

I-70B West



Wetland Finding

Prepared For: Colorado Department of Transportation



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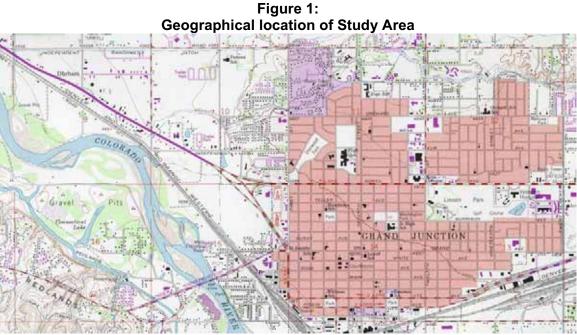




INTRODUCTION

The following is a wetland finding for the I-70B West Project (Project NH 0701-166 (14932)) in Mesa County, Colorado that has been written in compliance with Executive Order 11990, "Protection of Wetlands," and is in accordance with 23 CFR 771, 23 CFR 777, and Technical Advisory T6640.8A.

The Colorado Department of Transportation (CDOT) is proposing improvements to the I-70 Business Loop through Grand Junction from 24 Road (MM 2.42) to 15th Street (MM 6.59). The proposed project is located in Mesa County. The legal location is Township 1 South, Range 1 West, in Sections 9, 10, southwest 1/8 of 13, south ¹/₄ of 14, and northeast ¹/₄ of 15 of the USGS Grand Junction quadrangle (See **Figure 1**).

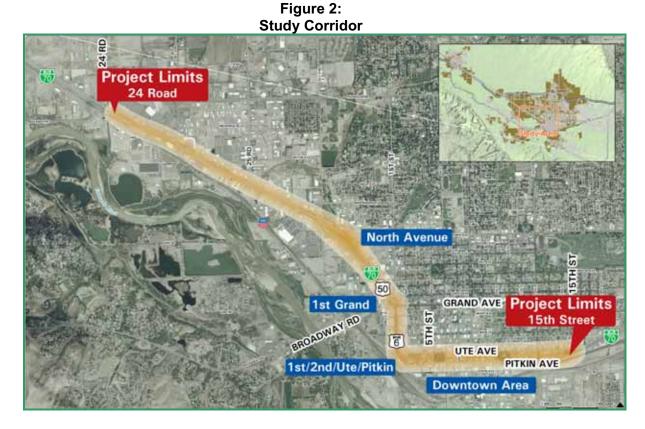


(USGS, 1962)

An Environmental Assessment (EA) for the I-70B West project is underway and a Preferred Alternative design has been identified (*Draft I-70B West Environmental Assessment*, 2007). The Preferred Alternative would provide 6 lanes of through travel throughout the I-70B West study corridor. The section of I-70B from 24 Road to Rimrock Avenue would be widened, additional turn lanes would be provided where warranted, and access



would be controlled to improve through traffic operations and safety. The North Avenue interchange would be improved to provide additional through capacity, better traffic operations, access to businesses west of I-70B, and improved safety. The 1st & Grand intersection would be reconfigured and improved to include additional through capacity and turn lanes. The 1st/2nd/Ute/Pitkin area would be improved to upgrade operations to accommodate the third lane in each direction and improve safety. The 4th/5th/Ute/Pitkin area would be converted to one-way 4th and 5th streets with additional turn lanes added to reduce vehicle conflicts and improve traffic operations. Figure 2 shows the study corridor.



Impacts to wetlands were considered during the design process and potential impacts to wetlands associated with the Ligrani Drain would be avoided by placement of the ramp and sidewalk fill slope outside of the wetland boundary. As widening of the roadway would be a necessary component of the project, impacts to wetlands in the drainage ditches adjacent to I-70B could not be avoided. In the case of these permanent impacts, a suitable mitigation plan will be applied.



Land within the study area is fully developed and urban in nature. The Union Pacific Railroad and Colorado River parallels the southern boundary of the study area, creating a defining break in land uses. At the western end of the study area, both sides of I-70B have been developed with retail and commercial uses, including large retail associated with the Mesa Mall and "big box" establishments such as Office Depot and Wal-Mart. Industrial uses are found along the south side of I-70B backed by a few isolated single-family residential structures along River Road near 25 Road. Land uses around the I-70B and North Avenue (US 6) interchange include mostly light industrial with some general retail and commercial services found directly adjacent to the interchange. South of this interchange to the intersection at 1st Street and Grand Avenue, land uses consist primarily of strip commercial development on either side of the highway.

From the 1st Street and Grand Avenue intersection and along Ute and Pitkin Avenues to 11th Street, land use consists of a mix of commercial, residential, and civic uses. Development along this area is more consistent with the historic grid of the downtown area. Auto related businesses (oil and lube, car wash, auto repair) are the predominant commercial enterprises within this portion of the study area. There are also numerous pawn shops and building supply companies. Civic uses along 1st Avenue include the Two Rivers Convention Center, and along Ute and Pitkin Avenues include the Whitman Education Center, Museum of the West, Grand Junction Fire and Police stations, a Greyhound Bus Station, and two community parks, Whitman and Emerson.

From 12th Street to the project terminus at 15th Street, commercial uses are present along the north side of the study area, with mixed commercial and light industrial uses found along the south side of the roadway.

The study area is located in the Colorado Plateau Ecoregion and the Shale Deserts and Sedimentary Basins sub-ecoregion. In the western retail/commercial and central portions of the study area, the dominant vegetation types include landscaped areas, saltgrass areas associated with I-70B and North Avenue (US 6) interchange, and weedy kochia and windmill grass in vegetated areas of the highway right-of-way. The eastern portion of the study area is a mix of residential, commercial and light industrial uses; except for mature street trees, landscaped areas, and lawns in parks and in front of some businesses and homes.



Based on records from Mesa County, the average annual precipitation for the area is 8.64". The study area is located within the Colorado Headwaters-Plateau watershed (Hydrologic Unit Code #14010005) east of the Colorado River and contains numerous retention ponds, drainage ditches and a CDOW pond within its boundaries.

Methods

Wetland delineations for the I-70B West study area were conducted by Carter & Burgess, Laura Backus and Brad Stoneman, on August 31 and September 1, 2006 in accordance with the U.S. Army Corps of Engineers (USACE) 1987 Wetlands Delineation Manual and the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, where for each wetland data is collected based on the presence of hydrophytic vegetation, wetland hydrology, and the presence of hydric soils (Environmental Laboratory, 1987). A wetland was determined to be present at a site if all three parameters were met. The boundaries of each wetland were then mapped on project sheets using a Trimble Geo XH Global Positioning System Receiver capable of submeter accuracy and supplemented by field measurements.

The indicator status of vegetation was derived from the National List of Plant Species That Occur in Wetlands: Intermountain (Region 8) (Reed 1988). Plant nomenclature follows Weber and Whittman (1996). Soil map unit names were collected from the National Resource Conservation Service Web Soil Survey. Wetland data forms and wetland photographs are presented in Appendix A and Appendix B.

RESULTS

Seven small roadside ditch or cross culvert pipe wetlands totaling 0.096 acre are present within the study area (see **Figure 3**). This total wetland acreage represents an extremely small portion of the entire study area. Wetlands 1, 2, and 3 are comprised of emergent vegetation (cattail, spikerush, barnyard grass) along the banks of roadside ditches which receive runoff from adjacent parking lots and I-70B. Wetlands 4 and 7 are emergent cattail wetlands located at stormwater culvert outlets. Wetlands 5 and 6 are bands of emergent vegetation (reed canarygrass, common reed) adjacent to Ligrani Drain.

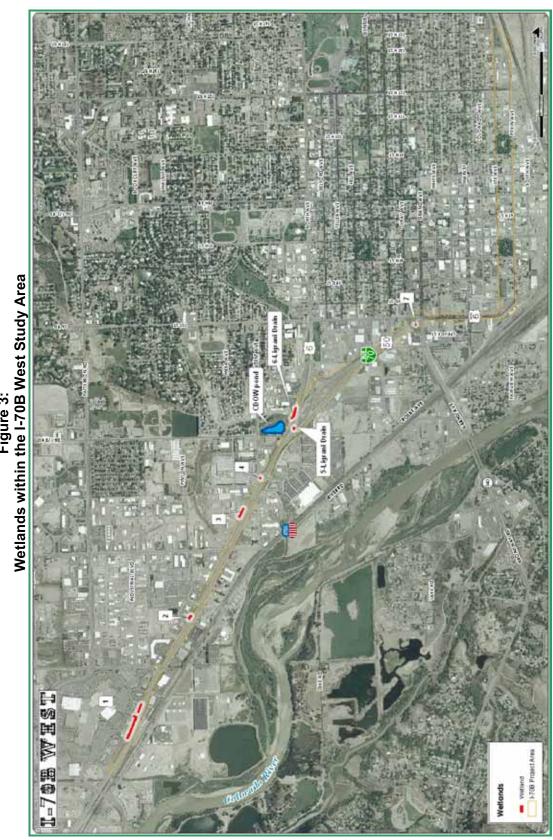


Figure 3: Wetlands within the I-70B West Study Area

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Wetlands 1, 2, 3, 4, and 7 drain to cross culverts under I-70B. Wetlands 5 and 6 are associated with the Ligrani Drain, a historical drainage that was established in 1950 as a measure to lower groundwater levels in the area. Both Wetland 5 and Wetland 6 drain into the Colorado River. In events of intense precipitation, Wetland 6 also empties into the CDOW pond located north of I-70B. **Table 1** provides a summary of wetlands present in the study area.

Table 1

Study Area Wetlands								
Site ID	Acres within the Study Area	USACE Jurisdictional?	Wetland Type*	Comments				
Wetland 1	0.052	Yes	Emergent	Ditch				
Wetland 2	0.013	Yes	Emergent	Ditch				
Wetland 3	0.010	Yes	Emergent	Ditch				
Wetland 4	0.003	No	Emergent	Storm Water Detention				
Wetland 5	0.007	Yes	Emergent	Ligrani Drain				
Wetland 6	0.010	Yes	Emergent	Ligrani Drain				
Wetland 7	0.001	Yes	Emergent	Ditch				
TOTAL	0.096							
	et al., 1979. Classific nited States Fish an		•					

Program; FWS/OBS-79/31.

The seven wetlands present are classified as palustrine emergent (Cowardin, 1979). Completed wetland data forms are included in **Appendix A**. Wetland photographs are presented in **Appendix B**.

Plant communities represented in the wetlands consist of vegetation typical of palustrine systems according to the Cowardin classification system. Wetlands of the emergent class are typically associated with grasses, sedges, rushes, and forbs. **Table 2** displays vegetation identified in the wetlands in the study area.

Table 2:Vegetation Summary Table for Wetlands in the I-70 B West Study Area

Common Name	Scientific Name *	Wetland Indicator Status**
Showy milkweed	Asclepias speciosa	FACW
Plumeless thistle	Carduus nutans	NI



 Table 2:

 Vegetation Summary Table for Wetlands in the I-70 B West Study Area (continued)

Common Name	Scientific Name *	Wetland Indicator Status**
Wooly sedge	Carex lanuginosa	OBL
Field bindweed	Convolvulus arvensis	NI
Inland saltgrass	Distichlis spicata	FAC
Barnyard grass	Echinochloa crusgalli	FACW
Creeping spikerush	Eleocharis palustris	OBL
Kochia	Kochia scoparia	FACU
Lady's thumb	Persicaria maculata	FACW
Reed canarygrass	Phalaroides arundinacea	OBL
Common reed	Phragmites australis	FACW
Buttercup	Ranunculus spp.	NI
Curly dock	Rumex crispus	FACW
Softstem bulrush	Schoenoplectus lacustris validus	OBL
Narrowleaf cattail	Typha angustifolia	OBL
Chinese elm	Ulmus pumila	NI
	enclature provided by Weber and Whi ed 1998 (Region 8) Intermountain Wet	

Wetland 1

Wetland 1 is a 0.052 acre emergent wetland dominated by cattail with minor cover by lady's thumb, bulrush, barnyard grass, sedges, and buttercup. The wetland is comprised of three separate areas; all are in the ditch between business parking lots and the northern side of I-70B.

Hydrology is primarily provided to this area by parking lot drainages from several adjacent commercial restaurant locations. Additionally, the side slopes are landscaped and have bluegrass sod that is watered by overhead sprinklers, which adds to the hydrology of the ditch.

All vegetation observed in Wetland 1 is classified by Cowardin et al. as emergent species. The dominant wetland vegetative species for Wetland 1 is narrowleaf cattail (Typha angustifolia), with lesser coverages of creeping spikerush (Eleocharis palustris), lady's thumb (Persicaria maculata), softstem bulrush (Schoenoplectus lacustris validus), barnyard grass (Echinochloa crusgalli), wooly sedge (Carex lanuginosa), and buttercup (Ranunculus spp.) located throughout. The cattail, creeping spikerush, softstem bulrush, wooly sedge, and buttercup are perennial in



nature. The barnyard grass and lady's thumb have annual growth durations.

Hydrology for Wetland 1 is provided primarily by runoff from parking lots and groundwater. Much of the area surrounding the wetland is commercial landscaping and bluegrass that is irrigated throughout the growing season. Frequent recharge from these activities creates standing water in the wetland.

Soils are brown (10YR 5/3) clay with common gray (10YR 6/1) mottles. The soils show borderline colors, indicating that the soils are developing. Wetland 1 is classified by its map unit name as Sagers silty clay loam.

Wetland 2

Wetland 2 is a 0.013 acre emergent wetland dominated by creeping spikerush and narrowleaf cattail. The wetland is located in the ditch between business parking lots and the northern side of I-70B. This wetland is very similar to Wetland 1 in both position in the landscape and the hydrology.

The vegetation observed in Wetland 2 is perennial in nature and classified by Cowardin et al. as emergent species. The dominant wetland vegetative species for Wetland 2 is creeping spikerush (*Eleocharis palustris*), with coverage of narrowleaf cattail (*Typha angustifolia*) also present.

Hydrology for Wetland 2 is provided primarily by runoff from parking lots and groundwater. Much of the area surrounding the wetland is commercial landscaping and turfgrass that is irrigated throughout the growing season. Frequent recharge from these activities creates standing water in the wetland. Wetland 2 drains into Wetland 1.

Soils are dark grayish brown (10YR 4/2) with dark gray (10YR 4/1) mottles commonly associated with developing soils. Wetland 2 is classified by its map unit name as Sagers silty clay loam.

Wetland 3

Wetland 3 is a 0.010 acre emergent wetland dominated by barnyard grass. This wetland is also a roadside ditch but is not surrounded by



bluegrass sod like Wetlands 1 and 2. It receives runoff from a large paved parking lot and the westbound lanes of I-70B.

The vegetation observed in Wetland 3 is annual in nature and classified by Cowardin et al. as emergent species. The dominant wetland vegetative species for Wetland 3 is barnyard grass (*Echinochloa crusgalli*).

Hydrology for Wetland 3 is provided primarily by runoff from parking lots and culverts at its east and west ends from I-70B. Hydrology was very faint at the time of survey and appears to occur only during short, seasonal intervals.

At the time of the wetland survey the soils were damp at the surface. A sandy clay loam soil displayed a gleyed or low chroma condition. At a depth of 12 inches, the soil is a dark grayish brown (10YR 4/2) with common mottles exhibiting yellowish red (5YR 4/6) color. Wetland 3 is classified by its map unit name as Green River clay loam.

Wetland 4

Wetland 4 is a 0.003 acre emergent wetland dominated by narrowleaf cattail. Wetland 4 is a small stormwater catchment in a cobblerock covered median area. It does not appear to have an actual outlet pipe and acts as a detention basin.

The vegetation observed in Wetland 4 is perennial in nature and classified by Cowardin et al. as an emergent species. The dominant wetland vegetative species for Wetland 4 is narrowleaf cattail (Typha angustifolia).

Hydrology for Wetland 4 is provided primarily by runoff from parking lots and culverts at its east and west ends and from I-70B. Much of the area surrounding the wetland is commercial landscaping and turfgrass that is irrigated throughout the growing season. Frequent recharge from these activities creates standing water in the wetland and there is no apparent outlet associated with Wetland 4.

No soil sample was collected for this site due to a restrictive surface layer. Soils are assumed to be hydric based on the dominance of obligate vegetation with a distinct, sharp boundary. Wetland 4 is classified by its map unit name as Green River clay loam.



Wetland 5

Wetland 5 is a 0.007 acre emergent wetland dominated by reed canarygrass, with curly dock, showy milkweed, and Chinese elm also present. Wetland 5 is located along the banks of the Ligrani Drain as it flows between pipes under I-70B westbound and eastbound. Due to its location in the landscape, being surrounded with steep, dry banks, the zone of influence from this drain is very limited. There are a couple of small terraces at or slightly above the water level, otherwise it is much too dry to support wetland vegetation or create hydric soil

Vegetation observed in Wetland 5 is perennial in nature and classified by Cowardin et al. as emergent species. The dominant wetland vegetative species for Wetland 5 is reed canarygrass (*Phalaroides arundinacea*), with curly dock (*Rumex crispus*), showy milkweed (*Asclepias speciosa*), and Chinese elm (*Ulmus pumila*) saplings throughout. A small patch of plumeless thistle (*Carduus nutans*) is located on the outer wetland fringe.

Hydrology for Wetland 5 is provided primarily from drainage. The wetland had water flow in the ditch at the time of survey. Wetland 5 drains to a cross culvert under I-70B and eventually empties into the Colorado River.

Soils are very dark grayish brown (10YR 3/2), a sandy clay loam with low chroma. Soils in this wetland are borderline and appear to be in transition. Wetland 5 is classified by its map unit name as Sagers-urban land complex.

Wetland 6

Wetland 6 is a 0.010 acre emergent wetland dominated by common reed, with inland saltgrass also present. Wetland 6 is also located along the banks of the Ligrani Drain. It is located along the north side of the Highway 6 frontage road and westbound I-70B, at the toe of slope.

Vegetation observed in Wetland 6 is perennial in nature and classified by Cowardin et al. as emergent species. The dominant wetland vegetative species for Wetland 6 is common reed (*Phragmites australis*), with small coverage provided by inland saltgrass (*Distichlis spicata*). Kochia and field bindweed occur as the soil becomes drier further up the slope.



Hydrology for Wetland 6 is provided by overflow from Wetland 5. Wetland 6 drains to the Colorado River, and in instances of intense precipitation, to the CDOW pond north of I-70B. Water was flowing in the ditch at the time of survey.

Soils were a dark brown (10YR 3/3) sandy loam from 0-6 inches displaying a low chroma, but absence of mottles. At 6-12 inches a value of 25 N with a sulfuric odor was observed: no mottles present in the sandy loam soil. Wetland 6 is classified by its map unit name as Sagers-urban land complex.

Wetland 7

Wetland 7 is a 0.001 acre emergent wetland dominated by cattail species with a very distinct boundary. The wetland is located at a stormwater culvert outlet in a landscaped island west of the 1st and Grand/I-70B intersection in the NW quadrant.

There is only one type of vegetation observed in Wetland 7, a cattail species (*Typha spp.*) that defines the wetland and has a very distinct boundary.

Hydrology for Wetland 7 is provided by roadway runoff and saturation was observed at the time of survey.

No soil samples were collected at Wetland 7 due to restrictive ground layer. Soils are assumed hydric based on the dominance of wetland obligate vegetation and a very distinct wetland boundary. Wetland 7 is classified by its map unit name as Sagers-urban land complex.

Wetland Functions and Values

The functions of the wetlands in the study area are extremely limited due to their size and location within the landscape. Existing functions include sediment/toxin retention, nutrient removal/transformation, bank stabilization, and storage for surface water flows. The wetlands have no aquatic habitat function, little wildlife habitat, and offer no educational or recreational possibilities.



Wetland Jurisdiction

All wetlands (except #4) are jurisdictional. The USACE has concurred with this determination in a letter dated February 8, 2008 – File Number SPK-2007-01602 (contained in Appendix C of the I-70B West EA). Total acreage of wetlands within the study area is 0.096 acre. **Table 1** lists wetlands present with their size, type, and predicted jurisdictional determination.

PROJECT IMPACTS

Wetland impacts are anticipated to total 0.013 acres to Wetlands 3 and 4 associated with the drainage ditch adjacent to I-70B. These wetlands are in an area planned for widening of I-70B and the addition of a sidewalk. Due to design constraints, these impacts cannot be avoided.

Impacts to Wetland 6 would be avoided by locating the ramp and sidewalk fill slope outside of the wetland boundary.

MITIGATION MEASURES

Mitigation for Temporary Impacts

All appropriate best management practices (BMP) to prevent temporary impacts to wetlands will be followed during construction. These BMPs could include:

- Wetland areas not permanently impacted by the project will be protected from construction activities by temporary and/or construction limit fencing.
- Sediment control measures will be installed where needed to prevent sediment from filling wetlands.
- Fertilizers or hydro-mulching will not be allowed within 50 feet of wetland.
- All disturbed areas will be revegetated with native grass and forb species. Seed, mulch, and mulch tackifier will be applied in phases throughout construction.



- Where permanent seeding operations are not feasible because of seasonal constraints (e.g., summer and winter months), disturbed areas will have mulch and mulch tackifier applied to prevent erosion.
- Erosion bales, erosion logs, silt fence, or other sediment control device will be used as sediment barriers and filters adjacent to wetlands, surface waterways, and at inlets where appropriate.
- Where appropriate, slope drains will be used to convey concentrated runoff from top to bottom of the disturbed slopes. Slope and cross-drain outlets will be constructed to trap sediment.
- Storm drain inlet protection will be used where appropriate to trap sediment before it enters the cross-drain.
- Check dams will be used where appropriate to slow the velocity of water through roadside ditches and in swales.

With proper Best Management Practices (BMP) for storm water runoff and construction disturbances, minimal sediment should ever reach any wetland area. The toes of new construction will be stabilized with silt fence or erosion logs.

Mitigation for Permanent Impacts

Section 404 permitting requirements will be discussed with the USACE. Since total permanent impacts are estimated to be 0.013 acres (0.010 acres of impacts to a jurisdictional wetland and 0.003 acres of impacts to a non-jurisdictional wetland) this project may meet the conditions of nationwide permit (NWP) #14 for linear transportation projects (awaiting USACE verification).

Three potential on-site mitigation opportunities exist within the study area including: widening and reconfiguration of the drainage ditch associated with Wetland 1, establishing shrub species at a CDOW maintained pond, and potential extension of wetlands associated with the Ligrani Drain (see **Appendix B – I-70 B Wetland Mitigation Site Options** for further details about potential mitigation sites and contingency plans). Reconfiguration of Wetland 1 may be the preferred alternative as it would be a better functional in-kind replacement for impacts to Wetlands 3 and 4. The potential for mitigation at these sites would require cooperation from either CDOW or the controlling authority of the Ligrani Drain. It may also



be necessary to establish any potential impacts to established water rights associated with these drainages.

Mitigation will be determined during final design process and the Section 404 permitting process. Dimensions of mitigation sites and placement of wetland material will be subject to a final survey in coordination with project engineers, USACE, and other stakeholders.

Indirect Impacts

It is anticipated that any indirect impacts to wetlands associated with project construction will occur from increased sediment release during construction of the project and from increased runoff potential before project completion. To minimize the amount of sediment released into the drainage ditches, the Ligrani Drain, and the CDOW pond, mitigation efforts as discussed in *Mitigation for Temporary Impacts* above, will be employed prior to, during, and after construction.

MONITORING

If a mitigation area is constructed instead of purchase of mitigation credits at a wetland bank, success of the mitigation plan will be monitored by a qualified contractor after each growing season following construction. Annual monitoring reports regarding the implementation and success of the mitigation plan will be submitted to the USACE by no later that December 31 complete with photo documentation. The monitoring report will continue until 0.013 acres of replacement wetlands have been created. The reports will contain all of the information as noted in the USACE permit including identifying any concerns associated with the site and make appropriate recommendations.

Seven wetlands totaling 0.096 acre were delineated during the summer of 2006 for the I-70B West EA study area. Six of the seven wetlands are under the jurisdiction of the USACE under Section 404 of the Clean Water Act. The Regulatory Branch of the Sacramento District of the Corps of Engineers has approved this determination in a letter dated February 8, 2008 – File Number SPK-2007-01602 (see Appendix C of the I70B West EA).



CLOSING STATEMENT

Based on the above considerations, it is determined that there are no practicable alternatives to the proposed new construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.





References

Ballagh, John. Grand Junction Drainage District. Telephone interview. 17 April 2007.

Carter & Burgess, Inc. 2007. Draft I-70 B West Environmental Assessment. Grand Junction, CO.

Colorado Headwaters-Plateau Watershed. Surf Your Watershed. Environmental Protection Agency. <u>http://cfpub.epa.gov/surf/huc.cfm?huc_code=14010005</u>.Updated June 11, 2007. Accessed June 6, 2007.

Corps of Engineers. 1987. Wetlands Delineation Manual. Wetlands Research Program Technical Report Y-87-1. U.S. Army Corps of Engineers Waterways Experiment Station.

Corps of Engineers. 2001. Minimum Standards for Acceptance of Preliminary Wetland Delineations. Letter by Art Champ November 30, 2001. Department of the Army, U.S. Army Engineer District, Sacramento Corps of Engineers. Sacramento, California.

Corps of Engineers. 2006. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. Wetlands Regulatory Assistance Program ERDC/EL TR-06-16. U.S. Army Engineer Research and Development Center. Vicksburg, MS.

Cowardin, L.M. et al. 1979. Classification of Wetlands and Deepwater Habitats of the United States. United States Fish and Wildlife Service. Biological Services Program; FWS/OBS-79/31.

Grand Junction, CO. MapStats. FedStats. Website updated October 24, 2006. Accessed June 6, 2007. http://www.fedstats.gov/qf/states/08/0831660.html

Macbeth Division of Kollmorgen Instruments Corporation. Munsell Soil Color Charts. 1994. New Windsor, NY.

Reed, Porter B., Jr. 1988. National list of plant species that occur in wetlands: Intermountain (Region 8). Biological Report 88(26.10).



Washington D.C.: U.S. Department of the Interior, Fish and Wildlife Service. In cooperation with : National and Regional Interagency Review Panels. 135p.

U.S. Court of Appeals. 9th Circuit. Headwaters, Inc. vs. Talent Irrigation District. No. 99-35373. D.C. No. CV-98-06004-ALA. Accessed from FindLaw.com June 14, 2007. < http://laws.lp.findlaw.com/getcase/9th/case/9935373&exact=1>

U.S. Department of Agriculture, Natural Resource Conservation Service. 1998. Field Indicators of Hydric Soils in the United States, Version 4.0. G.W. Hurt, Whited, P.M., and Pringle, R.F. (eds.). USDA, NRCS, Ft. Worth, TX.

Weber, W.A. and Whittmann, R.C. 1996. Colorado Flora: Western Slope. University Press of Colorado. Niwot, Colorado.

Web Soil Survey. National Resources Conservation Service, U.S. Department of Agriculture. Updated May 14, 2007. Accessed June 6, 2007. <u>http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx</u>

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Wetland Delineation Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: <u>I-70 B</u>		City/Coun	ty:	A Sampling Date: 8-31-06
pplicant/Owner: COUT REGION 3				State: CO Sampling Point:
vestigator(s): L. BACKUS, B. STONEMAN		Section, 1	ownship, Ra	
				convex, none): Cave AVE Slope (%): Approx
Ibregion (LRR): INTERIDR DESERTS	Lat: 2	9°5'2	Z.1"N	_ Long: 108 36 12.95" W Datum: NAD 8
il Map Unit Name: Spars silty cl.	an loan	1. S. 1.		NWI classification:/A
e climatic / hydrologic conditions on the site typica		1. V. I. M. V.	1	(If no, explain in Remarks.)
e Vegetation, Soil, or Hydrology _	and the second second	S 103 C 7		"Normal Circumstances" present? Yes / No
e Vegetation, Soil, or Hydrology _				eeded, explain any answers in Remarks.)
			a sugar strange	locations, transects, important features, etc.
	1		ng point i	interes, etc.
Hydrophytic Vegetation Present? Yes 🗸	No	1.	the Sample	
Vetland Hydrology Present? Yes	No	wit	hin a Wetla	nd? Yes No
Remarks:		- Law		
EGETATION	Absolute	Densines	A 10 08 + +	
ree Stratum (Use scientific names.)			t Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species
				That Are OBL, FACW, or FAC: (A)
	<u> </u>			Total Number of Dominant
<u></u>		- Aller		Species Across All Strata: (B)
· · · · · · · · · · · · · · · · · · ·	<u></u>			Percent of Dominant Species
Sapling/Shrub Stratum	I Cover:	(al de la		That Are OBL, FACW, or FAC: _100% (A/B)
·				Prevalence Index worksheet:
		1	114-1	Total % Cover of: Multiply by:
	191 1 - 1			OBL species <u>90</u> x 1 = <u>90</u>
		in the second		FACW species $\underline{4}$ x 2 = $\underline{8}$
		<u> 26</u>	<u>12.65 (</u>	FAC species x 3 =
erb Stratum	Cover:			FACU species x 4 =
Frong Son.	80	VES	OBL	UPL species x 5 =
Eleocharis palvatris		Ves	nBL	Column Totals: <u>99</u> (A) <u>98</u> (B)
Resigna maculata	2	No	FAW	Prevalence Index = $B/A = 1.04$
Schoenoplectus brustris	2	No	OBL	Hydrophytic Vegetation Indicators:
Echinochba crusigalli	2	No	FArw	Dominance Test is >50%
Carex Sep.	2	No		Prevalence Index is ≤3.01
Ranunculus spp.	2	No		Morphological Adaptations ¹ (Provide supporting
				data in Remarks or on a separate sheet)
oody Vine Stratum	Cover: <u>98</u>			Problematic Hydrophytic Vegetation ¹ (Explain)
and the second second second	Seren in			¹ Indicators of hydric soil and wetland hydrology must
		i.		be present.
Total	Cover: 98			Hydrophytic
2	Cover of Biotic Cr	uet		Vegetation
emarks:	Sover of blotte Cl		(1917 -19	Present? Yes V No
emana.				맛?? 그 그 그 관광 정말 가 많을 수 있
				사가에요. 그 성장이 가지 않는 것을 못해 하고 있는 것을 해야 하는 것을 수셨다.
				방법방법 같이 좀 다는 사람과 영화할 것이 다 나무것이

Frome Des	cription: (Describe	to the dep	th needed to docu	iment the	indicator	or confirr	n the absence	of indicators.)
Depth	Matrix			ox Feature				
(inches)	Color (moist)		Color (moist)	%	Type'	Loc	Texture	Remarks
7-2	10 YR 3/1		None			M	Chy	
2-12+	10 YR 5/3	85	10VR6/1	15		M	Chy	
	- /			_				
		• }				<u></u>		
Tupe: C=(Concentration, D=Dep		-Reduced Matrix	² L ocation			RC=Root Chan	
	Indicators: (Applic					e Lining, i		for Problematic Hydric Soils ³ :
Histoso	Carl State of the second	1.00	Sandy Red					Auck (A9) (LRR C)
	pipedon (A2)		Stripped N				Contraction Contraction Contraction	Auck (A10) (LRR B)
the second second	listic (A3)		Loamy Mu	the state of the	al (F1)		and the second sec	ed Vertic (F18)
	en Sulfide (A4)		Loamy Gle	a second second			A LONG THE DESIGNATION OF	arent Material (TF2)
	d Layers (A5) (LRR	C)	Depleted M			1.1	V Other	(Explain in Remarks)
Deplete	luck (A9) (LRR D) ed Below Dark Surfac	e (A11)	Redox Dar Depleted D	Dark Surfa	ce (F7)			
	Park Surface (A12)		Redox Dep		(F8)		3	of here here here and a standard and
	Mucky Mineral (S1)		Vernal Poo	93 (F9)				of hydrophytic vegetation and hydrology must be present.
the second se	Gleyed Matrix (S4) Layer (if present):	5	at the stand				wenand	nydiology must be present.
	Layer (ii present).						1.1.1.1	/
Type:							A march Sta	
							Hudrie Coll	Present? Var I No
Remarks:	ordenline colors	s, develoj	oing soils				Hydric Soil	Present? Yes <u>/</u> No
Remarks: Be	orderline colors	; develoj	oing soils				Hydric Soil	Present? Yes <u>/</u> No
Remarks: Be	orderline colors		oing soils					Present? Yes No
Remarks: Bo YDROLC Wetland Hy	orderline colors DGY						Secon	
Remarks: Be YDROLC Wetland Hy Primary Ind	orderline colors DGY rdrology Indicators: icators (any one indic			t (B11)			V	idary Indicators (2 or more required)
Remarks: Be YDROLC Wetland Hy Primary Ind Surface	orderline colors DGY Idrology Indicators:		cient)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				ndary Indicators (2 or more required) /ater Marks (B1) (Riverine)
Primary Ind Surface High W	OGY vdrology Indicators: icators (any one indic water (A1) ater Table (A2)		cient) Salt Crus Biotic Cru	ist (B12)			<u>Secor</u> W S D	idary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine)
Remarks: Ban YDROLC Wetland Hy Primary Ind Surface High W Saturat	orderline colors DGY Indrology Indicators: icators (any one indic Water (A1)	ator is suffi	cient) Salt Crus Biotic Cru Aquatic Ir	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1000000000000000		<u>Secor</u> W S D D	idary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
Remarks: B YDROLC Wetland Hy Primary Ind Surface High W Saturat Water I	OGY vdrology Indicators: icators (any one indic water (A1) ater Table (A2) ion (A3)	eator is suffi	cient) Salt Crus Biotic Cru Aquatic Ir Hydrogen	ist (B12) ivertebrate Sulfide O	1000000000000000	Living Rox	<u>Secor</u> W S D D D	idary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10)
Remarks: B YDROLC Wetland Hy Primary Ind Surface High W Saturat Water I Sedime	OGY vdrology Indicators: icators (any one indic water (A1) iater Table (A2) ion (A3) Warks (B1) (Nonriver int Deposits (B2) (No	ine) nriverine)	cient) Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized	ist (B12) nvertebrate Sulfide O Rhizosphe	đor (C1)	CON 10 TO 1 1 1	<u>Secor</u> W S D D D D D D D	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2)
Remarks: B Wetland Hy Primary Ind Surface High W Saturat Water I Sedime Drift De	OGY vdrology Indicators: icators (any one indic water (A1) iater Table (A2) ion (A3) Marks (B1) (Nonriver ent Deposits (B2) (No sposits (B3) (Nonrive	ine) nriverine)	cient) Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence	ist (B12) nvertebrate Sulfide O Rhizosphe of Reduce	dor (C1) eres along ed Iron (C4	4)	<u>Secor</u> W S D	Adary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8)
Remarks: Be WDROLC Wetland Hy Primary Ind Surface High W Saturat Water I Sedime Drift De Surface	orderline cobre OGY (drology Indicators: icators (any one indic water (A1) ater Table (A2) ion (A3) Warks (B1) (Nonriver int Deposits (B2) (No iposits (B3) (Nonrive s Soil Cracks (B6)	ator is suffi ine) nriverine) rine)	cient) Salt Crus Biotic Cru Aquatic Ir Hydrogen Voxidized Presence Recent Ir	ist (B12) nvertebrate Sulfide O Rhizosphe of Reduce on Reducti	đor (C1) eres along ed Iron (C4 ion in Plow	4)	Secor W S D D D D D D D D D D D D D S 	adary Indicators (2 or more required) Jater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C8
Remarks: B Wetland Hy Primary Ind Surface High W Saturat Water I Sedime Drift De Surface Inundat	OGY vdrology Indicators: icators (any one indic water (A1) iater Table (A2) ion (A3) Marks (B1) (Nonriver int Deposits (B2) (No ion visible on Aerial ion Visible on Aerial	ator is suffi ine) nriverine) rine)	cient) Salt Crus Biotic Cru Aquatic Ir Hydrogen Voxidized Presence Recent Ir	ist (B12) nvertebrate Sulfide O Rhizosphe of Reduce on Reducti	đor (C1) eres along ed Iron (C4 ion in Plow	4)	<u>Secor</u> 	Adary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8)
Remarks: Band Wetland Hy Primary Ind Surface High W Saturat Water I Sedime Drift De Surface Inundat	orderline colors orderline colors icators (any one indic water (A1) iater Table (A2) ion (A3) Marks (B1) (Nonriver int Deposits (B2) (No ion visible on Aerial Stained Leaves (B9)	ator is suffi ine) nriverine) rine)	cient) Salt Crus Biotic Cru Aquatic Ir Hydrogen Voxidized Presence Recent Ir	ist (B12) nvertebrate Sulfide O Rhizosphe of Reduce on Reducti	đor (C1) eres along ed Iron (C4 ion in Plow	4)	<u>Secor</u> 	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (CS hallow Aquitard (D3)
Remarks: B WDROLC Wetland Hy Primary Ind Surface High W Saturat Water I Sedime Drift De Surface Inundat Field Obse	orderline colors orderline colors icators (any one indic water (A1) iater Table (A2) ion (A3) Marks (B1) (Nonriver int Deposits (B2) (No ion visible on Aerial Stained Leaves (B9) rvations:	ine) nriverine) rine) lmagery (B7	cient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir ')Other (Ex	ist (B12) avertebrate a Sulfide O Rhizosphe of Reduct on Reducti plain in Re	gor (C1) eres along ed Iron (C4 ion in Plow emarks)	4)	<u>Secor</u> 	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (CS hallow Aquitard (D3)
Remarks: B YDROLC Wetland Hy Primary Ind Surface High W Saturat Water I Sedime Drift De Surface Water-S Field Obse Surface Wa	orderline colors orderline colors icators (any one indic water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonriver estation (B3) (Norriver estation (B3) (Norriver est	ine) nriverine) rine) limagery (B7	cient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex No Depth (ir	ist (B12) nvertebrate a Sulfide O Rhizosphe of Reduce on Reducti plain in Re-	gor (C1) eres along ed Iron (C4 ion in Plow emarks)	4)	<u>Secor</u> 	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (CS hallow Aquitard (D3)
Remarks: B B Primary Ind Primary Ind Surface High W Saturat Water I Surface Unift De Surface Surface Water Table	OGY vdrology Indicators: icators (any one indicators) icators (any one indicators) icators (any one indicators) water (A1) ater Table (A2) ion (A3) Warks (B1) (Nonriver ent Deposits (B2) (No posits (B3) (Nonriver e Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) rvations: ter Present? Y	rine) nriverine) rine) lmagery (B7 /res 1 /res 1	cient) Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Other (Ex No Depth (ir No Depth (ir	ist (B12) nvertebrate a Sulfide O Rhizosphe of Reduce on Reduct plain in Re- nches):	gor (C1) eres along ed Iron (C4 ion in Plow emarks)	l) /ed Soils (Secor W S D D D D D D D D C (C3) T C (C6) S F	ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrainage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (CS hallow Aquitard (D3) AC-Neutral Test (D5)
Remarks: Be YDROLC Wetland Hy Primary Ind Surface High W Saturat Water I Sedime Drift De Surface Inundat Water-3 Field Obse Surface Wa Water Table Saturation F includes ca	OGY vdrology Indicators: icators (any one indicators) icators (any one indicators) icators (any one indicators) water (A1) ater Table (A2) ion (A3) Warks (B1) (Nonriver ent Deposits (B2) (No posits (B3) (Nonriver e Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) rvations: ter Present? Y	ine) nriverine) rine) limagery (B7 res 1 res 1 res 1	cient) Salt Crus Biotic Cru Aquatic Ir Hydrogen Hydrogen Presence Recent Ir Other (Ex No Depth (ir No Depth (ir No Depth (ir	st (B12) nvertebrate a Sulfide O Rhizosphe of Reduct on Reduct plain in Re 	ģor (C1) eres along ed Iron (C4 ion in Plow emarks)	l) red Soils (WetI		ndary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (CS hallow Aquitard (D3)
Remarks: Be YDROLC Wetland Hy Primary Ind Surface High W Saturat Water I Sedime Drift De Surface Inundat Water-S Field Obse Surface Wa Nater Table Saturation F includes ca Describe Re	OGY variable (A2) ion (A3) variable (A2) ion (Visible on Aeriable Stained Leaves (B9) variable (A2) variable (A2) ion Visible on Aeriable Stained Leaves (B9) variable (A2) variable (A2) ion Visible on Aeriable Stained Leaves (B9) variable (A2) variable (A2) va	rine) nriverine) rine) Imagery (B7 res 1 res 1 res 1	cient) Salt Crus Biotic Cru Aquatic Ir Youther Aquatic Ir Oxidized Presence Recent Ir Other (Ex No Depth (ir No Depth (ir No Depth (ir No Depth (ir No Depth (ir No Depth (ir No Depth (ir	st (B12) nvertebrate a Sulfide O Rhizosphe of Reduct on Reduct plain in Re 	ĝor (C1) eres along ed Iron (C4 ion in Plow emarks) 2 revious ins	i) red Soils (Wetl pections),		Adary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (CS hallow Aquitard (D3) AC-Neutral Test (D5)
Remarks: Be YDROLC Wetland Hy Primary Ind Surface High W Saturat Water I Sedime Drift De Surface Inundat Water-S Field Obse Surface Wa Water Table Saturation F includes ca Describe Re	OGY variable of the second se	rine) nriverine) rine) Imagery (B7 res 1 res 1 res 1	cient) Salt Crus Biotic Cru Aquatic Ir Youther Aquatic Ir Oxidized Presence Recent Ir Other (Ex No Depth (ir No Depth (ir No Depth (ir No Depth (ir No Depth (ir No Depth (ir No Depth (ir	st (B12) nvertebrate a Sulfide O Rhizosphe of Reduct on Reduct plain in Re 	ĝor (C1) eres along ed Iron (C4 ion in Plow emarks) 2 revious ins	i) red Soils (Wetl pections),		Adary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (CS hallow Aquitard (D3) AC-Neutral Test (D5)
Primary Ind Primary Ind Primary Ind Primary Ind Surface High W Saturat Water I Surface Drift De Surface Inundat Water-3 Vater-3 Vater Table Surface Wa Vater Table Saturation F Includes ca Describe Re	OGY variable of the second se	rine) nriverine) rine) Imagery (B7 res 1 res 1 res 1	cient) Salt Crus Biotic Cru Aquatic Ir Youther Aquatic Ir Oxidized Presence Recent Ir Other (Ex No Depth (ir No Depth (ir No Depth (ir No Depth (ir No Depth (ir No Depth (ir No Depth (ir	st (B12) nvertebrate a Sulfide O Rhizosphe of Reduct on Reduct plain in Re 	ĝor (C1) eres along ed Iron (C4 ion in Plow emarks) 2 revious ins	i) red Soils (Wetl pections),		Adary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C hallow Aquitard (D3) AC-Neutral Test (D5)

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 1-70 B			City/Cour	nty: ///25	A	Sampling Date: C	1-1-06
Applicant/Owner: CDOT Region 3	<u></u>				State:	Sampling Point:	2
nvestigator(s): 1. BACKLS; B. STO	NEMAN		Section,	Township, Ra	ange: 009 15	JW .	
andform (hillslope, terrace, etc.):							
Subregion (LRR): TWTERTOR DE	SERTS	_ Lat: <u>3</u>	9°5'	8.1" N	_ Long: 168°35 41	.34" W Datum	NAD
Soil Map Unit Name: <u>Sagers Sil</u>					NWI classifie	Control Manual Second Prove Second	
we climatic / hydrologic conditions on the si	te typical for this	time of ye	ar? Yes_				1000
Are Vegetation, Soil, or Hydr					"Normal Circumstances"		No
Are Vegetation, Soil, or Hydr					eeded, explain any answe		
SUMMARY OF FINDINGS - Attac							tures, etc
Hydrophytic Vegetation Present?	res No			the Comple	1.0		
	res No		1.1.2.2.2.2.2.2	the Sample thin a Wetla		No	
Wetland Hydrology Present? Y Remarks:	res No	·				NO	
/EGETATION							367/10-1-1-
	No.	Absolute	Dominar	nt Indicator	Dominance Test work	sheet:	and the second second
Tree Stratum (Use scientific names.)		% Cover		? Status	Number of Dominant S	경험성 이 가지 않는 것 같아.	
1			1000	- <u></u>	That Are OBL, FACW,		(A)
2					Total Number of Domin	ant 7	
3		Statistics of the second	State of the		Species Across All Stra	ta:	(B)
Sapling/Shrub Stratum	Total Cover:	<u> </u>		2019.0	Percent of Dominant Sp That Are OBL, FACW,		<u>%</u> (А/В)
1			<u>, i i i i i</u>		Prevalence Index wor	ksheet:	
2	a farmer of the second second	82.5			Total % Cover of:		
3					and the second	x 1 = <u></u>	Sec. 10.
4 5			1.2. C.4	-	FACW species		
	Total Cover:				FACU species		and the second sec
Herb Stratum	Total Doron.	<u></u>			A sale of the second seco	x 5 =	
1. Typha angushtolia		15	NO	OBL	Column Totals: 99	(A) 99	(B)
2. Echinochtoa crus-galli		84	YES	084		I	
						= B/A =	
	and the second second	12: 200		-	Hydrophytic Vegetation		
			1000	-	Prevalence Index is		
7	· · · · · · · · · · · · · · · · · · ·			-	Morphological Adar	otations ¹ (Provide su	Ipporting
3.		1.1.1.1			data in Remarks	or on a separate sh	neet)
	Total Cover:	99	i sin i	- Aleranda	Problematic Hydrop	hytic Vegetation ¹ (E	Explain)
Noody Vine Stratum					1		
	and second as the		Terrer E		¹ Indicators of hydric soil be present.	and wetland hydrole	ogy must
2		na	<u> in an an</u>	- 			
	Total Cover:	and the second			Hydrophytic Vegetation	1	
% Bare Ground in Herb Stratum/	% Cover o	f Biotic Cru	ust		Present? Yes	No	1001
Remarks:							

US Army Corps of Engineers

			oth needed to docu			or confirm	n the absence	of indicators.)
Depth (inches)	Color (mois		Color (moist)	ox Feature %		Loc ²	Texture	Remarks
0-2	NIA	<u> </u>	NIA		· <u> </u>			Poot Mass
1-5	10YR 4/2	80	10 VR 4/1	20			Sulich	
2-5	<u>109K 7/2</u>		VYK 4/1				Sandy Chy	
5*	/A		//A		·			GRAVEL
					<u> </u>			
			Reduced Matrix.			e Lining, R		nel, M=Matrix.
		plicable to all	LRRs, unless othe		(ed.)			for Problematic Hydric Soils ³ :
Histosol	N		Sandy Red	COLUMN				Muck (A9) (LRR C)
	pipedon (A2) istic (A3)		Stripped N Loamy Mu	the second second	al (E1)		the state and the set	Muck (A10) (LRR B) ced Vertic (F18)
	en Sulfide (A4)		Loamy Gle				3	arent Material (TF2)
	d Layers (A5) (L	RR C)	Depleted M	A. C. S. C. S. S. S. S.				(Explain in Remarks)
the second se	uck (A9) (LRR D		Redox Dar	a contract sector	(F6)		0.00	
	d Below Dark Su		Depleted D					
the second se	ark Surface (A12		Redox Dep		F8)		3 mallantara	of hudronkidin up retailen and
	Mucky Mineral (S Gleyed Matrix (S4	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Vernal Poo	98 (19)				of hydrophytic vegetation and hydrology must be present.
and the second se	Layer (if presen	and the second se			A realized and a first			
		·/·					a such a such	
Type: (OKAVEL						1	
Type: <u>(</u> Depth (ind Remarks: <u>)</u>	C 11	Soils					Hydric Soil	Present? Yes <u>/</u> No
Depth (ind Remarks: j	ches): <u>5"</u> Developing	Soils					Hydric Soil	Present? Yes <u>No</u> No
Depth (ind Remarks: Ĵ	ches): <u>5"</u> Developing							Present? Yes No
Depth (ind Remarks:)) (YDROLO Wetland Hyd	ches): <u>5"</u> Developing GY	Drs:	icient)				Seco	
Depth (ind Remarks:)))))))))))))))))))	ches): <u>5"</u> Developing GY drology Indicate	Drs:	icient)	t (B11)			<u>Seco</u>	ndary Indicators (2 or more required)
Depth (ind Remarks:	ches): <u>5"</u> Developing GY drology Indicati	Drs:					<u>Seco</u>	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine)
Depth (ind Remarks:	Ches): <u>5"</u> Developing GY drology Indicati cators (any one i Water (A1) ater Table (A2)	Drs:	Salt Crus Biotic Cru				<u>Seco</u> V S 	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Depth (ind Remarks:	Ches): <u>5"</u> Developing GY drology Indicati cators (any one i Water (A1) ater Table (A2)	ors: Indicator is suffi	Salt Crus Biotic Cru Aquatic Ir	ist (B12)			<u>Seco</u> V S C	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Vrift Deposits (B3) (Riverine)
Depth (ind Remarks:	Ches): <u>5"</u> Developing GY drology Indicate cators (any one i Water (A1) atter Table (A2) on (A3) farks (B1) (Nonrin th Deposits (B2)	ors: ndicator is suffi (verine) (Nonriverine)	Salt Crus Biotic Cru Aquatic Ir Hydrogen	ist (B12) ivertebrate Sulfide O		Living Roo	<u>Seco</u> V S C C C C C C	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)
Depth (ind Remarks:	GY GY GY Water (A1) tter Table (A2) on (A3) farks (B1) (Nonrin th Deposits (B2) posits (B3) (Nonri	ors: ndicator is suffi (verine) (Nonriverine) riverine)	Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence	ist (B12) nvertebrate Sulfide O Rhizosphe of Reduce	dor (C1) res along ed Iron (C4	4)	Seco V S C C C C C C C	ndary Indicators (2 or more required) Vater 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)
Depth (ind Remarks:	Ches): <u>5</u> " Developing GY drology Indicate cators (any one i Water (A1) ater Table (A2) on (A3) larks (B1) (Nonr nt Deposits (B2) posits (B3) (Non Soil Cracks (B6)	ors: ndicator is suffi (verine) (Nonriverine) riverine)	Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent In	ist (B12) nvertebrate Sulfide O Rhizosphe of Reduce on Reduct	dor (C1) res along ed Iron (C4 on in Plow	4)	Seco V S C C C ots (C3)T C C6)S	ndary Indicators (2 or more required) Vater 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 (C9
Depth (ind Remarks:	GY GY GY Water (A1) ter Table (A2) on (A3) farks (B1) (Nonr nt Deposits (B2) posits (B3) (Non Soil Cracks (B6) on Visible on Ae	ors: ndicator is suffi (verine) (Nonriverine) riverine) rial Imagery (B	Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent In	ist (B12) nvertebrate Sulfide O Rhizosphe of Reduce	dor (C1) res along ed Iron (C4 on in Plow	4)	Seco V S C C C ots (C3)T C C6)S	ndary Indicators (2 or more required) Vater 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 (C9 Shallow Aquitard (D3)
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Depth (ind Remarks:	Ches): <u>5</u> " Developing GY drology Indicate cators (any one i Water (A1) ater Table (A2) on (A3) farks (B1) (Noni Soil Cracks (B6) on Visible on Aei tained Leaves (E vations:	ors: indicator is suffi iverine) (Nonriverine) riverine) rial Imagery (Bi 39)	Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir 7) Other (Ex	ist (B12) avertebrate a Sulfide O Rhizosphe of Reduct on Reducti plain in Re	dor (C1) res along ed Iron (C4 on in Plow	4)	Seco V S C C C ots (C3)T C C6)S	ndary Indicators (2 or more required) Vater 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 (C9 Shallow Aquitard (D3)
Depth (ind Remarks:	ches): <u><u>6</u>" Developing GY drology Indicate cators (any one i Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonir ht Deposits (B2) posits (B3) (Noni Soil Cracks (B6) on Visible on Aei tained Leaves (E vations: er Present?</u>	ors: ndicator is suffi (verine) (Nonriverine) riverine) rial Imagery (Bi 39) Yes	Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir 7) Other (Ex No Depth (ir	ist (B12) nvertebrate a Sulfide O Rhizosphe of Reduct on Reducti plain in Re nches):	dor (C1) eres along ad Iron (C4 on in Plow emarks) 2	4)	Seco V S C C C ots (C3)T C C6)S	ndary Indicators (2 or more required) Vater 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 (C9 Shallow Aquitard (D3)
Depth (ind Remarks:	ches): <u><u>6</u>" Developing GY drology Indicate cators (any one i Water (A1) ater Table (A2) on (A3) farks (B1) (Nonri ht Deposits (B2) boosits (B3) (Nonri Soil Cracks (B6) on Visible on Ae tained Leaves (E vations: er Present? Present?</u>	ors: ndicator is suffi (verine) (Nonriverine) riverine) rial Imagery (Bi 39) Yes Yes	 Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent In 7) Other (Ex No Depth (ir No Depth (ir	ist (B12) invertebrate Sulfide O Rhizosphe of Reduce on Reducti plain in Re- inches):	dor (C1) eres along ed Iron (C4 on in Plow emarks) 2 2	!) red Soils ((<u>Seco</u> V S C C C C6)S F	ndary Indicators (2 or more required) Vater 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 (C9 Shallow Aquitard (D3) (AC-Neutral Test (D5)
Depth (ind Remarks:	ches): <u><u>6</u>" Developing GY drology Indicate cators (any one i Water (A1) ater Table (A2) on (A3) Marks (B1) (Nomi to Deposits (B2) oosits (B3) (Nomi Soil Cracks (B6) on Visible on Ae tained Leaves (E vations: er Present? Present?</u>	ors: ndicator is suffi (verine) (Nonriverine) riverine) rial Imagery (Bi 39) Yes Yes	Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir 7) Other (Ex No Depth (ir	ist (B12) invertebrate Sulfide O Rhizosphe of Reduce on Reducti plain in Re- inches):	dor (C1) eres along ed Iron (C4 on in Plow emarks) 2 2	!) red Soils ((<u>Seco</u> V S C C C C6)S F	ndary Indicators (2 or more required) Vater 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 (C9 Shallow Aquitard (D3)
Depth (ind Remarks:	Ches): <u><u>6</u>" Developing GY drology Indicate cators (any one i Water (A1) ster Table (A2) on (A3) larks (B1) (Nonr ht Deposits (B2) posits (B3) (Nonr Soil Cracks (B6) on Visible on Ae tained Leaves (E vations: er Present? Present? present? posilary fringe)</u>	ors: Indicator is suffi (Verine) (Nonriverine) riverine) rial Imagery (B: 39) Yes Yes Yes	 Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent In 7) Other (Ex No Depth (ir No Depth (ir	st (B12) nvertebrate o Sulfide O Rhizosphe of Reduce on Reducti plain in Re- nches):	dor (C1) rres along ad Iron (C4 on in Plow emarks) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	() red Soils ((ndary Indicators (2 or more required) Vater 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 (C9 Shallow Aquitard (D3) (AC-Neutral Test (D5)
Depth (ind Remarks:	Ches): <u><u>6</u>" Developing GY drology Indicate cators (any one i Water (A1) ster Table (A2) on (A3) larks (B1) (Nonr ht Deposits (B2) posits (B3) (Nonr Soil Cracks (B6) on Visible on Ae tained Leaves (E vations: er Present? Present? present? posilary fringe)</u>	ors: Indicator is suffi (Verine) (Nonriverine) riverine) rial Imagery (B: 39) Yes Yes Yes	 Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Other (Ex No Depth (ir No Depth (ir No Depth (ir	st (B12) nvertebrate o Sulfide O Rhizosphe of Reduce on Reducti plain in Re- nches):	dor (C1) rres along ad Iron (C4 on in Plow emarks) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	() red Soils ((ndary Indicators (2 or more required) Vater 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 (C9 Shallow Aquitard (D3) (AC-Neutral Test (D5)
Depth (ind Remarks:	Ches): <u><u>6</u>" Developing GY drology Indicate cators (any one i Water (A1) ster Table (A2) on (A3) larks (B1) (Nonr ht Deposits (B2) posits (B3) (Nonr Soil Cracks (B6) on Visible on Ae tained Leaves (E vations: er Present? Present? present? posilary fringe)</u>	ors: Indicator is suffi (Verine) (Nonriverine) riverine) rial Imagery (B: 39) Yes Yes Yes	 Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Other (Ex No Depth (ir No Depth (ir No Depth (ir	st (B12) nvertebrate o Sulfide O Rhizosphe of Reduce on Reducti plain in Re- nches):	dor (C1) rres along ad Iron (C4 on in Plow emarks) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	() red Soils ((ndary Indicators (2 or more required) Vater 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 (C9 Shallow Aquitard (D3) (AC-Neutral Test (D5)
Depth (ind Remarks:	Ches): <u><u>6</u>" Developing GY drology Indicate cators (any one i Water (A1) ster Table (A2) on (A3) larks (B1) (Nonr ht Deposits (B2) posits (B3) (Nonr Soil Cracks (B6) on Visible on Ae tained Leaves (E vations: er Present? Present? present? posilary fringe)</u>	ors: Indicator is suffi (Verine) (Nonriverine) riverine) rial Imagery (B: 39) Yes Yes Yes	 Salt Crus Biotic Cru Aquatic Ir Hydrogen Oxidized Presence Recent Ir Other (Ex No Depth (ir No Depth (ir No Depth (ir	st (B12) nvertebrate o Sulfide O Rhizosphe of Reduce on Reducti plain in Re- nches):	dor (C1) rres along ad Iron (C4 on in Plow emarks) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	() red Soils ((ndary Indicators (2 or more required) Vater 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 (C9 Shallow Aquitard (D3) (AC-Neutral Test (D5)

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WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: I-70 B	City/County:A		_ Sampling Date:6
Applicant/Owner: CDOT Region 3			Sampling Point: 3
Investigator(s): 1. Backis; B. Stone man	Section, Township, Range:		
Landform (hillslope, terrace, etc.):	Local relief (concave, conve	x, none): <u>Concar</u>	R Stope (%): Approx. 21
Subregion (LRR): Interior Desert Lat:	39°4'55,55" N Lon	g: 108°35'10.	42" W Datum: NAD 83
Soil Map Unit Name: Green River clay los	im	NWI classifi	ication:/\A
Are climatic / hydrologic conditions on the site typical for this time of	f year? Yes No	(If no, explain in I	Remarks.)
Are Vegetation, Soil, or Hydrology significant	ntly disturbed? Are "Norm	al Circumstances"	present? Yes V No
Are Vegetation, Soil, or Hydrology naturally		explain any answ	
SUMMARY OF FINDINGS - Attach site map show	ing sampling point locat	ions. transect	s, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes V Yes V Yes V	_ No _ No _ No	Is the Sampled Area within a Wetland?	Yes /	No
Remarks: Hydrobgy is very f intenals.	faint at tin	ne of serv	ey and appears to only occu	r during sh	Port Seasonal

VEGETATION

Tree Stratum (Use scientific names.)		solute Cover	Dominant Species?		Dominance Test worksheet: Number of Dominant Species
1					That Are OBL, FACW, or FAC: (A)
2					Total Number of Dominant
3				the second second	Species Across All Strata: (B)
4	Total Cover:			Star 12	Percent of Dominant Species
Sapling/Shrub Stratum					That Are OBL, FACW, or FAC: (A/B)
1	the second second				Prevalence Index worksheet:
2					Total % Cover of:Multiply by:
3		-			OBL species x 1 =
4					FACW species x 2 =
5	and the second sec	Second and			FAC species x 3 =
Herb Stratum	Total Cover:				FACU species x 4 =
1. Echinoch ba crvs-galli	8	0	VES	FALLI	UPL species x 5 = Column Totals: $\underline{30}$ (A) $\underline{160}$ (B)
2			1	LINNE.	Column Totals: <u>80</u> (A) <u>160</u> (B)
3					Prevalence Index = B/A = 2.0
4				<u></u>	Hydrophytic Vegetation Indicators:
5	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1937			Dominance Test is >50%
6					Prevalence Index is ≤3.0 ¹
7			in mile	Selfer	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8		1			Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum	Fotal Cover: 🔏	0			
1					¹ Indicators of hydric soil and wetland hydrology must
2					be present.
	Total Cover:				Hydrophytic
% Bare Ground in Herb Stratum _//	% Cover of Bi	iotic Cru	ist	<u> </u>	Vegetation Present? Yes No No
Remarks:					
	a stranger and a stranger				

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	Matrix		Re	dox Features	· · · · · ·		
Depth (inches)	Color (moist)		Color (moist)	%Туре	2 ¹ Loc ²	Texture	Remarks
0-12+	10 YR 4/2	60	5YR 416	40	<u></u>	Sandy Clay	, Loam
Type: C=C	oncentration, D=Deple	etion, RM=R	educed Matrix.	² Location: PL=F	ore Lining, R	C=Root Chann	el, M=Matrix.
	Indicators: (Applica				200220		for Problematic Hydric Soils ³ :
Histoso				edox (S5)		Carl State of the second se	uck (A9) (LRR C)
	pipedon (A2)			Matrix (S6)		the second s	uck (A10) (LRR B)
	istic (A3)			lucky Mineral (F1)		 I set the set of the	d Vertic (F18)
	en Sulfide (A4) d Layers (A5) (LRR C	N	The second second	leyed Matrix (F2) Matrix (F3)			rent Material (TF2) Explain in Remarks)
	uck (A9) (LRR D)	<i>'</i>	T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ark Surface (F6)			
	d Below Dark Surface	(A11)		Dark Surface (F7)			
	ark Surface (A12)			epressions (F8)			
Sandy	Mucky Mineral (S1)		Vernal Pe	ools (F9)		³ Indicators of	of hydrophytic vegetation and
and the second se	Gleyed Matrix (S4)		Same and	all the ingrighter .	all barren	wetland I	hydrology must be present.
Pactrictiva	Layer (if present):						
10 Suite u vo	adjer (n present).						
Type:			_				
Type: Depth (ir	ches):	noted Me	trix value	thraghate	infire Sa	mple ; An	Present? Yes <u>No</u> No
Type: Depth (ir Remarks: * S	il isa Mix of 1	noted 14	- trix value	Hraghate	intire Sa	mple ; An	Present? Yes <u>No</u> No mean to be developing hydric Sou Conditions.
Type: Depth (ir Remarks: * S	nches): Dil isa Mix of I D GY	noted 146	- trix value	thraghate	intire Sa	mple.; Aq	zear to be developing hydric so. Conditions.
Type: Depth (ir Remarks: * S YDROLC	iches):)il is a Mix of I OGY drology Indicators:			Hragha <i>t</i> e	intire Sa	mple-; An Secon	zear to be developing hydric son Conditions. dary Indicators (2 or more required)
Type: Depth (ir Remarks: * S YDROLC Wetland Hy Primary Ind	iches):)il is a Mix of I DGY drology Indicators: cators (any one indica		ent)		intire Sa	mple-; Ap	cent to be developing hydric son Cordifiens. dary Indicators (2 or more required) ater Marks (B1) (Riverine)
Type: Depth (ir Remarks: * S YDROLC Wetland Hy Primary Ind Surface	ches):)il is a Mix of I OGY drology Indicators: cators (any one indica Water (A1)		ent) Salt Cru	ıst (B11)	intire Sa	<u>mple</u> ; Ap	cent to be developing hydric son Cordifiens. dary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
Type: Depth (ir Remarks: * S YDROLC Wetland Hy Primary Ind Surface High W	ches):)il is a Mix of I OGY drology Indicators: cators (any one indica Water (A1) ater Table (A2)		ent) Salt Cru Biotic C	ıst (B11) rust (B12)		<u>second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u>	cent to be developing hydric son Cordifiens. dary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine)
Type: Depth (ir Remarks: * S YDROLO Wetland Hy Primary Ind Surface High W	ches): Dil is a Mix of I DGY drology Indicators: cators (any one indica Water (A1) ater Table (A2) on (A3)	tor is sufficie	ent) Salt Cru Biotic C Aquatic	ıst (B11) rust (B12) Invertebrates (B13)		<u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u>	cent to be developing hydric son Cordifiens. dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10)
Type: Depth (ir Remarks: * S YDROLC Wetland Hy Primary Ind Surface High W Saturat Water N	ches): Dil is a Mix of I OGY drology Indicators: cators (any one indica Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriverin	tor is sufficie 10)	ent) Salt Cru Biotic C Aquatic Hydroge	ıst (B11) rust (B12) Invertebrates (B13) en Sulfide Odor (C1		<u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Se</u>	cent to be developing hydric son Conditions. dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) anage Patterns (B10) y-Season Water Table (C2)
Type: Depth (ir Remarks: * S YDROLC Wetland Hy Primary Ind Surface High W Saturat Saturat Sedime	ches): Dil is a Mix of I OGY drology Indicators: cators (any one indica Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriverin nt Deposits (B2) (Non	tor is sufficie 10) riverine)	ent) Salt Cru Biotic C Aquatic Hydroge Oxidized	ist (B11) rust (B12) Invertebrates (B13) en Sulfide Odor (C1 d Rhizospheres alor) ng Living Roo	<u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second Se	cent to be developing hydric son Conditions. dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7)
Type: Depth (ir Remarks: * S YDROLC Wetland Hy Primary Ind Surface High W Saturat Water N Sedime Drift De	ches): Dil is a Mix of I OGY drology Indicators: cators (any one indica Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriverin nt Deposits (B2) (Non posits (B3) (Nonriveri	tor is sufficie 10) riverine)	ent) Salt Cru Biotic C Aquatic Hydroge Oxidizer Presend	ist (B11) rust (B12) Invertebrates (B13) en Sulfide Odor (C1 d Rhizospheres alor se of Reduced Iron () ng Living Roo C4)	<u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second <u>Second</u> Second Second <u>Second</u> Second Secon	cent to be developing hydric son Conditions. dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) anage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8)
Type: Depth (ir Remarks: * S Wetland Hy Primary Ind Surface High W Saturat Water N Sedime Drift De Surface	ches): Dil is a Mix of I OGY drology Indicators: cators (any one indica Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriverin nt Deposits (B2) (Non posits (B3) (Nonriveri Soil Cracks (B6)	tor is sufficie ne) riverine) ne)	ent) Salt Cru Biotic C Aquatic Hydroge Oxidizer Presenc Recent	ist (B11) rust (B12) Invertebrates (B13) en Sulfide Odor (C1 d Rhizospheres alor se of Reduced Iron (Iron Reduction in Pl) ng Living Roo C4)	<u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> Second <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Second</u> <u>Seco</u>	cent to be developing hydric son Conditions. dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) anage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C8)
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WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: <u>I-70 B</u>	_ City/County:	Sampling Date: 8-31-06
Applicant/Owner: CNOT R.3		Sampling Point: 4
Investigator(s): L. BACKUS; B. Storeman		
Landform (hillslope, terrace, etc.): Stormuster Basin		
	39°4'51.07" N Long: 108°35'1.0	
Soil Map Unit Name: Green River clay los		
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 significant	ly disturbed? Are "Normal Circumstances"	present? Yes / No
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showin	g sampling point locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes No	- Is the Sampled Area	
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	within a Wetland? Yes 📈	No
Remarks:		

VEGETATION

Tree Stratum (Use scientific names.)	Absolute	Dominant		Dominance Test worksheet:
1	the state of the second s	Species?	2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Number of Dominant Species That Are OBL, FACW, or FAC: / (A)
2	- 3 . W. M	1		
3	for all the second	1.1.1.1.1.1		Total Number of Dominant Species Across All Strata: / (B)
4			- second a	
	Cover:			Percent of Dominant Species That Are OBL, FACW, or FAC: 100 % (All
1		1		Prevalence Index worksheet:
2	S. S. Same	· · · · · · · · · · · · · · · · · · ·	114	Total % Cover of: Multiply by:
3				OBL species <u>90</u> x 1 = <u>90</u>
4				FACW species x 2 =
5	Children and the	19.6.82	1. S. C.	FAC species x 3 =
Total	Cover:		2.0. 8	FACU species x 4 =
Herb Stratum				UPL species x 5 =
Typha angistitolia	90	YES	<u></u>	Column Totals: <u>90</u> (A) <u>90</u> (B
3	10.000	garden og		Prevalence Index = B/A =/
				Hydrophytic Vegetation Indicators:
		11.19	Sec. C	Dominance Test is >50%
		1	77786784	Prevalence Index is ≤3.0 ¹
k				Morphological Adaptations ¹ (Provide supporting
L			1.1.1.1.1.1	data in Remarks or on a separate sheet)
	Cover: 90			Problematic Hydrophytic Vegetation ¹ (Explain)
la <u>n essentita di</u> based servere da detes				¹ Indicators of hydric soil and wetland hydrology must
2				be present.
	Cover:	······		Hydrophytic
% Bare Ground in Herb Stratum _/// %		ist		Vegetation Present? Yes No
Remarks:				Lange and the second

US Army Corps of Engineers

Profile Description: (Describe to the dep	oth needed to document the indicator or cor	firm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist)%Type ¹ Coc	Texture Remarks
		-
	<u></u>	
Type: C=Concentration, D=Depletion, RM		ig, RC=Root Channel, M=Matrix.
Hydric Soil Indicators: (Applicable to all	LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3)	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)	3 discharge of builden builden weekstigen and
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	³ Indicators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)		wetland hydrology must be present.
Restrictive Layer (if present):		같은 것도 없는 것은 것은 것은 것을 가지 않는 것이다.
Type: Cobble Stone grave	والاحب والمتشاشين والأمر ومعالم	1
Depth (inches): Surface	the second s	Hydric Soil Present? Yes No
Remarks: No soil sample possible du	e to restrictive Surface laye	r. Soils assured hydric based on
	e to restrictive Surface laye muith a distinct, Sharp boundo	r. Soils assured hydric based on V.
YDROLOGY	e to restrictive Surface laye muith a distinct, sharp boundo	r. Soils assured hydric based on V. Secondary Indicators (2 or more require
YDROLOGY Wetland Hydrology Indicators:		
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff	icient)	Secondary Indicators (2 or more require Water Marks (B1) (Riverine)
YDROLOGY Netland Hydrology Indicators: Primary Indicators (any one indicator is suff Surface Water (A1)	icient) Salt Crust (B11)	Secondary Indicators (2 or more require Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
YDROLOGY Netland Hydrology Indicators: Primary Indicators (any one indicator is suff Surface Water (A1) High Water Table (A2)	icient) Salt Crust (B11) Biotic Crust (B12)	Secondary Indicators (2 or more require Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff Surface Water (A1) High Water Table (A2) Saturation (A3)	icient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13)	Secondary Indicators (2 or more require Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	icient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more require Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine)	icient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living	Secondary Indicators (2 or more require) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Roots (C3) Thin Muck Surface (C7)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	icient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)	Secondary Indicators (2 or more require) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6)	icient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Soi	Secondary Indicators (2 or more require) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Ils (C6) Saturation Visible on Aerial Imagery
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff Surface Water (A1) 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 (B	icient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Soi	Secondary Indicators (2 or more require)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff Surface Water (A1) 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 (B Water-Stained Leaves (B9)	icient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Soi	Secondary Indicators (2 or more require) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Ils (C6) Saturation Visible on Aerial Imagery
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff Surface Water (A1) 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 (B Water-Stained Leaves (B9) Field Observations:	icient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Sol 7) Other (Explain in Remarks)	Secondary Indicators (2 or more require)
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YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff ✓ Surface Water (A1) 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 (B Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Nater Table Present? Yes Saturation Present? Yes	icient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Sol 7) Other (Explain in Remarks) No Depth (inches): <u>Pet dug</u>	Secondary Indicators (2 or more require) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) ils (C6) Saturation Visible on Aerial Imagery Shallow Aquitard (D3)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff ✓ Surface Water (A1) 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 (B Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Nater Table Present? Yes Saturation Present? Yes Saturation Present? Yes	icient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Soi Recent Iron Reduction in Plowed Soi Other (Explain in Remarks) No Depth (inches): 2 No Depth (inches): 5 No Depth (inc	Secondary Indicators (2 or more require Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Dry-Season Water Table (C2) Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) ils (C6) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) Yetland Hydrology Present? Yes No
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff ✓ Surface Water (A1) 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 (B Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Nater Table Present? Yes Saturation Present? Yes Saturation Present? Yes	icient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Sol 7) Other (Explain in Remarks) No Depth (inches): <u>Vo PH dug</u>	Secondary Indicators (2 or more require Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Dry-Season Water Table (C2) Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) ils (C6) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) Yetland Hydrology Present? Yes No
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff ✓ Surface Water (A1) _ 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 (B _ Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes _ Nater Table Present? Yes _ Saturation Present? Yes <	icient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Soi Recent Iron Reduction in Plowed Soi Other (Explain in Remarks) No Depth (inches): 2 No Depth (inches): 5 No Depth (inc	Secondary Indicators (2 or more require Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Dry-Season Water Table (C2) Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) ils (C6) Saturation Visible on Aerial Imagery Shallow Aquitard (D3) Yetland Hydrology Present? Yes No
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff ✓ Surface Water (A1) _ 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 (B _ Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes _ Saturation Present? Yes _ Gaturation Present? Yes _ Underschilder Soillary fringe) Describe Recorded Data (stream gauge, model)	icient)	Secondary Indicators (2 or more require
WPDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff ✓ Surface Water (A1)	icient)	Secondary Indicators (2 or more require
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff ✓ Surface Water (A1) _ 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 (B _ Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes _ Saturation Present? Yes _ Gaturation Present? Yes _ Underschilder Soillary fringe) Describe Recorded Data (stream gauge, model)	icient) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Soi Recent Iron Reduction in Plowed Soi Other (Explain in Remarks) No Depth (inches): 2 No Depth (inches): 5 No Depth (inc	Secondary Indicators (2 or more require
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff ✓ Surface Water (A1) _ 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 (B _ Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes _ Saturation Present? Describe Recorded Data (stream gauge, model)	icient)	Secondary Indicators (2 or more require
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is suff ✓ Surface Water (A1)	icient)	Secondary Indicators (2 or more require

Appendix

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: I-70B	City/County:	5A	Sampling Date:	9-1-06
Applicant/Owner: CDOT R.3			Sampling Point:	* ***********************************
Investigator(s): L. Backis; B. Stoneman	Section, Township, F	ange: 010		
Landform (hillslope, terrace, etc.): Ditch	Local relief (concave	, convex, none): <u>Cor</u>	ncave Slop	e (%): 2
Subregion (LRR): Interior Desert	Lat: 3904 43.1" N	Long: 108°34'L	-16.77" W Datum	NAD 8
Soil Map Unit Name: Sagers - Urban land				
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes No	(If no, explain i	n Remarks.)	
Are Vegetation, Soil, or Hydrology sig	inificantly disturbed? Are	"Normal Circumstance	s" present? Yes	No
Are Vegetation, Soil, or Hydrology na		needed, explain any ans		
SUMMARY OF FINDINGS - Attach site map s	howing sampling point	locations, transed	cts, important fea	tures, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks:					

VEGETATION

<u>Tree Stratum</u> (Use scientific names.) 1	Absolute % Cover	Dominant Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3	and the second			Species Across All Strata: (B)
Total Cover: Sapling/Shrub Stratum	<u></u>		Stern 1	Percent of Dominant Species
1. Umus pumila	10	No	NT	Prevalence Index worksheet:
2				Total % Cover of: Multiply by:
3				OBL species 55 x 1 = 55
4				FACW species 25 x 2 = 50
5	1.1.1.1	1000	1000	FAC species x 3 =
Total Cover:	10	1	Robert	FACU species x 4 =
Herb Stratum 1. <u>Phala condes acundina cea</u>		VES	OBI	UPL species x 5 = <u>50</u>
2. Rumex crispus		No	FACW	Column Totals: <u>90</u> (A) <u>155</u> (B)
3. Asclenias speciosa		and the second s	FACW	Prevalence Index = $B/A = 1,72$
4Y	1222	1.1.1.1		Hydrophytic Vegetation Indicators:
5	12. 1994	1.4.4.2	Sec.	∠ Dominance Test is >50%
6				✓ Prevalence Index is ≤3.0 ¹
7			<u> </u>	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8Total Cover:	00		Contraction of the	Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum	-00			
1			<u></u>	¹ Indicators of hydric soil and wetland hydrology must be present.
Total Cover:	90			Hydrophytic
10	of Biotic Cru	ist		Vegetation Present? Yes No
Remarks: Small patch of Carduss spp. locate				

US Army Corps of Engineers

Depth	cription: (Describe Matrix		Re	dox Feature	es					
(inches)	Color (moist)	%	Color (moist)		Type ¹	_Loc ²	Texture		Remarks	
7-12	10YR 3/2		NA			<u> </u>	Sardy Clar	1 Loam		
	in the state of the									
			8 - S - S - S - S - S - S - S - S - S -	10 (A)						
100.00	·				-		·			
			and the second second	1						
and the second		1999 - 1999 -	1. C. H. M. S. S. S.	<u>ie</u> 	-	<u> 1996 - 1996</u>		1 <u>926) (*</u>		
to have		<u>pana a</u>	dadaq kining bili	<u>16 21 48</u>	<u></u>		<u></u>			<u> Andrea</u>
		<u>,</u>			<u> </u>	<u></u>		Carlos Services		
	concentration, D=Dep	the second s				e Lining, f	RC=Root Chan			
1928. 1 Carlo	Indicators: (Applic	able to all L	and the second second		ted.)				matic Hydric S	olls":
Histoso	i (A1) pipedon (A2)			edox (S5) Matrix (S6)			C. MARTING CO., MACH	Muck (A9) (I Muck (A10)		
	listic (A3)			lucky Minera	al (F1)		ALC: ALC: ALC: ALC: ALC: ALC: ALC: ALC:	ed Vertic (F		
	en Sulfide (A4)			leyed Matrix			and the second se	arent Mater		
	d Layers (A5) (LRR	C)	- 2	Matrix (F3)			V Other	(Explain in I	Remarks)	
1 cm M	uck (A9) (LRR D)		and the second sec	ark Surface						
	d Below Dark Surfac	e (A11)		Dark Surfa						
	ark Surface (A12)			epressions ((F8)		3te diastars	of hudron	die voorstellen s	
	Mucky Mineral (S1) Gleyed Matrix (S4)		Vernal P	0015 (1-9)					tic vegetation a must be presen	
	Layer (if present):							, alongy		
Type:	- A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4						1 1 1 1		1	
	iches): Soils are border lin	e and app	ear to be in a	state of	transitio	'n	Hydric Soil	Present?	Yes	No
Remarks: (Soils are border hr	e and app	ear to be in a	state of	transitio	ກ	Hydric Soil	Present?	Yes	No
Remarks:	Soils are border hr		ear to be in a	state of	Hansitio	³ h			Yes	
Remarks: (YDROLC	boils are borderlin DGY			state of	transitio	vi 	Seco	ndary Indica		required)
YDROLC Vetland Hy Primary Indi	boils are border hr DGY drology Indicators:		ent)	state of a	transitio	b)	V	ndary Indica Vater Marks	tors (2 or more	required)
YDROLC Vetland Hy Primary Indi Surface	Soils are border hr OGY drology Indicators: cators (any one indic		ient) Salt Cru		transitio	n 	<u>Seco</u> V S	ndary Indica Vater Marks rediment De	tors (2 or more (B1) (Riverine)	required) (rerine)
YDROLC Vetland Hy Primary Indi	Doils are border hr DGY drology Indicators: cators (any one indic Water (A1) ater Table (A2)		ent) Salt Cru Biotic C Aquatic	ist (B11) rust (B12) Invertebrate	es (B13)	n 	<u>Seco</u> V S S	ndary Indica Vater Marks rediment De rrift Deposits	tors (2 or more (B1) (Riverine) posits (B2) (Riv	required) (rerine)
YDROLC YDROLC Wetland Hy Primary Indi Surface High W- Saturati Water M	OGY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver	ator is suffici	ent) Salt Cru Biotic C Aquatic Hydroge	ist (B11) rust (B12) Invertebrate en Sulfide O	es (B13) dor (C1)			ndary Indica Vater Marks sediment De rrift Deposits rrainage Pal rry-Season N	tors (2 or more (B1) (Riverine) posits (B2) (Riverine tems (B10) Water Table (C2	required) (rerine) ()
Primary Indi Primary Indi Surface High W: Saturati Water M Sedime	OGY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No	ator is suffici ine) nriverine)	ent) Salt Cru Biotic C Aquatic Hydroge Oxidized	ist (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe	es (B13) dor (C1) eres along l	Living Ro	<u>Seco</u> 	ndary Indica Vater Marks Sediment De Irift Deposits Irainage Pal Iry-Season N hin Muck Si	tors (2 or more (B1) (Riverine) posits (B2) (Riverine tems (B10) Water Table (C2) urface (C7)	required) (rerine) ()
Primary Indi Primary Indi Surface High W: Saturati Water M Sedime Drift De	OGY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive	ator is suffici ine) nriverine)	ent) Salt Cru Biotic C Aquatic Hydroge Oxidized Presend	ist (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reduce	es (B13) dor (C1) eres along l ed Iron (C4	Living Roo	<u>Seco</u> V S C C C C C C C C	ndary Indica Vater Marks Sediment De Prift Deposits Irainage Pal Iry-Season 1 hin Muck Se Irayfish Burr	tors (2 or more (B1) (Riverine) posits (B2) (Riverine tems (B10) Water Table (C2) urface (C7) ows (C8)	required) (rerine)) 2)
Primarks: YDROLC Wetland Hy Primary Indi Surface High Wi Saturati Water M Sedime Drift De Surface	boils are border in boils are border in drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6)	ator is suffici ine) nriverine) rine)	ent) Salt Cru Biotic C Aquatic Hydroge Oxidized Presenc Recent	ist (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reduce Iron Reducti	es (B13) dor (C1) eres along l ed Iron (C4 ion in Plow	Living Roo	<u>Seco</u> V S C C C C C C C C C S	ndary Indica Vater Marks Sediment De Prift Deposits Prainage Pal Iry-Season 1 hin Muck Se rrayfish Burr aturation Vi	tors (2 or more (B1) (Riverine) posits (B2) (Riverine tems (B10) Water Table (C2) urface (C7) ows (C8) sible on Aerial I	required) (rerine)) 2)
Primarks: YDROLC Wetland Hy Primary Indi Surface High Wi Saturati Water M Sedime Drift De Surface Inundat	Coils are border in boils are border in drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial	ator is suffici ine) nriverine) rine)	ent) Salt Cru Biotic C Aquatic Hydroge Oxidized Presenc Recent	ist (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reduce Iron Reducti	es (B13) dor (C1) eres along l ed Iron (C4 ion in Plow	Living Roo	Secor V S C C C C C C C C S S	ndary Indica Vater Marks Sediment De Prift Deposits Irainage Pal Iry-Season 1 hin Muck Se rayfish Burr aturation Vi hallow Aqui	tors (2 or more (B1) (Riverine) posits (B2) (Riverine tems (B10) Water Table (C2) urface (C7) ows (C8) sible on Aerial I tard (D3)	required) (rerine)) 2)
Primary Indi VDROLC Wetland Hy Primary Indi Surface High Wi Saturati Water M Sedime Drift De Surface Inundat Water-S	Coils are border in boils are border in drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial stained Leaves (B9)	ator is suffici ine) nriverine) rine)	ent) Salt Cru Biotic C Aquatic Hydroge Oxidized Presenc Recent	ist (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reduce Iron Reducti	es (B13) dor (C1) eres along l ed Iron (C4 ion in Plow	Living Roo	Secor V S C C C C C C C C S S	ndary Indica Vater Marks Sediment De Prift Deposits Prainage Pal Iry-Season 1 hin Muck Se rrayfish Burr aturation Vi	tors (2 or more (B1) (Riverine) posits (B2) (Riverine tems (B10) Water Table (C2) urface (C7) ows (C8) sible on Aerial I tard (D3)	required) (rerine)) 2)
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Primary Indi Primary Indi Surface High Wi Saturati Water M Sedime Drift De Surface Inundat Surface Water-S Field Obser Surface Water	boils are border in bools are border in drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial stained Leaves (B9) vations: ter Present?	ine) nriverine) rine) lmagery (B7) 'es No	ent) Salt Cru Biotic C Aquatic Hydroge Oxidized Presend Recent Other (E	ist (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reduce iron Reducti Explain in Re	es (B13) dor (C1) eres along I ed Iron (C4 ion in Plow emarks)	Living Roo	Secor V S C C C C C C C C S S	ndary Indica Vater Marks Sediment De Prift Deposits Irainage Pal Iry-Season 1 hin Muck Se rayfish Burr aturation Vi hallow Aqui	tors (2 or more (B1) (Riverine) posits (B2) (Riverine tems (B10) Water Table (C2) urface (C7) ows (C8) sible on Aerial I tard (D3)	required) (rerine)) 2)
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YDROLC YDROLC Vetland Hy Primary Indi Surface High Wi Saturati Water M Sedime Drift De Surface Inundat Water-S Field Obser Surface Wal Vater Table Saturation Fincludes ca	Coils are border in boils are border in drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ton Visible on Aerial stained Leaves (B9) vations: ter Present? Present? Yresent? Yresent? Y	ine) nriverine) rine) imagery (B7) ies No ies No ies No	ent) Salt Cru Biotic C Aquatic Hydroge Oxidize. Presend Recent Other (E Depth (Depth (ist (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe er of Reduct inch es): inches): inches):	es (B13) dor (C1) eres along l ed Iron (C4 ion in Plow emarks)	Living Rod) red Solls (<u>Secon</u> V S C C C C C C6)S F and Hydrolog	ndary Indica Vater Marks rediment De prift Deposits rrainage Pal ry-Season N hin Muck Si rayfish Burr aturation Vi hallow Aqui AC-Neutral	tors (2 or more (B1) (Riverine) posits (B2) (Rive terns (B10) Water Table (C2) urface (C7) ows (C8) sible on Aerial I tard (D3) Test (D5)	required) (rerine)) 2)
YDROLC YDROLC Vetland Hy Primary Indi Surface High Wi Saturati Water M Sedime Drift De Surface Inundat Water-S Field Obser Surface Wal Vater Table Saturation Fincludes ca	Coils are border in boils are border in drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial stained Leaves (B9) vations: ter Present? Present? Y	ine) nriverine) rine) imagery (B7) ies No ies No ies No	ent) Salt Cru Biotic C Aquatic Hydroge Oxidize. Presend Recent Other (E Depth (Depth (ist (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe er of Reduct inch es): inches): inches):	es (B13) dor (C1) eres along l ed Iron (C4 ion in Plow emarks)	Living Rod) red Solls (<u>Secon</u> V S C C C C C C6)S F and Hydrolog	ndary Indica Vater Marks rediment De prift Deposits rrainage Pal ry-Season N hin Muck Si rayfish Burr aturation Vi hallow Aqui AC-Neutral	tors (2 or more (B1) (Riverine) posits (B2) (Rive terns (B10) Water Table (C2) urface (C7) ows (C8) sible on Aerial I tard (D3) Test (D5)	required) (rerine)) 2)
Primarks: YDROLC Vetland Hy Primary Indi Surface High Wi Saturati Water M Surface Inundat Water-S Field Obser Surface Water Surface Water Surf	Coils are border in boils are border in drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial stained Leaves (B9) vations: ter Present? Present? Present? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent?	ine) nriverine) rine) Imagery (B7) res No res No res No res No	ent) Salt Cru Biotic C Aquatic Presend Oxidized Presend Recent Other (E o Depth (o Depth (o Depth (itoring well, aeria	ist (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reducti inches): (inches): (inches): al photos, pr	es (B13) dor (C1) eres along l ed Iron (C4 ion in Plow emarks)	Living Rod) red Solls (<u>Secon</u> V S C C C C C C6)S F and Hydrolog	ndary Indica Vater Marks rediment De prift Deposits rrainage Pal ry-Season N hin Muck Si rayfish Burr aturation Vi hallow Aqui AC-Neutral	tors (2 or more (B1) (Riverine) posits (B2) (Rive terns (B10) Water Table (C2) urface (C7) ows (C8) sible on Aerial I tard (D3) Test (D5)	required) (rerine)) 2)
Primarks: YDROLC Vetland Hy Primary Indi Surface High Wi Saturati Water M Surface Inundat Water-S Field Obser Surface Water Surface Water Surf	Coils are border in boils are border in drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ton Visible on Aerial stained Leaves (B9) vations: ter Present? Present? Yresent? Yresent? Y	ine) nriverine) rine) Imagery (B7) res No res No res No res No	ent) Salt Cru Biotic C Aquatic Presend Oxidized Presend Recent Other (E o Depth (o Depth (o Depth (itoring well, aeria	ist (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reducti inches): (inches): (inches): al photos, pr	es (B13) dor (C1) eres along l ed Iron (C4 ion in Plow emarks)	Living Rod) red Solls (<u>Secon</u> V S C C C C C C6)S F and Hydrolog	ndary Indica Vater Marks rediment De prift Deposits rrainage Pal ry-Season N hin Muck Si rayfish Burr aturation Vi hallow Aqui AC-Neutral	tors (2 or more (B1) (Riverine) posits (B2) (Rive terns (B10) Water Table (C2) urface (C7) ows (C8) sible on Aerial I tard (D3) Test (D5)	required) (rerine)) 2)
Primarks: YDROLC Wetland Hy Primary Indi Surface High Wi Saturati Water M Sedime Drift De Drift De Surface Inundat Water-S Field Obser Surface Water Surface Water Surfac	Coils are border in boils are border in drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial stained Leaves (B9) vations: ter Present? Present? Present? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent?	ine) nriverine) rine) Imagery (B7) res No res No res No res No	ent) Salt Cru Biotic C Aquatic Presend Oxidized Presend Recent Other (E o Depth (o Depth (o Depth (itoring well, aeria	ist (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reducti inches): (inches): (inches): al photos, pr	es (B13) dor (C1) eres along l ed Iron (C4 ion in Plow emarks)	Living Rod) red Solls (<u>Secon</u> V S C C C C C C6)S F and Hydrolog	ndary Indica Vater Marks rediment De prift Deposits rrainage Pal ry-Season V hin Muck Si rrayfish Burr aturation Vi hallow Aqui AC-Neutral	tors (2 or more (B1) (Riverine) posits (B2) (Rive terns (B10) Water Table (C2) urface (C7) ows (C8) sible on Aerial I tard (D3) Test (D5)	required) (rerine)) 2)
Primarks: YDROLC Wetland Hy Primary Indi Surface High Wi Saturati Water M Sedime Drift De Drift De Surface Inundat Water-S Field Obser Surface Water Surface Water Surfac	Coils are border in boils are border in drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial stained Leaves (B9) vations: ter Present? Present? Present? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent?	ine) nriverine) rine) Imagery (B7) res No res No res No res No	ent) Salt Cru Biotic C Aquatic Presend Oxidized Presend Recent Other (E o Depth (o Depth (o Depth (itoring well, aeria	ist (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reducti inches): (inches): (inches): al photos, pr	es (B13) dor (C1) eres along l ed Iron (C4 ion in Plow emarks)	Living Rod) red Solls (<u>Secon</u> V S C C C C C C6)S F and Hydrolog	ndary Indica Vater Marks rediment De prift Deposits rrainage Pal ry-Season V hin Muck Si rrayfish Burr aturation Vi hallow Aqui AC-Neutral	tors (2 or more (B1) (Riverine) posits (B2) (Rive terns (B10) Water Table (C2) urface (C7) ows (C8) sible on Aerial I tard (D3) Test (D5)	required) (rerine)) 2)
YDROLC YDROLC Vetland Hy Primary Indi Surface High Wi Saturati Water N Sedime Drift De Drift De Surface Inundat Water-S Vater Table Saturation F ncludes ca Describe Re	Coils are border in boils are border in drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial stained Leaves (B9) vations: ter Present? Present? Present? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent? Yresent?	ine) nriverine) rine) Imagery (B7) res No res No res No res No	ent) Salt Cru Biotic C Aquatic Presend Oxidized Presend Recent Other (E o Depth (o Depth (o Depth (itoring well, aeria	ist (B11) rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reducti inches): (inches): (inches): al photos, pr	es (B13) dor (C1) eres along l ed Iron (C4 ion in Plow emarks)	Living Rod) red Solls (<u>Secon</u> V S C C C C C C6)S F and Hydrolog	ndary Indica Vater Marks rediment De prift Deposits rrainage Pal ry-Season V hin Muck Si rrayfish Burr aturation Vi hallow Aqui AC-Neutral	tors (2 or more (B1) (Riverine) posits (B2) (Rive terns (B10) Water Table (C2) urface (C7) ows (C8) sible on Aerial I tard (D3) Test (D5)	required) (rerine)) 2)

WETLAND DETERMINATION DATA FORM - Arid West Region

		_ City/County:	MESA	
pplicant/Owner: <u>CDJT Region 3</u>				Sampling Point:
nvestigator(s): L. Backis ; B. Storeman				
andform (hillslope, terrace, etc.): D.tch		_ Local relief (con	cave, convex, none): <u>Conce</u>	Slope (%): 2
subregion (LRR): The cor Desert	Lat: 🤮	39°4'43.01	N Long: 108° 341 42	Datum: NAD
ioil Map Unit Name: Sagers - Urba	n land com	plex	NWI classifi	cation: N/A
re climatic / hydrologic conditions on the site ty				A CALL AND A
re Vegetation, Soil, or Hydrolo				· · · · · · · · · · · · · · · · · · ·
re Vegetation, Soil, or Hydrolo			(If needed, explain any answe	
UMMARY OF FINDINGS - Attach				
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes	1	- Is the Sa	mpled Area Wetland? Yes	1
EGETATION				
<u>Free Stratum</u> (Use scientific names.) I	A CALL A CALL AND A CA	e Dominant Indic e <u>r Species? Sta</u>		pecies ,
L			Total Number of Domin	and the second sec
	18 1.18 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1	in which have been	Species Across All Stra	
ł	And the local day of the second		Percent of Dominant S	Decies
Sapling/Shrub Stratum	Total Cover:	~~ 맛 맛 봐요. 신영	That Are OBL, FACW,	
·			Prevalence Index wor	ksheet:
-			Total % Cover of:	Multiply by:
L			OBL species) x 1 =
			FACW species _ 70	x 2= 140
		<u>. V. andrija</u>	FAC species	x 3 = <u></u>
	Total Cover:	<u>-</u>	FACU species	x 4 =
. Phragmites avstralis	70	VES En	UPL species	
Districhlis sacata		- YES PAC	Column Totals: 80	(A) <u>170</u> (B)
		- <u></u> <u>FA</u>	Prevalence Index	= B/A = 2.12
			Hydrophytic Vegetatic	
			Dominance Test is	>50%
		1	Dominance Test is	
			Prevalence Index is	s ≤3.0 ¹ otations ¹ (Provide supporting
			Prevalence Index is Morphological Adag data in Remarks	s ≤3.0 ¹ otations ¹ (Provide supporting s or on a separate sheet)
	Total Cover: <u>50</u>		Prevalence Index is Morphological Adag data in Remarks	s ≤3.0 ¹ otations ¹ (Provide supporting
	Fotal Cover: <u>50</u>	-	Prevalence Index is Morphological Adap data in Remarks Problematic Hydrop	s ≤3.0 ¹ otations ¹ (Provide supporting or on a separate sheet) ohytic Vegetation ¹ (Explain)
	Fotal Cover: <u>80</u>		Prevalence Index is Morphological Adap data in Remarks Problematic Hydrop	s ≤3.0 ¹ otations ¹ (Provide supporting s or on a separate sheet)
5 5 7			Prevalence Index is Morphological Adage data in Remarks Problematic Hydrog ¹ Indicators of hydric soll be present.	s ≤3.0 ¹ otations ¹ (Provide supporting or on a separate sheet) ohytic Vegetation ¹ (Explain)
Noody Vine Stratum	Total Cover: <u>80</u> Total Cover: <u>80</u> % Cover of Biotic C		Prevalence Index is Morphological Adap data in Remarks Problematic Hydrop ¹ Indicators of hydric soil	s ≤3.0 ¹ otations ¹ (Provide supporting or on a separate sheet) ohytic Vegetation ¹ (Explain)

US Army Corps of Engineers

Profile Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: Description: (Description: Description: Description: (Description: Description: Descretor: Descretor: Description: Description: Description:	SOIL					Sampling Point:
indices Color (moist) % Color (moist) % Type Loc ² Texture Remarks D-6 III YE 3/3 Adare Stadylawn Stadylawn G-12 Z.5 N Adare Stadylawn				or confirm	n the absence of inc	licators.)
D-6 IIYE 3/3 Narc Surficer G-12 2.5 N Narc Surficer ''Type: C=Concentration, D=Depletion, RM=Reduced Matrix: ************************************				Loc ²	Texture	Remarks
G-12 2.5 N						
Type: Cacconcentration. D=Depletion. RM=Reduced Matrix. ?Location: PL=Pore Lining. RC=Rod Channel, M=Matrix. Type: Cacconcentration. D=Depletion. RM=Reduced Matrix. ?Location: PL=Pore Lining. RC=Rod Channel, M=Matrix. Hydric Soil Indicators: Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils': Histic Epipedon (A2) Stripped Matrix (S5)						
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Histic Epideon (A2) Ströped Matrix (S5) 1 cm Muck (A9) (LRR C) Jake Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F13) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Reduced Vertic (F13) Stratefide Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redex Dark Surface (F7) Red Parent Material (TF2) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Other (Explain in Remarks) Sandy Gleyed Matrix (S4) Redex Depressions (F8) ************************************	<u>6-12 2.5 N</u>	<i>None</i> _			<u>Dandy Laam</u>	
tydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls*: Histic Episedon (A2) Ströped Matrix (S5) 1 cm Muck (A9) (LRR C) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F15) Yudrogen 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 (F7) Redox Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Sandy Gleyed Matrix (S4) Vernal Pools (F9) *Indicators of hydrophytic vegetation and wetland hydrology must be present. Vpre:						
Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Learny Mucky Mineral (F1) Reduced Vetic (F16) Hydrogen Sulfide (A4) Learny Mucky Mineral (F2) Red Parent Material (T72) Stratified Layers (A5) (LRR C) Depieted Matrix (F2) Red Parent Material (T72) Depieted Boliv Dark Surface (A11) Depieted Dark Surface (F7) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Vernal Pools (F9) ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present. Startific Layer (If present): Type:		and stated as a second state of the second state of		e Lining, R		
Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F16)		Sandy Redox	(S5)			
Image: Sufficiency of the secondary indicators (2 or more required from the secondary indicators (2) indindec diftencol (2) indindec diftered (2) indicators (2) indicator		the second se	at Door 15 lightenites put him ?			
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 (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) 3andy Eleyed Matrix (S4) wetland hydrology must be present. Restrictive Layer (if present): Type: Type:						Contraction of the second s
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		and the state of the state of the state of the	Constant of the second			
Sandy Mucky Mineral (S1)		and the second s				
Restrictive Layer (if present): Type:			C.C.C.C. 20, 1 A		³ Indicators of hyd	rophytic vegetation and
Type:					wetland hydro	logy must be present.
Depth (inches):	Restrictive Layer (if present):	a service services				
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Remarks: Water flowing at time of survey.	Depth (inches): Remarks: Strong Totten egg odor Present IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator is su Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes	ufficient) Salt Crust (B1 Biotic Crust (I Aquatic Invert Hydrogen Sul e) Oxidized Rhiz Presence of F Recent Iron R (B7) Other (Explain No Depth (inche No No No	B12) tebrates (B13) fide Odor (C1) cospheres along I Reduced Iron (C4 Reduction in Plow n in Remarks) s): s):) ed Soils (0	Secondary I Water M Sedime Drift De Drainag Dry-Sea Dry-Sea Dry-Sea Dry-Sea Crayfish Crayfish C6) Saturati FAC-Ne	ndicators (2 or more required) Marks (B1) (Riverine) nt Deposits (B2) (Riverine) posits (B3) (Riverine) e Patterns (B10) ason Water Table (C2) ason Water Table (C2) ason Water Table (C2) on Visible on Aerial Imagery (C2) Aquitard (D3) autral Test (D5)
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US Army Corps of Engineers

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: <u>I-70B</u>	City/County:	Sampling Date: 9-1-06
Applicant/Owner: CDOT R.3		Sampling Point: 7
Investigator(s): <u>L. Backis; B. Stoneman</u>		
Landform (hillslope, terrace, etc.): <u>Stormugler Basin</u>	_ Local relief (concave, convex, none):	Slope (%): Flat
Subregion (LRR): <u>Interior Desert</u> Lat: 3		
Soil Map Unit Name: Sagers - Urban land com	plex NW classific	cation:N/A
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes No (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes	No

VEGETATION

Remarks:

Wetland Hydrology Present?

Yes No____ No___

Tree Stratum (Use scientific names.) 1		 Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:
23	12 9 18 <u>1</u>			Total Number of Dominant Species Across All Strata:(B)
4Sapling/Shrub Stratum	Total Cover:			Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
1		 -	16.00	Prevalence Index worksheet: Total % Cover of:Multiply by:
3		 		OBL species 100 x 1 = 100 FACW species x 2 =
5 Herb Stratum	Total Cover:	 	and the second	FAC species x 3 = FACU species x 4 =
1. Typha Spp. 2.		Constraint and		UPL species $x = 5$ Column Totals: 100 (A) 100 (B)
3 4	200 A. C. C.			Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
5		 		✓ Dominance Test is >50% ✓ Prevalence Index is ≤3.01
7 8		 		Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
<u>Woody Vine Stratum</u> 1 2				¹ Indicators of hydric soil and wetland hydrology must be present.
% Bare Ground in Herb Stratum	Total Cover:	ust		Hydrophytic Vegetation Present? Yes No
Remarks:				
S Army Corps of Engineers		 		Arid West - Version 11-1-2006

Profile Description: (Describe to the de	pth needed to document the indicator of	confirm the abse	nce of indicators.)
Depth Matrix	Redox Features		
(inches) Color (moist) %	Color (moist) % Type ¹	Loc ² Textur	e Remarks
A CONTRACTOR CONTRACTOR			
		<u></u>	
	a state and the second state of	<u></u>	
	ويتبينها فللسبين بتبعا متبار مسيور		
ype: C=Concentration, D=Depletion, RM ydric Soil Indicators: (Applicable to a	M=Reduced Matrix. ² Location: PL=Pore		hannel, M=Matrix. tors for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Redox (S5)		cm Muck (A9) (LRR C)
_ Histic Epipedon (A2)	Stripped Matrix (S6)	and the state of t	cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)		educed Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	a second cards	ed Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)		her (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	SALAN STREET	
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)		
Thick Dark Surface (A12)	Redox Depressions (F8)		
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	³ Indica	tors of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)			land hydrology must be present.
testrictive Layer (if present):			
Туре:	<u> </u>		And the second sec
Depth (inches):	and the second sec	Hydric	Soil Present? Yes No
Remarks: No p.t. Soils assumed	l hydric based on dominance of	OBL Vegetati	on and distinct wetland bandary,
	l hydric based on dominance of	OBL Vegetah	on and distinct wetland bandary.
YDROLOGY	l hydric based on dominance of		econdary Indicators (2 or more required)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (any one indicator is suf			bandary,
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (any one indicator is su	fficient)		econdary Indicators (2 or more required) _ Water Marks (B1) (Riverine)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (any one indicator is suf Surface Water (A1)	fficient) Salt Crust (B11)		econdary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
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Appendix B

Wetland Photos



Wetland 1: View to the Southeast



Wetland 2: View to the Southeast



Wetland 3: View to the Southeast



Wetland 4: View to the East



Wetland 5: View to the West



Wetland 6: View to the West



Wetland 7: View to the Northwest. Wetland is to the left of the sign.



Appendix C

I-70B Wetland Mitigation Site Options

I-70 B WETLAND MITGATION SITE OPTIONS

Colorado Department of Transportation - Wetland Mitigation Site Selection Form

 Project Name/No.
 I-70 B WETLAND FINDING REPORT
 Subaccount

 Region
 3
 Author
 D. YATES
 Firm
 CARTER & BURGESS
 Date
 10/4/07

	(1) Mitigation bank available?	UNKNOWN
	(2) Project impacts in 1°, 2° service	UNKNOWN
tions	area?	
otio e	(3) HUC units UNKNOWN	UNKNOWN
Of	(4) On-site mitigation available?	YES
on aila	(5) Off-site mitigation available?	YES-SEE CONTINGENCY PLANS
ati Ava	(6) In-lieu fee arrangement? In-lieu	NO IN-LIEU FEE ARRANGEMENT OR SPONSOR
Mitigation Avail:	fee sponsor?	
M	(7) Mitigation ratio(s) other than 1:1	1:1 RATIO. EACH WETLAND ACRE IS REPLACED FOR
	involved? Ratio(s)	EACH ACRE IMPACTED, REGARDLESS OF WETLAND
		JURISDICATIONAL STATUS

		Impact Site	Mitigation Site
stics	(8) Geographic location.	SIX ROADSIDE WETLANDS	SITE #1 - EXPANDS EXISTING WETLAND IN ROADSIDE DITCH.
Characteristics	(9) Wetland community type and percentage.	100% PALUSTINE EMERGENT WETLANDS	EMERGENT WETLAND VEGETATION.
Char	(10) Functions, values	SEE ADDITIONAL INFORMATION	SEE ADDITIONAL INFORMATION.
Site	(11) Size of impacts, percentage of total area.	0.013 ACRES (566 SF) IMPACTED WHICH IS 13% OF PROJECT TOTAL OF 0.096 ACRES (4182 SF)	PROVIDES 0.013 ACRES OF WETLAND MITIGATION.
t	(12) T&E species/habitat present	NONE	NONE
ita	(13) Species? Status?	NOT APPLICABLE	NOT APPLICABLE
lab	(14) Migratory Bird Treaty Act?	NOT APPLICABLE	NOT APPLICABLE
H	(15) Other wildlife issues	NONE	NONE
ano	(16) Status of aquatic resource?	NOT APPLICABLE	NOT APPLICABLE
Ife	(17) Special aquatic site?	NONE	NONE
Wildlife and Habitat	(18) Unique? Quality? Ranking?	NOT APPLICABLE	NOT APPLICABLE
Wi	(19) Watershed, ecosystem issues?	NO WATER DEPLETION OF COLORADO RIVER.	NO WATER DEPLETION OF COLORADO RIVER.

	(20) Likelihood of success?	HIGH
Site	(21) Interagency agreement?	CDOT AND CITY OF GRAND JUNCTION – TO BE
n S ues		PREDETERMINED.
tioı	(22) Project logistics, size/scope?	WETLAND MITIGATION CAN OCCUR AT ONE LOCATION
er]		AND AS PART OF I-70B ROAD CONSTRUCTION.
Mitiga Other	(23) Cost considerations?	LOW COST
20	(24) Buffer used:	NONE

I-70 B WETLAND MITGATION SITE OPTIONS

Colorado Department of Transportation - Wetland Mitigation Site Selection Form

	(25) Individual 404 permit condition?	NONE
Site ues	(26) 404(b) (1) Guidelines?	IMPACTS TO WETLANDS WERE MINIMIZED DURING
		DESIGN ALTERNATIVE ANALYSIS.
tion Iss	(27) NWP gen., reg. conditions?	MOST LIKELY THIS PROJECT WILL MEET CONDITIONS OF
		NWP #14 WITH 0.010 ACRE OF IMPACT TO
Mitiga Wate		JURISDICTIONAL WETLANDS.
Σ ^	(28) Regulatory letters?	NONE TO DATE.
	(29) S.B. 40?	NO CONSULTATION WITH THE COLORADO DIVISION OF
		WILDLIFE HAS BEEN MADE TO DATE.
	(30) Water rights issues?	NONE KNOWN.

	(31) Cumulative impact issues?	EPA AND USACE DID NOT IDENTIFY WETLANDS AS A RESOURCE THAT WARRANTS A CUMULATIVE EFFECT ANALYSIS.
ation Site A Issues	(32) Agency policy, input?	A FORMAL REQUEST FOR JURISDICTIONAL DETERMINATION HAS BEEN MADE TO US ARMY CORPS OF ENGINEERS, GRAND JUNCTION FIELD OFFICE, SACRAMENTO DISTRICT.
Mitigat NEPA	(33) Public involvement?	WETLAND RESOURCES WERE PRESENTED AT THE ENVIRONMENTAL ASSESSMENT PUBLIC SCOPING MEETING. INFORMATION ON EXISTING WETLANDS AND IMPACTS WAS PRESENTED AT TWO PUBLIC OPEN HOUSE HELD 9/8/06 AND 1/24/07 WITH NO PUBLIC COMMENT SPECIFICALLY ON WETLAND ISSUES.

ADDITIONAL INFORMATION

(10) FUNCTIONS, VALUES:

THE FUNCTIONS AND VALUES OF THE SIX EXISTING WETLAND AREAS ARE LIMITED TO SEDIMENT AND TOXICANT RETENTION, BANK STABILIZATION, NUTRIENT REMOVAL AND TRANSFORMATION, AND STORAGE FOR SURFACE WATER FLOWS.

EXPANSION OF THE EXISTING ROADSIDE DITCH WETLAND #1 WOULD REPLACE THE FOLLOWING WETLAND FUNCTIONS LOST BY CONSTRUCTION OF THE PREFERRED ALTERNATIVE:

- SEDIMENT AND TOXICANT RETENTION,
- NUTRIENT REMOVAL AND TRANSFORMATION, AND
- STORAGE FOR SURFACE WATER FLOWS.

I-70 B WETLAND MITGATION SITE OPTIONS

Colorado Department of Transportation - Wetland Mitigation Site Selection Form

(34) **Basis for Decision**

[Describe those factors from the front side that are instrumental in the selection of the chosen mitigation decision.]

WETLAND MITIGATION SITE #1, ON THE NORTH SIDE OF I-70B NEXT TO MESA MALL, WOULD WIDEN AND RECONFIGURE THE ROADSIDE DITCH AND ITS ASSOCIATED EXISTING WETLAND.

THIS SITE HAS THE BEST POTENTIAL FOR FUNCTIONAL, IN-KIND REPLACEMENT. THE DITCH DESIGN CAN BE WIDENED AND THE OUTLET RECONFIGURED TO DETAIN STORM WATER FLOWS AND PROVIDE A SOURCE OF WATER TO SUPPORT WETLAND CONDITIONS. SINCE THIS SITE IS WITHIN CDOT RIGHT-OF-WAY, COORDINATION WITH OTHER AGENCIES AND PROPERTY OWNERS WOULD NOT BE NECESSARY.

(35) **Decision**

MITIGATION WILL BE DETERMINED DURING FINAL DESIGN PROCESS AND SECTION 404 PERMITTING PROCESS, AND IN CONSULTATION WITH PROJECT ENGINEERS, USACE, AND OTHER STAKEHOLDERS.

(36) Contingency Plans

WETLAND MITIGATION SITE #2 IS LOCATED AT THE WESTLAKE STATE WILDLIFE AREA, OWNED BY THE COLORADO DIVISION OF WILDLIFE (CDOW) AND LOCATED IMMEDIATELY NORTH OF I-70B / NORTH AVENUE INTERCHANGE. SITE #2 PROVIDES OFF-SITE, OUT-OF-KIND MITIGATION AS AN ALTERNATIVE TO SITE #1. POTENTIAL MITIGATION ACTIVITES INCLUDE PLANTING RIPARIAN SHRUBS AND TREES NEXT TO THE POND AND OTHER WILDLIFE HABITAT ENHANCEMENTS. COORDINATION WITH CDOW AND USACE WOULD BE REQUIRED TO IDENTIFY WHAT WILDLIFE HABITAT EHNANCEMENTS QUALIFY AS MITIGATION FOR I-70B IMPACTS AND ARE ACCEPTABLE TO CDOW.

WETLAND MITIGATION SITE #3 IS LOCATED ALONG THE LIGRANI DRAIN IN THE NORTH AVENUE / I-70 B INTERCHANGE WITHIN CDOT RIGHT-OF-WAY. SITE #3 OFFERS ON-SITE, IN-KIND WETLAND REPLACEMENT AS AN ALTERNATIVE TO MITIGATION SITE #1. POTENTIAL MITIGATION ACTIVITIES INCLUDE WIDENING THE DITCH BOTTOM TO INCREASE AREA OF SOIL SATURATION AND PLANTING EMERGENT WETLAND VEGETATION. COORDINATION WITH LIGRANI DRAIN OPERATORS AND USACE WOULD BE REQUIRED TO IDENTIFY ACCEPTABLE MITIGATION ACTIVITIES, AND REASSURANCES THAT THE DITCH WATER SOURCE IS DEPENDABLE AND WATER RIGHTS WOULD NOT BE IMPACTED.