicator	Dominance Test wo	orksheet:					
Tree Stratum (Use scientific names.)	% Cover Species?	Status	Number of Dominant	Species					
1			That Are OBL, FACV	V, or FAC:	1 (A)				
2			Total Number of Don		(5)				
3			Species Across All S	trata:	1 (B)				
4.			Percent of Dominant						
Sapling/Shrub Stratum Total Cove	er: %		That Are OBL, FACV	V, or FAC:	100.0 % (A/B)				
1.			Prevalence Index w						
2.			Total % Cover of		ultiply by:				
3.			OBL species	x1=	0				
4.			FACW species FAC species	100 x 2 = x 3 =	200				
5Total Cove	or: %		FACU species	x 4 =	0				
Herb Stratum	f: 70		UPL species	x5=	0				
1. Phalaris arundinacea	100 Yes	FACW	Column Totals:	100 (A)	200 (B)				
2.									
3.			Prevalence Ind		2.00				
4.			Hydrophytic Vegeta		:				
5.			 Dominance Test Prevalence Index 						
6.			Morphological A		vide supporting				
7. 8.			data in Rema	rks or on a sepa	arate sheet)				
Total Cove	- 100ar		Problematic Hyd	rophytic Vegeta	tion¹ (Explain)				
Woody Vine Stratum	r: 100%								
1			¹ Indicators of hydric be present.	soil and wetlan	d hydrology must				
2									
Total Cove	r: %		Hydrophytic Vegetation						
% Bare Ground in Herb Stratum 10 % % Cove	r of Biotic Crust	%		res 📵 💮 N	· C				
Remarks:			<u> </u>						

Sampling Point: W2-1

Profile Des	cription: (Describe	to the de	pth neede				or confir	m the abs	ence of indica	ors.)	-		
Depth Matrix (inches) Color (moist) %				Features % Type¹ L		Loc ²	Textu	ire ³	Remar	ks			
(inches)	· .		Color (moist)			_ Type_	Loc			10110	_		
	7.5YR 5/4	100						silty clay	Ioain				
2-10	2.5 4/N	100	7.5YR 5	/6	2	<u>C</u>	M						
		-	·										
¹ Type: C=0	Concentration, D=Dep	oletion, RM	=Reduced	d Matrix.					Channel, M=Ma				
³ Soil Textur	es: Clay, Silty Clay,	Sandy Cla	y, Loam, S	Sandy Clay	Loam, S	andy Loan	, Clay Lo	am, Silty (Clay Loam, Silt I	oam, Silt, Loam	y Sand, Sand.		
I	Indicators: (Applicat	ole to all Li	_							natic Hydric Sol	ls:		
Histoso	• •			Sandy Redo: Stripped Ma				1 cm Muck (A9) (LRR C) 2 cm Muck (A10) (LRR B)					
h L	Epipedon (A2) Histic (A3)			Sinpped ivia Loamy Muc				Reduced Vertic (F18)					
1 []	en Sulfide (A4)			Loamy Gley	-			Red Parent Material (TF2)					
	ed Layers (A5) (LRR	C)		Depleted M					Other (Explain in	Remarks)			
	luck (A9) (LRR D)			Redox Dark		. ,							
1 1 1	ed Below Dark Surfac	:e (А11)		Depleted Da Redox Dep									
	Dark Surface (A12) Mucky Mineral (S1)			Vernal Pool		(ГО)		⁴Indio	ators of hydrop	hytic vegetation	and		
	Gleyed Matrix (S4)		Ш		(,			wetland hydrology must be present.					
	Layer (if present):									_			
Туре:											_		
Depth (i	Depth (inches): Hydric Soll Present? Yes (No (No C		
Remarks: Utaline Series													
HYDROL	OGY												
Wetland H	ydrology Indicators	:								cators (2 or more			
Primary Inc	licators (any one indi	cator is su	fficient)					Water Marks (B1) (Riverine)					
X Surfac	e Water (A1)			Salt Crust				Sediment Deposits (B2) (Riverine)					
1 🗀 💆	Vater Table (A2)			Biotic Crus						its (B3) (Riverir	ie)		
1 123									☐ Dry-Season Water Table (C2)				
🗀	Marks (B1) (Nonrive		ιH	Hydrogen		odor (C1) neres along	Livina Pa	note (C3)	⊔ ′	Surface (C7)	32)		
	ent Deposits (B2) (No		' 님		•	_	_	3013 (03)					
1 🖳	□ Drift Deposits (B3) (Nonriverine) □ Presence of Reduced Iron (C4) □ Crayfish Burrows (C8) □ Surface Soil Cracks (B6) □ Recent Iron Reduction in Plowed Soils (C6) □ Saturation Visible on Aerial Imagery (C9)										Imagery (C9)		
l 🖳	Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Shallow Aquitard (D3)												
1 🗀	Stained Leaves (B9)		, _—						FAC-Neutr	al Test (D5)			
Field Obse	ervations:					·							
Surface Wa	ater Present?	Yes (No 🌘	Depth (in	ches):	0							
Water Tabl	e Present?	Yes 何	No C	Depth (in	ches):_	8							
Saturation		Yes 🕝	No C	Depth (in	ches):	1	We	tland Hyd	Irology Presen	? Yes 📵	No C		
(includes c	apillary fringe) ecorded Data (strear	n daude n	nonitoring	well aerial	photos.	previous in				100 (0			
1	tos, topo maps	ii gaago, ii		,	F ,		•	,.					
Remarks:													
US Army Cor	ps of Engineers												

Project/Site: SH 92 Stengel's Hill			City/Co	ounty: Delta		Sar	npling Da	ate: 9/20/20)11
Applicant/Owner: CDOT, Region 3 En	vironmental				State: CO	Sar	npling Po	oint: W3-1	1
Investigator(s): Paula Durkin			Section	n, Township, R	ange: NW 1/4 NW	7 1/4 Sect.	. 32, T . 1	14S, R. 93	w
Landform (hillslope, terrace, etc.): slope		_	- Local	relief (concave,	, convex, none): con	icave		Slope (%):	1
Subregion (LRR): D - Interior Deserts		Lat: 3	- 8.47592	2	Long: 107.4902	23		Datum: NA	D83
Soil Map Unit Name: 80 - Utaline-Tor	riorthents comple	 ex			_	assification	ı: PEM		
Are climatic / hydrologic conditions on the			/ear? Ye	es 🕟 No ((If no, expla	in in Rema	rks.)		
		gnificantl			"Normal Circumstar			e No	° C
	" -	aturally p	•		eeded, explain any			•	•
	_			•				•	4.
SUMMARY OF FINDINGS - Att	acn site map s	nowing	g samp	oling point i	ocations, trans	ects, im	portani	t reatures	, etc.
Hydrophytic Vegetation Present?	Yes 🌘 No	@							
Hydric Soil Present?	Yes 🌀 No	(Is the Sample	d Area				
Wetland Hydrology Present?	•	(within a Wetla		•	No C		
Remarks: Marshy area east of stock	pond. Irrigation ri	unoff fr	om ditcl	hes likely fro	m Stingley Gulch	to the nor	theast a	nd drainin	g to
Big Gulch.									
VEGETATION									
		Absolute	Domin	ant Indicator	Dominance Test	workshoe	-t-		
<u>Tree Stratum</u> (Use scientific names.)		% Cover			Number of Domir				
1					That Are OBL, FA			2	(A)
2					Total Number of I	Dominant			
3			_		Species Across A			2	(B)
4					Percent of Domin	ant Specie	s		
Sapling/Shrub Stratum	Total Cover:	%	ò		That Are OBL, FA		_	100.0%	(A/B)
1.					Prevalence Inde	x workshe	et:		
2.			_		Total % Cove	er of:	Mu	ıltiply by:	
3.					OBL species	- 81	x 1 =	0	
4.					FACW species	122	x 2 =	244	
5.					FAC species	2	x 3 =	6	
Llaula Ctratura	Total Cover:	%	i		FACU species	1	x 4 =	4	
Herb Stratum		100	37		UPL species		x 5 =	0	
1. Distichlis spicata		100	Yes	FACW	Column Totals:	125	(A)	254	(B)
2. Polypogon monspeliensis3. Festuca arundinacea			Yes	FACW	Prevalence	Index = B/	'A =	2.03	
4. Rumex crispus		1	No No	FACW FAC	Hydrophytic Veg	etation Inc	dicators:		
5. Juncus torreyi		1	No	FACW	X Dominance T	est is >50%	6		
6. Hordeum jubatum		1	No	FAC	× Prevalence Ir	ndex is ≤3.0) ¹		
7. Cirsium arvense		1	No	FACU	Morphologica				ing
8.					1		•	rate sheet)	-1
	Total Cover:	125%			Problematic I	-туагорпуш	; vegetati	ion (Explair	1)
Woody Vine Stratum					¹Indicators of hyd	ric eoil and	t wetland	l hydrology	muet
1					be present.	nc son and	i welland	Hydrology	must
2	Total Cover:	%			Hydrophytic				
					Vegetation			_	
	% Cover o		_	<u>%</u>	Present?	Yes (No	· C	
Remarks: Muhlenbergia asperifolia	(FACW) more co	mmon	around	the stockpone	d.				
JS Army Corps of Engineers									

Sampling Point: W3-1

SOIL

Depth inches)	Matrix Color (moist)	%	Color (moist)	x Features % Type	1 Loc2	Texture ⁵	3	Remark	KS
inches)					_ <u>Loc</u>	silty clay loa			
0-8	2.5YR 6/2	100	2.5 YR 4/1	C		Sity Clay Ioa			
oil Texture dric Soll Ir Histosol Histic Ep Black Hi Hydroge Stratifled 1 cm Mu Depleted Thick Da Sandy M	ndicators: (Applica	Sandy Clarible to all LF	y, Loam, Sandy Clay RRs, unless otherwise Sandy Redo Stripped M Loamy Muc Loamy Gle Depleted M Redox Dari Depleted D	e noted.) ox (S5) atrix (S6) cky Mineral (F1) yed Matrix (F2) fatrix (F3) k Surface (F6) bark Surface (F7) oressions (F8)	ore Lining, Ram, Clay Loa	Indicato Indicato 1 cr 2 cr Rec Ch	y Loam, Silt Loors for Problem m Muck (A9) (I m Muck (A10) (duced Vertic (F d Parent Mater ner (Explain in I	nam, Silt, Loam atte Hydric Soil .RR C) (LRR B) :18) ial (TF2) Remarks)	s:
	Bleyed Matrix (S4)					T			
	Gleyed Matrix (S4) Layer (if present):								
Type: Depth (in	Layer (if present):						Soil Present?	Yes (e	No C
Type: Type: Depth (in Remarks: U	Layer (if present): ches): taline Series							Yes (•	No (
Type: Depth (in temarks: U	ches): taline Series					Hydric S	Soil Present?		
Type: Depth (internal type) Depth (internal type) Type Type Type Type Type Type Type Type	ches): taline Series		fficient)			Hydric S	Soil Present?		required)
YDROLO Vetland Hy Surface High Water N Sedime Drift De Surface Inundati Water-S	ches): taline Series dGY drology Indicators cators (any one Ind. Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (N posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aeria Stained Leaves (B9	icator is suf erine) onriverine erine)	Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence	' ') ng Living Ro (C4) lowed Soils (Hydric S Se	econdary Indica Water Marks Sediment De Drift Deposit Drainage Pa Dry-Season Thin Muck S Crayfish Bur	ators (2 or more (B1) (Riverine eposits (B2) (Riverine tterns (B10) Water Table (C urface (C7) rows (C8) isible on Aerial itard (D3)	e required) a) verine) e)
Type: Depth (in Temarks: U TOROLO Vetland Hy Inimary India Surface High Wa Saturati Water M Sedime Drift De Surface Inundati Water-S Vetland Observices	ches): taline Series GY drology Indicators cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aeria Stained Leaves (B9 reations:	erine) onriverine; erine) I Imagery (I	Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent In B7) Other (Ex	ust (B12) nvertebrates (B13) n Sulfide Odor (C' Rhizospheres ald of Reduced Iron on Reduction in F) ng Living Ro (C4) lowed Soils (Hydric S Se	econdary Indicate Water Marks Sediment De Drift Deposite Dry-Season Thin Muck S Crayfish Bur Saturation V Shallow Aqu	ators (2 or more (B1) (Riverine eposits (B2) (Riverine tterns (B10) Water Table (C urface (C7) rows (C8) isible on Aerial itard (D3)	e required) a) verine) e)
Type: Depth (in emarks: U /DROLO /etland Hy rimary India // Surface High Water M Sedime Drift De Surface Inundati Water-S ield Obser	ches): taline Series GY drology Indicators cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (Nonrive Soil Cracks (B6) ion Visible on Aeria Stained Leaves (B9) rvations:	erine) onriverine) erine) I Imagery (I	Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent In Other (Ex	ust (B12) nvertebrates (B13) n Sulfide Odor (C' Rhizospheres alco of Reduced Iron on Reduction in Ferplain in Remarks) ng Living Ro (C4) lowed Soils (Hydric S Se	econdary Indicate Water Marks Sediment De Drift Deposite Dry-Season Thin Muck S Crayfish Bur Saturation V Shallow Aqu	ators (2 or more (B1) (Riverine eposits (B2) (Riverine tterns (B10) Water Table (C urface (C7) rows (C8) isible on Aerial itard (D3)	e required) verine) e)
Type: Depth (in emarks: U /DROLO /etland Hy rimary India / Surface High Water M Sedime Drift De Surface Inundati Water-S ield Obser surface Water Table saturation P	ches): taline Series GY drology Indicators cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aeria Stained Leaves (B9) rvations: ter Present?	erine) onriverine; erine) I Imagery (I	Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent In B7) Other (Ex	ist (B12) invertebrates (B13) in Sulfide Odor (C ² Rhizospheres alcorof Reduced Iron ion Reduction in Feplain in Remarks inches): 0 inches): 8) ng Living Rod (C4) lowed Soils (Hydric S Se X cots (C3)	econdary Indicate Water Marks Sediment De Drift Deposite Dry-Season Thin Muck S Crayfish Bur Saturation V Shallow Aqu	itors (2 or more (B1) (Riverine eposits (B2) (Riverine tterns (B10) Water Table (C urface (C7) rows (C8) isible on Aerial itard (D3) Test (D5)	e required) verine) e)
Type: Depth (in emarks: U /DROLO /etland Hy rimary India / Surface High Water M Sedime Drift De Surface Inundati Water-S ield Obser urface Wat vater Table saturation P includes ca	ches): taline Series GGY drology Indicators cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (Nonrive Soil Cracks (B6) ion Visible on Aeria Stained Leaves (B9 rvations: ter Present? Present? Present? pillary fringe) ecorded Data (strea	erine) conriverine; erine) I Imagery (I Yes (Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent In Other (Ex	ust (B12) nvertebrates (B13) n Sulfide Odor (C' Rhizospheres alcorof Reduced Iron on Reduction in Ferplain in Remarks nuches): 0 nuches): 8 nuches): 1) ng Living Rod (C4) lowed Soils (Hydric S Se X ots (C3)	econdary Indica Water Marks Sediment De Drift Deposit Drainage Pa Dry-Season Thin Muck S Crayfish Bur Saturation V Shallow Aqu FAC-Neutral	itors (2 or more (B1) (Riverine eposits (B2) (Riverine tterns (B10) Water Table (C urface (C7) rows (C8) isible on Aerial itard (D3) Test (D5)	e required) verine) e) C2) Imagery (C
Type: Depth (internates: University of the proof of the p	ches): taline Series GY drology Indicators cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aeria Stained Leaves (B9 rvations: ter Present? Present?	erine) conriverine; erine) I Imagery (I Yes (Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent In B7) Other (Ex No Depth (in No Depth (in	ust (B12) nvertebrates (B13) n Sulfide Odor (C' Rhizospheres alcorof Reduced Iron on Reduction in Ferplain in Remarks nuches): 0 nuches): 8 nuches): 1) ng Living Rod (C4) lowed Soils (Hydric S Se X ots (C3)	econdary Indica Water Marks Sediment De Drift Deposit Drainage Pa Dry-Season Thin Muck S Crayfish Bur Saturation V Shallow Aqu FAC-Neutral	itors (2 or more (B1) (Riverine eposits (B2) (Riverine tterns (B10) Water Table (C urface (C7) rows (C8) isible on Aerial itard (D3) Test (D5)	e required) verine) e) C2) Imagery (C
Type: Depth (in emarks: U /DROLO /etland Hy rimary India // Surface High Wa // Saturati Water M // Sedime // Drift De // Surface // Inundati // Water-Sield Obser // Surface Water Table // Saturation Pincludes ca	ches): taline Series GGY drology Indicators cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (Nonrive Soil Cracks (B6) ion Visible on Aeria Stained Leaves (B9 rvations: ter Present? Present? Present? pillary fringe) ecorded Data (strea	erine) conriverine; erine) I Imagery (I Yes (Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent In B7) Other (Ex No Depth (in No Depth (in	ust (B12) nvertebrates (B13) n Sulfide Odor (C' Rhizospheres alcorof Reduced Iron on Reduction in Ferplain in Remarks nuches): 0 nuches): 8 nuches): 1) ng Living Rod (C4) lowed Soils (Hydric S Se X ots (C3)	econdary Indica Water Marks Sediment De Drift Deposit Drainage Pa Dry-Season Thin Muck S Crayfish Bur Saturation V Shallow Aqu FAC-Neutral	itors (2 or more (B1) (Riverine eposits (B2) (Riverine tterns (B10) Water Table (C urface (C7) rows (C8) isible on Aerial itard (D3) Test (D5)	e required) verine) e) C2) Imagery (C
Type: Depth (in emarks: U /DROLO /etland Hy rimary Indi / Surface High Water N Sedime Drift De Surface Inundati Water-S ield Obser surface Water Table saturation P includes ca escribe Re erial phote	ches): taline Series GGY drology Indicators cators (any one ind Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrive nt Deposits (B2) (Nonrive Soil Cracks (B6) ion Visible on Aeria Stained Leaves (B9 rvations: ter Present? Present? Present? pillary fringe) ecorded Data (strea	erine) conriverine; erine) I Imagery (I Yes (Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent In B7) Other (Ex No Depth (in No Depth (in	ust (B12) nvertebrates (B13) n Sulfide Odor (C' Rhizospheres alcorof Reduced Iron on Reduction in Ferplain in Remarks nuches): 0 nuches): 8 nuches): 1) ng Living Rod (C4) lowed Soils (Hydric S Se X ots (C3)	econdary Indica Water Marks Sediment De Drift Deposit Drainage Pa Dry-Season Thin Muck S Crayfish Bur Saturation V Shallow Aqu FAC-Neutral	itors (2 or more (B1) (Riverine eposits (B2) (Riverine tterns (B10) Water Table (C urface (C7) rows (C8) isible on Aerial itard (D3) Test (D5)	e required) verine) e) C2) Imagery (C

Project/Site: SH 92 Stengel's Hill			City/C	County:	Delta		San	npling Da	ate: 9/20/20)11
Applicant/Owner: CDOT, Region 3 En	nvironmental					State: CO	San	npling Po	oint: W 4-1	
Investigator(s): Paula Durkin			Section	on, Tow	mship, Ra	ange: NW 1/4 NW	1/4 Sect.	32, T.	14S, R. 93	W
Landform (hillslope, terrace, etc.): slope	e		Local	l relief (concave,	convex, none): con	cave		Slope (%):	1
Subregion (LRR): D - Interior Deserts		Lat: 38	- 3.4759	5		Long: 107.4901	6		Datum: NA	D83
Soil Map Unit Name: 80 - Utaline-To		ex				NWI d	assification	: PEM		
Are climatic / hydrologic conditions on th			ear? Y	es 🕝	No ((If no, explai	n in Rema	rks.)		
		ignificantly		-	-	"Normal Circumstan	ces" prese	nt? Yes	s (No	· C
	, «, <u>⊢</u>	aturally pr	•			eeded, explain any a	•		•	•
SUMMARY OF FINDINGS - At	· • · ·	• •								etc
COMMANT OF THE INGS - AL	tacii site map s		j Saili	pillig	poniti	——————————————————————————————————————	ects, mil	- Citain		
Hydrophytic Vegetation Present?		o 🕝								
Hydric Soil Present?		o @			Sample		_	_		
Wetland Hydrology Present? Remarks: Marshy area east of Gun	•	0 (- 61-11		a Wetla		-	No C	C1-1- 4-	41
northeast and draining to	•								.,	
VEGETATION						-				
		Absolute			dicator	Dominance Test	workshee	t:		
Tree Stratum (Use scientific names.) 1.		% Cover	Spec	ies?	Status	Number of Domin That Are OBL, FA			2	(A)
2						Total Number of D	Dominant			
3						Species Across A	II Strata:		2	(B)
4	Total Cover	- %				Percent of Domin That Are OBL, FA			100.0%	(A/B)
Sapling/Shrub Stratum						·			100.0 /0	·,
1						Prevalence Index			dial de la constant	
2.						OBL species	10	x 1 =	ultiply by:	-
4.			-			FACW species	106	x2=	212	
5.						FAC species	1	x 3 =	3	
	Total Cover	- %				FACU species		x 4 =	0	
Herb Stratum						UPL species		x 5 =	0	
1. Distichlis spicata	***	70	Yes	FA	CW	Column Totals:	117	(A)	225	(B)
2. Muhlenbergia asperifolia		30	Yes	FA	CW	Prevalence	Indox = D/	Λ -	1.02	
3. Schoenoplectus americanus		5	No	OE		Hydrophytic Veg			1.92	
4. Juncus torreyi		5	No		cw	Dominance T			1	
5. Beckmannia syzigachne 6. Echinochloa crus-galli		<u>- 5</u>	No No	—— OB	CW	× Prevalence Ir				
7. Xanthium strumarium		$\frac{1}{1}$	No	FA FA	-	Morphologica	l Adaptatio	ns¹ (Prov	vide support	ing
8.						1		•	rate sheet)	
	Total Cover	117%				Problematic F	Hydrophytic	: Vegetat	ion' (Explair	1)
Woody Vine Stratum		11//0				11-41-4		مالم ل	d boudenlasse.	
1						¹ Indicators of hyd be present.	nc son and	wetiand	т пуагоюду	musi
2	Total Cover:	%				Hydrophytic				
% Bare Ground in Herb Stratum5		of Biotic C	Crust _	9	<u>6</u>	Vegetation Present?	Yes (No	· C	
Remarks:										
		_								

		to the depth			OI COIIIIIII	the absence of Indicators.)	
Depth (inches)	Matrix Color (moist)	% -	Color (moist)	x Features % Type ¹	Loc ²	Texture ³	Remarks
		90	00.0.			silty clay loam	
0-16	7.5YR 5/4					Sity viay loan.	
	7.5YR 5/1						
		e),					
1 T C	Concentration, D=Dep	Jotion DM-E	Reduced Matrix	2l costion: PI =Por	a Lining Ri	C=Root Channel, M=Matrix.	
3Soil Textu	res: Clav. Silty Clay. S	Sandv Clav.	teduced Mainx. Loam, Sandv Clav	Loam, Sandy Loan	, Clay Loa	m, Silty Clay Loam, Silt Loam,	, Silt, Loamy Sand, Sand.
	Indicators: (Applicab					Indicators for Problematic	Hydric Soils:
Histos			Sandy Red			1 cm Muck (A9) (LRR	
Histic I	Epipedon (A2)		Stripped M			2 cm Muck (A10) (LR	•
	Histic (A3)			cky Mineral (F1)		Reduced Vertic (F18)	
	gen Sulfide (A4)	•		yed Matrix (F2)		Red Parent Material (Other (Explain in Rem	•
	ied Layers (A5) (LRR (Muck (A9) (LRR D)	()	Depleted N	natrix (F3) k Surface (F6)		Other (Explain in Kell	, or the j
	ииск (А9) (LKK D) ted Below Dark Surfac	e (A11)		Park Surface (F7)			
	Dark Surface (A12)	(*****)		ressions (F8)			
	Mucky Mineral (S1)		Vernal Poo	ols (F9)		4Indicators of hydrophytic	
Sandy	Gleyed Matrix (S4)					wetland hydrology mus	at be present.
Restrictive	e Layer (if present):						
Туре:							
Depth (i	inches):					Hydric Soil Present? Y	es (No (
Remarks: 1	Utaline Series		-				
HYDROL							
HINKOL	OGY						
	OGY lydrology Indicators:					Secondary Indicators	s (2 or more required)
Wetland H			ient)			Secondary Indicators Water Marks (B	
Wetland H	lydrology Indicators:		ient) Salt Crus	t (B11)		Water Marks (B1	
Wetland H Primary Ind	lydrology Indicators: dicators (any one indic					Water Marks (B1 Sediment Depos Drift Deposits (B	1) (Riverine) sits (B2) (Riverine) (3) (Riverine)
Wetland H Primary Ind Surface High V	lydrology Indicators: dicators (any one indic ce Water (A1)		Salt Crus Biotic Cn			Water Marks (B1	1) (Riverine) sits (B2) (Riverine) (3) (Riverine) ns (B10)
Wetland H Primary Ind Surface High V Satura	lydrology Indicators: dicators (any one indic ce Water (A1) Water Table (A2)	cator is suffic	Salt Crus Biotic Cru Aquatic I Hydrogei	ust (B12) nvertebrates (B13) n Sulfide Odor (C1)		Water Marks (B1 Sediment Depos Drift Deposits (B Drainage Pattern Dry-Season Water	1) (Riverine) sits (B2) (Riverine) i3) (Riverine) ns (B10) ter Table (C2)
Wetland H Primary Ind Surface High V Satura Water	lydrology Indicators: dicators (any one indic ce Water (A1) Water Table (A2) ation (A3)	cator is suffic	Salt Crus Biotic Cru Aquatic I Hydrogei Oxidized	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along		Water Marks (B1 Sediment Deposits (B1 Drift Deposits (B1 Drainage Pattern Dry-Season Water Marks (C3) Thin Muck Surfa	1) (Riverine) sits (B2) (Riverine) (3) (Riverine) sits (B10) ter Table (C2) site (C7)
Wetland H Primary Ind Surface High V Satura Water Sedim	lydrology Indicators: dicators (any one indic ce Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriver	cator is suffic rine) onriverine)	Salt Crus Biotic Cru Aquatic I Hydrogel Oxidized Presence	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C	4)	Water Marks (B1 Sediment Deposits (B) Drift Deposits (B) Drainage Pattern Dry-Season Water Ots (C3) Thin Muck Surfa	1) (Riverine) sits (B2) (Riverine) (3) (Riverine) sits (B10) ster Table (C2) sice (C7) s (C8)
Wetland H Primary Ind Surface High V Satura Water Sedim Drift D	dicators: (any one indicators: dicators (any one indicators (A1)) Water (A1) Water Table (A2) Ation (A3) Marks (B1) (Nonriversent Deposits (B2) (No	cator is suffic rine) onriverine)	Salt Crus Biotic Cru Aquatic II Hydrogel Oxidized Presence	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C on Reduction in Plo	4)	Water Marks (B*) Sediment Deposits (B*) Drift Deposits (B*) X Drainage Pattern Dry-Season Water (C3) Thin Muck Surfater (C6) X Saturation Visible	1) (Riverine) sits (B2) (Riverine) (3) (Riverine) ns (B10) ter Table (C2) nce (C7) s (C8) le on Aerial Imagery (C9)
Wetland H Primary Ind Surface High V Satura Water Sedim Drift D Surface Inunda	dicators (any one indicators: dicators (any one indicators Marks (B1) (Nonriversity (B3) (Nonriversity (B3) (Nonriversity (B6) attion Visible on Aerial	cator is suffic rine) enriverine) erine)	Salt Crus Biotic Cru Aquatic II Hydrogei Oxidized Presence	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C	4)	Water Marks (B1 Sediment Deposits (B1 Drift Deposits (B1 Drainage Pattern Dry-Season Water (C3) Thin Muck Surfater (C6) Saturation Visible Shallow Aquitant	1) (Riverine) sits (B2) (Riverine) (3) (Riverine) (ns (B10) ter Table (C2) (cc (C7) (s (C8) (d (D3)
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Wetland H Primary Ind Surface High V Satura Water Sedim Drift D Surface Inunda Water Water	dicators (any one indicators: dicators (any one indicators (any one indicators (any one indicators (A1)) Nater Table (A2) ation (A3) Marks (B1) (Nonriver (B2)) Moreosits (B3) (Nonriver (B3)) Moreosits (B3) (Nonriver (B4)) Moreosits (B6)	cator is sufficience) enriverine) erine) Imagery (B7	Salt Crus Biotic Cru Aquatic II Hydrogel Oxidized Presence Recent II Other (Ex	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Con Reduction in Plotoplain in Remarks) nches): 0	4)	Water Marks (B1 Sediment Deposits (B1 Drift Deposits (B1 Drainage Pattern Dry-Season Water (C3) Thin Muck Surfater (C6) Saturation Visible Shallow Aquitant	1) (Riverine) sits (B2) (Riverine) (3) (Riverine) (ns (B10) ter Table (C2) (cc (C7) (s (C8) (d (D3)
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Wetland H Primary Ind X Surface High V X Satura Water Sedim Drift D Surface Inunda Water Field Obse Surface W Water Tab Saturation (includes of Describe Faerial pho	dicators (any one indicators: dicators (any one indicators (any one indicators (any one indicators (any one indicators (A2) ation (A3) Marks (B1) (Nonriver one of the indicator (B2) (Nonriver one of the indicator (B3) (Nonriver one of the indicator (B4) dicator Visible on Aerial of the indicator (B9) dervations: dicator Present? Present? Present? Capillary fringe) Recorded Data (stream	cator is sufficerine) prine) Imagery (B7 Yes (Salt Crus Biotic Cru Aquatic I Hydrogei Oxidized Presence Recent II Other (E:	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Con Reduction in Plotoplain in Remarks) nches): 0 nches): 16 nches): 12	4) wed Soils (Water Marks (Band Marks) Water Marks (Band Marks) Sediment Deposits (Band Marks) Drainage Pattern Dry-Season Water Marks (Ca) Thin Muck Surfator (Cayfish Burrow) Crayfish Burrow Crayfish Burrow Saturation Visible Shallow Aquitare FAC-Neutral Test	1) (Riverine) sits (B2) (Riverine) (3) (Riverine) ns (B10) ter Table (C2) nce (C7) s (C8) de on Aerial Imagery (C9) dt (D3) st (D5)

Project/Site: SH 92 Stengel's Hill		City/C	county: Delta		Sai	mpling Da	ate: 9/20/20	11
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Sar	npling Po	int: W4-2	2
Investigator(s): Paula Durkin	·	Section	on, Township, Ra	ange: SW 1/4 SW 1/	4 Sect.	29, T. 1	4S, R. 93V	V
Landform (hillslope, terrace, etc.): slope		Local	l relief (concave,	convex, none): conce	ave		Slope (%):	1
Subregion (LRR): D - Interior Deserts	Lat: 38.	.4801	9	Long: 107.48564			Datum: NA	D83
Soil Map Unit Name: 80 - Utaline-Torriorthents comp	olex			NWI clas	sification	n: PEM		
Are climatic / hydrologic conditions on the site typical for th	is time of ye	ar? Y	es (6 No ((If no, explain	in Rema	rks.)		
Are Vegetation Soil or Hydrology	significantly	distur	bed? Are	"Normal Circumstance	es" prese	ent? Yes	(No	0
Are Vegetation Soil or Hydrology	naturally pro	blema	atic? (If n	eeded, explain any an	swers in	Remarks	s.)	
SUMMARY OF FINDINGS - Attach site map	showing	sam	pling point i	ocations, transe	cts, im	portant	t features	, etc.
Hydrophytic Vegetation Present? Yes 6	No ©					•		
	No (İ	Is the Sample	d Area				
Wetland Hydrology Present? Yes (a Remarks: Marshy area east of Gun Club driveway r	40 @		within a Wetla		•	No C		
to the northeast and draining to Big Gulch VEGETATION								
	Absolute		nant Indicator	Dominance Test w	orkshe	et:		
Tree Stratum (Use scientific names.) 1	% Cover	Spec	ies? Status	Number of Dominal That Are OBL, FAC			2	(A)
2. 3.				Total Number of Do Species Across All			2	(B)
4.				- ·			L	(5)
Total Cove Sapling/Shrub Stratum	er: %			Percent of Dominar That Are OBL, FAC			100.0%	(A/B)
1.				Prevalence Index	workshe	et:		
2.				Total % Cover	of:	Mu	ıltiply by:	_
3				OBL species	- 18	x 1 =	0	
4.				FACW species	100	x 2 =	200	
5Total Cove	r: %			FAC species FACU species	2	x3= x4=	6	
Herb Stratum	1. 70			UPL species		x 5 =	0	
1. Distichlis spicata	60	Yes	FACW	Column Totals:	102	(A)	206	(B)
2. Muhlenbergia asperifolia	40	Yes	FACW					
3. Asclepias speciosa	2	No	FAC	Prevalence In			2.02	
4.				Hydrophytic Vege				
5.				➤ Dominance Tes ➤ Prevalence Ind				
6. 7.	÷			Morphological /	Adaptatio	ons¹ (Prov		ing
8.				Problematic Hy			-	1)
Total Cove Woody Vine Stratum	r: 102%				p y	g	(,
1.				¹ Indicators of hydric be present.	soil and	d wetland	hydrology	must
2. Total Cove	r: %			Hydrophytic				
	r of Biotic C	rust	%	Vegetation Present?	Yes 📵	Ma	» (1	
Remarks:	. JI BIOGO OI		70	riesenti	169 (4	140		
Nomains.								
JS Army Corps of Engineers								

Sampling	Point:	W4-2

Depth	Matrix			document the in				
(inches)	Color (moist)	%	Color (mois		Type ¹ Loc	c ² Text	ure ³ Remarks	
0-16	7.5YR 5/4	90				silty clay	o loam	
	7.5YR 5/1	10						
-	7.51K 3/1							
	*							
								_
¹ Type: C=0	Concentration, D=De	pletion, RM=	Reduced Mat				Channel, M=Matrix.	
³ Soil Textu	es: Clay, Silty Clay,	Sandy Clay	, Loam, Sandy	Clay Loam, Sar	dy Loam, Clay		Clay Loam, Silt Loam, Silt, Loamy Sand,	Sand.
Hydric Soil	Indicators: (Applica	ble to all LRI	Rs, unless oth	erwise noted.)			ators for Problematic Hydric Soils:	
Histoso	• •			Redox (S5)			1 cm Muck (A9) (LRR C)	
	Epipedon (A2)			ed Matrix (S6) ly Mucky Mineral	/E1\		2 cm Muck (A10) (LRR B) Reduced Vertic (F18)	
	Histic (A3) gen Sulfide (A4)			y Mucky Millerar y Gleyed Matrix			Red Parent Material (TF2)	
_ ' '	ed Layers (A5) (LRR	C)		eted Matrix (F3)	· -/		Other (Explain in Remarks)	
	luck (A9) (LRR D)	-,		x Dark Surface (I	=6)			
	ed Below Dark Surfa	ce (A11)		eted Dark Surface				
	Dark Surface (A12)			x Depressions (F	8)	4, ,,	4 St. Levelette venetation and	
	Mucky Mineral (S1)		Vema	al Pools (F9)			cators of hydrophytic vegetation and retland hydrology must be present.	
	Gleyed Matrix (S4)						retiand hydrology must be present.	
	Layer (if present):							
Type:						Hordei	ic Soil Present? Yes (No (
Depth (i	Italine Series			_		- Inyan	100 (0)	
Nemains.	Jianne Series							
				_				
HYDROL	OGY	· · · · ·	<u> </u>					
	OGY ydrology Indicators	B:					Secondary Indicators (2 or more require	<u>d)</u>
Wetland H			cient)				Water Marks (B1) (Riverine)	<u>d)</u>
Wetland H	ydrology Indicators			Crust (B11)				d)
Wetland H Primary Inc	ydrology Indicators licators (any one indi		Salt	Crust (B11)			Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)	<u>d)</u>
Wetland H Primary Inc Surfac High W	ydrology Indicators licators (any one indi e Water (A1) /ater Table (A2)		Salt		s (B13)		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)	<u>d)</u>
Wetland H Primary Inc Surfac High W Satura	ydrology Indicators licators (any one indi e Water (A1) /ater Table (A2)	icator is suffi	Salt Biot Aqu Hyd	ic Crust (B12) atic Invertebrates rogen Sulfide Od	or (C1)		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)	<u>d)</u>
Wetland H Primary Ind X Surfac High W X Satura Water Sedime	ydrology Indicators licators (any one indi e Water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (N	icator is suffi erine) onriverine)	Salt Bioti Aqu Hyd Oxid	ic Crust (B12) atic Invertebrates rogen Sulfide Od lized Rhizospher	or (C1) es along Living	g Roots (C3)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)	<u>d)</u>
Wetland H Primary Inc Surface High W Satura Water Sedim Drift D	ydrology Indicators licators (any one indicators (any one indicators (A1) water (A1) water Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (Nonrive eposits (B3) (Nonrive	icator is suffi erine) onriverine)	Salt Bioti Aqu Hyd Oxic	ic Crust (B12) atic Invertebrates rogen Sulfide Od dized Rhizospher sence of Reduce	or (C1) es along Living d Iron (C4)		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)	_
Wetland H Primary Inc Surface High W Satura Water Sedim Drift D Surface	ydrology Indicators licators (any one indice e Water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6)	icator is suffi erine) onriverine) erine)	Salt Bioti Aqu Hyd Oxic	ic Crust (B12) atic Invertebrates rogen Sulfide Od dized Rhizospher sence of Reduces ent Iron Reduction	or (C1) es along Living d Iron (C4) on in Plowed S		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery	_
Wetland H Primary Inc Surfac High W Satura Water Sedime Drift D Surfac	ydrology Indicators dicators (any one indicators (any one indicators (A1) water Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (Nonrive e Soil Cracks (B6) tion Visible on Aeria	erine) onriverine) erine) limagery (B	Salt Bioti Aqu Hyd Oxic	ic Crust (B12) atic Invertebrates rogen Sulfide Od dized Rhizospher sence of Reduce	or (C1) es along Living d Iron (C4) on in Plowed S		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3)	_
Wetland H Primary Inc Surfac High W Satura Water Sedim Drift D Surfac Inunda Water-	ydrology Indicators dicators (any one indicators (any one indicators (A1) water Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) tion Visible on Aeria Stained Leaves (B9)	erine) onriverine) erine) limagery (B	Salt Bioti Aqu Hyd Oxic	ic Crust (B12) atic Invertebrates rogen Sulfide Od dized Rhizospher sence of Reduces ent Iron Reduction	or (C1) es along Living d Iron (C4) on in Plowed S		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery	_
Primary Inc Surfac High W Satura Water Sedim Drift D Surfac Inunda Water- Field Obse	ydrology Indicators licators (any one indicators (any one indicators (A1) Water Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (Nonrive e Soil Cracks (B6) tion Visible on Aeria Stained Leaves (B9) ervations:	erine) onriverine) erine)	Salt Bioti Aqu Hyd Oxic Pres Rec 7) Othe	ic Crust (B12) atic Invertebrates rogen Sulfide Od dized Rhizospher sence of Reduces ent Iron Reduction er (Explain in Res	or (C1) es along Living d Iron (C4) on in Plowed S marks)		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3)	_
Wetland H Primary Inc Surface High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse	ydrology Indicators licators (any one indicators (any one indicators (A1) Water (A1) Water Table (A2) Ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (Nonrive eposits (B3) (Nonrive e Soil Cracks (B6) Ition Visible on Aeria Stained Leaves (B9) Prvations: ater Present?	erine) conriverine) erine) l Imagery (B	Salt Bioti Aqu Hyd Oxic Pres Rec 7) Othe	ic Crust (B12) atic Invertebrates rogen Sulfide Od dized Rhizospher sence of Reduce ent Iron Reduction er (Explain in Reluction pth (inches):	or (C1) es along Living d Iron (C4) on in Plowed S marks)		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3)	_
Wetland H Primary Inc Surface High W Satura Water Sedime Drift De Surface Inunda Water- Field Obse Surface Water Table	ydrology Indicators licators (any one indicators (any one indicators (any one indicators) Water (A1) Water Table (A2) Ition (A3) Marks (B1) (Nonrive ent Deposits (B2) (Nonrive eposits (B3) (Nonrive e Soil Cracks (B6) Ition Visible on Aeria Stained Leaves (B9) Provations: ater Present? e Present?	erine) conriverine) erine) l Imagery (B) Yes (Salt Bioti Aqu Hyd Oxic Pres Rec 7) Othe	ic Crust (B12) atic Invertebrates rogen Sulfide Od dized Rhizospher sence of Reduce ent Iron Reduction er (Explain in Reduction pth (inches): pth (inches):	or (C1) es along Living d Iron (C4) on in Plowed S marks) 0 16		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3)	_
Wetland H Primary Inc Surface High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse Surface Water Tabl Saturation	ydrology Indicators dicators (any one indicators (any one indicators (A1) water Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) tion Visible on Aeria Stained Leaves (B9) ervations: de Present? Present?	erine) conriverine) erine) l Imagery (B) Yes (Salt Bioti Aqu Hyd Oxic Pres Rec 7) Othe	ic Crust (B12) atic Invertebrates rogen Sulfide Od dized Rhizospher sence of Reduce ent Iron Reduction er (Explain in Reluction pth (inches):	or (C1) es along Living d Iron (C4) on in Plowed S marks) 0 16	oils (C6)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5)	_
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Wetland H Primary Inc Surface High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse Surface Water Tabl Saturation (includes c Describe R	ydrology Indicators dicators (any one indicators dicators (any one indicators (any one indicators) dicators (any one indicators (any one indicators) dicators (any one indicators) dicato	erine) conriverine) erine) l Imagery (B' Yes (Yes (Yes (Salt Biot Aqu Hyd Oxic Pres Rec 7) Cthe	ic Crust (B12) atic Invertebrates rogen Sulfide Od dized Rhizospher sence of Reduces ent Iron Reduction er (Explain in Res pth (inches): pth (inches):	or (C1) es along Living d Iron (C4) on in Plowed S marks) 0 16 12	oils (C6) Wetland Hyd	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5)	(C9)
Wetland H Primary Inc Surface High W Satura Water Sedim Surface Inunda Water-Field Obse Surface Water Tabl Saturation (includes c Describe R aerial pho	ydrology Indicators dicators (any one indicators dicators (any one indicators (any one indicators) dicators (any one indicators (any one indicators) dicators (any one indicators) dicato	erine) conriverine) erine) l Imagery (B' Yes (Yes (Yes (Salt Biot Aqu Hyd Oxic Pres Rec 7) Cthe	ic Crust (B12) atic Invertebrates rogen Sulfide Od dized Rhizospher sence of Reduces ent Iron Reduction er (Explain in Res pth (inches): pth (inches):	or (C1) es along Living d Iron (C4) on in Plowed S marks) 0 16 12	oils (C6) Wetland Hyd	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5)	(C9)
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Wetland H Primary Inc Surface High W Satura Water Sedime Drift De Surface Inunda Water- Field Obse Surface Water Table Saturation (includes c Describe R aerial pho	ydrology Indicators dicators (any one indicators dicators (any one indicators (any one indicators) dicators (any one indicators (any one indicators) dicators (any one indicators) dicato	erine) conriverine) erine) l Imagery (B' Yes (Yes (Yes (Salt Biot Aqu Hyd Oxic Pres Rec 7) Cthe	ic Crust (B12) atic Invertebrates rogen Sulfide Od dized Rhizospher sence of Reduces ent Iron Reduction er (Explain in Res pth (inches): pth (inches):	or (C1) es along Living d Iron (C4) on in Plowed S marks) 0 16 12	oils (C6) Wetland Hyd	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5)	(C9)
Wetland H Primary Inc Surface High W Satura Water Sedime Drift De Surface Inunda Water- Field Obse Surface Water Table Saturation (includes co Describe R aerial pho	ydrology Indicators dicators (any one indicators dicators (any one indicators (any one indicators) dicators (any one indicators (any one indicators) dicators (any one indicators) dicato	erine) conriverine) erine) l Imagery (B' Yes (Yes (Yes (Salt Biot Aqu Hyd Oxic Pres Rec 7) Cthe	ic Crust (B12) atic Invertebrates rogen Sulfide Od dized Rhizospher sence of Reduces ent Iron Reduction er (Explain in Res pth (inches): pth (inches):	or (C1) es along Living d Iron (C4) on in Plowed S marks) 0 16 12	oils (C6) Wetland Hyd	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) FAC-Neutral Test (D5)	(C9)

Project/Site: SH 92 Stengel's Hill		City/Coun	ty: Delta		Sam	pling Date	9/20/20	011
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Sam	pling Point	W5-1	
Investigator(s): Paula Durkin		Section, 7	ownship, Ra	inge: SW 1/4 SW 1	/4 Sect. 2	9, T. 14S	, R. 93W	V
Landform (hillslope, terrace, etc.): slope		Local reli	ef (concave,	convex, none): conc	ave	S	ope (%):	1
Subregion (LRR): D - Interior Deserts	Lat: 38	3.48022		Long: 107.48549		Dat	tum: NA	D83
Soil Map Unit Name: 80 - Utaline-Torriorthents comple	 ex			NWI clas	sification:	PEM		
Are climatic / hydrologic conditions on the site typical for this		ear? Yes (No ((If no, explain	in Remark	s.)		
Are Vegetation Soil or Hydrology si	gnificantly	y disturbed	? Are	"Normal Circumstanc	es" presen	t? Yes	No.	· C
Are Vegetation Soil or Hydrology na	aturally pr	oblematic?	(If ne	eeded, explain any an	swers in F	Remarks.)		
SUMMARY OF FINDINGS - Attach site map s	howing	ı sampliı	ng point k	ocations, transe	cts, imp	ortant f	eatures	, etc.
Hydrophytic Vegetation Present? Yes 6 No	. 6							
	6	Is	the Sampled	l Area				
7	(hin a Wetlaı			No C		
Remarks: Irrigation runoff from ditches likely from	Stingley	Gulch to	the northea	st and draining to I	Big Gulch	1.		
VEGETATION								
	Absolute	Dominan	Indicator	Dominance Test v	vorksheet	:		
	% Cover	Species?		Number of Domina		-		
1				That Are OBL, FAC	W, or FAC):	2	(A)
2		-		Total Number of Do				
3.				Species Across All	Strata:		2	(B)
4.	0.4			Percent of Domina				
Sapling/Shrub Stratum Total Covers	%			That Are OBL, FAC	W, or FAC	<i>z</i> : 10	0.0%	(A/B)
1				Prevalence Index	workshee	t:		
2				Total % Cover	of:		oly by:	-
3.				OBL species	80	x 1 =	80	
4.				FACW species FAC species	21	x2= x3=	42	
5Total Cover:	%			FACU species	2	x4=	6	
Herb Stratum	70			UPL species		x 5 =	0	
1. Distichlis spicata	20	Yes	FACW	Column Totals:	103	(A)	128	(B)
2. Typha latifolia	80	Yes	OBL			` '		
3. Cirsium arvense	2	No	FAC	Prevalence In			1.24	
4. Muhlenbergia asperifolia	1	No	FACW	Hydrophytic Vege Dominance Te				
5.				× Prevalence Ind				
6. 7.				Morphological			e support	ina
8.				data in Rem				
Total Cover:	103%		,	Problematic Hy	drophytic	Vegetation	¹ (Explair	۱) (۱
Woody Vine Stratum	103 %			1		. 41 1 . 1		
1				¹ Indicators of hydrid be present.	c soil and	wetland h	yarology	must
2								
Total Cover:	%			Hydrophytic Vegetation				
% Bare Ground in Herb Stratum 0 % % Cover	of Biotic C	Crust	%_	Present?	Yes 📵	No (
Remarks:			- "					

Sampling Point: W5-1

Profile Des	scription: (Describe	to the dept	needed to docur	nent the ir	ndicator o	or confirm	m the absence of indicators.)	
Depth	Matrix			(Features	Typo1	Loc ²	Texture ³ Remarks	
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	LOC		_
0-12	7.5YR 5/4						silty clay loam	
	7.5YR 5/1							
***************************************	7. ·	-						
	_		<u> </u>					
				·	DI D	Listen F	RC=Root Channel, M=Matrix.	
¹ Type: C=	Concentration, D=De	epletion, RM=	Reduced Matrix.	"Location:	: PL=Pore	Clay Los	am, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, S	and.
	Indicators: (Applica				idy Loain	, Olay Loc	Indicators for Problematic Hydric Soils:	
	ol (A1)	IDIO IO AII ENN	Sandy Redo				1 cm Muck (A9) (LRR C)	
	Epipedon (A2)		Stripped Ma				2 cm Muck (A10) (LRR B)	
	Histic (A3)		Loamy Muc	ky Mineral	(F1)		Reduced Vertic (F18)	
Hydro	gen Sulfide (A4)		Loamy Gle		(F2)		Red Parent Material (TF2)	
	ied Layers (A5) (LRF	(C)	Depleted M		E0)		Other (Explain in Remarks)	
	Muck (A9) (LRR D)	(044)	Redox Dark					
	ted Below Dark Surfa Dark Surface (A12)	ice (ATT)	Redox Dep					
	Mucky Mineral (S1)		Vernal Poo		0,		⁴ Indicators of hydrophytic vegetation and	
	Gleyed Matrix (S4)			(/			wetland hydrology must be present.	_
	e Layer (if present):		-					
Туре:								
Depth (inches):						Hydric Soil Present? Yes 📦 No 🤇	
Remarks:	Utaline Series							
HYDROL	OGY		<u></u>					
Wetland F	lydrology Indicator	s:					Secondary Indicators (2 or more required)	!
Primary In	dicators (any one inc	licator is suffic	cient)				Water Marks (B1) (Riverine)	
	ce Water (A1)		Salt Crust	(B11)			Sediment Deposits (B2) (Riverine)	
~ 1	Nater Table (A2)		Biotic Cru	st (B12)			Drift Deposits (B3) (Riverine)	
1 1 "	ation (A3)		Aquatic Ir	vertebrate	s (B13)		Drainage Patterns (B10)	
12.21	Marks (B1) (Nonriv	erine)	Hydrogen	Sulfide Od	dor (C1)		Dry-Season Water Table (C2)	
Sedim	nent Deposits (B2) (N	lonriverine)		Rhizosphe				
Drift C	Deposits (B3) (Nonri	rerine)		of Reduce			Crayfish Burrows (C8)	(00)
Surfac	ce Soil Cracks (B6)			on Reduction		ved Soils		(C9)
	ation Visible on Aeria		') Tother (Ex	plain in Re	marks)		Shallow Aquitard (D3)	
Water	r-Stained Leaves (B9)					FAC-Neutral Test (D5)	
Field Obs	ervations:				_			
	later Present?	-	No 🌀 Depth (ir		0	_		
Water Tab	ole Present?	Yes 🕝	No C Depth (ir	iches):	16	_		
Saturation		Yes 📵	No C Depth (ir	nches):	12	- We	tland Hydrology Present? Yes 📵 No (
(includes of	capillary fringe) Recorded Data (strea	ат дация то	nitoring well. aerial	photos. pr	evious ins		The state of the s	
	otos, topo maps	30080, 1110						
Remarks:								
. willeliks.								
IIC AC	and of Engineers							
S Army Co	orps of Engineers							

Project/Site: SH 92 Stengel's Hill		City/Co	ounty: Delta		Sa	mpling Da	ate: 9/19/20	011
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Sa	mpling Po	oint: UP1 1	-1
Investigator(s): Paula Durkin		Section	n, Township, Ra	ange: NE 1/4 NE 1	/4 Sect.	31, T. 14	IS, R. 93W	r
Landform (hillslope, terrace, etc.): slope		Local	relief (concave,	convex, none):	-		Slope (%):	
Subregion (LRR): D - Interior Deserts	Lat: 38	- 3.47522	2	Long: 107.4928	8	ļ	Datum: NA	D83
Soil Map Unit Name: 23 - Chipeta silty clay, 3 to 30	percent slo	pes	-	NWI cl	assificatio	n:		
Are climatic / hydrologic conditions on the site typical for			es 🕟 No ((If no, explai	in in Rema	arks.)		
Are Vegetation Soil or Hydrology	significantly	disturb	ed? Are	"Normal Circumstan	ices" pres	ent? Yes	s 🕟 No	° C
Are Vegetation Soil or Hydrology	naturally pr			eeded, explain any a	-			-
SUMMARY OF FINDINGS - Attach site may			•				•	s, etc.
-		<u> </u>		•		•		
Hydrophytic Vegetation Present? Yes (*) Hydric Soil Present? Yes (*)	No (© No (©		Is the Sample	d Aros				
Wetland Hydrology Present? Yes	No (- 1	within a Wetla		C	No 🕡		
Remarks: adjacent to wetland #1,1-1, on the SW of			WILLIE WOLL		`	140 (5		
	-							
				-				
VEGETATION								
Tree Stratum (Use scientific names.)	Absolute % Cover		ant Indicator es? Status	Dominance Test				
1.	70 00101	Орсы	Joi Otatas	Number of Domin			1	(A)
2.				1			1	6.9
3.				Total Number of I Species Across A			2	(B)
4.				- '			_	` '
Total Co	ver: %			 Percent of Domin That Are OBL, FA 			50.0 %	(A/B)
Sapling/Shrub Stratum	20	37		Prevalence Inde	v worksh	not:		
Sarcobatus vermiculatus Z.		Yes	FAC	Total % Cove			ultiply by:	
3.				OBL species	146	x 1 =	0	_
4.				FACW species		x 2 =	0	
5.				FAC species	30	x 3 =	90	
Total Cov	ver: 30 %			FACU species		x 4 =	0	
Herb Stratum				UPL species	37	x 5 =	185	
1. Kochia scoparia		Yes	UPL	Column Totals:	67	(A)	275	(B)
2. Chorispora tenella	5	No	UPL	Prevalence	Index = B	s/A =	4.10	
3. Convolvulus arvensis 4. Salsola kali		No No	UPL	Hydrophytic Veg				
5.		INO	UPL	Dominance T	est is >50	%		
6.				Prevalence Ir	ndex is ≤3.	.0¹		
7.				Morphologica				ing
8.							rate sheet)	
Total Cov	/er: 37 %			Problematic I	-iyaropnyti	.c vegetat	ion. (Exbiaii	n)
Woody Vine Stratum				¹ Indicators of hyd	ric eoil an	d wetlen	t bydrology	muet
1				be present.	IIC SUII all	u welland	i Hydrology	must
2Total Cov	/er: %		_	Hydrophytic				
	, -			Vegetation			_	
	er of Biotic C	Crust	<u>%</u>	Present?	Yes (Ne	• •	
Remarks:								

Depth	Matrix	o to the dep		Redox Features			the absence of indicate	•
Depth (inches)	Color (moist)	%	Color (moist		Type ¹	Loc ²	Texture ³	Remarks
()	Total (interest)							
	-							
	·							
1-			D. L 1 Market	21	DI - Dave	Lining DC	C=Root Channel, M=Matr	
Type: C=0	Concentration, D=De	pletion, RM	=Reduced Matri					oam, Silt, Loamy Sand, Sand.
					indy Loam	, Clay Loar	Indicators for Problem	
	Indicators: (Applica	ble to all LR					1 cm Muck (A9) (I	-
Histoso	• •			Redox (S5)			2 cm Muck (A10)	
	Epipedon (A2)			ed Matrix (S6)	J /E4)		Reduced Vertic (F	•
	Histic (A3)			Mucky Minera			Red Parent Mater	-
	gen Sulfide (A4)			Gleyed Matrix	(FZ)		Other (Explain in	
	ed Layers (A5) (LRF	(C)		ed Matrix (F3)	(EG)		U Other (Explaint)	(Cinamo)
	fluck (A9) (LRR D)	(844)	1 1	Dark Surface ed Dark Surface				
1 1 '	ed Below Dark Surfa	ice (ATT)	'	Depressions (
	Dark Surface (A12)			Pools (F9)	ro <i>)</i>		4Indicators of hydroph	vtic vegetation and
1 1 "	Mucky Mineral (S1)		U veiriai	FOOIS (FB)			wetland hydrology	
	Gleyed Matrix (S4)						Woulding Hydrology	
	Layer (if present):							
Type:								Was Co. No Co.
Depth (i	nches):						Hydric Soil Present?	Yes No 6
Remarks:								
I								
HYDROL	OGY							
Wetland H	ydrology Indicator	s:			<u> </u>			ators (2 or more required)
			ficient)					ators (2 or more required) s (B1) (Riverine)
Primary Inc	dicators (any one inc			Crust (B11)			Water Marks	
Primary Inc	dicators (any one inc e Water (A1)		Salt 0	Crust (B11)			Water Marks Sediment De	eposits (B2) (Riverine)
Primary Inc	dicators (any one inc e Water (A1) Vater Table (A2)		Salt (Crust (B12)	es (B13)		Water Marks Sediment Do Drift Deposit	s (B1) (Riverine) eposits (B2) (Riverine) s (B3) (Riverine)
Primary Inc Surface High W	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3)	licator is suff	Salt (Biotic	: Crust (B12) tic Invertebrate			Water Marks Sediment Do Drift Deposit Drainage Pa	s (B1) (Riverine) eposits (B2) (Riverine) s (B3) (Riverine) tterns (B10)
Primary Inc Surface High W Satura Water	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv	licator is suff	Salt (Biotic Aqua Hydro	: Crust (B12) tic Invertebrate ogen Sulfide C	dor (C1)	Living Poo	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season	s (B1) (Riverine) eposits (B2) (Riverine) s (B3) (Riverine) atterns (B10) Water Table (C2)
Primary Inc Surface High W Satura Water Sedime	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (N	licator is suff erine) lonriverine)	Salt 0 Biotic Aqua Hydro	: Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe	dor (C1) eres along		Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season ats (C3) Thin Muck S	s (B1) (Riverine) eposits (B2) (Riverine) es (B3) (Riverine) atterns (B10) Water Table (C2) furface (C7)
Primary Inc Surface High W Satura Water Sedime	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Nonriv eposits (B3) (Nonriv	licator is suff erine) lonriverine)	Salt C Biotic Aqua Hydre Oxidi	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduc	dor (C1) eres along ed Iron (C4	1)	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season Thin Muck S Crayfish But	e (B1) (Riverine) eposits (B2) (Riverine) es (B3) (Riverine) etterns (B10) Water Table (C2) eurface (C7) erows (C8)
Primary Inc Surfac High W Satura Water Sedime	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Nonriv eposits (B3) (Nonriv e Soil Cracks (B6)	cerine) cerine) cerine)	Salt 0 Biotic Aqua Hydre Oxidi Prese	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduc ont Iron Reduct	dor (C1) eres along ed Iron (C4 ion in Plov	1)	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season Thin Muck S Crayfish But C6) Saturation V	e (B1) (Riverine) eposits (B2) (Riverine) s (B3) (Riverine) tterns (B10) Water Table (C2) surface (C7) rrows (C8) (isible on Aerial Imagery (C9)
Primary Inc Surfac High W Satura Water Sedim Drift De Surfac	dicators (any one inc e Water (A1) Vater Table (A2) Ition (A3) Marks (B1) (Nonriv ent Deposits (B2) (Neposits (B3) (Nonriv e Soil Cracks (B6) Ition Visible on Aeria	erine) ionriverine) verine)	Salt 0 Biotic Aqua Hydre Oxidi Prese	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduc	dor (C1) eres along ed Iron (C4 ion in Plov	1)	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season ots (C3) Thin Muck S Crayfish But C6) Saturation V Shallow Aqu	s (B1) (Riverine) eposits (B2) (Riverine) s (B3) (Riverine) tterns (B10) Water Table (C2) turface (C7) trows (C8) isible on Aerial Imagery (C9) titard (D3)
Primary Inc Surface High W Satura Water Sedim Drift De Surface Inunda	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Nonriv eposits (B3) (Nonriv e Soil Cracks (B6)	erine) ionriverine) verine)	Salt 0 Biotic Aqua Hydre Oxidi Prese	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduc ont Iron Reduct	dor (C1) eres along ed Iron (C4 ion in Plov	1)	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season Thin Muck S Crayfish But C6) Saturation V	s (B1) (Riverine) eposits (B2) (Riverine) s (B3) (Riverine) tterns (B10) Water Table (C2) turface (C7) trows (C8) isible on Aerial Imagery (C9) titard (D3)
Primary Inc Surface High W Satura Water Sedim Drift De Surface Inunda	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Neposits (B3) (Nonriv e Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9)	erine) ionriverine) verine)	Salt 0 Biotic Aqua Hydre Oxidi Prese	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduc ont Iron Reduct	dor (C1) eres along ed Iron (C4 ion in Plov	1)	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season ots (C3) Thin Muck S Crayfish But C6) Saturation V Shallow Aqu	s (B1) (Riverine) eposits (B2) (Riverine) s (B3) (Riverine) tterns (B10) Water Table (C2) turface (C7) trows (C8) isible on Aerial Imagery (C9) titard (D3)
Primary Ind Surface High W Satura Water Sedime Drift De Surface Inunda Water- Field Obse	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Neposits (B3) (Nonriv e Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9)	erine) ionriverine) verine)	Salt C Biotic Aqua Hydre Oxidi Prese Rece 37) Other	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduc ont Iron Reduct	dor (C1) eres along ed Iron (C4 ion in Plov	1)	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season ots (C3) Thin Muck S Crayfish But C6) Saturation V Shallow Aqu	s (B1) (Riverine) eposits (B2) (Riverine) s (B3) (Riverine) tterns (B10) Water Table (C2) turface (C7) trows (C8) isible on Aerial Imagery (C9) titard (D3)
Primary Inc Surface High W Satura Water Sedime Surface Inunda Water- Field Obse	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Nonriv e Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9) ervations:	erine) lonriverine) verine) al Imagery (E)	Salt C Biotic Aqua Hydre Oxidi Prese Rece 70 Other	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduce ont Iron Reduct r (Explain in Re-	dor (C1) eres along ed Iron (C4 ion in Plov	1)	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season ots (C3) Thin Muck S Crayfish But C6) Saturation V Shallow Aqu	s (B1) (Riverine) eposits (B2) (Riverine) s (B3) (Riverine) tterns (B10) Water Table (C2) turface (C7) trows (C8) isible on Aerial Imagery (C9) titard (D3)
Primary Inc Surface High W Satura Water Sedim Drift De Surface Inunda Water- Field Obse Surface Water Table	dicators (any one inc e Water (A1) Vater Table (A2) Ition (A3) Marks (B1) (Nonriv ent Deposits (B2) (Nonriv eposits (B3) (Nonriv e Soil Cracks (B6) ation Visible on Aeria -Stained Leaves (B9) ervations: ater Present?	erine) ionriverine) verine) al Imagery (E) Yes (Salt C Biotic Aqua Hydro Oxidi Press Rece Other	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduc int Iron Reduct r (Explain in Re th (inches): th (inches):	dor (C1) eres along ed Iron (C4 ion in Plov	t) ved Soils (0	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season Thin Muck S Crayfish Bui Cayfish Bui Shallow Aqu FAC-Neutra	eposits (B2) (Riverine) s (B3) (Riverine) sterns (B10) Water Table (C2) surface (C7) rrows (C8) isible on Aerial Imagery (C9) iltard (D3) I Test (D5)
Primary Ind Surface High W Satura Water Sedime Drift De Surface Inunda Water- Field Obse Surface Water Tabl Saturation (includes ce	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Nonriv e Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9 ervations: ater Present? Present?	erine) ionriverine) verine) Il Imagery (E) Yes (Yes (Yes (Salt C Biotic Aqua Hydre Oxidi Prese Rece Other	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduce to Iron Reduct r (Explain in Reduct th (inches): th (inches):	dor (C1) eres along ed Iron (C4 ion in Plov emarks)	t) ved Soils (0	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season Ots (C3) Thin Muck S Crayfish Bui Crayfish Bui Saturation V Shallow Aqu FAC-Neutra	eposits (B2) (Riverine) s (B3) (Riverine) sterns (B10) Water Table (C2) surface (C7) rrows (C8) isible on Aerial Imagery (C9) iltard (D3) I Test (D5)
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Primary Inc Surface High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse Surface Water Tabl Saturation (includes c Describe R	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Nonriv e Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9 ervations: ater Present? Present?	erine) ionriverine) verine) Il Imagery (E) Yes (Yes (Yes (Salt C Biotic Aqua Hydre Oxidi Prese Rece Other	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduce to Iron Reduct r (Explain in Reduct th (inches): th (inches):	dor (C1) eres along ed Iron (C4 ion in Plov emarks)	t) ved Soils (0	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season Ots (C3) Thin Muck S Crayfish But Crayfish But Shallow Aqu FAC-Neutra	eposits (B2) (Riverine) s (B3) (Riverine) sterns (B10) Water Table (C2) surface (C7) rrows (C8) isible on Aerial Imagery (C9) iltard (D3) I Test (D5)
Primary Inc Surfac High W Satura Water Sedim Drift D Surfac Inunda Water- Field Obse Surface Water Tabl Saturation (includes c Describe R aerial pho	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Nonriv e Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9) ervations: ater Present? le Present? Present? apillary fringe)	erine) ionriverine) verine) Il Imagery (E) Yes (Yes (Yes (Salt C Biotic Aqua Hydre Oxidi Prese Rece Other	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduce to Iron Reduct r (Explain in Reduct th (inches): th (inches):	dor (C1) eres along ed Iron (C4 ion in Plov emarks)	t) ved Soils (0	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season Ots (C3) Thin Muck S Crayfish But Crayfish But Shallow Aqu FAC-Neutra	eposits (B2) (Riverine) s (B3) (Riverine) sterns (B10) Water Table (C2) surface (C7) rrows (C8) isible on Aerial Imagery (C9) iltard (D3) I Test (D5)
Primary Inc Surface High W Satura Water Sedime Drift De Surface Inunda Water- Field Obse Surface Water Tabl Saturation (includes co	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Nonriv e Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9) ervations: ater Present? le Present? Present? apillary fringe)	erine) ionriverine) verine) Il Imagery (E) Yes (Yes (Yes (Salt C Biotic Aqua Hydre Oxidi Prese Rece Other	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduce to Iron Reduct r (Explain in Reduct th (inches): th (inches):	dor (C1) eres along ed Iron (C4 ion in Plov emarks)	t) ved Soils (0	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season Ots (C3) Thin Muck S Crayfish But Crayfish But Shallow Aqu FAC-Neutra	eposits (B2) (Riverine) s (B3) (Riverine) sterns (B10) Water Table (C2) surface (C7) rrows (C8) isible on Aerial Imagery (C9) iltard (D3) I Test (D5)
Primary Inc Surfac High W Satura Water Sedim Drift D Surfac Inunda Water- Field Obse Surface Water Tabl Saturation (includes c Describe R aerial pho	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Nonriv e Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9) ervations: ater Present? le Present? Present? apillary fringe)	erine) ionriverine) verine) Il Imagery (E) Yes (Yes (Yes (Salt C Biotic Aqua Hydre Oxidi Prese Rece Other	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduce to Iron Reduct r (Explain in Reduct th (inches): th (inches):	dor (C1) eres along ed Iron (C4 ion in Plov emarks)	t) ved Soils (0	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season Ots (C3) Thin Muck S Crayfish But Crayfish But Shallow Aqu FAC-Neutra	eposits (B2) (Riverine) s (B3) (Riverine) sterns (B10) Water Table (C2) surface (C7) rrows (C8) isible on Aerial Imagery (C9) iltard (D3) I Test (D5)
Primary Inc Surfac High W Satura Water Sedim Drift D Surfac Inunda Water- Field Obse Surface Water Tabl Saturation (includes c Describe R aerial pho	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Nonriv e Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9) ervations: ater Present? le Present? Present? apillary fringe)	erine) ionriverine) verine) Il Imagery (E) Yes (Yes (Yes (Salt C Biotic Aqua Hydre Oxidi Prese Rece Other	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduce to Iron Reduct r (Explain in Reduct th (inches): th (inches):	dor (C1) eres along ed Iron (C4 ion in Plov emarks)	t) ved Soils (0	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season Ots (C3) Thin Muck S Crayfish But Crayfish But Shallow Aqu FAC-Neutra	eposits (B2) (Riverine) s (B3) (Riverine) sterns (B10) Water Table (C2) surface (C7) rrows (C8) isible on Aerial Imagery (C9) iltard (D3) I Test (D5)
Primary Inc Surface High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse Surface Water Tabl Saturation (includes ce Describe R aerial pho	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Nonriv e Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9) ervations: ater Present? le Present? Present? apillary fringe)	erine) ionriverine) verine) Il Imagery (E) Yes (Yes (Yes (Salt C Biotic Aqua Hydre Oxidi Prese Rece Other	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduce to Iron Reduct r (Explain in Reduct th (inches): th (inches):	dor (C1) eres along ed Iron (C4 ion in Plov emarks)	t) ved Soils (0	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season Ots (C3) Thin Muck S Crayfish But Crayfish But Shallow Aqu FAC-Neutra	eposits (B2) (Riverine) s (B3) (Riverine) sterns (B10) Water Table (C2) surface (C7) rrows (C8) isible on Aerial Imagery (C9) iltard (D3) I Test (D5)
Primary Inc Surfac High W Satura Water Sedim Drift D Surfac Inunda Water- Field Obse Surface Water Tabl Saturation (includes c Describe R aerial pho	dicators (any one inc e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonriv ent Deposits (B2) (Nonriv e Soil Cracks (B6) ation Visible on Aeria Stained Leaves (B9) ervations: ater Present? le Present? Present? apillary fringe)	erine) ionriverine) verine) Il Imagery (E) Yes (Yes (Yes (Salt C Biotic Aqua Hydre Oxidi Prese Rece Other	c Crust (B12) tic Invertebrate ogen Sulfide C zed Rhizosphe ence of Reduce to Iron Reduct r (Explain in Reduct th (inches): th (inches):	dor (C1) eres along ed Iron (C4 ion in Plov emarks)	t) ved Soils (0	Water Marks Sediment Do Drift Deposit Drainage Pa Dry-Season Ots (C3) Thin Muck S Crayfish But Crayfish But Shallow Aqu FAC-Neutra	eposits (B2) (Riverine) s (B3) (Riverine) sterns (B10) Water Table (C2) surface (C7) rrows (C8) isible on Aerial Imagery (C9) iltard (D3) I Test (D5)

Project/Site: SH 92 Stengel's Hill		City/Co	unty: Delta		Sa	mpling Da	te: <u>9/19/20</u>	11
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Sa	mpling Po	int: UP1 1-	2
Investigator(s): Paula Durkin		Section	ı, Township, Ra	ange: NE 1/4 NE 1	/4 Sect.	31, T. 14	S, R. 93W	
Landform (hillslope, terrace, etc.): slope		Local r	elief (concave,	convex, none):			Slope (%):	
Subregion (LRR): D - Interior Deserts	Lat:	1		Long:			Datum: NAI	D83
Soil Map Unit Name: 23 - Chipeta silty clay, 3 to 30	percent slo	pes		NWI cla	assificatio	n:		
Are climatic / hydrologic conditions on the site typical for the			s (No ((If no, explai	n in Rema	arks.)		
Are Vegetation Soil or Hydrology	significantly	disturbe	ed? Are	"Normal Circumstan	ces" pres	ent? Yes	(No	
Are Vegetation Soil or Hydrology	naturally pr	oblemati	ic? (If n	eeded, explain any a	nswers in	Remarks	:.)	
SUMMARY OF FINDINGS - Attach site map			•	ocations, trans	ects, im	portant	features	, etc.
Hydrophytic Vegetation Present? Yes	No (
	No (- [s the Sample	d Area				
1	No 🌀		within a Wetla		C	No 🕡		
Remarks: upland area adjacent to wetland #1, 1-2								
VEGETATION								
_	Absolute		ant Indicator	Dominance Test	workshe	et:		
Tree Stratum (Use scientific names.) 1.	% Cover	Specie	s? Status	Number of Domin That Are OBL, FA			1	(A)
2.				Total Number of D	Oominant			
3				Species Across A	II Strata:		2	(B)
4				Percent of Domin				
Total Cov	ver: %			That Are OBL, FA	CW, or F	AC:	50.0 %	(A/B)
1. Sarcobatus vermiculatus	30	Yes	FAC	Prevalence Index	worksh			
2.				Total % Cove	r of:		ıltiply by:	-
3	_			OBL species		x1=	0	
4.				FACW species	20	x2=	0	
5.	20.0/			FAC species FACU species	30	x3= x4=	90	
Total Covi	er: 30 %			UPL species	37	x 5 =	185	
1. Kochia scoparia	30	Yes	UPL	Column Totals:	67	(A)	275	(B)
2. Halogeton glomeratus	5	No	UPL					
3. Convolvulus arvensis	1	No	UPL	Prevalence			4.10	
4. Salsola kali	1	No	UPL	Hydrophytic Veg			i	
5.				Dominance T Prevalence Ir				
6. 7.				Morphologica			vide support	ing
8.	_			data in Re	marks or	on a sepa	rate sheet)	
Total Cove	er: 37 %			Problematic F	łydrophyt	ic Vegetat	ion' (Explair	1)
Woody Vine Stratum	57 70			1 adjantan of bud			l budenlanci	
1	_			Indicators of hyd be present.	ric son ar	id wetland	nyarology	musi
2Total Cov	er: %			Hydrophytic				
	er of Biotic C	Crust	%	Vegetation Present?	Yes (Ne Ne		
Remarks:	DIOIIO C					144		
Tomano.								

Profile Des	cription: (Describ	e to the dep				or confirm	the absence of indic	cators.)	
Depth	Matrix			ox Features		Loc ²	Texture ³	Remarks	
(inches)	Color (moist)		Color (moist)	_ <u> </u>	Type ¹	LUC	Texture	Tomano	_
									
									_
									_
			·						
1Tuno: C=C	Concentration, D=D	onlotion PM	-Deduced Matrix	2l ocation	· PI =Pore	Lining RC	C=Root Channel, M=N	Matrix.	_
³ Soil Textur	es: Clay Silty Clay	Sandy Clay	Loam, Sandy Clay					It Loam, Silt, Loamy Sand, Sa	nd.
			Rs, unless otherwis		,	,,	Indicators for Prob	ematic Hydric Solls:	
Histoso	,	able to all Liv	Sandy Red				1 cm Muck (A		
	pipedon (A2)		Stripped M				2 cm Muck (A	, ,	
	listic (A3)			cky Minera	ıl (F1)		Reduced Verti	ic (F18)	
	en Sulfide (A4)			eyed Matrix			Red Parent M	aterial (TF2)	
Stratifie	ed Layers (A5) (LR	R C)	Depleted I	vlatrix (F3)			Other (Explain	n in Remarks)	
1 cm M	luck (A9) (LRR D)			rk Surface					
	ed Below Dark Surf	ace (A11)		Dark Surfac					
	ark Surface (A12)			pressions (F8)		41	anhydia vagatation and	
1 🗀	Mucky Mineral (S1	•	Vernal Po	ols (F9)				ophytic vegetation and ogy must be present.	
	Gleyed Matrix (S4)						Wettarid hydroid	ogy must be present.	
	Layer (if present)):							
Type:								10 V - C N- C	
Depth (ir	nches):						Hydric Soil Preser	nt? Yes No (
Remarks:									
HYDROLO	ngy —				_				
	ydrology Indicato	re'					Secondary In	dicators (2 or more required)	
1			inion#\					arks (B1) (Riverine)	
l — — —	icators (any one in	dicator is sun		. (544)			_ ⊔	it Deposits (B2) (Riverine)	
ı 🗀	e Water (A1)		Salt Crus					osits (B3) (Riverine)	
١ш -	/ater Table (A2)			ust (B12)	- (D40)			e Pattems (B10)	
🗀	tion (A3)			nvertebrate					
	Marks (B1) (Nonri			n Sulfide O		Lhilan Dan	₩.	son Water Table (C2)	
	ent Deposits (B2) (-	L	•	•	Living Roo	` ' 🗀	ck Surface (C7)	
! —	eposits (B3) (Nonri	verine)	1 1	of Reduc	-			Burrows (C8) on Visible on Aerial Imagery (C	201
, Ш	e Soil Cracks (B6)					ved Soils (0	· ·	Aquitard (D3)	,,
	tion Visible on Aeri		7) Uther (E	xplain in Re	emarks)		<u> </u>		
	Stained Leaves (B	9)					FAC-Nei	utral Test (D5)	
Field Obse	ervations:		_						
Surface Wa	ater Present?	Yes C	No @ Depth (i	nches):		_			
Water Table	e Present?	Yes C	No @ Depth (i	nches):					
Saturation I	Present?	Yes C	No C Depth (i	nches):		MI-AI.	and Hydrology Prese	ent? Yes (No (
(includes ca	apillary fringe)	-		I abotes =	rovious las			EUC: 169 (140 (C	
		am gauge, m	onitoring well, aeria	i priotos, p	I SAIOUS IIIS	pecuona),	ii dadiidbie.		
	tos, topo maps								
Remarks:									
US Army Cor	ps of Engineers								

Project/Site: SH 92 Stengel's Hill		City/Coun	ty: Delta		Sam	pling Da	te: 9/19/20	011
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Sam	pling Po	int: UP1 1	-3
Investigator(s): Paula Durkin		Section, T	ownship, Ra	ange: NE 1/4 NE 1	/4 Sect. 3	1, T. 14	s, R. 93W	7
Landform (hillslope, terrace, etc.): slope		Local reli	ef (concave,	convex, none):			Slope (%):	
Subregion (LRR): D - Interior Deserts	Lat:	_		Long:			atum: NA	D83
Soil Map Unit Name: 23 - Chipeta silty clay, 3 to 30 p	ercent slo	pes		NWI cl	assification	:		
Are climatic / hydrologic conditions on the site typical for this	s time of y	ear? Yes (No ((If no, explai	n in Remar	ks.)		
Are Vegetation Soil or Hydrology s	ignificantly	/ disturbed?	? Are	"Normal Circumstan	ces" preser	nt? Yes	(● No	· C
Are Vegetation Soil or Hydrology r	naturally pr	oblematic?	(If n	eeded, explain any a	ınswers in I	Remarks	.)	
SUMMARY OF FINDINGS - Attach site map	showing	samplir	ng point l	ocations, trans	ects, imp	ortant	features	, etc.
Hydrophytic Vegetation Present? Yes (N	o (6							
	0 6	ls t	he Sample	d Area				
	o (e		hin a Wetla		\cap	No 🕡		
Remarks: upland area adjacent to wetland #1, 1-3								
VEGETATION								
VEGETATION	A1 1 - 4 - ''		to distance	1.5	- C-C	4.		
Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test				
1.				Number of Domin That Are OBL, FA			1	(A)
2.				- - Total Number of □	Cominant			
3.				Species Across A			3	(B)
4.				Percent of Domina	ant Species			
Total Cove Sapling/Shrub Stratum	r: %			That Are OBL, FA			33.3 %	(A/B)
1. Sarcobatus vermiculatus	30	Yes	FAC	Prevalence Index	k workshed	et:		
2. Chrysothamnus nauseosus	30	Yes	UPL	Total % Cove	r of:	Mu	Itiply by:	_
3.				OBL species	36	x 1 =	0	
4.				FACW species		x 2 =	0	
5				FAC species	30	x 3 =	90	
Total Cover Herb Stratum	60 %			FACU species		x 4 =	0	
1. Kochia scoparia	30	Yes	UPL	UPL species	60	x 5 =	300	(5)
2.		1 68	.—————————————————————————————————————	Column Totals:	90	(A)	390	(B)
3.				Prevalence	index = B//	A =	4.33	
4.				Hydrophytic Veg	etation Ind	licators:		
5.				Dominance T	est is >50%	, D		
6.				Prevalence In				
7.				Morphologica	l Adaptation marks or or	ns¹ (Prov	ide support	ing
8.				Problematic H			,	n)
Total Cover Woody Vine Stratum	30 %				iyaropiiyao	rogoluli	on (Explain	"
1.				¹ Indicators of hyd	ric soil and	wetland	hydrology	must
2.		***************************************		be present.				
Total Cover	%			Hydrophytic				
	of Biotic C	Person de	0/	Vegetation	Yes (No		
	OI BIOLIC C		<u>%</u>	Present?	res (- NO	(•	
Remarks:								

Profile Description: (Describe to the depth needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type¹ Loc²	Texture ³ Remarks
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ² Location: PL=Pore Lining, R	C=Root Channel, M=Matrix.
³ Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loa	Indicators for Problematic Hydric Soils:
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	1 cm Muck (A9) (LRR C)
Histosol (A1) Sandy Redox (S5) Histic Epipedon (A2) Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Histic Epipedon (A2) Stripped Matrix (S6) Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6)	_
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7)	
Thick Dark Surface (A12) Redox Depressions (F8)	A. u
Sandy Mucky Mineral (S1) Vernal Pools (F9)	⁴Indicators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)	wetland hydrology must be present.
Restrictive Layer (if present):	
Type:	12 12 N-6
Depth (inches):	Hydric Soil Present? Yes No (
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)
Primary Indicators (any one indicator is sufficient)	Water Marks (B1) (Riverine)
	
	Sediment Deposits (B2) (Riverine)
	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
High Water Table (A2) Biotic Crust (B12)	Drift Deposits (B3) (Riverine)
High Water Table (A2) Saturation (A3) Biotic Crust (B12) Aquatic Invertebrates (B13)	
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Rock	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roll Presence of Reduced Iron (C4)	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roce Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Soils (Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Biotic Crust (B12) Aquatic Invertebrates (B13) Aquatic Invertebrates (B13) Oxidized Rhizospheres along Living Rose Oxidized Rhizospheres along Living Rose Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Soils (Other (Explain in Remarks)	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water Table (A2) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roo Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Soils (Other (Explain in Remarks) Water-Stained Leaves (B9)	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Soils (C4) Other (Explain in Remarks)	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Soils (Other (Explain in Remarks) Water-Stained Leaves (B9)	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Surface Water Present? Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Rot Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Soils (Other (Explain in Remarks) Other (Explain in Remarks)	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Water Council Imagery (B7) Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present?	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Saturation Present? Vec No Depth (inches): Saturation Present?	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Water Council Imagery (B7) Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present?	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wet Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections)	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Water Table Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections); aerial photos, topo maps	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Water Table Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections); aerial photos, topo maps	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Water Table Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections); aerial photos, topo maps	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Water Table Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections); aerial photos, topo maps	Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)

Project/Site: SH 92 Stengel's Hill		City/Cou	ınty: Delta		Sampling Date: 9/19/2011			
Applicant/Owner: CDOT, Region 3 Environmental		State: CO					int: UP1 1	-4
Investigator(s): Paula Durkin		Section,	Township, Ra	ange: NE 1/4 NE 1/	/4 Sect. 1	31, T. 14	S, R. 93W	7
Landform (hillslope, terrace, etc.): slope		Local re	elief (concave,	convex, none):			Slope (%):	
Subregion (LRR): D - Interior Deserts	Lat:	•		Long:	Datum: NAD83			
Soil Map Unit Name: 23 - Chipeta silty clay, 3 to 3	30 percent slo	pes	·	NWI cla	ssification	n:		
Are climatic / hydrologic conditions on the site typical for	_		No ((If no, explair	n in Rema	rks.)		
Are Vegetation Soil or Hydrology	significantly	disturbe	d? Are	"Normal Circumstane	ces" prese	ent? Yes	€ No	0
Are Vegetation Soil or Hydrology	naturally pr			eeded, explain any a				•
SUMMARY OF FINDINGS - Attach site ma	• •		,					s, etc.
Hydrophytic Vegetation Present? Yes	No 🌀			·		•		<u> </u>
Hydric Soil Present? Yes	No (le	s the Sample	l Area				
Wetland Hydrology Present? Yes	No (ithin a Wetla			No 📵		
Remarks: upland area adjacent to wetland #1, 1-	-							
VEGETATION Trop Stratum (Use esigntific names)	Absolute		nt Indicator	Dominance Test	workshee	et:		
Tree Stratum (Use scientific names.) 1.	% Cover	Species	S? Status	Number of Domina That Are OBL, FA			1	(A)
2. 3.				Total Number of D	-		2	(D)
4.				Species Across Al	Strata:		3	(B)
Total C	Cover: %			 Percent of Domina That Are OBL, FAG 			22.2 %	(A (D)
Sapling/Shrub Stratum	70			Illac Ale Obc, I A	500, OI 17	ΑΟ.	33.3 %	(A/B)
1. Sarcobatus vermiculatus	30	Yes	FAC	Prevalence Index				
2.		-		Total % Cover	of:		Itiply by:	-
3. 4.				OBL species FACW species		x1= x2=	0	
5.				FAC species	30	x3=	90	
Total C	over: 30 %			FACU species	30	x 4 =	0	
Herb Stratum	50 /6			UPL species	40	x 5 =	200	
1. Kochia scoparia	30	Yes	UPL	Column Totals:	70	(A)	290	(B)
2. Halogeton glomeratus	10	Yes	UPL					
3.				Prevalence II			4.14	
4.				Hydrophytic Vege				
5.				Dominance Te				
6. 7.			_	Morphological			ride support	ina
8.			_	data in Ren				ıı.ı
Total Co	over: 40 =			Problematic H	ydrophytic	c Vegetat	ion¹ (Explair	n)
Woody Vine Stratum	over: 40 %							
1				¹ Indicators of hydri	ic soil and	d wetland	hydrology	must
2				be present.				
Total Co	over: %			Hydrophytic Vegetation				
% Bare Ground in Herb Stratum 30 % % Co	ov er of Biotic C	rust	%	Present?	Yes (No	•	
Remarks:				l				
JS Army Corps of Engineers								

SOIL Sampling Point: <u>UP1 1-4</u>

Profile Des	cription: (Describ	e to the dept	h needed to docu	ment the	indicator	or confirm	the abs	sence of Indicator	's.)	
Depth	Matrix	_	Redo	x Features	3					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textu	ıre ^a	Remark	<u>s</u>
	· .									
	-									
										
						 -				
¹Type: C=C	concentration, D=D	epletion, RM=	Reduced Matrix.	² Location	n: PL=Pore	Lining, RC	C=Root	Channel, M=Matrix	(. Cilt Loomer	· Cand Sand
	es: Clay, Silty Clay				ndy Loam	, Clay Loan	n, Silty C	Clay Loam, Slit Loa	am, Siit, Loarny	Sand, Sand.
Hydric Soil I	Indicators: (Application	able to all LRR						ators for Problema		ii .
Histoso			Sandy Red					1 cm Muck (A9) (L 2 cm Muck (A10) (
	pipedon (A2)		Stripped M	, ,	1.754			z cm Muck (A10) (Reduced Vertic (F		
	listic (A3)		Loamy Mu					Red Parent Materi	-	
1 🗀	en Sulfide (A4)	3.0%	Depleted N	-				Other (Explain in F	` '	
1 🗀	d Layers (A5) (LRI uck (A9) (LRR D)	(0)	Redox Dar	, ,				(—)	,	
	ed Below Dark Surf	ace (A11)	Depleted D							
ι 🗀 .	ark Surface (A12)	,	Redox De							
1 🗀	Mucky Mineral (S1))	Vemal Pod	ols (F9)				cators of hydrophy		
Sandy	Gleyed Matrix (S4)						w	etland hydrology n	nust be presen	
Restrictive	Layer (if present)	:								
Type:										
Depth (ir	nches):						Hydri	ic Soil Present?	Yes (No 📵
Remarks:										
					_					
HYDROLO	OGY									
Wetland Hy	drology Indicator	s:						Secondary Indica		
Primary Ind	icators (any one in	dicator is suffic	cient)						(B1) (Riverine	
Surface	Water (A1)		Salt Crus	t (B11)				Sediment De	posits (B2) (Ri v	/erine)
High W	ater Table (A2)		Biotic Cru	ıst (B12)					(B3) (Riverine	a)
Saturat	tion (A3)		Aquatic I	nvertebrat	es (B13)			Drainage Pat	terns (B10)	
	Marks (B1) (Nonriv	erine)	Hydrogei	n Sulfide C	odor (C1)			Dry-Season \	Water Table (C	2)
Sedime	ent Deposits (B2) (I	Nonriverine)	Oxidized	Rhizosph	eres along	Living Roo	ts (C3)	Thin Muck Su	urface (C7)	
. —	eposits (B3) (Nonri		Presence	of Reduc	ed Iron (C	4)		Crayfish Burr	ows (C8)	
Surface	Soil Cracks (B6)		Recent Ir	on Reduc	tion in Plov	ved Soils (C	C6)	Saturation Vi	sible on Aerial	imagery (C9)
Inunda	tion Visible on Aeri	al Imagery (B	7) 🗍 Other (E:	oplain in R	emarks)			Shallow Aqui	tard (D3)	
1 🖳	Stained Leaves (B		_					FAC-Neutral	Test (D5)	
Field Obse	rvations:									
Surface Wa	iter Present?	Yes C	No (Depth (i	nches):						
Water Table		-	No 🌀 Depth (i	nches):						
Saturation			No (Depth (i	-						0
(includes ca	apillary fringe)						_	drology Present?	Yes (No (•
Describe R	ecorded Data (stre	am gauge, mo	nitoring well, aeria	photos, p	revious in	spections),	if availa	ble:		
aerial pho	tos, topo maps									
Remarks:										
170 4 0	- of England					_				
US Army Cor	ps of Engineers									

Project/Site: SH 92 Stengel's Hill		City/Co	ounty: Delta		Sa	mpling Da	ate: <u>9/19/20</u>	11
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Sa	mpling Po	int: UP1 1	-5
Investigator(s): Paula Durkin		Section	n, Township, Ra	ange: NE 1/4 NE 1	/4 Sect.	31, T. 14	S, R. 93W	
Landform (hiilslope, terrace, etc.): slope		Local	relief (concave,	convex, none):		-	Slope (%):	
Subregion (LRR): D - Interior Deserts	Lat: 38	3.47528	}	Long: 107.4923	2	Datum: NAD83		
Soil Map Unit Name: 23 - Chipeta silty clay, 3 to 30 p	percent slo	pes	-	NWI cl	assificatio	n:		
Are climatic / hydrologic conditions on the site typical for the			s (No ((If no, explai	in in Rem	arks.)		
Are Vegetation Soil or Hydrology	significantly	/ disturb	ed? Are	"Normal Circumstan	ces" pres	ent? Yes	(No	· C
	naturally pr	oblemat	ic? (If n	eeded, explain any a	answers ii	n Remarks	s.)	
SUMMARY OF FINDINGS - Attach site map			,					. etc.
		,,						
	No (©		I- 41- 0I-	4.4				
	No 🌀 No 🌀		Is the Sample within a Wetla			No @		
Remarks: adjacent to wetland #1, 1-5, on the SE co	-		within a wetia	riur 195		140 (4		
	-							
VEGETATION								
VEGETATION	Absolute	Domin	ant Indicator	Dominance Test	workshe	et:		
Tree Stratum (Use scientific names.) 1.	% Cover	Specie	es? Status	Number of Domin That Are OBL, FA			1	(A)
2.				Total Number of I	Dominant			
3				Species Across A	di Strata:		2	(B)
4.				Percent of Domin			#0.0	(a 100)
Total Covi	er: %			That Are OBL, FA	ACW, or F	AC:	50.0 %	(A/B)
1. Sarcobatus vermiculatus	30	Yes	FAC	Prevalence Inde	x worksh	eet:		
2				Total % Cove	er of:		ultiply by:	-
3.				OBL species		x1=	0	
4.				FACW species	20	x2= x3=	0	
5.	20.0/			FAC species FACU species	30	x 4 =	90	
Total Cove	er: 30 %			UPL species	5	x 5 =	25	
1. Halogeton glomeratus	5	Yes	UPL	Column Totals:	35	(A)	115	(B)
2.								
3.				Prevalence			3.29	
4.				Hydrophytic Veg			:	
5.				Dominance T				
7.				Morphologica			vide support	ina
8.				data in Re	marks or	on a sepa	rate sheet)	
Total Cove	er: 5 %			- Problematic I	Hydrophy	ic Vegeta	tion¹ (Explaii	1)
Woody Vine Stratum	5 %							
1				¹ Indicators of hyd be present.	Iric soil a	nd wetland	d hydrology	must
2				<u>.</u>				
Total Cove W Bare Ground in Herb Stratum 70 % % Cove	er: % er of Biotic C	Crust	%	Hydrophytic Vegetation Present?	Yes (· No	o (
Remarks:								

Depth (inches)	Matrix		Re	edox Features			
(HIGHGS)	Color (moist)	%	Color (moist)	% Type¹	Loc ²	Texture ³	Remarks
, , , , , , ,							
	·						
1Tuner Car	Concentration, D=De	nlotion PM	-Deduced Matrix	² l ocation: Pl =Por	Lining RC	=Root Channel, M=M	atrix.
Type: C≃C	concentration, D=De	spieuon, rxivi Sandy Clay	-Reduced Maill	lay Loam Sandy Loam	Clay Loan	n. Silty Clay Loam. Silt	Loam, Silt, Loamy Sand, Sand.
	Indicators: (Applica				i, Olay Loan	Indicators for Probl	ematic Hydric Soils:
		ible to all LK		edox (S5)		1 cm Muck (A9	
Histoso	Epipedon (A2)			Matrix (S6)		2 cm Muck (A1	
	Histic (A3)			Mucky Mineral (F1)		Reduced Vertic	
	gen Sulfide (A4)			Gleyed Matrix (F2)		Red Parent Ma	•
_ ~ ~	ed Layers (A5) (LRR	(C)		d Matrix (F3)		Other (Explain	•
	fuck (A9) (LRR D)	,	ш.	Dark Surface (F6)			
	ed Below Dark Surfa	ice (A11)		d Dark Surface (F7)			
	Dark Surface (A12)	,		Depressions (F8)			
\Box	Mucky Mineral (S1)		Vernal	Pools (F9)		-	phytic vegetation and
Sandy	Gleyed Matrix (S4)					wetland hydrolo	gy must be present.
Restrictive	Layer (if present):						
Type:							
Depth (i	nches).					Hydric Soil Presen	t? Yes (No (
Remarks:							
110111011101							
HYDROLO	OGY	·					
		s:				Secondary Inc	dicators (2 or more required)
Wetland H	ydrolog y Indicator s		Ficient)				dicators (2 or more required)
Wetland H	ydrology Indicators dicators (any one ind			Tiet (D44)		Water Ma	rks (B1) (Riverine)
Wetland H	ydrology Indicators dicators (any one ind e Water (A1)		Salt C	rust (B11)		Water Ma	rks (B1) (Riverine) Deposits (B2) (Riverine)
Wetland H Primary Ind Surface High W	ydrology Indicators dicators (any one ind e Water (A1) Vater Table (A2)		Salt C	Crust (B12)	-	Water Ma Sediment Drift Depo	rks (B1) (Riverine) t Deposits (B2) (Riverine) osits (B3) (Riverine)
Wetland High Windows High Windows Satura	ydrology Indicators dicators (any one ind e Water (A1) Vater Table (A2) tion (A3)	licator is suff	Salt C Biotic Aquat	Crust (B12) ic Invertebrates (B13)		Water Ma Sediment Drift Depo	orks (B1) (Riverine) t Deposits (B2) (Riverine) cosits (B3) (Riverine) Patterns (B10)
Wetland H Primary Ind Surface High W Satura Water	ydrology Indicators dicators (any one ind e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonrive	licator is suff	Salt C Biotic Aquat Hydro	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1)		Water Ma Sediment Drift Depo	orks (B1) (Riverine) Deposits (B2) (Riverine) Disits (B3) (Riverine) Patterns (B10) On Water Table (C2)
Wetland H Primary Ind Surface High W Satura Water Sedime	ydrology Indicators dicators (any one ind e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (N	licator is suff erine) lonriverine)	Salt C Biotic Aquat Hydro Oxidiz	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along	_	Water Ma Sediment Drift Depo Drainage Dry-Seas ts (C3) Thin Muc	arks (B1) (Riverine) E Deposits (B2) (Riverine) Distis (B3) (Riverine) Patterns (B10) On Water Table (C2) k Surface (C7)
Wetland H Primary Ind Surface High W Satura Water Sedime	ydrology Indicators dicators (any one ind e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonrive	licator is suff erine) lonriverine)	Salt C Biotic Aquat Hydro Oxidiz Prese	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C	4)	Water Ma Sediment Drift Depo Drainage Dry-Seas ts (C3) Thin Muc	rks (B1) (Riverine) Deposits (B2) (Riverine) Desits (B3) (Riverine) Patterns (B10) On Water Table (C2) k Surface (C7) Burrows (C8)
Wetland H Primary Inc Surface High W Satura Water Sedime	ydrology Indicators dicators (any one ind e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (N	licator is suff erine) lonriverine)	Salt C Biotic Aquat Hydro Oxidiz Prese Recer	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C at Iron Reduction in Plo	4)	Water Ma Sediment Drift Depo Drainage Dry-Seas ats (C3) Thin Muc Crayfish I Saturation	rks (B1) (Riverine) Deposits (B2) (Riverine) Dists (B3) (Riverine) Patterns (B10) On Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9)
Wetland H Primary Inc Surface High W Satura Water Sedime Drift De Surface	ydrology Indicators dicators (any one ind e Water (A1) Vater Table (A2) dion (A3) Marks (B1) (Nonrive ent Deposits (B2) (No	licator is suff erine) lonriverine) verine)	Salt C Biotic Aquat Hydro Oxidiz Prese Recer	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C	4)	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A	arks (B1) (Riverine) Deposits (B2) (Riverine) Desits (B3) (Riverine) Patterns (B10) On Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9) Aquitard (D3)
Wetland H Primary Inc Surface High W Satura Water Sedime Drift De Surface Inunda	ydrology Indicators dicators (any one ind e Water (A1) Vater Table (A2) dion (A3) Marks (B1) (Nonrive ent Deposits (B2) (Nonrive e Soil Cracks (B6)	erine) lonriverine) verine) al Imagery (E	Salt C Biotic Aquat Hydro Oxidiz Prese Recer	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C at Iron Reduction in Plo	4)	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A	rks (B1) (Riverine) Deposits (B2) (Riverine) Dists (B3) (Riverine) Patterns (B10) On Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9)
Wetland H Primary Inc Surface High W Satura Water Sedime Drift De Surface Inunda	ydrology Indicators dicators (any one ind e Water (A1) Vater Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (N eposits (B3) (Nonrive es Soil Cracks (B6) ation Visible on Aeria -Stained Leaves (B9)	erine) lonriverine) verine) al Imagery (E	Salt C Biotic Aquat Hydro Oxidiz Prese Recer	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C at Iron Reduction in Plo	4)	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A	arks (B1) (Riverine) Deposits (B2) (Riverine) Desits (B3) (Riverine) Patterns (B10) On Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9) Aquitard (D3)
Wetland H Primary Inc Surface High W Satura Water Sedime Drift De Surface Inundae Water- Field Obse	ydrology Indicators dicators (any one indicators (any one indicators (A1) e Water (A1) Vater Table (A2) tition (A3) Marks (B1) (Nonrive ent Deposits (B2) (Nonrive e Soil Cracks (B6) ation Visible on Aeria -Stained Leaves (B9) ervations:	erine) lonriverine) verine) al Imagery (E	Salt C Biotic Aquat Hydro Oxidiz Prese Recer 37) Other	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C at Iron Reduction in Plo	4)	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A	arks (B1) (Riverine) Deposits (B2) (Riverine) Desits (B3) (Riverine) Patterns (B10) On Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9) Aquitard (D3)
Wetland H Primary Inc Surface High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse	ydrology Indicators dicators (any one indicators (any one indicators (any one indicators) e Water (A1) Vater Table (A2) dition (A3) Marks (B1) (Nonrive ent Deposits (B2) (Nonrive e Soil Cracks (B6) ation Visible on Aeria -Stained Leaves (B9) ervations: ater Present?	erine) lonriverine) verine) l Imagery (E	Salt C Biotic Aquat Hydro Oxidiz Prese Recer Recer Other	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C tt Iron Reduction in Plot (Explain in Remarks)	4)	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A	arks (B1) (Riverine) Deposits (B2) (Riverine) Desits (B3) (Riverine) Patterns (B10) On Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9) Aquitard (D3)
Wetland H Primary Inc Surface High W Satura Water Sedime Drift De Surface Inunda Water-Field Obse Surface Water Table	ydrology Indicators dicators (any one indicators (any one indicators (any one indicators) water (A1) Vater Table (A2) dition (A3) Marks (B1) (Nonrive ent Deposits (B2) (Nonrive es Soil Cracks (B6) ation Visible on Aeria -Stained Leaves (B9 ervations: ater Present?	erine) lonriverine) verine) Il Imagery (E) Yes (Salt C Biotic Aquat Hydro Oxidiz Prese Recer Recer Other No • Dept	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C at Iron Reduction in Plor (Explain in Remarks) in (inches):	4) wed Soils (C	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A FAC-Neu	arks (B1) (Riverine) t Deposits (B2) (Riverine) posits (B3) (Riverine) Patterns (B10) on Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9) Aquitard (D3) tral Test (D5)
Wetland H Primary Inc Surface High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse Surface Water Tabl Saturation (includes c	ydrology Indicators dicators (any one indicators (any one indicators (any one indicators) e Water (A1) Vater Table (A2) Intion (A3) Marks (B1) (Nonrive ent Deposits (B2) (Nonrive e Soil Cracks (B6) ation Visible on Aeria -Stained Leaves (B9 ervations: ater Present? Present?	erine) lonriverine) verine) l Imagery (E) Yes (Yes (Yes (Salt C Biotic Aquat Hydro Oxidiz Prese Recer Recer Other No Dept No Dept No Dept	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C at Iron Reduction in Plot (Explain in Remarks) in (inches): in (inches):	4) wed Soils (0	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A FAC-Neu	arks (B1) (Riverine) t Deposits (B2) (Riverine) posits (B3) (Riverine) Patterns (B10) on Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9) Aquitard (D3) tral Test (D5)
Wetland H Primary Inc Surface High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse Surface Wi Water Tabl Saturation (includes c Describe R	ydrology Indicators dicators (any one indicators (B2) (Nonriverse) ent Deposits (B2) (Nonriverse) esposits (B3) (Nonriverse) espos	erine) lonriverine) verine) l Imagery (E) Yes (Yes (Yes (Salt C Biotic Aquat Hydro Oxidiz Prese Recer Recer Other No Dept No Dept No Dept	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C at Iron Reduction in Plor (Explain in Remarks) in (inches):	4) wed Soils (0	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A FAC-Neu	arks (B1) (Riverine) t Deposits (B2) (Riverine) posits (B3) (Riverine) Patterns (B10) on Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9) Aquitard (D3) tral Test (D5)
Wetland H Primary Inc Surface High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse Surface Wi Water Tabl Saturation (includes c Describe R	ydrology Indicators dicators (any one indicators (any one indicators (any one indicators) e Water (A1) Vater Table (A2) Intion (A3) Marks (B1) (Nonrive ent Deposits (B2) (Nonrive e Soil Cracks (B6) ation Visible on Aeria -Stained Leaves (B9 ervations: ater Present? Present?	erine) lonriverine) verine) l Imagery (E) Yes (Yes (Yes (Salt C Biotic Aquat Hydro Oxidiz Prese Recer Recer Other No Dept No Dept No Dept	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C at Iron Reduction in Plot (Explain in Remarks) in (inches): in (inches):	4) wed Soils (0	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A FAC-Neu	arks (B1) (Riverine) t Deposits (B2) (Riverine) posits (B3) (Riverine) Patterns (B10) on Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9) Aquitard (D3) tral Test (D5)
Wetland H Primary Inc Surface High W Satura Water Sedim Drift D Surface Inunda Water- Field Obse Surface Wi Water Tabl Saturation (includes c Describe R	ydrology Indicators dicators (any one indicators (B2) (Nonriverse) ent Deposits (B2) (Nonriverse) esposits (B3) (Nonriverse) espos	erine) lonriverine) verine) l Imagery (E) Yes (Yes (Yes (Salt C Biotic Aquat Hydro Oxidiz Prese Recer Recer Other No Dept No Dept No Dept	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C at Iron Reduction in Plot (Explain in Remarks) in (inches): in (inches):	4) wed Soils (0	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A FAC-Neu	arks (B1) (Riverine) t Deposits (B2) (Riverine) posits (B3) (Riverine) Patterns (B10) on Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9) Aquitard (D3) tral Test (D5)
Wetland H Primary Inc Surface High W Satura Water Sedime Drift De Surface Inunda Water- Field Obse Surface Wi Water Table Saturation (includes c Describe R aerial pho	ydrology Indicators dicators (any one indicators (B2) (Nonriverse) ent Deposits (B2) (Nonriverse) esposits (B3) (Nonriverse) espos	erine) lonriverine) verine) l Imagery (E) Yes (Yes (Yes (Salt C Biotic Aquat Hydro Oxidiz Prese Recer Recer Other No Dept No Dept No Dept	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C at Iron Reduction in Plot (Explain in Remarks) in (inches): in (inches):	4) wed Soils (0	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A FAC-Neu	arks (B1) (Riverine) t Deposits (B2) (Riverine) posits (B3) (Riverine) Patterns (B10) on Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9) Aquitard (D3) tral Test (D5)
Wetland H Primary Inc Surface High W Satura Water Sedime Drift De Surface Inunda Water- Field Obse Surface Wi Water Table Saturation (includes c Describe R aerial pho	ydrology Indicators dicators (any one indicators (B2) (Nonriverse) ent Deposits (B2) (Nonriverse) esposits (B3) (Nonriverse) espos	erine) lonriverine) verine) l Imagery (E) Yes (Yes (Yes (Salt C Biotic Aquat Hydro Oxidiz Prese Recer Recer Other No Dept No Dept No Dept	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C at Iron Reduction in Plot (Explain in Remarks) in (inches): in (inches):	4) wed Soils (0	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A FAC-Neu	arks (B1) (Riverine) t Deposits (B2) (Riverine) posits (B3) (Riverine) Patterns (B10) on Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9) Aquitard (D3) tral Test (D5)
Wetland H Primary Inc Surface High W Satura Water Sedime Drift De Surface Inunda Water- Field Obse Surface Wi Water Table Saturation (includes c Describe R aerial pho	ydrology Indicators dicators (any one indicators (B2) (Nonriverse) ent Deposits (B2) (Nonriverse) esposits (B3) (Nonriverse) espos	erine) lonriverine) verine) l Imagery (E) Yes (Yes (Yes (Salt C Biotic Aquat Hydro Oxidiz Prese Recer Recer Other No Dept No Dept No Dept	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C at Iron Reduction in Plot (Explain in Remarks) in (inches): in (inches):	4) wed Soils (0	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A FAC-Neu	arks (B1) (Riverine) t Deposits (B2) (Riverine) posits (B3) (Riverine) Patterns (B10) on Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9) Aquitard (D3) tral Test (D5)
Wetland H Primary Inc Surface High W Satura Water Sedime Drift De Surface Inunda Water- Field Obse Surface Wi Water Table Saturation (includes c Describe R aerial pho	ydrology Indicators dicators (any one indicators (B2) (Nonriverse) ent Deposits (B2) (Nonriverse) esposits (B3) (Nonriverse) espos	erine) lonriverine) verine) l Imagery (E) Yes (Yes (Yes (Salt C Biotic Aquat Hydro Oxidiz Prese Recer Recer Other No Dept No Dept No Dept	Crust (B12) ic Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C at Iron Reduction in Plot (Explain in Remarks) in (inches): in (inches):	4) wed Soils (0	Water Ma Sediment Drift Depo Drainage Dry-Seas Its (C3) Thin Muc Crayfish I Saturation Shallow A FAC-Neu	arks (B1) (Riverine) t Deposits (B2) (Riverine) posits (B3) (Riverine) Patterns (B10) on Water Table (C2) k Surface (C7) Burrows (C8) n Visible on Aerial Imagery (C9) Aquitard (D3) tral Test (D5)

Project/Site: SH 92 Stengel's Hill		City/C	county: Delta		Sai	mpling Da	ate: 9/20/20)11
Applicant/Owner: CDOT, Region 3 Environmental	State: CO					mpling Po	oint: Up2 2	-1
Investigator(s): Paula Durkin		Section	on, Township, R	ange: NE 1/4 NE 1/4	—— 4 Sect. 3	31, T. 14	S, R. 93W	r
Landform (hiilslope, terrace, etc.):		Local	relief (concave,	convex, none):			Slope (%):	1
Subregion (LRR): D - Interior Deserts	Lat: 38	- 3.4757	1	Long: 107.49098			Datum: NA	D83
Soil Map Unit Name: 80 - Utaline-Torriorthents com	nplex				ssification	n:		
Are climatic / hydrologic conditions on the site typical for t		ear? Y	es (No ((If no, explain	in Rema	rks.)		
Are Vegetation Soil or Hydrology	significantly			"Normal Circumstanc	es" prese	ent? Yes	e No	
Are Vegetation Soil or Hydrology	naturally pr			eeded, explain any ar	Iswers in	Remarks	-	•
SUMMARY OF FINDINGS - Attach site map			,	• •			•	, etc.
Hydrophytic Vegetation Present? Yes	No (6							
	No 🌀		Is the Sample	d Area				
Wetland Hydrology Present? Yes	No 🌀		within a Wetla	nd? Yes	\cap	No 📵		
VEGETATION								
T 011 (1)	Absolute		nant Indicator	Dominance Test v	vorkshee	et:		
Tree Stratum (Use scientific names.) 1.	% Cover	Speci	ies? Status	Number of Domina				(A)
2.				That Are OBL, FAC	,vv, or F <i>F</i>	AC:	1	(A)
3.				Total Number of Do Species Across All			4	(B)
4.				- ·			4	(0)
Total Cov	ver: %			Percent of Dominal That Are OBL, FAC			25.0 %	(A/B)
1. Artemisia filifolia	20	Yes	UPL	Prevalence Index	workshe	et:		
2. Sarcobatus vermiculatus	20	Yes	FAC	Total % Cover	of:	Μι	ıltiply by:	_
3. Chrysothamnus nauseosus	20	Yes	UPL	OBL species		x 1 =	0	
4.				FACW species		x 2 =	0	
5				FAC species	20	x3=	60	
Total Cov Herb Stratum	er: 60 %			FACU species UPL species	38	x 4 =	0	
1. Thinopyrum intermedium	60	Yes	UPL		110	x 5 =	550	(D)
2. Machaeranthera tanacetifolia	$-\frac{00}{10}$	No	UPL	Column Totals:	130	(A)	610	(B)
3.				Prevalence In	dex = B	/A =	4.69	
4.	_			Hydrophytic Vege	tation in	dicators:		
5.				Dominance Te				
6.				Prevalence Ind				!
7.				Morphological data in Rem	Adaptation	ons (Prov on a sepa	/ıae support rate sheet)	ing
8.				- Problematic Hy			•	1)
Total Cove Woody Vine Stratum	er: 70 %					-		
1.				¹ Indicators of hydri	c soil and	d wetland	hydrology	must
2.				be present.				
Total Cove	er: %			Hydrophytic				
% Bare Ground in Herb Stratum % % Cove	er of Biotic C	rust	%	Vegetation Present?	Yes (No		
Remarks:				1	•		•	
US Army Corps of Engineers						_		

Profile Des	cription: (Describ	e to the depth			or confirm	the absence of Indicators.)
Depth	Matrix			ox Features	Loc ²	Texture ³ Remarks
(inches)	Color (moist)	%	Color (moist)	% Type ¹		16Attile Remarks
		_				
¹ Type: C=0	Concentration, D=D	epletion, RM=l	Reduced Matrix.	² Location: PL=Po	re Lining, RO	C=Root Channel, M=Matrix.
					n, Clay Loai	m, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.
I —	Indicators: (Application	able to all LRR				Indicators for Problematic Hydric Soils:
Histose			Sandy Red			1 cm Muck (A9) (LRR C) 2 cm Muck (A10) (LRR B)
	Epipedon (A2) Histic (A3)			Matrix (S6) ucky Mineral (F1)		Reduced Vertic (F18)
	gen Sulfide (A4)			leyed Matrix (F2)		Red Parent Material (TF2)
1 🗀	ed Layers (A5) (LRF	R C)		Matrix (F3)		Other (Explain in Remarks)
	luck (A9) (LRR D)	- -	1 1	ark Surface (F6)		
	ed Below Dark Surf	ace (A11)	1 1 '	Dark Surface (F7)		
	Dark Surface (A12)			epressions (F8)		⁴ Indicators of hydrophytic vegetation and
1 1 1 "	Mucky Mineral (S1)		Vernal Po	oois (F9)		wetland hydrology must be present.
	Gleyed Matrix (S4)					listatic nyarotogy mass specific
1	e Layer (if present)	•				
Type: Depth (i	inchae):					Hydric Soil Present? Yes No (
	Utaline Series					
Remarks.	Otanne Series					
HYDROL						Secondary Indicators (2 or more required)
1	lydrology Indicator					Water Marks (B1) (Riverine)
Primary Inc	dicators (any one inc	dicator is suffic				 _
, L	e Water (A1)			ıst (B11)		Sediment Deposits (B2) (Riverine)
<u> </u>	Vater Table (A2)			rust (B12)		☐ Drift Deposits (B3) (Riverine) ☐ Drainage Patterns (B10)
	ation (A3)			Invertebrates (B13)		Dry-Season Water Table (C2)
	Marks (B1) (Nonriv	-		en Sulfide Odor (C1) d Rhizospheres alon		
	ent Deposits (B2) (I			ce of Reduced Iron (Crayfish Burrows (C8)
	eposits (B3) (Nonri	verine)		Iron Reduction in Ple	-	
	æ Soil Cracks (B6) ation Visible on Aeri	al imageny (B7	<u></u>	Explain in Remarks)	oned come (Shallow Aquitard (D3)
I 🗀	-Stained Leaves (B			_xpiair in recinancy		FAC-Neutral Test (D5)
Field Obs		-1				
	ater Present?	Yes C	lo 📵 Depth	(inches):		
'	le Present?			(inches):		
				(inches):	\dashv	_
Saturation (includes of	apillary fringe)		(· -	L L	land Hydrology Present? Yes C No C
Describe F	Recorded Data (stre	am gauge, mo	nitoring well, aeri	al photos, previous i	nspections),	, if available:
aerial pho	otos, topo maps					
Remarks:	-		•			
US Army Co	rps of Engineers					

Project/Site: SH 92 Stengel's Hill		City/Co	ounty: Delta		San	npling Da	te: 9/20/20	011
Applicant/Owner: CDOT, Region 3 Environmental	_			State: CO	San	npling Poi	int: Up3 3-	-1
Investigator(s): Paula Durkin		Section	n, Township, Ra	nge: NW 1/4 NW	 V 1/4 Sect	. 32, T.	14S, R. 93	W
Landform (hillslope, terrace, etc.):			relief (concave, o				Slope (%):	
Subregion (LRR): D - Interior Deserts	Lat: 38	•		Long: 107.4902	23		Datum: NA	D83
Soil Map Unit Name: 80 - Utaline-Torriorthents compl					lassification			
Are climatic / hydrologic conditions on the site typical for this		ear? Ye	es (No (
	ignificantly			'Normal Circumstan		•	€ No	
	aturally pro			eded, explain any a			•	•
SUMMARY OF FINDINGS - Attach site map s							•	, etc.
	。 • •							
	0 6	ĺ	Is the Sampled	Area				
	o @	- 1	within a Wetlan			No 🕡		
Remarks: upland area directly adj to wetland #3, 3-1	by the st	ock po	nd					
VEGETATION								
VEGETATION	Absolute	Domin	nant Indicator	Dominance Test	workshoe			
Tree Stratum (Use scientific names.)				Number of Domin				
1.				That Are OBL, FA			0	(A)
2.				Total Number of [Dominant			
3.				Species Across A			4	(B)
4				Percent of Domin	ant Specie	S		
Total Covel Sapling/Shrub Stratum	r: %			That Are OBL, FA			0.0 %	(A/B)
1. Artemisia filifolia	30	Yes	UPL	Prevalence Inde	x workshe	et:		
2. Sarcobatus vermiculatus		No	FAC	Total % Cove			Itiply by:	_
3. Chrysothamnus nauseosus	· — — —	No	UPL	OBL species	-160	x1=	0	
4. Artemisia tridentata		No	UPL	FACW species		x 2 =	0	
5.				FAC species	5	x 3 =	15	
Total Cover	45 %			FACU species	20	x 4 =	80	
Herb Stratum	10	37		UPL species	52	x 5 =	260	
1. Bromus inermis	10	Yes	FACU	Column Totals:	77	(A)	355	(B)
Salsola kali Grindelia squarrosa	10	Yes Yes	UPL	Prevalence	Index = B/	/A =	4.61	
4. Machaeranthera tanacetifolia	$-\frac{10}{2}$	No Yes	FACU	Hydrophytic Veg	etation in	dicators:		-
5.		110	OFL	Dominance T	est is >50%	%		
6.				Prevalence Ir	ndex is ≤3.0	O ¹		
7.				Morphologica				ing
8.					emarks or o			۰,
Total Cover	32 %			Problematic H	чуогорпуцс	; vegetati	on (⊏xpian	1)
Woody Vine Stratum				¹ Indicators of hyd	fric soil and	d wetland	hydrology	must
1				be present.	nic son and	, wouding	Hydrology	muot
ZTotal Cover	- %			Hydrophytic				
				Vegetation	•	2.0	_	
	of Biotic C	rust	<u>%</u>	Present?	Yes (No	•	
Remarks:								

Profile Des	cription: (Describe	to the depth i	needed to docu	ment the	Indicator	or confirm	the absence of indicator	s.)
Depth	Matrix		Redo	x Features	<u> </u>			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture ³	Remarks
-								
	·							
	V							
1Tuno: C=C	Concentration, D=De	nlotion PM=Pe	aduced Matrix	² Location	PI =Pore	Lining RC	C=Root Channel, M=Matrix	
3Soil Textur	ces: Clay Silty Clay	Sandy Clay. Le	oam. Sandv Clav	Loam. Sa	andy Loam	, Clay Loar	m, Silty Clay Loam, Silt Loa	m, Silt, Loamy Sand, Sand.
	Indicators: (Applica						Indicators for Problema	tic Hydric Soils:
Histoso		Die to all Littes,	Sandy Redo				1 cm Muck (A9) (LI	
, L	Epipedon (A2)		Stripped M				2 cm Muck (A10) (I	•
	Histic (A3)		Loamy Mu	cky Minera	al (F1)		Reduced Vertic (F1	
Hydrog	gen Sulfide (A4)		Loamy Gle	-			Red Parent Materia	
1 🗀	ed Layers (A5) (LRR	(C)	Depleted N				Other (Explain in R	emarks)
	fluck (A9) (LRR D)	(644)	Redox Dar					
111 '	ed Below Dark Surfa Dark Surface (A12)	ice (ATT)	Redox Dep					
1 🗀	Mucky Mineral (S1)		Vernal Poo		(. 0)		4Indicators of hydrophy	tic vegetation and
1 -	Gleyed Matrix (S4)						wetland hydrology m	
	Layer (if present):							
Type:	,							
Depth (i	nches):						Hydric Soil Present?	Yes No (
	Utaline Series							
, , , , , , , , , , , , , , , , , , , ,								
HYDROL							Coonday Indicat	ors (2 or more required)
1	lydrology Indicator							(B1) (Riverine)
Primary Inc	dicators (any one ind	licator is sufficie						
Surfac	e Water (A1)		Salt Crus					oosits (B2) (Riverine)
1 🗀 💆	Vater Table (A2)		Biotic Cru	, ,	(5.46)		Driπ Deposits Drainage Pati	(B3) (Riverine)
	ition (A3)			nvertebrat				Vater Table (C2)
	Marks (B1) (Nonrive	-		Sulfide C		Living Dec		
1 🗀	ent Deposits (B2) (N					Living Roo	Crayfish Burn	
	eposits (B3) (Nonriv	rerine)			ed Iron (C			sible on Aerial Imagery (C9)
<u> </u>	ce Soil Cracks (B6)					wed Soils (Shallow Aquit	
	ation Visible on Aeria		U Other (E)	oplain in R	emarks)		FAC-Neutral	
	-Stained Leaves (B9							1001 (00)
Field Obse		v	O D 4 (
	ater Present?	-	Depth (i			-		
Water Tab	le Present?	Yes C No	Depth (i	· -				
Saturation		Yes C No	Depth (i	nches):		Wetl	and Hydrology Present?	Yes (No (
Describe F	capillary fringe) Recorded Data (strea	m gauge, moni	toring well. aeria	photos, p	revious in			
1	otos, topo maps	· U0-1	• · · · · · · · · · · · · · · · · · · ·			,		
Remarks:						_		
INCINAINS.								
	677				<u> </u>			
US Army Con	rps of Engineers							

Project/Site: SH 92 Stengel's Hill		City/Co	unty: Delta		Sai	npling Da	ate: <u>9/20/2</u> 0)11	
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Sar	Sampling Point: Up4 4-1			
Investigator(s): Paula Durkin		Section	, Township, Ra	ange: NW 1/4 NW	1/4 Sec	t. 32, T.	14S, R. 93	W	
Landform (hillslope, terrace, etc.):		Local re	elief (concave,	convex, none):			Slope (%):	1	
Subregion (LRR): D - Interior Deserts	Lat: 38	.47595		Long: 107.4901	7		Datum: NA	D83	
Soil Map Unit Name: 80 - Utaline-Torriorthents com	nplex			NWI cla	ssification	1:			
Are climatic / hydrologic conditions on the site typical for t	this time of ye	ear? Yes	s (No ((If no, explain	n in Rema	rks.)			
Are Vegetation Soil or Hydrology	significantly	disturbe	ed? Are	"Normal Circumstan	ces" prese	nt? Yes	(No	· C	
Are Vegetation Soil or Hydrology	naturally pr	oblemati	c? (If n	eeded, explain any a	nswers in	Remarks	i.)		
SUMMARY OF FINDINGS - Attach site map	showing	samp	ling point l	ocations, transe	ects, im	portant	t features	, etc.	
Hydrophytic Vegetation Present? Yes	No 🌀								
Hydric Soil Present? Yes	No 🌀	1	s the Sample	d Area					
Wetland Hydrology Present? Yes Remarks: upland area directly adj to wetland #4 4-	No 🌀		within a Wetla	nd? Yes	\cap	No 🕡			
VEGETATION									
Tree Stratum (Use scientific names.)	Absolute % Cover	Domina Species	ant Indicator s? Status	Dominance Test		-			
1. Elaeagnus angustifolia	10	Yes	FAC	Number of Domina That Are OBL, FA			2	(A)	
2.				Total Number of D					
3.				Species Across Al			3	(B)	
4.				Percent of Domina	ant Specie	s			
Total Cov Sapling/Shrub Stratum	ver: 10 %			That Are OBL, FA			66.7 %	(A/B)	
1.				Prevalence Index	workshe	et:			
2.				Total % Cove	r of:	Mu	ıltiply by:	_	
3.				OBL species		x 1 =	0		
4.				FACW species		x 2 =	0		
5				FAC species	30	x3=	90		
Total Cov	/er : %			FACU species	50	x 4 =	200		
1. Bromus inermis	50	Yes	FACU	UPL species Column Totals:	2	x 5 =	10	(B)	
2. Oenothera villosa	$-\frac{30}{20}$	Yes	FAC	_ Column Totals:	82	(A)	300	(B)	
3. Machaeranthera tanacetifolia		No	UPL	Prevalence I	ndex = B	/A =	3.66		
4.				Hydrophytic Veg					
5.				➤ Dominance Te					
6.				Morphological			ride support	ina	
7. 8.				data in Rei				a	
Total Cov	'er' 70 o			Problematic H	lydrophytic	c Vegetat	ion¹ (Explaiı	٦)	
Woody Vine Stratum	er: 72 %								
1				¹ Indicators of hydr be present.	ic soil an	d wetland	l hydrology	must	
2								-	
Total Cov		.	0.4	Hydrophytic Vegetation	* - • •	N.	6	ĺ	
% Bare Ground in Herb Stratum%	er of Biotic C	-rusi		Present?	Yes (NC	•		
remains.									

SOIL

Sampling Point: Up4 4
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

						or confirm	the absence of indicate	ors.)
Depth (inches)	Matrix Color (moist)	<u>%</u>	Color (mois	Redox Feature 1		Loc ²	Texture ³	Remarks
(Inches)	Color (moist)		COIOI (IIIOIS		1350			
_	·							
	· 							
¹Type: C=C	Concentration, D=D	epletion, RM=	Reduced Mat				C=Root Channel, M=Matr	
						, Clay Loar	n, Slity Clay Loam, Slit Lo	pam, Silt, Loamy Sand, Sand.
	Indicators: (Applic	able to all LRR			.)		Indicators for Problem	
Histoso	, ,			Redox (S5)	•		1 cm Muck (A9) (
	Epipedon (A2)			ed Matrix (S			2 cm Muck (A10)	, ,
	listic (A3)			y Mucky Min			Reduced Vertic (F	•
	en Sulfide (A4)			y Gleyed Ma			Red Parent Mater	• •
	ed Layers (A5) (LRI	R C)		ted Matrix (F	•		Other (Explain in	remains)
	luck (A9) (LRR D)	/6.4.45		x Dark Surfa				
ш.	ed Below Dark Surf	ace (A11)		ted Dark Su				
	Dark Surface (A12)			x Depression	IS (F0)		⁴ Indicators of hydroph	vtic vegetation and
	Mucky Mineral (S1)		vema	al Pools (F9)			wetland hydrology	
	Gleyed Matrix (S4)						T Wedatta tryatology	made by prodein.
	Layer (if present)	:						
Type:		·- <u>·</u>						Yes C No (
Depth (ii	·						Hydric Soil Present?	Yes (NO (
Remarks: [Jtaline Series		_					
1								
HYDROLO	OGY							
Wetland H	ydrology Indicato	rs:					Secondary Indica	ators (2 or more required)
Primary Ind	licators (any one in	dicator is suffic	cient)				Water Marks	s (B1) (Riverine)
	e Water (A1)			Crust (B11)			Sediment D	eposits (B2) (Riverine)
🗀	/ater Table (A2)			ic Crust (B12	יו		Drift Deposit	ts (B3) (Riverine)
	tion (A3)			atic Inverteb				atterns (B10)
		raulma\		rogen Sulfide				Water Table (C2)
	Marks (B1) (Nonriv	•		_	pheres along	Living Poo		
, 🗀	ent Deposits (B2) (I	-					Crayfish Bu	' '
1 🖳	eposits (B3) (Nonri	verine)			luced Iron (C			isible on Aerial Imagery (C9)
l 🖳	e Soil Cracks (B6)		. =		uction in Plov	vea solis (C	· · · /	
	tion Visible on Aeri	•	r) Oth	er (Explain in	Remarks)		Shallow Aqu	
Water-	Stained Leaves (B	9)					FAC-Neutra	I Test (D5)
Field Obse	ervations:							
Surface Wa	ater Present?	Yes C	No 🌀 De	pth (inches):				
Water Tabl	e Present?	Yes C	No 🌀 De	pth (inches):				
Saturation	Present?	-		pth (inches):				
(includes ca	apillary fringe)			•			and Hydrology Present	Yes No (
	ecorded Data (stre	am gauge, mo	nitoring well,	aerial photos	, previous in	spections),	if available:	
aerial pho	tos, topo maps							
Remarks:						·	- -	
US Army Cor	ps of Engineers							

Project/Site: SH 92 Stengel's Hill		City/0	County: Delta		Sa	mpling Da	te: 9/20/2	011
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Saı	mpling Po	int: Up4 4	1-2
Investigator(s): Paula Durkin		Secti	ion, Township, R	ange: SW 1/4 SW	/ / 1/4 Sect	. 29 , T. 1	4S, R. 93	W
Landform (hillslope, terrace, etc.):		Loca	al relief (concave	, convex, none):			Slope (%)	:
Subregion (LRR): D - Interior Deserts	Lat:	 38.4802	22	49		Datum: NA	D83	
Soil Map Unit Name: 80 - Utaline-Torriorthents c	omplex			NWI c	lassificatio	n:		
Are climatic / hydrologic conditions on the site typical t	or this time of	year?	Yes 🕟 No ((If no, expla	in in Rema	ırks.)		
Are Vegetation Soil or Hydrology	significar	ntly distu	rbed? Are	"Normal Circumsta	nces" presi	ent? Yes	(N	lo (
Are Vegetation Soil or Hydrology	naturally	problem	atic? (If n	eeded, explain any	answers in	Remarks	i.)	
SUMMARY OF FINDINGS - Attach site m	nap showii	ig san	npling point I	ocations, trans	ects, im	portant	t feature:	s, etc.
Hydrophytic Vegetation Present? Yes	No (6					-		
Hydric Soil Present? Yes (No (Is the Sample	d Area				
Wetland Hydrology Present? Yes	No 🌀		within a Wetla		s ()	No 🕝		
Remarks: upland area directly adj to wetland 4	in vegetated	swale	1					
VECETATION								
VEGETATION	Abaalid	- D	!	D	4 	-A.		
Tree Stratum (Use scientific names.)	Absolut % Cove		inant Indicator cies? Status	Number of Domi				
1.				That Are OBL, F.			0	(A)
2.				Total Number of	Dominant			
3				Species Across			1	(B)
4.				- Percent of Domi	nant Specie	es		
Total Sapling/Shrub Stratum	Cover:	%		That Are OBL, F.			0.0 %	(A/B)
1.				Prevalence Inde	x workshe	et:		
2.				Total % Cov	er of:	Mu	ıltiply by:	
3.			·	OBL species	100	x 1 =	0	
4.				FACW species		x 2 =	0	
5				FAC species	5	x 3 =	15	
Total (Cover:	%		FACU species		x 4 =	0	
Herb Stratum 1 This common interest is the strategy of the st	50	37		UPL species	60	x 5 =	300	
1. Thinopyrum intermedium 2. Machaeranthera tanacetifolia	$\frac{50}{10}$	Yes No	UPL UPL	_ Column Totals:	65	(A)	315	5 (B)
3. Cirsium arvense		No No	FAC*	Prevalence	Index = B	/A =	4.85	5
4.			TAC TAC	Hydrophytic Ve	getation In	dicators:		
5.				Dominance '	Test is >50	%		
6.				Prevalence I				
7.				Morphologic	al Adaptatio	ons¹ (Prov	/ide suppor rate sheet)	rting
8.				Problematic				
Total 0 Woody Vine Stratum	Cover: 65	%	<u>-</u>		. 75 GIOPIIYU	o rogeral	\LAPIA	,
1.				¹ Indicators of hy	dric soil an	d wetland	l hydrology	must
2.		_		be present.				
Total C	Cover:	<u></u>		Hydrophytic				
	Cover of Biotic		0/_	Vegetation Present?	Yes (N/a	6	
Remarks:		, Grust –	<u>%</u>	riesentr	162 (_	140	. (-	
romans.								

Depth (inches)	Matrix		Red	dox Features		the absence of indicator	
	Color (moist)	%	Color (moist)	% Type	Loc ²	Texture ³	Remarks
_			· · · · · · ·				
			-			·	
						C-Doot Channel M-Matrix	
Type: C=C	Concentration, D=De	pletion, RM=	Reduced Matrix.	*Location: PL=P	ore Lining, Ru	C=Root Channel, M=Matrix m, Silty Clay Loam, Silt Loa	ım Silt Loamy Sand San
					am, Clay Loai	Indicators for Problema	tio Hudrio Soile
	Indicators: (Applica	ble to all LRI					
Histoso	, ,		Sandy Re	• •		1 cm Muck (A9) (LI	•
	pipedon (A2)			Matrix (S6)		2 cm Muck (A10) (I Reduced Vertic (F1	
	listic (A3)			lucky Mineral (F1)		Red Parent Materia	-
	en Sulfide (A4)			leyed Matrix (F2)		Other (Explain in R	• •
_	ed Layers (A5) (LRR	(C)	1 1 '	Matrix (F3) ark Surface (F6)			and the same of
	luck (A9) (LRR D)	no (A44)		агк Suпасе (F6) I Dark Surface (F7)			
	ed Below Dark Surfa	t∪9 (ATT)		epressions (F8)			
	Dark Surface (A12)		Vernal P			4Indicators of hydrophyl	tic vegetation and
_	Mucky Mineral (S1)		U vernare	0015 (F9)		wetland hydrology m	
	Gleyed Matrix (S4)				 -	Todana nyarotogy	
lestrictive	Layer (if present):						
Type:							v 0 N-0
Depth (is	nches):					Hydric Soil Present?	Yes No (
Remarks: [Jtaline Series						
							
YDROLO	OGY		-				
	OGY ydrology Indicator	s:					ors (2 or more required)
Wetland H	ydrolog y Indicat or		icient)				ors (2 or more required) (B1) (Riverine)
Wetland H	ydrology Indicator licators (any one ind			ust (B11)		Water Marks	
Wetland H	ydrology Indicator licators (any one ind e Water (A1)		Salt Cri	ust (B11) Crust (B12)		Water Marks Sediment Dep	(B1) (Riverine)
Wetland H	ydrology Indicator licators (any one ind e Water (A1) /ater Table (A2)		Salt Cri	crust (B12)	3)	Water Marks Sediment Dep	(B1) (Riverine) cosits (B2) (Riverine) (B3) (Riverine)
Wetland H Primary Ind Surface High W	ydrology Indicator licators (any one ind e Water (A1) /ater Table (A2) tion (A3)	licator is suff	Salt Cri Biotic C	Crust (B12) : Invertebrates (B13	•	Water Marks Sediment Dep Drift Deposits Drainage Patt	(B1) (Riverine) cosits (B2) (Riverine) (B3) (Riverine) terns (B10)
Wetland History Ind Surface High Wells Satura Water	ydrology Indicator licators (any one ind e Water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonrive	licator is suff erine)	Salt Cri Biotic C Aquatio Hydrog	crust (B12) Invertebrates (B13 en Sulfide Odor (C	1)	Water Marks Sediment Der Drift Deposits Drainage Patt Dry-Season V	(B1) (Riverine) cosits (B2) (Riverine) (B3) (Riverine) terns (B10) Vater Table (C2)
Vetland High Water Surface High Water Water Sedime	ydrology Indicators licators (any one ind e Water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (N	licator is suff erine) lonriverine)	Salt Cri Biotic C Aquatic Hydrog Oxidize	crust (B12) Invertebrates (B13 en Sulfide Odor (C d Rhizospheres ald	1) ong Living Roo	Water Marks Sediment Deposits Drift Deposits Drainage Patt Dry-Season Vots (C3)	(B1) (Riverine) cosits (B2) (Riverine) (B3) (Riverine) terns (B10) Vater Table (C2)
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Wetland H Primary Ind Surface High W Satura Water Sedime Drift De Surface Inunda	ydrology Indicators licators (any one ind e Water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6)	licator is suff erine) lonriverine) verine)	Salt Cri Biotic C Aquatic Hydrog Oxidize Presen Recent	Crust (B12) Invertebrates (B13) en Sulfide Odor (C d Rhizospheres ald ce of Reduced Iron Iron Reduction in F	1) ong Living Roo (C4) Plowed Soils (G	Water Marks Sediment Deposits Drainage Patt Dry-Season Vots (C3) Crayfish Burna C6) Saturation Vis	(B1) (Riverine) cosits (B2) (Riverine) (B3) (Riverine) terns (B10) Vater Table (C2) trace (C7) cows (C8) sible on Aerial Imagery (C8) trace (D3)
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Primary Ind Surface High W Satura Water Sedime Surface Inunda Water-Fleld Obse Surface Water Table Saturation (includes c Describe R aerial pho	ydrology Indicators licators (any one inde e Water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonrive ent Deposits (B2) (Nonrive esoil Cracks (B6) tion Visible on Aeria Stained Leaves (B9 ervations: ater Present? e Present? Present? apillary fringe) lecorded Data (strea	erine) lonriverine) verine) al Imagery (B) Yes (Yes (Yes (Salt Cri Biotic C Aquatic Hydrog Oxidize Presen Recent Other (No Depth No Depth No Depth	crust (B12) c Invertebrates (B13) en Sulfide Odor (C d Rhizospheres ald ce of Reduced Iron Iron Reduction in F Explain in Remarks (inches): (inches):	1) ong Living Roc (C4) Plowed Soils (6)	Water Marks Sediment Deposits Drainage Patt Dry-Season Vots (C3) Thin Muck Su Crayfish Burn C6) Saturation Vis Shallow Aquit FAC-Neutral	(B1) (Riverine) cosits (B2) (Riverine) (B3) (Riverine) terns (B10) Vater Table (C2) trace (C7) cows (C8) sible on Aerial Imagery (C9 ard (D3) Test (D5)
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Project/Site: SH 92 Stengel's Hill		City/Cour	nty: Delta		Saı	mpling Da	ate: 9/20/20	11
Applicant/Owner: CDOT, Region 3 Environmental				State: CO	Sar	npling Po	oint: Up5 5-	·1
Investigator(s): Paula Durkin		Section,	Township, Ra	ange: SW 1/4 SW	1/4 Sect.	29, T. 1	4S, R. 93V	V
Landform (hillslope, terrace, etc.):		Local rel	ief (concave,	convex, none):			Slope (%):	
Subregion (LRR): D - Interior Deserts	Lat: 38	3.48022	•	Long: 107.4854	9		- Datum: NA	D83
Soil Map Unit Name: 80 - Utaline-Torriorthents comp	lex				assification			
Are climatic / hydrologic conditions on the site typical for thi	_	ear? Yes	No ((If no, explai	n in Rema	rks.)		
	significantly			"Normal Circumstan		•	e No	
· ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	naturally pr			eeded, explain any a	•		•	•
SUMMARY OF FINDINGS - Attach site map			•	•				, etc.
		<u> </u>				-		_
	o ©	١	4 0					
	o		the Sample		_	No @		
Remarks: upland area directly adj to wetland #5, 5-1	•	1	ithin a Wetla	nd? Yes		NO (
upland area directly and to westand "3, 3"	III IIQAL L	O IIIIgutii	on diton					
VEGETATION								
	Absolute		t Indicator	Dominance Test	workshe	et:		-
Tree Stratum (Use scientific names.)	% Cover	Species'	-	Number of Domin				(4)
1. Elaeagnus angustifolia	10	Yes	FAC	That Are OBL, FA	CW, or FA	AC:	3	(A)
2				Total Number of I			-	(D)
3.				Species Across A	III Strata:		5	(B)
7 Total Cove	r: 10 %		_	Percent of Domin			(0.0	(A (D)
Sapling/Shrub Stratum	r: 10 %			That Are OBL, FA	CVV, OF FA	AC:	60.0 %	(A/B)
1. Tamarix parviflora	2	Yes	FAC	Prevalence Inde	x workshe			
2. Artemisia filifo lia	2	Yes	UPL	Total % Cove	er of:		ultiply by:	_
3. Ribes aureum	2	Yes	FAC	OBL species		x1=	0	
4		-		FACW species	2.12	x 2 =	0	
5.				FACUL species	14	x3= x4=	42	
Total Cover Herb Stratum	6 %			FACU species UPL species		x 5 =	0	
1.Thinopyrum intermedium	50	Yes	UPL	Column Totals:	62	(A)	310 352	(B)
2. Machaeranthera tanacetifolia	10	No	UPL	_ Column Totals.	76	(//)	332	(5)
3.				Prevalence			4.63	
4.				Hydrophytic Veg			:	
5.			_	X Dominance T				
6.				Prevalence Ir		*		,
7				Morphologica data in Re	marks or o	ons (Pro	vide support irate sheet)	ing
8				Problematic I			_	n)
Total Cover Woody Vine Stratum	60 %			-				
1.				¹ Indicators of hyd	ric soil an	d wetland	hydrology	must
2.				be present.				
Total Cover	: %			Hydrophytic				
% Bare Ground in Herb Stratum % % Cove	of Biotic C	Crust	%	Vegetation Present?	Yes (N	• (6	
Remarks:								
Tronging.								

Depth	ription: (Describ Matrix			Redo	x Features							_	
(inches)	Color (moist)	%	Color	(moist)	%	Type ¹	Loc ²	Textu	'е ³			Remark	S
									_				
													<u> </u>
										_			
			-										
Type: C=C	oncentration, D=D	epletion, RM	/I=Reduce	ed Matrix.			Lining, RC						0
Soil Texture	es: Clay, Silty Clay	, Sandy Cla	ay, Loam,	Sandy Clay	/ Loam, Sa	andy Loam	, Clay Loar	m, Silty C	lay Lo	am, Silt	Loam, Si	t, Loamy	Sand, Sa
Hydric Soil I	ndicators: (Applica	able to all LF	RRs, unle	ss otherwis	e noted.)						matic Hy		Ė
Histosol				Sandy Red				_ <u>_</u> 1	cm M	uck (A9)	(LRR C)		
Histic E	pipedon (A2)		H	Stripped M	latrix (S6)					•) (LRR E	3)	
	istic (A3)		Ħ	Loamy Mu	cky Minera	al (F1)		□ R	educ	ed Vertic	(F18)		
Hydroge	en Sulfide (A4)		Ħ	Loamy Gle	yed Matrix	(F2)					erial (TF2		
	d Layers (A5) (LRI	R C)	Ħ	Depleted N	/atrix (F3)				ther (Explain i	n Remarl	(S)	
	uck (A9) (LRR D)	•		Redox Da	rk Surface	(F6)							
	d Below Dark Surf	ace (A11)	H	Depleted [Dark Surfa	ce (F7)							
Thick D	ark Surface (A12)		Ħ	Redox De	pressions ((F8)							
Sandy I	Mucky Mineral (S1))	H	Vernal Poo	ols (F9)						ohytic veg		
Sandy (Gleyed Matrix (S4)							we	tland	hydrolog	y must b	e present	<u>. </u>
Restrictive	Layer (if present)	:											
Type:	, , ,												
туро													
Donth (in	choc).							Hydric	Soil	Present	? Yes	\cap	No 🕡
Depth (in								Hydric	Soil	Present	? Yes	<u>െ</u>	No (
• •	taline Series							Hydric	Soil	Present	? Yes	<u> </u>	No (
• •					<u> </u>			Hydric	Soil	Present	? Yes	<u> </u>	No (®
• •								Hydric	Soil	Present	? Yes	<u> </u>	No (®
Remarks: U	taline Series							Hydric	Soil	Present'	? Yes	<u></u>	No (
• •	taline Series												
Remarks: U	Italine Series	rs:											No (•
Remarks: U	taline Series OGY rdrology Indicator		ifficient)						Secor	dary Indi		or more	required)
Remarks: U IYDROLO Wetland Hy Primary Indi	ogy rdrology Indicator cators (any one inc		ifficient)	3 Salt Crus	et (B11)				Secor W	dary Indi	icators (2	or more	required)
Remarks: U IYDROLO Wetland Hy Primary Indi Surface	ogy rdrology Indicator cators (any one inc		ifficient)	Salt Crus					Secor W S	dary Indi ater Mar	icators (2 ks (B1) (i	or more Riverine (B2) (Riv	required)
Remarks: U IYDROLO Wetland Hy Primary Indi Surface High W	OGY rdrology Indicator cators (any one indicators (A1) ater Table (A2)		ifficient)	Biotic Cr	ust (B12)	oo (P42)			Secor W S	dary Indi /ater Mar ediment rift Depo:	icators (2 ks (B1) (i Deposits sits (B3)	or more Riverine (B2) (Riv (Riverine	required)
Remarks: U IYDROLO Wetland Hy Primary Indi Surface High W Saturat	order (A1) ater Table (A2) ion (A3)	dicator is su	ifficient)	Biotic Cri Aquatic I	ust (B12) nvertebrat				Secor W S D	dary Indi /ater Mar ediment rift Depo rainage I	icators (2 ks (B1) (i Deposits sits (B3)	or more Riverine (B2) (Riv (Riverine (B10)	required)) verine)
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