APPENDIX F

WETLAND FINDING

DRAFT REPORT

US 550 FROM NEW MEXICO STATE LINE North to County Road 220 Wetland Finding Project NH5501-011 Subaccount 12979



Prepared for: Colorado Department of Transportation

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The proposed project is to expand US 550 between the New Mexico State Line and County Road 220, including a new bridge over the Animas River in La Plata County, Colorado. The total length of the study corridor is approximately 15.4 miles. This Wetland Finding was prepared as part of environmental surveys to support an Environmental Assessment and permitting for the proposed highway reconstruction. A total of four alternatives for the project were examined during the EA process, including the No Action Alternative. Alternatives 1, 2, and 3 only differ between milepost 3.1 and milepost 6.6. The remaining segments of the build alternatives are the same. Alternative 2 was selected as the preferred alternative, because it is the least environmentally damaging. Due to budgetary considerations, construction details of the entire project and its ultimate completion will require a long-term approach divided into temporal sections; the initial construction is projected for the spring of 2005. This Finding reflects the best conceptualization of the project at this time.

The project area contains 70 wetlands covering 13.03 acres. Wetlands are found along the Animas River and tributaries of the Animas and Florida rivers, and in upland locations in roadside ditches, irrigation ditches, sewage lagoons, and ponds. Other waters include one perennial stream, several intermittent streams, and several isolated ponds and irrigation ditches.

The project would permanently impact 2.67 acres of wetlands and 0.28 acre of other waters, including 1.14 acres of jurisdictional wetlands. Based on this level of impact to jurisdictional waters of the United States, this alternative is likely to require an Individual Section 404 Permit prior to construction. Unavoidable permanent impacts will be mitigated through on-site and/or off-site wetland creation or restoration, in accordance with current CDOT, FHWA (23 CFR 777), and USACOE policies, and the conditions of the USACOE Section 404 Permit. Although the Clean Water Act only requires compensatory mitigation for those wetlands and other waters considered jurisdictional by USACOE, it is CDOT policy to mitigate all wetlands impacts (jurisdictional and non-jurisdictional) at a 1:1 ratio. Based on a functional assessment methodology, USACOE will determine the appropriate level of mitigation based upon the functions lost or adversely affected as a result of impacts to aquatic resources.

The following is a Draft Wetland Finding for the US 550 From New Mexico State Line North to County Road 220 Project (Project Number NH5501-011) and 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.

Wetlands are important biological resources that perform many functions including groundwater recharge, flood flow attenuation, erosion control, and water quality improvement. They also provide habitat for many plants and animals, including threatened and endangered species. The following sections describe each of the wetlands identified within the study area, how they would be impacted by the project, and how their impacts would be mitigated.

US 550 is a principal arterial on the National Highway System providing the major north-south link in the transport of goods and services between the Durango, Colorado and Farmington, New Mexico areas. The project area for the US 550 From New Mexico State Line North to County Road 220 is located between the New Mexico State line at milepost 0 and County Road (CR) 220 at milepost 15.4 in La Plata County, Colorado. The northern end of the project area (milepost 15.4) is located approximately 3.25 miles southeast of Durango, Colorado. The total length of the study corridor is approximately 15.4 miles as shown in Figure 1. About 9.5 miles are located on Florida Mesa, 1.5 miles on Bondad Hill, and 4.5 miles in the Animas River Valley.

The project is located on the Bondad Hill, Long Mountain, and Loma Linda United States Geological Survey (USGS) topographic quads, and is located within or on the edges of the following sections:

- Township 32N, Range 10W, Section 1, 12, 13
- Township 32N, Range 9W, Section 6, 7, 18, 19
- Township 33N, Range 9W, Sections 5, 6, 7, 18, 19, 31
- Township 34N, Range 9W, Sections 5U, 8U, 9U, 17, 19, 20, 29, 30, 31, 32

The elevation ranges from about 5960 at the New Mexico border to 6720 feet at the junction with CR220. It is located in the Colorado Plateau Semi-Desert Province Ecoregion (Bailey 1995), and in the pinyon-juniper/sagebrush vegetation zone. Most of the project area is native woodlands and shrublands, and rural residential with agriculture. The Animas River and Deer Creek cross the project area near the south end and provide relatively narrow bands of riparian vegetation that are used by various species of birds, small and large mammals, and other wildlife.



3.1 **PROJECT HISTORY**

In February 1999, the Final US 550 and US 160 Feasibility Study (URSG 1999) was published after 2.5 years of performing technical studies and gathering public input. The Feasibility Study recommended that US 550 be widened to a four-lane highway from the New Mexico State Line to Durango. The *Feasibility Study* recommended that two highway corridors, the existing US 550 corridor and the Animas River Corridor (ARC), be evaluated further.

An agency scoping meeting was held June 14, 2001, to present the two US 550 highway corridors. There was concurrence among the agency representatives that only the least environmentally damaging practicable alternative (LEDPA) would receive agency support. The consensus among agency representatives in attendance was that the ARC could not be considered the LEDPA. As a result, the ARC was eliminated from further consideration, and the US 550 corridor was advanced for evaluation in accordance with the National Environmental Policy Act (NEPA).

3.2 PROPOSED ACTION

The proposed action would improve US 550 to a four-lane highway by extending the existing four-lane section that terminates approximately 1 mile north of the New Mexico/Colorado border north to the project terminus near CR 220.

3.3 PURPOSE OF THE PROJECT

The purpose of the project is to improve safety and increase highway capacity. This project is needed to address the existing substandard roadway design, which contributes to accidents, and to improve highway capacity and efficiency to meet the growing traffic demand. The objectives of the highway improvements include:

- Improve safety for the traveling public to reduce the number and severity of accidents;
- Increase travel capacity/efficiency to meet current and future needs;
- Provide a facility that meets current Colorado Department of Transportation (CDOT) design standards; and
- Reduce access deficiencies.

3.4 NEED FOR THE PROJECT

This action is intended to address both local and regional transportation needs that include safe and efficient travel to and from the urban centers of Durango, Colorado, and Farmington, NM, as well as the transport of goods and services across the western portion of Colorado. The need for the proposed action is evidenced by the history of accidents and the projected 2025 traffic volumes on US 550.

A detailed discussion of the project need is presented in Section 1.5 of the Draft Environmental Assessment (EA) (FHWA and CDOT 2004).

A total of four alternatives for the project were examined during the Environmental Assessment process, including the No Action Alternative. Alternatives 1, 2, and 3 only differ between milepost 3.1 and 6.6. The remaining segments of the build alternatives are the same. Alternative 2 was selected as the preferred alternative.

The segment from milepost 0 to 3.1 consists of a safety improvement that was completed in this section in 2001. Approximately 1 mile of the safety improvement (milepost 0 to 1) is a four-lane to two-lane transition north of the New Mexico State Line where US 550 extends south as a fourlane highway. The remainder of the project was comprised of a two-lane safety improvement. As part of that project, nearly all of the right-of-way (ROW) needed to complete the four-lane improvement was acquired. The land that has not been acquired is comprised of Southern Ute Indian Tribal Lands located both east and west of US 550. All of the build alternatives would widen the remainder of this section to four-lanes, with the proposed alignment generally following the existing median centerline. No work would be performed outside of existing ROW, except where new ROW is required and for new driveway connections. The design speed for this segment would be 70 miles per hour (mph) and a 46-foot depressed grass median would separate opposing travel lanes.

From milepost 3.1 to 6.6, Alternative 1 would generally follow the existing 2-lane highway alignment with moderate shifts to the east and slight shifts to the west to reduce impacts to the environment and existing development. This section includes intersections with CR 213 and CR 318. Alternative 1 proposes to realign the CR 213 and CR 318 intersections to improve the approach angle to 90 degrees. Alternative 1 ascends Bondad Hill at a 5 percent grade between milepost 4.3 and 5.3. The highway design transitions from a 70 mph design speed with a 46-foot depressed grass median north and south of Bondad Hill to a 45 mph design speed with a 14-foot median and a median barrier separating opposing lanes.

Alternative 2 (Preferred Alternative) also generally follows the existing 2-lane highway alignment and increases the highway width to 4-travel lanes between milepost 3.1 and 6.6, but shifts the alignment slightly to the east to flatten the horizontal curve at Bondad Hill. This shift would reduce the grade on Bondad Hill by 5 percent. The design speed for this segment would be 60 mph with a 14-foot median and a median barrier separating opposing travel lanes. Alternative 2 also proposes to realign the CR 213 and CR 318 intersections to improve the approach angle to 90 degrees.

Alternative 3 would also increase the highway width to 4-travel lanes between milepost 3.1 and 6.6. It would shift the alignment to the east side of Bondad Hill, up to 1,200 feet from the existing alignment, to provide a 4 percent grade and minimal horizontal curves. The design speed for this alternative would be 70 mph, and a 46-foot depressed grass median would separate the opposing travel lands. Alternative 3 would also realign the CR 213 and CR 318 intersections to improve the approach angle to 90 degrees.

From milepost 6.6 to 10.5, all action alternatives would generally follow the existing highway alignment with moderate shifts to the east and slight shifts to the west to reduce impacts to existing development and to flatten horizontal curves. This section includes CR 215, CR 218 and CR 217. The CR 215 intersection would have improved geometrics and would provide 0.5-mile spacing from the CR 218 intersection. The design speed for this segment would be 70 mph and a 46-foot depressed grass median would separate opposing travel lanes.

From milepost 10.5 to 15.4, all action alternatives would generally follow the existing highway with an easterly shift to preserve the existing west ROW line. This section includes intersections CR 214, CR 219 and CR 302. The CR 219 intersections would be consolidated into a single access point located between the two existing intersections. The design speed for this segment is 70 mph and a 46-foot depressed grass median separates opposing travel lanes.

Alternative 2 has been identified as the preferred alternative. Thus, the discussion in this section includes a description of wetlands located only within the study area for Alternative 2.

METHODS 5.1

Wetlands were delineated by using the Routine Determination procedures described in the 1987 Corps Wetlands Delineation Manual (Environmental Laboratory 1987) that require positive evidence of wetland hydrology, hydrophytic vegetation, and hydric soils. Field studies were performed September 17-21, 2001 by URS wetland biologists Jeff Dawson and Andy Herb and November 10-12, 2003, by Jeff Dawson and Kim Cornelisse. The wetland study area included all areas within 300 feet of the centerline of the existing highway, plus an expanded study area at Bondad Hill to allow consideration of a range of alternative roadway configurations. Wetland boundaries were delineated using a combination of Global Positioning System (GPS) and aerial photo interpretation, and were mapped on one inch equals 100 feet (1:1,200 scale) digital aerial photographs. The GPS data and the digitized wetland boundaries were incorporated into an ArcView/Geographical Information System (GIS) computer database for analysis and display.

At the request of the U.S. Army Corps of Engineers (USACOE), a preliminary evaluation was made as to whether each wetland and water was under the jurisdiction of the USACOE for Section 404 permitting. Wetlands are identified as jurisdictional where they occurred adjacent to an interstate water of the U.S. (Animas River), or were located along tributaries of the Animas River. Wetlands are considered to be non-jurisdictional where they are isolated from other waters of the U.S., or appear to result primarily from irrigation or other artificial sources. Nonjurisdictional wetlands included irrigation ditches in upland areas, roadside ditches, stock ponds and irrigation ponds in upland areas, and sewage lagoons. This preliminary evaluation of jurisdictional status has not been confirmed by the USACOE, therefore, those wetlands determined to be outside USACOE jurisdiction are likely considered non-jurisdictional.

5.2 **WETLANDS**

Wetlands are those areas that are inundated or saturated with water at or near the surface of the soil for a sufficient duration during the growing season to develop characteristic soil and vegetation. Many wetlands are protected under the Section 404 of the Clean Water Act (CWA) as waters of the United States and "special aquatic sites," and are under the jurisdiction of USACOE for Section 404 permitting. Isolated and irrigation-induced wetlands may be nonjurisdictional areas that are not protected by Section 404.

Executive Order 11990 directs all federal agencies to avoid, if possible, adverse impacts to wetlands and to enhance the natural and beneficial values of wetlands. It is CDOT policy to avoid impacts to wetlands where possible, minimize impacts, and mitigate unavoidable impacts for all wetlands regardless of jurisdictional status.

For all action alternatives, a Section 404 Permit would be required for this project. USACOE is a cooperating agency in the EA and will use the EA for its Section 404(b)(1) Alternatives Analysis and to support preparation of the Section 404 Permit.

The distribution of wetlands in the project area is shown on Map 1 to Map 11 in Appendix C. Wetlands delineated within the project corridor totaled approximately 13.03 acres (Table 1). More detailed information about the wetlands is provided in Appendix A. The following

sections describe the wetlands by groups, generally from south to north through the study area. Groups are defined based on connections to drainages (where there is a connection) or by source of hydrology for other wetlands.

Summary of Wethind Groups in the OB 250 Project field							
Wetland Group	Number of Wetlands	Total Area (acres)	Map Number	Jurisdictional			
State Line North Project Mitigation Wetlands	1	1.73	3	Yes			
Deer Creek Wetlands	3	0.82	3	Yes			
Animas River Wetlands	4	1.24	3,4	Yes			
Unnamed Tributary of Florida River	6	1.46	5, 6	Yes			
Trumble Draw Wetlands	4	0.65	8, 9	Yes			
Hillside Seeps	5	0.67	3, 5, 11	No, except W-4			
Isolated Irrigation Ditches in Uplands	22	4.71	3-11	No			
Sewage Lagoons	11	0.13	5-11	No			
Other Isolated Ponds	9	1.35	7, 9, 10, 11	No			
Roadside Ditches	5	0.27	6, 9, 10, 11	No			
Total	70	13.03	NA	NA			

Table 1 Summary of Wetland Groups in the US 550 Project Area

Wetland locations are shown on Maps 1-11.

5.2.1 State Line North Project Mitigation Wetlands

Several wetlands were created in 2000 as part of the CDOT US 550 State Line North Project, under USACOE Permit Number 199975031. The original mitigation plan included the creation of 1.65 acres of wetland to mitigate the loss of 1.34 acres of jurisdictional wetland and 0.31 acre of non-jurisdictional wetland. A total of 1.85 acres of wetland was created during construction, including 1.43 acres at site CC, 0.04 acre at site FF, and 0.38 acre at site HH (URS 2002c). The wetland delineation of this area was conducted in November 2003 and the only wetland delineated was at site CC (Wetland 72) (Map 3). Wetlands were not found at the other two sites.

Wetland 72 is a PEM wetland that consists of a constructed basin on the east side of US 550 and adjacent seepage and overflow areas. Water is provided by return flows from the Citizens Animas Ditch through an inlet in the northwestern corner of the wetland. The current area of this wetland within the highway ROW is 1.73 acres; however, additional wetlands extend east of the ROW fence. Seepage and overflows from this wetland are captured by the Two Rock Ditch, which parallels the Animas River down-gradient from the wetland. The Two Rock Ditch crosses the state line, and therefore, the wetland is considered jurisdictional by the USACOE (Cara Hellige, personal communication, December 17, 2003). The majority of the dominant plant species have an indicator status of obligate (OBL), facultative-wet (FACW), or facultative (FAC) (Reed 1988). Dominant wetland species observed include creeping spikerush (Eleocharis palustris), broadleaf cattail (Typha latifolia), Torrey rush (Juncus torreyi), pondweed (Potamogeton spp.), sandbar willow (Salix exigua), and Baltic rush (Juncus balticus). Most of the constructed wetland is occupied by a dense stand of broadleaf cattail. Pondweed occurs in small open water areas. The other species primarily occur in mixed stands on and below the eastern embankment of the wetland, watered by seepage and overflows.

Hydrologic indicators in the constructed portion of the wetland included inundation (most of the area), saturation, and sediment deposits. Hydrologic indicators in the seepage wetland include drainage patterns, limited areas of inundation, and saturation within the upper 12 inches.

Paired soils pits (wetland and upland) were examined on the western side of Wetland 72, and an additional wetland soil pit was examined on the eastern side. Wetland soils exhibited low chroma in the constructed wetland and mottles on the embankment.

5.2.2 Deer Creek Wetlands

Deer Creek is a perennial tributary of the Animas River. Three wetlands occur along Deer Creek, including a wetland adjacent to the channel (Wetland 62), and seep-fed meadows that connect to Deer Creek (Wetlands 61 and 63) (Map 3). These wetlands are considered jurisdictional because they are adjacent to and connected to Deer Creek, a named tributary of the Animas River. They are classified as palustrine emergent and riverine intermittent streambed (Cowardin et al. 1979).

The majority of the dominant plant species in each wetland has an indicator status of OBL, FACW, or FAC. Dominant wetland species observed includes creeping spikerush, broadleaf cattail, jointed rush (Juncus articulatus), and Baltic rush. Adjacent areas are heavily grazed upland grassland and sparsely vegetated areas dominated by weedy species such as musk thistle (Carduus nutans), tansymustard (Descurainia spp.), common burdock (Arctium minus), common mallow (Malva neglecta), and amaranth (Amaranthus spp.).

All of the wetlands exhibited inundation and saturation in the upper 12 inches. The main channel of Deer Creek was included in the mapped area of Wetland 62 and consists of a fastmoving stream 6 to 8 feet wide. The source of hydrology for Wetlands 61 and 63 is seeps. The ultimate source of the seepage is likely to be the Citizens Animas Ditch, which is upgradient about 0.25 mile to the west. The flow in Deer Creek may also be discharge from the same ditch.

A soil pit was examined in Wetland 61 and hydric soil indicators included sulfidic odor, gleyed or low chroma colors, and aquic moisture regime. Soils are mapped as Ustic Torriorthents-Ustic Haplargids, 12 to 60 percent slopes (SCS, 1982). These soils occur on terrace edges and hillsides.

Animas River Wetlands 5.2.3

Four wetlands occur on the floodplain of the Animas River, near the US 550 bridge (Wetlands 57, 58, and 59 [Maps 3 and 4]), and near milepost 3 (Wetland 66) (Map 3). These wetlands are considered jurisdictional because they are adjacent to and connected to the Animas River. These wetlands are classified as palustrine emergent, palustrine scrub/shrub, and palustrine aquatic bed (Cowardin et al. 1979). They include wetlands on the floodplain of the Animas River, as well as adjacent seepage areas on terraces adjoining the floodplain. These wetlands are all large and diverse in composition and structure.

The majority of the dominant plant species in each wetland has an indicator status of OBL, FACW, or FAC. Dominant wetland vegetation in these wetlands includes broadleaf cattail, redtop (Agrostis stolonifera), woolly sedge (Carex lanuginosa), creeping spikerush, and sandbar willow. The upland perimeter of the wetlands is dominated by species such as cottonwoods (Populus angustifolia and P. deltoides), box elder (Acer negundo), chokecherry (Prunus



virginiana), alder (*Alnus incana*), wild licorice (*Glycyrrhiza lepidota*), juniper (*Juniperus scopulorum*), and big sagebrush (*Artemisia tridentata*).

The primary hydrological indicators observed in all four wetlands were inundation and saturation in the upper 12 inches. All of the wetlands have seeps that contribute to wetland hydrology, and two of the wetlands (58 and 59) also receive irrigation return flows.

Paired soil pits in wetland and adjacent upland areas were examined at wetland 59 in 2003. Wetland soils in Pit 59-A exhibited low chroma and mottles (Appendix A, Table A-2). Soil pits were not examined in other wetlands because the wetlands were dominated by OBL and FACW vegetation. Soils are mapped as Ustic Torriorthents-Ustic Haplargids, 12 to 60 percent slopes, and Tefton loam (SCS 1982). Ustic Torriorthents-Ustic Haplargids are on terrace edges and hillsides. Tefton loam is a deep, somewhat poorly drained soil of floodplains and alluvial valley floors.

5.2.4 Unnamed Tributary to Florida River Wetlands

Six wetlands (Wetland 47, 48, 49, 50, 51, 53) appear to be connected via surface flow to the Florida River and all are palustrine emergent bed (Cowardin et al. 1979) (Maps 5 and 6). They appear to represent a route for irrigation return flows. Wetland 47 is a wet swale at the upper end of this wetland group. Wetlands 48 and 49 have the appearance of irrigation ditches, and Wetlands 50 and 51 are overflow or seepage areas from leaks and holes in Wetland 49. Wetland 53, on the lower end, is also an irrigation ditch and is a continuation of Wetland 49 on the east side of US 550. Wetland 51 connects to an unnamed tributary of the Florida River on the aerial photograph, and therefore, the entire group of wetlands appears to be connected to the Florida River. In addition, the USGS topographic map shows most of these wetlands as part of the unnamed tributary. This group of wetlands is therefore considered jurisdictional.

The majority of the dominant plant species in each wetland has an indicator status of OBL, FACW, or FAC. These wetlands are dominated by creeping spikerush, Baltic rush, reed canarygrass (*Phalaris arundinacea*), and broadleaf cattail. Wetlands 47, 48, 50, and 51 are located within agricultural land (hay meadows and pastures), and Wetlands 49 and 50 are in sagebrush scrub and pinyon-juniper woodland.

The primary hydrological indicators observed were inundation, saturation in the upper 12 inches, and drainage patterns. The landowner for Wetland 51 said that Wetlands 50 and 51 were the result of gophers making holes in the canal (wetland 49) on Southern Ute Indian Tribe land on the west side of the road. However, Wetlands 50 and 51 are located in a natural drainage system, and the leaks from wetland 49 have persisted long enough to kill junipers in some areas. Surface water was observed at all of the wetlands except Wetland 47.

One soil pit was examined in Wetland 47 (Appendix A, Table A-2). The soil exhibited low chroma and numerous small mottles. No soil pits were examined in the other wetlands because they had obvious hydrology, and are dominated by OBL and FACW vegetation. Soils are mapped as Falfa clay loam, 3 to 8 percent slopes, a deep, well-drained soil of mesa tops (SCS 1982).

Trumble Draw Wetlands 5.2.5

Four wetlands occur along the Trumble Draw drainage. Three of the wetlands (Wetlands 27, 28, and 29; Maps 8 and 9) are ditch-like in appearance, and Wetland 30, located downstream, is a wet swale. These wetlands are considered jurisdictional because they are connected to Trumble Draw, a named tributary of the Animas River. They are classified as palustrine emergent and palustrine scrub/shrub (Cowardin et al. 1979).

The majority of the dominant plant species in each wetland has an indicator status of OBL, FACW, or FAC. Dominant plant species in these wetlands include retop, sandbar willow, broadleaf cattail, reed canary-grass, and small-fruit bulrush (Scirpus microcarpus). Surrounding vegetation consists of (Medicago sativa) alfalfa and grass hay fields for Wetlands 27, 28, and 29, and pastures dominated by Kentucky bluegrass (*Poa pratensis*) and timothy (*Phleum pratense*) for Wetland 30.

The primary hydrology indicators are inundation and saturation in the upper 12 inches. Wetlands 27, 28, and 29 have defined channels, and the wetlands are confined to a fringe on one side of the ditch. Wetland 30 is fed by an irrigation ditch but has no defined channel within it.

No soil pits were examined because the wetlands were dominated by OBL and FACW species. Soils are mapped as Falfa clay loam, 3 to 8 percent slopes (SCS 1982). This is a deep, welldrained soil of mesa tops.

Wetlands Associated with Hillside Seeps 5.2.6

This group includes five wetlands; four of them occur on the steep west slope of Florida Mesa (Wetlands 4 and 5; [Map 11]) and Wetlands 54 and 56 [Map 5]), and a similar seepage wetland (Wetland 65) is shown on Map 3. Wetland 4 is the only one of this group that appears to be jurisdictional and is located on a mapped USGS intermittent drainage that connects to the Animas River at the base of the slope. Wetland 4 also includes an area of open water. Wetland 56 has strong flow from a spring, but is apparently captured for irrigation on Sunnyside Mesa, which lies between the base of the slope and the Animas River. This wetland is therefore considered non-jurisdictional. Wetlands 5, 54, and 65 are isolated and are not on mapped drainages; therefore, they are considered non-jurisdictional. Wetlands 5, 54, 56, and 65 are classified as palustrine emergent, and Wetland 4 is classified as palustrine emergent, palustrine scrub/shrub, and palustrine aquatic bed (Cowardin et al. 1979).

The majority of the dominant plant species in each wetland has an indicator status of OBL, FACW, or FAC. Dominant vegetation in these wetlands includes redtop, sandbar willow, broadleaf cattail, caraway (Carum carvi), and triangular-valve dock (Rumex triangulivalvis). Four of the wetlands (Wetlands 4, 5, 54, and 56) are located within pinyon-juniper woodlands, and the fifth. Wetland 65, is in a pasture at the base of a slope below an irrigated agricultural field. Vegetation adjacent to the wetlands includes pinyon (Pinus edulis), juniper (Juniperus osteospermum), Gamble oak (Quercus gambelii), narrowleaf cottonwood (W-4 only), aster (Aster spp.), Canada thistle (Cirsium arvense), cocklebur (Xanthium strumarium), Siberian elm (Ulmus pumila), skunkbush sumac (Rhus trilobata), and rubber rabbitbrush (Chrysothamnus nauseosus).

The primary hydrological indicators observed in all five wetlands were inundation and saturation in the upper 12 inches. One of the wetlands (56) included a spring with a strong flow. Wetlands

5, 54, and 65 were seepage areas, and wetland 4 includes open water behind a small dam that was mapped separately (Map 11). The source of water for groundwater discharge appears to be irrigation on Florida Mesa.

No soil pits were examined because all of the wetlands were dominated by OBL and FACW vegetation. Several soils are mapped at these locations. Wetland 4 is mapped as Falfa clay loam, 3-8 percent slopes. Wetland 5 is on the interface of mapped Falfa clay loam, 3 to 8 percent slopes, and badland. Wetlands 54 and 56 are mapped on the interface of Ustic Torriorthents-Ustollic Haplargids, 12 to 60 percent slopes, and Witt loam, 3 to 8 percent slopes. Wetland 66 is mapped as Ustic Torriorthents-Ustollic Haplargids, 12 to 60 percent slopes, 12 to 60 percent slopes.

5.2.7 Isolated Irrigation Ditch Wetlands in Uplands

Nineteen fringe wetlands (Wetland 9, 14, 17, 18, 21, 32, 33, 37, 38, 39, 42, 43, 44, 45, 60, 64, 68, 69 and 70) along irrigation ditches occur in upland portions of the study area. All of them are considered non-jurisdictional because they are both isolated and irrigation-induced. The only one of these ditches/canals named on the USGS topographic map is Coop Ditch (Wetlands 7, 10, and 15 [Map11]). Fringe wetlands occur on both sides of the ditch channels and are 0.5 to 5 feet wide on each side. Wetland 43 is not a ditch, but was a pocket of wetland at a leaky irrigation pipe in an upland grassland.

The majority of the dominant plant species in each wetland have an indicator status of OBL, FACW, or FAC. Dominant plant species in these wetlands include redtop, creeping spikerush, Baltic rush, reed canary-grass, timothy, and sandbar willow. A few peachleaf willow (*Salix amygdaloides*), Siberian elm, and Russian olive (*Elaeagnus angustifolia*) individuals occur along the banks of some irrigation ditches. The irrigation ditches are located within agricultural pastures and meadows, and along roadsides. Adjacent non-wetland vegetation included goldenrod (*Solidago* spp.), wild lettuce (*Lactuca serriola*), smooth brome (*Bromus inermis*), common sunflower (*Helianthus annuus*), showy milkweed (*Asclepias speciosa*), curlycup gumweed (*Grindelia speciosa*), field horsetail (*Equisetum arvense*), Kentucky bluegrass (*Poa pratensis*), Canada thistle (*Cirsium arvense*), common mullein (*Verbascum thapsus*), chicory (*Chicorium intybus*), yellow sweetclover (*Melilotus officinalis*), red clover (*Trifolium pratense*), plantain (*Plantago* spp.), aster (*Aster* spp.), and asparagus (*Asparagus officinalis*).

The primary hydrological indicators observed were inundation, saturation in the upper 12 inches, drainage patterns, and drift lines.

Few soil pits were examined because all of the wetlands were dominated by OBL and FACW vegetation. Paired wetland and upland soil pits were located in wetland 68 (Appendix A, Table A-2). Soils in the wetland exhibited low chroma and mottles. Soils were mostly mapped as Falfa clay loam, 1 to 3 and 3 to 8 percent slopes, and Witt loam, 1 to 3 percent slopes. These are deep, well-drained soils of mesa tops and uplands.

5.2.8 Wetlands Associated with Sewage Lagoons

Small household sewage lagoons occur at several locations throughout the project area (11 total wetlands: Wetland 1, 6, 8, 11, 20, 24, 31, 35, 40 and 55). All of these wetlands are isolated in uplands and are considered non-jurisdictional. They are generally 10 to 20 feet in diameter and occur within 100 to 300 feet of the residences that they serve. Several of the sewage lagoons could

not be examined up close because there was no permission for access. These wetlands are classified according to Cowardin et. al. (1979) as primarily palustrine emergent. About 50 percent or more of their surface usually is open water.

All of the dominant plant species in each wetland have an indicator status of OBL, FACW, or FAC. Dominant plant species in these wetlands are barnyard grass (Echinochloa crusgalli), creeping spikerush (Eleocharis palustris), broadleaf cattail (Typha latifolia), and lesser duckweed (Lemna minor). Two sewage lagoons (Wetlands 1 and 6) are located in pinyon-juniper woodlands, and all others were located in pastures or other grassland. Vegetation around the perimeter of the wetlands is generally weedy and includes yellow sweetclover, common sunflower, kochia (Kochia scoparia), wild lettuce, smooth brome, and Canada thistle.

The primary hydrological indicators observed in all of these wetlands were inundation and saturation in the upper 12 inches.

No soil pits were examined because all of the wetlands were dominated by OBL and FACW vegetation. Soils were mapped as Falfa clay loam, 1 to 3 and 3 to 8 percent slopes, and Witt loam, 3 to 8 percent slopes (SCS 1982). These are deep well-drained soils of mesa tops and uplands.

5.2.9 Wetlands in Other Isolated Ponds

Wetlands in ponds other than sewage lagoons occur at several places in the study area, in upland areas. They include Wetlands 3 (Map 11); 16 (Maps 9 and 10); 19, 23, and 25 (Map 9); 34 (Map 8); and 36, 41, and 67 (Map 7). All are considered non-jurisdictional because they are in uplands, with no apparent connection to jurisdictional drainages. All of these wetlands are primarily palustrine emergent. Wetlands 16, 25, 34, and 36 enclose relatively large areas of open water with aquatic bed vegetation that were mapped as other waters. Wetland 67 is on the edge of a pond, which is outside the study area boundary. The others were too small to map the wetland and open water separately.

The most common plant species throughout these wetlands are creeping spikerush, few-flowered spikerush (Eleocharis quinqueflora), willow-reed (Polygonum lapathifolium), and pondweed. These wetlands are generally located within pastures and hay meadows, except Wetland 3, which is in a pinyon-juniper woodland.

The primary hydrological indicators observed were inundation and saturation in the upper 12 inches. Wetland 3 was dry at the time of survey; its indicators were water marks and sediment deposits.

Soil pits were not examined at most of these wetlands because the vegetation was dominated by wetland (hydrophytic) vegetation. Paired soil pits (wetland and adjacent upland) were located at Wetland 67. The wetland pit was on the perimeter of the wetland because nearly all of the wetland was inundated at the time of the survey. The soil pit did not exhibit hydric characteristics, but it was assumed that hydric soils are present due to the pit being on the margin, and the evident hydrology and hydrophyic vegetation. All of these wetlands are on soils mapped as Falfa clay loam, 1 to 3 and 3 to 8 percent slopes (SCS 1982).

5.2.10 Wetlands in Roadside Ditches

Five roadside ditch wetlands occur in the study area, at widely scattered locations. These include Wetlands 2 (Map 11); 13 (Map 10); 22 (Map 9); 46 (Map 6); and 71 (Map 3). These wetlands are all isolated and considered non-jurisdictional. Wetland 2 is in a roadside depression that receives water from a natural swale and overland flow. There is no culvert under US 550. The other roadside ditch wetlands are also in low areas along roads. All roadside ditch wetlands are classified as palustrine emergent and/or palustrine scrub/shrub (Cowardin et al. 1979).

The majority of the dominant plant species in each wetlands has an indicator status of OBL, FACW, or FAC. Dominant vegetation in these wetlands includes creeping spikerush, sandbar willow, small-fruit bulrush, broadleaf cattail, fox-tail barley (Hordeum jubatum), and barnyard grass (Echinochloa crusgalli). Wetlands 2 and 22 are surrounded by a pasture next to a road, Wetland 13 is between two roads, and Wetland 46 is in a pasture next to a road. Wetland 71 is within the US 550 ROW and was recently constructed as part of the State line North Project. Vegetation on the edges of these wetlands is mainly smooth brome (Bromus inermis) and cheatgrass (Bromus tectorum).

The primary hydrological indicators observed were sediment deposits (Wetlands 2, 46, and 71), drainage patterns (Wetlands 2 and 22), and saturation in the top 12 inches (Wetlands 13 and 46).

A soil pit was examined in Wetland 71. Hydric characteristics were not observed, but hydric soils may not have had time to develop, because the area was recently constructed. A paired upland soil pit was also examined. Soil pits were not examined in the other wetlands because most of the vegetation was dominated by wetland species. Soils are mapped as Falfa clay loam, 1 to 3 percent and 3 to 8 percent (SCS 1982). These are deep, well-drained soils of mesa tops.

5.2.11 Other Waters

Other aquatic features are also regulated as waters of the United States under Section 404 of the CWA including intermittent and perennial streams. Other waters include five streams, six ponds, and several sewage lagoons and irrigation ditches. Descriptions of these areas are provided below. Streams are jurisdictional under Section 404 of the CWA, but the ponds, sewage lagoons, and irrigation ditches are isolated and therefore non-jurisdictional.

Animas River. About 700 linear feet of the Animas River are within the study area, where US 550 crosses it on a bridge just above its confluence with the Florida River (Map 3). The river is approximately 110 feet wide, and 1.8 acres of river channel are within the study area. The Animas River is one of the major rivers of southwestern Colorado and flows south to join the San Juan River in New Mexico.

Deer Creek. US 550 crosses Deer Creek on a bridge about 0.5 mile south of the Animas River crossing. Deer Creek was mapped as part of Wetland 61 because the fringe wetlands along the stream channel and on islands within the channel were larger than the open water part of the stream. Deer Creek had a fast-moving open water channel about 6 to 8 feet wide at the time of the survey. Deer Creek has a watershed area of about 3,000 acres and joins the Animas River about 700 feet east of the study area.

Intermittent stream O-8. Other water O-8 is an intermittent stream that originates in a roadside ditch near the top of Bondad Hill and flows more than 0.5 mile across the study area toward the Florida River. It has a watershed area of about 45 acres, and is assumed to reach the Florida



River, which is about 400 feet away from the lower end of the mapped stream. This drainage is not mapped on the Bondad Hill USGS topographic map. The bottom of the channel ranged from 4 to 8 feet wide, or an average of about 5 feet wide. It had a total area of about 0.4 acre within the study area.

Intermittent stream O-13. This intermittent drainage originates on forested hills west of the Animas River. It crosses the CDOT ROW for about 300 feet, of which 50 feet are covered by the US 550 bridge. The stream averages 30 to 40 feet wide within the highway ROW, but is much narrower above and below the ROW. The portions within the US 550 ROW were widened and armored as part of the State Line North Project. This drainage has a watershed of about 900 acres and connects to the Animas River about 500 feet downstream of the study area. It is mapped as an intermittent stream on the Long Mountain and Bondad Hill USGS topographic maps.

Intermittent stream O-14. This intermittent stream also originates on forested hills west of the Animas River. It crosses the US 550 ROW for about 250 feet, of which about 50 feet are under the bridge. The stream averages about 40 feet wide within the ROW, but is much narrower above and below the ROW. The portions within the US 550 ROW were widened and armored as part of the State Line North Project. This drainage has a watershed of about 250 acres and connects to the Animas River about 800 feet downstream of the study area. It is mapped as an intermittent stream on the Long Mountain and Bondad Hill USGS topographic maps.

Sewage lagoons. Other waters O-2, O-9, O-10 and O-12 are sewage lagoons similar to the sewage lagoons previously described, except that they contained only open water.

Other isolated ponds. Other waters 0-3, 0-4, 0-5, and 0-6 are ponds with open water. Each of these have a narrow wetland fringe around them that is described in the wetland section. Other waters O-7 and O-11 are ponds without wetland fringes. These six ponds are in upland areas and are isolated from other waters of the United States.

Irrigation ditches. Most of the larger ditches in the project area are delineated as wetlands, but three major irrigation ditches are considered as other waters because they did not meet the criteria for wetlands. The Citizens Animas Ditch and Twin Rock Ditch are large ditches mapped and named on the USGS topographic maps. Paxton Ditch is not shown on the Bondad Hill USGS topographic map and is difficult to see on aerial photographs because it traverses a wooded area on the northeast side of Bondad Hill. The numerous small field ditches in and adjacent to irrigated farmland are not considered to be waters of the United States, but are delineated as wetlands where they meet wetland criteria.

5.3 NON-WETLAND DATA POINTS

Six delineation data sheets were recorded at sites where a determination was made that the site was not a wetland. These include sites NW-1 and NW-2 on Map 9, NW-3 on Map 6, NW-4 on Map 7, NW-5 on Map 3 and NW-6 on Map 1.

NW-1 is a low area within a hay meadow/pasture, where the natural slope of the land is blocked by the highway embankment. It had a preponderance of hydrophytic vegetation, primarily creeping spikerush. A soil pit was dug, and the site did not exhibit evidence of wetland hydrology or hydric soils. The soil is mapped as Falfa clay loam, 1 to 3 percent slopes, a welldrained soil of mesa tops (SCS 1982).

NW-2 is located on the other side of the road from NW-1. It is located in a swale upstream from Trumble Draw, and is shown as a connected drainage on both the Loma Linda USGS topographic map and the aerial photographs. It is a small area that may be dammed by a dirt road and ponds water following heavy precipitation or ditch overflows. It also exhibited a preponderance of hydrophytic vegetation, primarily creeping spikerush. A soil pit was dug, and the site did not exhibit evidence of wetland hydrology or hydric soils. The soil is also mapped as Falfa clay loam, 1 to 3 percent slopes, a well-drained soil of mesa tops (SCS 1982).

NW-3 is in a swale associated with the unnamed tributary of the Florida River. The swale appears to represent the original route of this drainage (based on the Bondad Hill USGS topographic map), but any flows from upstream now pass through wetland 49, a ditch. It did not have a more than 50 percent hydrophytic vegetation, although several hydrophytic species were common, especially creeping spikerush. A soil pit was dug, and the site did not exhibit evidence of wetland hydrology or hydric soils. The soil is also mapped as Falfa clay loam, 3 to 8 percent slopes, a well-drained soil of mesa tops (SCS 1982).

NW-4 is in a roadside ditch along county road 216 near Sunnyside. It is dominated by dense tall reed canary grass, a hydrophytic species. A soil pit showed saturation at 4 inches, evidence of wetland hydrology. However, it lacked hydric soil characteristics in the soil pit. The soil is Falfa clay loam, 1 to 3 percent slopes (SCS 1982).

NW-5 is in a roadside depression along the west side of Country Road 213. It is dominated by hydrophytic vegetation including cattail, creeping spikerush, curly dock, and sandbar willow. A soil pit was dug. There was no saturation or inundation, although drainage patterns were present. Soils had no hydric characteristics.

NW-6 is in a roadside depression on the west side of US550, bordered by cottonwood woodland below the Twin Rock Ditch. The lowest portion of the depression, which has no outlet, is dominated by dense woolly sedge. A soil pit found no evidence of wetland hydrology or hydric soils. There are no channels or sediment deposits. This soil is mapped as Pescar fine sandy loam, a soil of floodplains, low terraces, and alluvial valley floors (SCS 1982).

5.4 WETLAND FUNCTIONS AND VALUES

A preliminary evaluation of wetland functions was completed, generally following the Montana Department of Transportation Wetland Field Evaluation Methods (Berglund, 1999). Functions were assessed as high, moderate, low, or not applicable (NA) using a semi-quantitative scoring method for the following 12 wetland functions:

- Habitat for Federally listed, or proposed threatened or endangered species
- Habitat for State listed special status species
- General wildlife habitat
- General fish/aquatic habitat
- Flood attenuation
- Short and long term water storage
- Sediment/nutrient/toxicant retention and removal

SECTIONFIVE

- Sediment/shoreline stabilization
- Production export/food chain support
- Groundwater discharge/recharge
- Uniqueness .
- Recreation/education potential

The results of the preliminary analysis of wetland functions are provided in Appendix A, Table A-1. Results are summarized below.

Federal Threatened and Endangered Species Habitat. Wetlands within or adjacent to riparian woodland and with open water habitat are rated high for this function because of the suspected presence of wintering bald eagles (wetlands 57 and 58). Shrub wetlands that were considered suitable habitat for southwestern willow flycatcher during a presence/absence survey (Sugnet, 2003) are rated as moderate (wetland 7). Wetlands 57 and 58 also have suitable southwestern willow flycatcher habitat. No southwestern willow flycatchers were observed during the survey.

State Listed Special Status Species. Wetlands where northern leopard frog was suspected to occur and which had highly suitable habitat are rated as high (wetlands 4, 34, 57, and 58). Wetlands that had marginally suitable habitat for northern leopard frog are rated as moderate.

General Wildlife Habitat. Wetlands are rated for general wildlife habitat based on several factors, including evidence of wildlife use, structural diversity, duration of surface water, and level of disturbance within and adjacent to the wetland. Wetlands rated high for this function include 4, 54, 56, 57, and 58. These are hillside seeps within relatively undisturbed forest, or structurally diverse wetlands within riparian habitat. A number of wetlands are rated as moderate, including wetlands with a mix of emergent and scrub-shrub vegetation, or a mix of emergent and aquatic bed habitat.

General Fish/aquatic Habitat. Assessment of fish/aquatic habitat is based on several factors, including duration of surface water, presence of cover, shading, and impairment due to water quality or structures. Several ponds provide moderate quality habitat (4, 16, 34, 41, and 62). Most wetlands are rated as not applicable (NA).

Flood Attenuation. No wetlands are rated as moderate or high.

Short and Long Term Surface Water Storage. This function depends on relative storage capacity, duration of surface water, and other factors. No wetlands are rated as high. Several of the larger wetlands are rated as moderate, including 7, 25, 33, 36, 47, 50, and 58.

Sediment and Nutrient Retention. Assessment of this function is based on relative level of nutrients or sediments received by a wetland, evidence of flooding or ponding, and presence of an outlet. Wetlands that received low to moderate levels of sediments or nutrients are rated higher than those receiving larger amounts, because the larger amounts cause eutrophication or impairment of other functions. Most wetlands in the study area are adjacent to or within agricultural land, heavily used pasture, or highways, and therefore are assessed as moderate or low for this function. Wetlands 57 and 58 are rated as high.

Shoreline Stabilization. This function only applies for waters within the banks of streams or man-made drainages, or ponds subject to wave action. No wetlands are rated as moderate or high.

Production Export/Food Chain Support. This function considers size, structural diversity, presence of an outlet, and duration of surface water. Structurally diverse wetlands adjacent to the Animas River are rated high for this function (wetlands 57, 58). Many wetlands are rated as moderate.

Groundwater Discharge/Recharge. Wetlands with springs or seeps are rated high for this function (wetlands 4, 5, 54, 56, 57, 58, 59, 61, 63, 65, 66). These include wetlands along the Animas River and Deer Creek, and isolated hillside seeps. Wetlands with large amounts of surface water that may provide recharge are also rated as high (16, 25, 34, 36, and 72). All other wetlands are rated as low.

Uniqueness. Assessment of this function is based on presence of rare types, structural diversity, and level of disturbance. No wetlands are rated as high, but several wetlands are rated as moderate (wetlands 4, 54, 56, 57, 58, and 66).

Recreation/Education Potential. Assessment of this function is based on known or potential use, level of disturbance, and public/private ownership. None of the wetlands are on public land, except for a few within the CDOT ROW. All wetlands are considered low for this function.



6.1 **AVOIDANCE AND MINIMIZATION**

Impacts to wetlands have been considered during development of the alternatives. Wetlands have been avoided and impacts have been minimized primarily by keeping close to the existing road alignment and by minimization of the road footprint on the south side the Animas River crossing. Many of the impacts are unavoidable because of design constraints or needs. Avoidance and minimization of impacts will be ongoing during engineering design and will be coordinated with USACOE (See Section 7.1).

6.2 **TEMPORARY IMPACTS**

Temporary construction areas have not yet been identified, and therefore, temporary impacts were assessed by assuming that all wetlands within 10 feet of the construction footprint would be impacted. Temporary impacts during construction may result from operation of construction equipment within wetlands, from reconstruction and extension of existing culverts, and from installation of silt fencing adjacent to the ROW. Disturbed areas will be restored to their original contours, and no permanent long-term impacts to wetland size or functions are expected in these areas. Minor and mostly temporary impacts will occur following construction of the highway from routine maintenance activities, including winter sanding and maintenance of culverts and roadside ditches. The estimated area of temporary impacts would be 0.515 acre, including 0.178 acre of jurisdictional wetland and 0.337 acre of non-jurisdictional wetland.

6.3 PERMANENT IMPACTS

Permanent impacts to wetlands were assessed by overlaying the highway construction footprint and the mapped wetland areas. The construction footprints used in the analysis are based on conceptual design, and there could be some changes during final design. All wetlands within the construction footprint of the highway and the berm will be filled and permanently lost. Impacts of the proposed project are summarized in Tables 2 and 3.

Summary of roposed roject remanent wenand impacts by microsis								
Section	Jurisdictional Wetlands (acres)Non-jurisdictional wetlands (acres)Total Wetlands		Non-jurisdictional wetlands (acres)		ands (acres)			
	Ft ²	Acres	Ft ²	Acres	Ft ²	Acres		
MP 0.0 – 3.1	0	0.000	297	0.007	297	0.007		
MP 3.1 – 6.6	22,656	0.521	1,856	0.043	24,512	0.564		
MP 6.6 – 10.5	24,108	0.553	39,746	0.912	63,854	1.466		
MP 10.5 – 15.4	3,033	0.070	24,793	0.569	27,826	0.639		
Total	49,797	1.144	66,692	1.531	116,489	2.676		

Table 2 Summary of Proposed Project Permanent Watland Impacts by Milanests

	Preliminary	Mileposts				
Wetland Group	Section 404 Jurisdictional Status	MP 0.0 – 3.1	MP 3.1 – 6.6	MP 6.6 – 10.5	MP 10.5 – 15.4	Total
Deer Creek wetlands	Jurisdictional		0.198			0.198
Animas River wetlands	Jurisdictional		0.323			0.323
Unnamed tributary of Florida River	Jurisdictional			0.554		0.554
Trumble Draw wetlands	Jurisdictional				0.070	0.070
Hillside seeps	Non-Jur.		0.005			0.005
Isolated irrigation ditches	Non-Jur.		0.034	0.886	0.476	1.396
Sewage lagoons	Non-Jur		0.004	0.017		0.021
Other isolated ponds	Non-Jur				0.027	0.027
Roadside ditches	Non-Jur	0.007		0.009	0.066	0.082
Total		0.007	0.564	1.466	0.639	2.676

 Table 3

 Summary of Proposed Project Permanent Wetland Impacts by Wetland Group

The proposed project would permanently impact 2.676 acres of wetlands and 0.28 acre of other waters, including 1.14 acres of jurisdictional wetlands. Based on this level of impact to jurisdictional waters of the United States, this alternative is likely to require an Individual Section 404 Permit prior to construction. Impacts to the different components of the wetland environment are discussed below. Impacts to individual wetlands are summarized in Table 4.

Wetland	Wetland Type	Jurisdictional wetlands		Non-jurisdictional wetlands		Total Wetlands (acres)	
		Ft ²	Acres	Ft ²	Acres	Ft ²	Acres
MP 0.0 – 3.1							
Wetland 71	Roadside ditch	0	0.00	297	0.007	297	0.007
Subtotal		0	0.00	297	0.007	297	0.007
MP 3.1 – 6.6							
Wetland 55	Sewage lagoon	0	0.000	169	0.004	169	0.004
Wetland 58	Animas River floodplain	4738	0.109	0	0.000	4,738	0.109
Wetland 59	Animas River floodplain	9317	0.214	0	0.000	9,317	0.214
Wetland 60	Isolated irrigation ditch	0	0.000	1,130	0.026	1,130	0.026
Wetland 61	Deer Creek	3,606	0.083	0	0.000	3,606	0.083
Wetland 62	Deer Creek	4,995	0.115	0	0.000	4,995	0.115
Wetland 64	Isolated irrigation ditch	0	0.000	213	0.005	213	0.005
Wetland 65	Hillside seep	0	0.000	211	0.005	211	0.005
Wetland 70	Isolated irrigation ditch	0	0.000	133	0.003	133	0.003
Subtotal		22656	0.521	1,856	0.043	24512	0.564

Table 4Proposed Project Permanent Wetland Impacts by Wetland

Wetland	Wetland Type	Jurisdi wetl	Jurisdictional wetlands		Non-jurisdictional wetlands		Total Wetlands (acres)	
		Ft ²	Acres	Ft ²	Acres	Ft ²	Acres	
MP 6.6 – 10.5								
Wetland 33	Isolated irrigation ditch	0	0.000	22,218	0.510	22,218	0.510	
Wetland 38	Isolated irrigation ditch	0	0.000	11,983	0.275	11,983	0.275	
Wetland 42	Isolated irrigation ditch	0	0.000	423	0.009	423	0.009	
Wetland 44	Isolated irrigation ditch	0	0.000	3,301	0.076	3,301	0.076	
Wetland 45	Isolated irrigation ditch	0	0.000	696	0.016	696	0.016	
Wetland 46	Roadside ditch	0	0.000	400	0.009	400	0.009	
Wetland 47	Unnamed tributary of Florida River	12,495	0.287	0	0.000	12495	0.287	
Wetland 48	Unnamed tributary of Florida River	4,340	0.100	0	0.000	4,340	0.100	
Wetland 50	Unnamed tributary of Florida River	1398	0.032	0	0.000	1,398	0.032	
Wetland 51	Unnamed tributary of Florida River	5,009	0.115	0	0.000	5,009	0.115	
Wetland 52	Sewage lagoon	0	0.000	725	0.017	725	0.017	
Wetland 53	Unnamed tributary of Florida River	866	0.020	0	0.000	866	0.020	
Subtotal		24,108	0.553	39,746	0.912	63,854	1.466	
MP 10.5 – 15.4	4							
Wetland 2	Roadside ditch	0	0.000	2,320	0.053	2,320	0.053	
Wetland 3	Other isolated pond	0	0.000	565	0.013	565	0.013	
Wetland 7	Isolated irrigation ditch	0	0.000	13,515	0.310	13,515	0.310	
Wetland 9	Isolated irrigation ditch	0	0.000	968	0.022	968	0.022	
Wetland 10	Isolated irrigation ditch	0	0.000	3,842	0.088	3,842	0.088	
Wetland 13	Roadside ditch	0	0.000	547	0.013	547	0.013	
Wetland 14	Isolated irrigation ditch	0	0.000	631	0.014	631	0.014	
Wetland 15	Isolated irrigation ditch	0	0.000	299	0.007	299	0.007	
Wetland 16	Other isolated pond	0	0.000	600	0.014	600	0.014	
Wetland 21	Isolated irrigation ditch	0	0.000	1,506	0.035	1,506	0.035	
Wetland 27	Trumble Draw	3,033	0.070	0	0.000	3,033	0.070	
Subtotal		3,033	0.070	24,793	0.569	27,826	0.639	
Total		49,797	1.144	66,692	1.531	116,489	2.676	

Table 4 **Proposed Project Permanent Wetland Impacts by Wetland**

Milepost 0.0 – 3.1

There would be only minor impacts to wetlands from the US 550 project because wetland impact and mitigation has already taken place as part of the US 550 State Line North Project in 2000. Approximately 0.01 acre of non-jurisdictional wetlands would be permanently impacted. Wetland 71 (Table 3) is associated with a roadside ditch and would be filled during the construction of the roadway embankment. This wetland has no moderate- or high-rated functions.

Milepost 3.1 – 6.6

The proposed project would permanently impact 0.59 acre of wetlands and 0.03 acre of other waters between MPs 3.1 and 6.6, including 0.55 acre of jurisdictional wetlands. Most of the impacts would occur to wetlands associated with the Animas River and Deer Creek.

Animas River Wetlands. The proposed project would impact 0.32 acre of jurisdictional wetlands associated with the Animas River - Wetlands 58 and 59 (Table 3) on the south side of the bridge crossing. Impacts would primarily result from placement of fill associated with the roadway embankment. Wetland 58 on the west side of the highway is a highly diverse natural wetland with high functions for federal and state endangered or threatened species, general wildlife habitat, sediment and nutrient retention, and groundwater discharge; and moderate functions for surface water storage, production export, and uniqueness. Wetland 59 on the east side of the highway has high functions for groundwater discharge, and moderate functions for general wildlife habitat, sediment and nutrient retention, and production export.

Deer Creek Wetlands. Portions of Wetlands 61 and 62 (Table 3) would be filled as part of the roadway embankment construction and expansion of the box culvert. Permanent impacts to these wetlands associated with Deer Creek from the proposed project would account for a loss of 0.20 acre of jurisdictional wetlands. Wetland 61 has moderate functions for production export and high functions for groundwater discharge. Wetland 62 has moderate functions for general fish/aquatic habitat and production export.

Hillside Seeps. Less than 0.01 acre of non-jurisdictional hillside seep wetlands would be permanently impacted. Wetland 65 (Table 3) would be filled in this section of the roadway as result of the construction of the embankment. This wetland has high functions for groundwater discharge and moderate general wildlife habitat.

Isolated Irrigation Ditches in Uplands. The project would impact 0.03 acre of nonjurisdictional wetlands (Wetlands 60, 64, and 70) (Table 3) associated with isolated irrigation ditches in upland areas. These wetlands would be filled as part of the roadway embankment construction. These wetlands do not have any high- or moderate-rated wetland functions.

Sewage Lagoons. Less than 0.01 acre of non-jurisdictional wetlands associated with sewage lagoons (Wetland 55 - Table 3) would be permanently filled. This wetland is rated moderate for sediment and nutrient retention.

Other Waters. A relatively small portion (0.03 acre) of intermittent stream O-8 originating near the top of Bondad Hill would be filled as part of the roadway embankment construction. There would be no permanent impacts within the channel of the Animas River, because the piers would be placed outside the channel. The large piers of the old bridge within the channel would be removed.

Milepost 6.6 – 10.5

Improvements to this section would permanently impact 1.47 acres of wetlands, including 0.55 acre of jurisdictional wetlands. Most of the impacts would occur to wetlands associated with an unnamed tributary of Florida River and wetlands associated with irrigation ditches.

Unnamed Tributary to the Florida River. Permanent impacts to the Wetlands (47, 48, 50, 51, 53) associated with the unnamed tributary to the Florida River (jurisdictional) would account for loss of 0.55 acre of wetlands (Table 3). About 50 percent of the impacts would occur at Wetland

47. These wetlands would be filled as part of the roadway embankment construction. Wetland 50 is rated as moderate for general wildlife habitat, Wetlands 47 and 50 are rated as moderate for surface water storage, and Wetlands 47, 48, 50 and 51 are rated as moderate for sediment and nutrient retention.

Isolated Irrigation Ditches in Uplands. The roadway design would result in the fill of 0.89 acre of non-jurisdictional wetlands associated with isolated irrigation ditches in upland areas (Wetlands 33, 38, 42, 44, and 45 – Table 3). Wetland 33 is rated as moderate for general wildlife habitat, surface water storage, and production export. Other wetlands and wetland functions are rated as low or not applicable.

Sewage Lagoons. Approximately 0.02 acre of non-jurisdictional wetlands associated with a sewage lagoon (Wetland 52 – Table 3) would be permanently impacted in this roadway section. This wetland would be filled as part of the roadway embankment construction and is rated as moderate for sediment and nutrient retention.

Roadside Ditch. About 0.01 acre of Wetland 46 (Table 3) would be impacted by the project. No functions are rated as moderate or high.

Milepost 10.5 – 15.4

Improvements to MPs 10.5 through 15.4 would permanently impact 0.64 acre of wetlands, including 0.07 acre of jurisdictional wetlands. Most of the impacts would occur to wetlands associated with irrigation ditches.

Trumble Draw Wetlands. Roadway embankment construction would result in the permanent loss of portions of one jurisdictional wetland associated with Trumble Draw (Wetland 27 - Table 3). Impacts to wetlands would total 0.08 acre. All of the functions of this wetland is rated as low or not applicable.

Isolated Irrigation Ditches in Uplands. All alternatives would result in the fill of 0.48 acre of non-jurisdictional wetlands (Wetlands 7, 9, 10, 14, 15, 17, and 21) associated with isolated irrigation ditches in upland areas (Table 3). A number of wetlands had moderate rated functions:

- Federal threatened or endangered species Wetlands 7 and 10 •
- General wildlife habitat Wetlands 10 and 14 •
- Surface water storage Wetland 7 •
- Production export Wetlands 7, 9, 10, 15, and 21

Other Isolated Ponds. Approximately 0.03 acre of non-jurisdictional wetlands associated with isolated ponds (Wetlands 3 and 16) would be permanently impacted in this roadway section (Table 3). These wetlands would be filled as part of the roadway embankment construction. Wetland 3 is rated as moderate for sediment and nutrient retention, and Wetland 16 is rated as moderate for state special status species habitat, general wildlife habitat, general fish habitat, sediment and nutrient retention, and production export, and high for groundwater recharge.

Roadside Ditches. A total of 0.07 acre of roadside ditch wetlands would be filled as a result of improvements to this roadway section. Both Wetlands 2 and 13 are considered nonjurisdictional (Table 3). Wetland 2 is rated as moderate for general wildlife habitat and sediment and nutrient retention.

Other Waters. Road construction would impact 0.25 acre of other water 0-3, an isolated pond. This would eliminate most of the pond.

6.4 **INDIRECT IMPACTS**

Indirect impacts to wetlands include sedimentation, erosion, and noxious weed invasion. These impacts are not quantifiable and are briefly discussed below.

During construction, clearing of vegetation and other earth-moving activities will destabilize the soil surface and can lead to accelerated erosion of soils from the construction area, and deposition of sediment in downstream and adjoining areas. Long-term impacts to wetlands as a result of roadway sanding may occur. This non-point source of sediment can accumulate in areas adjacent to the roadway, covering the existing vegetation. Long-term impacts from erosion would typically be most pronounced along the roadway edge where there is increased flow frequency, volume, and velocity due to the increase in impermeable surface in the immediate area.

Although noxious weed invasions typically occur in areas of exposed soil with full or partial sun, some noxious weeds are known to invade well-vegetated areas. There are relatively few noxious weed species that regularly occur within wetland areas in Colorado and most of those that do occur are primarily on the margins of the wetlands or in areas of changing hydrology. Noxious weed species associated with wetlands and adjacent moist habitats include Canada thistle, teasel, cut-leaf teasel, purple loosestrife, perennial pepperweed, and leafy spurge. Additionally, areas of exposed soil in nearby non-wetlands could be invaded and could provide an additional seed source for an invasion in wetland areas.

7.1 WETLAND MITIGATION FOR TEMPORARY IMPACTS

Under Section 404 of the CWA, impacts to wetlands and other waters of the United States must be avoided, minimized, or mitigated, in order of preference. Some wetland impacts have been avoided or minimized during development of the project alternatives. Additional avoidance and minimization measures will be developed during the final design process for each highway segment, based on current (within 3 years) wetland delineation. Avoidance and minimization measures that will be considered during final design include slight shifts in the highway alignment and reducing the limits of construction by utilizing retaining walls or guardrails with increased side slopes. The avoidance and minimization measures evaluation will also include consideration of safety impacts, feasibility, and conformance to design criteria.

The following mitigation measures will be utilized during project construction to minimize adverse impacts to wetlands during construction:

- All mitigation efforts will be implemented throughout the project construction period, as appropriate.
- Precautions will be taken when working in areas with shallow groundwater or areas that frequently carry surface water flows to avoid inadvertent hydrologic modifications.
- Unnecessary temporary impacts will be avoided by fencing the limits of disturbance during construction.
- Best management practices (BMPs) will be used during all phases of construction to reduce impacts from sedimentation and erosion. BMPs will include using berms, brush barriers, check dams, erosion-control blankets, filter strips, sandbag barriers, sediment basins, silt fences, straw-bale barriers, surface roughening, and/or diversion channels.
- No equipment staging or storage of construction materials will occur within 50 feet of wetlands or other waters.
- The use of chemicals, such as soil stabilizers, dust inhibitors, and fertilizers, within 50 feet of wetlands and other waters will be prohibited.
- Equipment will be refueled in designated contained areas, at least 50 feet from wetlands and other waters.
- Where practicable, work will be performed during low flows or dry periods. If flowing water is present, it will be diverted around active construction areas.
- No discharge of effluent into wetlands or other waters will occur.
- Temporary fill material will not be stored within wetlands or other waters.
- All areas of exposed soil will be seeded and/or planted and mulched throughout construction (following the completion of each section). Mulch and mulch tackifier will be placed for temporary erosion control when seeding and/or planting cannot occur due to seasonal constraints. Upland seed mixes will not be used within wetlands.
- Any wetland areas used for construction access will be covered with a layer of geotextile and/or straw, and at least 2 feet of soil prior to use.

- All new bridges will be designed to not allow any direct discharge of stormwater runoff into wetlands or other waters.
- A project-specific noxious weed management plan will be developed and implemented during construction. The plan will include identification of noxious weeds in the area, weed management goals and objectives, and preventative and control measures for weeds.

7.2 WETLAND MITIGATION FOR PERMANENT IMPACTS

Unavoidable permanent impacts will be mitigated through on-site and/or off-site wetland creation or restoration, in accordance with CDOT, FHWA, and USACOE mitigation policies, and the conditions of the USACOE Section 404 Permit. Although the CWA only requires compensatory mitigation for those wetlands and other waters considered jurisdictional by USACOE, it is CDOT policy to mitigate all wetlands impacts (jurisdictional and non-jurisdictional) at a 1:1 ratio. Based on a functional assessment methodology, USACOE will determine the appropriate level of mitigation based upon the functions lost or adversely affected as a result of impacts to aquatic resources.

Per the USACOE Regulatory Guidance Letter No. 02-2 (December 24, 2002) USACOE is taking a watershed approach to the mitigation of impacts to waters of the United States. This philosophy suggests that USACOE is likely to request not only wetland creation, but also the use of vegetated upland buffers. The letter states that "applicants will be encouraged to provide compensatory mitigation projects that include a mix of habitats such as open water, wetlands, and adjacent uplands. When viewed from a watershed perspective, such projects often provide a greater variety of functions". There are currently no wetland mitigation banks that service the project area, and the following conceptual mitigation plan identifies on-site areas that appear to be suitable and practicable for wetland mitigation (See Appendix E-Wetland Mitigation Site Selection Form).

The overall goals of compensatory mitigation will be to replace the acreage of wetlands that will be permanently impacted by the project, to replace the wetland functions that will be lost, and to provide additional functions that the local ecosystem may have previously lost (or partially lost) due to impacts from other projects and activities in the area. In addition, mitigation will follow an ecosystem approach and include a mix of habitats and will be within the same watershed as the impacted wetlands. Mitigation for non-wetland other waters and for riparian habitat has also been incorporated into the wetland mitigation conceptual design.

Detailed wetland mitigation plans will be developed in accordance with USACOE Regulatory Guidance Letter 02-2 (USACOE 2002) and will include but are not limited to the following:

- Project description
- Baseline information
- Goals and objectives, including factors considered in site selection
- Mitigation work plan, including hydrology, earthwork, planting plan, fencing, erosion control and schedule
- Performance standards
- Responsible parties

SECTIONSEVEN

- Site protection (legal means for protecting mitigation area)
- Contingency plan
- Monitoring and long-term management
- Financial assurances

The plan will describe all phases of wetland creation, including site layout, shallow groundwater monitoring well installation, construction details, and success monitoring. The site layout will include a detailed base map outlining the exact location of the site(s), the different planting zones, details on the sources of wetland hydrology, and techniques used to create a viable and functioning site. The construction details will provide a detailed seed and plant mix, including the sources and quantities of seed and plants to be used; details on construction methods, timing and sequence; and all other pertinent details regarding construction and planting. The success monitoring will include performance standards, the compensatory mitigation site requirements set forth by the USACOE, and details for the short- and long-term management of the site. The success of the site is typically based on compliance with the success criteria written into the Section 404 Permit.

One existing CDOT wetland mitigation area is located within the project area, the State Line North Mitigation Wetland near milepost 3. This site will be not be affected by project activity. It cannot be expanded within the current CDOT ROW because of topography (the wetland extends to the edge of the ROW).

Five new potential on-site wetland mitigation areas have been identified and are briefly discussed in the following paragraphs. One of them (Animas River Terrace – Figure 2) is relatively large and can be used to mitigate all of the project impacts, if necessary, and also provides a location for riparian habitat mitigation. The other four sites are smaller and address specific impacts. These areas will be investigated during the final design and permitting process of each highway segment. The construction schedule and final design will be included in the final wetland finding. All of the potential mitigation areas are in upland or primarily upland areas, and wetland mitigation will primarily consist of wetland creation. Final selection of sites and construction methods will depend on various factors such as the areas required, land availability, hydrology, engineering feasibility, wetland functions that can be achieved, and the surrounding habitats and relative importance in the ecological landscape. CDOT will identify and preserve large blocks of land for wetland mitigation as early as possible. Early identification, preservation, and construction of mitigation sites will facilitate management and monitoring, increase the probability of success, and enable better long-term protection. CDOT will obtain easements or other legal protection of the mitigation areas.

Potential Site #1: Animas River Terrace Mitigation Area. This site is located on a terrace immediately downstream from the Animas River Bridge, on private land between Wetland 59 and the river (Figure 2 and Map 3). The terrace averages about 400 feet wide and is about 1,800 feet long and 4 to 8 feet above the river. It is bordered by the river on the east and by an upland slope on the west.

The mitigation area is currently part of a operating farm and appears to have been heavily grazed in the past. The vegetation is mostly a weedy grassland. A herbaceous wetland is present along the toe slope of the adjoining upland and appears to receive water from seepage near the base of the slope. Water may also be provided by overbank flooding and alluvial groundwater flows. A



number of cottonwoods occur on slightly higher ground adjacent to the river. Soils are mapped as Tefton loam, a deep, somewhat poorly drained soil of floodplains and alluvial valley floors (SCS 1982).

The proposed mitigation site would be developed by excavating portions of the grassland next to the existing wetland to reach the groundwater table. There is an existing shallow groundwater table in meadow areas adjacent to the wetland, which appears to be supported by seepage from the adjoining upland, because the wetland is about 4 to 6 feet higher in elevation than the river surface. Water may potentially also be provided by redirecting seepage flows from Wetlands 58 and 59 that will be covered during construction of the wider embankment needed for the four-lane highway. The wetland will mimic a natural wetland depression ("meander scar") left behind by channel migration. It will be a combination PEM/PSS wetland with a large PSS area for southwestern willow flycatcher habitat. Depth of excavation is expected to range from 1 to 3 feet depending on the depth to groundwater. Excavation depth will be determined by monitoring of groundwater elevations throughout a complete growing season. The existing wetland and mature cottonwoods will be preserved wherever possible.

The mitigation will consist of about 2 acres of new wetland and about 2.75 acres of riparian habitat. The wetland will be planted with native forbs, grass-like plants, and shrubs. Wetland vegetation will be transplanted from portions of Wetlands 58 and 59 that will be filled by the project, if possible and appropriate. The riparian mitigation area consists of mature cottonwood trees with a weedy herbaceous layer and will be enhanced by planting of young trees and shrubs and by weed control. Mitigation may also include seeding. The riparian area will not require excavation. The mitigation area is bordered by the Animas River, US 550, the upland slope west of the river, and a farm road and farm buildings to the south. The mitigation area could potentially be expanded to the south on the terrace.

Wetland functions expected to be replaced at this wetland include federal endangered and threatened species habitat (bald eagle and southwestern willow flycatcher), state special status species habitat (northern leopard frog), general wildlife habitat, surface water storage, sediment and nutrient retention, and production export. In addition, the existing groundwater discharge is expected to continue.

Potential Site #2: Deer Creek Canyon Mitigation Area. The portion of Wetland 61 that would be filled during road widening is a wetland drainage that carries water from seepage areas further uphill to Deer Creek. This mitigation area (Figure 3) would create the drainage at the toe of the road slope in order to maintain the connectivity of the wetland to Deer Creek. The lower part of the road embankment would be constructed of impervious or slowly draining material, and minor excavation would be used to direct drainage flows toward Deer Creek at the new location. The total area of wetland replaced would be about 0.1 acre. The existing habitat is a heavily grazed pasture with sparse upland vegetation. Riparian trees and shrubs could be planted along the mitigation wetland and along Deer Creek, if livestock are excluded.

Potential Site #3: Ditch Relocation. Wetlands W-7, W-33 and W-38 generally parallel US 550 and would be relocated to the edge of the ROW under all action alternatives. The existing fringe wetlands along these ditches will be recreated by operating the ditches at their new locations because of the presence of water and clay loam soils. Wetland establishment can be enhanced, if needed, by transplanting wetland vegetation from the old ditch to the new. Typical species along



these ditches include redtop, creeping spikerush, Baltic rush, reed canarygrass, timothy, smallfruit bulrush, sandbar willow, and broadleaf cattail. Average fringe wetland width is expected to be the same for relocated ditches as for existing ditches, if slopes are the same. Functions that are likely to be replaced include surface water storage, production export, and bank stabilization. General wildlife habitat and threatened and endangered species habitat may also be created if the ditch companies allow creation of willow habitat. The expected mitigation areas are shown in Table 4.

Expected in Figurion Ditch Whitgation Areas								
Wetland Mitigation Area	Length	Average fringe wetland width (excluding open channel)	Size of Mitigation area (sq. ft.)	Size of Mitigation area (acres)				
W-7 (relocated)	1400	8	11,200	0.26				
W-33 (relocated)	3815	5	19 075	0.44				
W-38 (relocated)	3930	3	11,790	0.27				
Total			42,065	0.97				

Table 5 Expected Irrigation Ditch Mitigation Areas

This mitigation will replace approximately two-thirds of the impacts to irrigation ditches. Other ditches impacted by the project are less likely to be moved and more likely to be piped or carried through a culvert across the ROW, or have narrower fringe wetlands that are less likely to be replicated at the new location. These wetlands will be mitigated at another wetland mitigation site.
Based on the above considerations, it is determined that there is no practicable alternative 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.

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													Wetland	Functions					
Wetland Number	Map Number	Wetland Group	Descriptive Type	Cowardin Type	Size (acres)	Size (Square feet)	Jurisdictional?	Federal Threatened and Endangered Species Habitat	State Special Status Species Habitat	General Wildlife Habitat	General Fish/aquatic Habitat	Flood Attenuation	Surface Water Storage	Sediment , Nutrient , and toxicant Retention	Sediment/ Shoreline Stabilization	Production Export/ Food Chain Support	Groundwater Discharge/Recharge	Uniqueness	Recreation/ Education Potential
1	11	Sewage lagoon		PEM, POWF	0.009	393	No - isolated	Low	Low	Low	NA	NA	NA	Mod.	NA	Low	Low	Low	Low
2	11	Roadside ditch		60% PEM/ 40% PSS	0.053	2,320	No - isolated (cut off by road). Mapped int. trib of Animas	Low	Low	Mod.	NA	Low	Low	Mod.	NA	Low	Low	Low	Low
3	11	Other isolated pond		PEM	0.013	565	No - isolated	Low	Low	Low	Low	NA	Low	Mod.	NA	Low	Low	Low	Low
4	11	Hillside seep		50% PEM/ 50% PSS/ PAB (O-1)	0.092	4,026	Yes - drainage connects to Animas on topo	Low	High	High	Mod.	NA	Low	Mod.	NA	Mod.	High	Mod.	Low
5	11	Hillside seep		PEM	0.503	21,911	No - on steep slope above Animas R., does not appear to be connected	Low	Low	Mod.	NA	NA	NA	Mod.	NA	Mod.	High	Low	Low
6	11	Sewage lagoon		PEM/POW	0.019	826	No - isolated	Low	Low	Low	NA	NA	NA	Mod.	NA	Low	Low	Low	Low
7	10-11	Isolated irrigation ditch	Coop Ditch - northern part	80% PEM/ 20% PSS	0.804	35,009	No - irrigation	Mod.	Low	Low	NA	Low	Mod	Low	Low	Mod.	Low	Low	Low
8	11	Sewage lagoon		PEM	0.006	242	No - isolated	Low	Low	Low	NA	NA	NA	Mod.	NA	Low	Low	Low	Low
9	10	Isolated irrigation ditch		80% PEM/ 20% PSS	0.039	1,683	No - irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Mod.	Low	Low	Low
10	10	Isolated irrigation ditch	Coop Ditch - middle part	50% PEM/ 50% PSS	0.078	3,390	No - irrigation	Mod.	Low	Mod.	NA	Low	Low	Low	Low	Mod.	Low	Low	Low
11	10	Sewage lagoon		PEM, POWF	0.003	110	No - isolated	Low	Low	Low	NA	NA	NA	Mod.	NA	Low	Low	Low	Low
13	10	Roadside ditch		PEM	0.013	547	No - isolated	Low	Low	Low	NA	Low	Low	Low	NA	Low	Low	Low	Low
14	10	Isolated irrigation ditch		PSS	0.018	789	No - irrigation	Low	Low	Mod.	NA	Low	Low	Low	Low	Low	Low	Low	Low
15	9-10	Isolated irrigation ditch	Coop Ditch - south part	80% PEM/ 20% PSS	0.434	18,865	No - irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Mod	Low	Low	Low
16	9-10	Other isolated pond		PEM fringe around PAB (O-3)	0.021	898	No - isolated	Low	Mod	Mod.	Mod.	NA	Low	Mod.	Low	Mod.	High	Low	Low
17	9	Isolated irrigation ditch		PEM	0.385	16,759	No - irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Low	Low	Low	Low

													Wetland	Functions					
Wetland Number	Map Number	Wetland Group	Descriptive Type	Cowardin Type	Size (acres)	Size (Square feet)	Jurisdictional?	Federal Threatened and Endangered Species Habitat	State Special Status Species Habitat	General Wildlife Habitat	General Fish/aquatic Habitat	Flood Attenuation	Surface Water Storage	Sediment , Nutrient , and toxicant Retention	Sediment/ Shoreline Stabilization	Production Export/ Food Chain Support	Groundwater Discharge/Recharge	Uniqueness	Recreation/ Education Potential
18	9	Isolated irrigation		60% PEM/	0.056	2,449	No - irrigation	Low	Low	Mod.	NA	Low	Low	Low	Low	Low	Low	Low	Low
		ditch		40% PSS															
19	9	Other isolated pond		PEM/PUB	0.007	296	No - isolated	Low	Low	Low	Low	NA	Low	Mod.	NA	Low	Low	Low	Low
20	9	Sewage lagoon		PEM, POWF	0.015	646	No - isolated	Low	Low	Low	NA	NA	NA	Mod.	NA	Low	Low	Low	Low
21	9	Isolated irrigation ditch		PEM	0.072	3,132	No - irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Mod.	Low	Low	Low
22	9	Roadside ditch		85% PEM/	0.169	7,348	No - isolated	Low	Low	Low	NA	NA	Low	Mod.	NA	Low	Low	Low	Low
				15% PSS															
23	9	Other isolated pond		PEM/PAB	0.021	897	No - isolated	Low	Low	Mod.	Low	NA	Low	Mod.	NA	Low	Low	Low	Low
24	9	Sewage lagoon		PEM/POWF	0.015	661	No - isolated	Low	Low	Low	NA	NA	NA	Mod.	NA	Low	Low	Low	Low
25	9	Other isolated pond		PEM around PAB (O-4)	0.758	33,000	No - appears to be isolated from Trumble Draw	Low	Mod.	Mod.	Low	NA	Mod.	Mod.	NA	Low	High	Low	Low
27	9	Trumble Draw	Resembles irrigation ditch	PEM	0.108	4,705	Yes- connected to Trumble Draw	Low	Low	Low	NA	Low	Low	Low	Low	Low	Low	Low	Low
28	9	Trumble Draw	Resembles irrigation ditch	80% PEM/ 20% PSS	0.051	2,219	Yes - connected	Low	Low	Low	NA	Low	Low	Low	Low	Mod.	Low	Low	Low
29	8-9	Trumble Draw	Ressembles irrigation ditch	85% PEM/ 15% PSS	0.161	7,027	Yes - connected	Low	Low	Low	NA	Low	Low	Low	Low	Mod.	Low	Low	Low
30	8	Trumble Draw	swale	PEM	0.331	14,403	Yes- connected	Low	Low	Low.	NA	Low	Low	Low	Low	Low	Low	Low	Low
31	8	Sewage lagoon		PEM, POWF	0.007	311	No - isolated	Low	Low	Low	NA	NA	NA	Mod.	NA	Low	Low	Low	Low
32	8	Isolated irrigation ditch		PEM	0.001	32	No - irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Low	Low	Low	Low
33	7-8	Isolated irrigation ditch		95% PEM/ 5% PSS	0.861	37,500	No - irrigation	Low	Low	Mod.	NA	Low	Mod.	Low	Low	Mod.	Low	Low	Low
34	8	Other isolated pond		PEM fringe around PAB (O-5)	0.071	3,108	No - isolated	Low	High	Low	Mod.	NA	Low	Mod.	Low	Mod.	High	Low	Low
35	7	Sewage lagoon		PEM, POWF	0.024	1,034	No - isolated	Low	Low	Low	NA	NA	NA	Mod.	NA	Low	Low	Low	Low

													Wetland	Functions					
Wetland Number	Map Number	Wetland Group	Descriptive Type	Cowardin Type	Size (acres)	Size (Square feet)	Jurisdictional?	Federal Threatened and Endangered Species Habitat	State Special Status Species Habitat	General Wildlife Habitat	General Fish/aquatic Habitat	Flood Attenuation	Surface Water Storage	Sediment , Nutrient , and toxicant Retention	Sediment/ Shoreline Stabilization	Production Export/ Food Chain Support	Groundwater Discharge/Recharge	Uniqueness	Recreation/ Education Potential
36	7	Other isolated pond		PEM fringe around PAB (O-6)	0.195	8,511	No - isolated	Low	Mod.	Mod.	Low	NA	Mod.	Mod.	Low	Mod.	High	Low	Low
37	7-8	Isolated irrigation ditch		PEM	0.165	7,172	No - irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Low	Low	Low	Low
38	6-7	Isolated irrigation ditch		95% PEM/ 5% PSS	1.165	50,754	No - irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Low	Low	Low	Low
39	7	Isolated irrigation ditch		PEM	0.019	841	No - irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Low	Low	Low	Low
40	7	Sewage lagoon		PEM, POWF	0.009	388	No - isolated	Low	Low	Low	NA	NA	NA	Mod.	NA	Low	Low	Low	Low
41	7	Other isolated pond		PEM/POW	0.140	6,077	No - isolated, irrigation	Low	Mod.	Mod.	Mod.	NA	Low	Mod.	NA	Low	Low	Low	Low
42	7	Isolated irrigation ditch		PEM	0.256	11,146	No - irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Low	Low	Low	Low
43	7	Isolated irrigation ditch		PEM	0.016	692	No - irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Low	Low	Low	Low
44	6	Isolated irrigation ditch		PEM	0.093	4,041	No - irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Low	Low	Low	Low
45	6	Isolated irrigation ditch		PEM	0.024	1,039	No - isolated, irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Low	Low	Low	Low
46	6	Roadside Ditch		PEM	0.009	400	No - isolated, irrigation	Low	Low	Low	NA	Low	Low	Low	NA	Low	Low	Low	Low
47	6	Unnamed Tributary of Florida River	swale	РЕМ	0.428	18,636	Yes - connects to Florida River	Low	Low	Low	NA	Low	Mod.	Mod.	Low	Low	Low	Low	Low
48	6	Unnamed Tributary of Florida River	Irrigation ditch	PEM	0.100	4,340	Yes - connects to Florida River	Low	Low	Low	NA	Low	Low	Mod.	Low	Low	Low	Low	Low
49	5-6	Unnamed Tributary of Florida River	Irrigation ditch	PEM	0.317	13,790	Yes - connects to Florida via tributary	Low	Mod.	Mod.	NA	Low	Low	Low	Low	Low	Low	Low	Low
50	5-6	Unnamed Tributary of Florida River	swale	PEM	0.407	17,723	Yes - connects to Florida River	Low	Low	Mod.	NA	Low	Mod.	Mod.	NA	Low	Low	Low	Low
51	5-6	Unnamed Tributary of Florida River	swale	PEM	0.164	7,152	Yes - connects to Florida River	Low	Low	Low	NA	Low	Low	Mod.	NA	Low	Low	Low	Low
52	5-6	Sewage lagoon		PEM, POWF	0.017	725	No - isolated	Low	Low	Low	NA	NA	NA	Mod.	NA	Low	Low	Low	Low

													Wetland	Functions					
Wetland Number	Map Number	Wetland Group	Descriptive Type	Cowardin Type	Size (acres)	Size (Square feet)	Jurisdictional?	Federal Threatened and Endangered Species Habitat	State Special Status Species Habitat	General Wildlife Habitat	General Fish/aquatic Habitat	Flood Attenuation	Surface Water Storage	Sediment , Nutrient , and toxicant Retention	Sediment/ Shoreline Stabilization	Production Export/ Food Chain Support	Groundwater Discharge/Recharge	Uniqueness	Recreation/ Education Potential
53	5-6	Unnamed Tributary of Florida River	Irrigation ditch	PEM	0.047	2,061	Yes - connects to Florida River	Low	Low	Low	NA	Low	Low	Low	Low	Low	Low	Low	Low
54	5	Hillside seep		PEM	0.032	1,389	No - appears to be isolated	Low	Low	High	NA	NA	Low	Low	NA	Low	High	Mod.	Low
55	5	Sewage lagoon		PEM, POWF	0.004	169	No - isolated	Low	Low	Low	NA	NA	NA	Mod.	NA	Low	Low	Low	Low
56	5	Hillside seep		PEM	0.036	1,553	No - appears to be Isolated. Spring flow used for irrigation	Low	Low	High	NA	NA	NA	Mod.	NA	Low	High	Mod.	Low
57	4	Animas River floodplain	floodplain, hillside seep	50% PEM/ 40% PSS/ 10% PAB	0.085	3,704	Yes - adjacent to Florida	High	High	High	Low	Low	Low	High	NA	Mod.	High	Mod.	Low
58	3	Animas River floodplain	floodplain, hillside seep	85% PEM/ 5% PSS/ 10% PAB	0.798	34,768	Yes - hydrologically connected to river	High	High	High	Low	Low	Mod	High	NA	Mod	High	Mod.	Low
59	3	Animas River floodplain	Floodplain, hillside seep	PEM	0.312	13,602	Yes - hydrologically connected to river	Low	Low	Mod.	NA	Low	Low	Mod	NA	Mod.	High	Low	Low
60	3	Isolated irrigation ditch		PEM	0.052	2,259	No - irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Low	Low	Low	Low
61	3	Deer Creek	Hillside seep	PEM	0.483	21,035	Yes - connected to Deer Creek	Low	Low	Low	NA	NA	NA	Low	NA	Mod.	High	Low	Low
62	3	Deer Creek	Creek and adjoining wetlands	60% PEM/ 40% RS3SB	0.294	12,798	Yes- creek connected to Animas River	Low	Low	Low	Mod.	Low	Low	Low	Low	Mod.	Low	Low	Low
63	3	Deer Creek	hillside seep	PEM	0.040	1,761	Yes - connects to Deer Creek	Low	Low	Low	NA	NA	Low	Low	NA	Low	High	Low	Low
64	3	Isolated irrigation ditch		PEM	0.020	889	No - irrigation	Low	Low	Low	NA	Low	Low	Low	Low	Low	Low	Low	Low
65	3	Hillside seep		60% PEM/ 40% PSS	0.005	217	No - isolated, irrigation- related	Low	Low	Mod.	NA	NA	Low	Low	NA	Low	High	Low	Low
66	3	Animas River floodplain	floodplain, hillside seep	PEM	0.041	1,771	Yes - hydrologically connected to river	Low	Low	Mod.	NA	Low	Low	Mod.	NA	Low	High	Mod.	Low

													Wetland	Functions					
Wetland Number	Map Number	Wetland Group	Descriptive Type	Cowardin Type	Size (acres)	Size (Square feet)	Jurisdictional?	Federal Threatened and Endangered Species Habitat	State Special Status Species Habitat	General Wildlife Habitat	General Fish/aquatic Habitat	Flood Attenuation	Surface Water Storage	Sediment , Nutrient , and toxicant Retention	Sediment/ Shoreline Stabilization	Production Export/ Food Chain Support	Groundwater Discharge/Recharge	Uniqueness	Recreation/ Education Potential
67	7	Other isolated pond		PEM			No- isolated, irrigation	Low	Mod.	Low	NA	Low	Low	Mod	NA	Mod.	Low	Low	Low
68	9	Isolated irrigation ditch		PEM			No – irrigation	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
69	4-5	Isolated irrigation ditch	Paxton Ditch	PEM			No – irrigation	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
70	3	Isolated irrigation ditch		PEM			No – isolated	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
71	3	Roadside ditch		PEM			No – isolated	Low	Low	Low	NA	Low	Low	Low	NA	Low	Low	Low	Low
72	3	Stateline North mitigation area		PEM			Yes – outflow is captured by Two Rock Ditch, which crosses into New Mexico	Low	Low	Mod.	NA	Low	Mod.	Mod.	Low.	Mod.	High	Low	Low

							Table A-2 Soil Pit Data		
Soil Pit Number	Wetland/Upland	Location	Soil Depth (inches)	Matrix Color	Mottle Color	Mottle Density/ Size	Texture	Hydrology	Surface
Animas	River Wetlands				I			-	
59-A	Wetland	Edge of wetland	0-6 6-8+	10YR4/2 10YR4/2	None 7.5YR4/5	 Common, large	Fibrous silty clay Silty clay loam	Saturated to surface, most of wetland has shallow inundated	Creeping b bulrush, for rush, alkali
59-B	Upland	About 50 feet east of 59-A	0-12	7.5YR4/3	None		Clay loam	Saturation at 16 inches	Akali muhl barley, koc dandelion,
Deer Cro	eek Wetlands			·					·
61-A	Wetland	Middle of wetland	0-12	2.5/N	None		Fibrous organic matter mixed	Saturated to surface, inundated to 12 inches, very hummocky	Creeping s
			12+	2.5/N	None		with clay Clay		
Unname	d Tributary of Flo	orida River	-						
47-A	Wetland	Middle of wetland	0-1 1-16	10YR3/1 7.5YR5/2	None 7.5YR5/8	 Numerous, small	Clay loam, fibrous	Saturated to surface	Reed canar spikerush
							Clay Loam		
U.S 550	State Line North	Mitigation Wetland							
72-A	Wetland	3 feet within cattail	0-2	2.5Y3/1	None		Clay	Saturated to surface, mostly	Broadleaf of
			2-12	10YR4/1	None		Clay		
72 - B	Upland	About 20 feet from 72_{-}	0-6	10YR3/4	None		Loam	No indicators	Mix of upla
		12-14	6-8	2.5Y6/8	None		Hard sandy loam		10105
			8+	Rock	None		White sandstone		
72-C	Wetland (Stateline North mitigation area)	Wetland on east berm	0-12	10YR5/2	7.5YR4/4	Abundant	Loamy clay	Saturated to surface, inundated in parts, drainage patterns	Creeping b sandbar wi creeping sp
Roadsid	e Ditch Wetlands								
71-A	Wetland	Bottom of depression	0-12	Mix of 10YR4/3, 10YR3/3, and 10YR5/1	None		Clay loam	Saturated to surface, sediment deposits, partly inundated	Barnyard g
71-B	Upland	Near 71-A	0-9	Mix of 5Y4/3, 7.5YR5/6, 2.5Y4/1, 2.5Y4/3	None		Cobbly loamy clay	No indicators	Tall wheatg wheatgrass ricegrass, y

Vegetation at Soil Pit	Notes
entgrass, softstem x-tail barley, Torrey muhly	
y, wild licorice, foxtail hia, white goosefoot, chicory	
pikerush	
y grass, creeping	
eattail	
and grasses and weedy	
entgrass, Torrey rush, llow, willowherb, ikerush, others	
rass, spikerush	Problem area, newly constructed
grass, slender , plantain, Indian ellow sweetclover	

							Table A-2 Soil Pit Data			
Soil Pit Number	Wetland/Upland	Location	Soil Depth (inches)	Matrix Color	Mottle Color	Mottle Density/ Size	Texture	Hydrology	Surface Vegetation at Soil Pit	Notes
Other Is	olated Ponds						•			
67-A	Wetland	Perimeter	0-2	10YR3/2	None	None	Loam	Saturated to surface	Reed canary grass	Problem area
			2-12	10YR4/3	None	None	Loamy clay			
67-B	Upland	10 feet from 67-A, in	0-1	2.5Y/1	None	None	Loam, high	No indicators	Dense quackgrass	
		upland	1-12	10YR4/3	None	None	organic			
							Loamy clay			
Isolated 2	Irrigation Ditches									1
68-A	Wetland	Bottom of ditch	0-8	7.5YR3/2	7.5YR4/6	5%, to $\frac{1}{4}$ inch	Clay loam	Very moist, sediment deposits	Cattail and small-fruit bulrush	
			8-12+	10YR4/4	None		Silty clay loam			
69-A	Wetland	1 foot down- slope from ditch	0-12	10YR3/2	5YR4/6	20%, to 1/8 inch	Clay loam, many cobbles	Saturated at 8 inches	Baltic rush, creeping bentgrass	
69-B	Upland	10 feet from 69-A,	0-3	10YR3/3	None		Clay loam	No indicators	Chicory, dandelion, plantain,	
		edge of pipeline right	3-7	10YR3/4	7.5YR4/6	10%, slight	Sandy clay loam		squirreltail, cheatgrass	
		of way	7-12	10YR4/4	None	contrast	Clay loam			
Non-wei	Liand Data Points		0.10	103/0 4/2			T 1	NT 1 1		
IN W-1	Upland	wetland	0-12	10 Y K4/3	Faint		Loamy clay	No indicators	foxtail barley	
NW-2	Upland	Middle of potential wetland	0-14	7.5YR3/3	Faint	Small	Clay loam	No indicators	Creeping spikerush, bluegrass	
NW-3	Upland	Middle of potential wetland	0-10+	10YR4/3	Faint	Few	Clay loam	No indicators	Creeping spikerush, plantain, foxtail barley	
NW-4	Wetland	1 foot from edge of	0-6	10YR4/4	None		Clay loam	Saturated at 4 inches	Dense tall reed canarygrass	
		wetland	6-12	10YR4/3	2.5Y/1	20%, moderate	Clay loam			
			12+	10YR4/4	None		Clay loam			
NW-5	Upland	Middle of drainage pattern	0-12	10YR4/3	None		Stiff clay	Drainage patterns	Dense spikerush	
NW-6	Upland	Bottom of swale	0-9	10YR4/3	7.5YR4/4	Few, large	Clay loam	No indicators	Dense wooly sedge	
			9-12+	10YR/2	None		Clay loam			

Appendix B Representative Wetland Photographs





Animas River Wetlands – Wetland 57



Animas River Wetlands – Wetland 58





Deer Creek Wetlands – Wetland 61



Deer Creek Wetlands – Soil pit in Wetland 61





Deer Creek Wetlands – Wetland 62 and Deer Creek



Trumble Draw Wetlands – Wetland 27





Trumble Draw Wetlands – Wetland 30



Unnamed Tributary of Florida River – Wetland 47





Unnamed Tributary of Florida River – Wetland 49



Unnamed Tributary of Florida River – Wetland 50





Hillside Seeps – Wetland 54



Hillside Seeps – Wetland 56





Roadside Ditches – Wetland 2



Roadside Ditches – Wetland 13





Sewage Lagoons – Wetland 8



Sewage Lagoons - Wetland 52





Other Isolated Ponds – Wetland 16



Other Isolated Ponds – Wetland 36





Irrigation Ditches in Uplands – Wetland 7



Irrigation Ditches in Uplands – Wetland 18

Appendix C Wetland Maps





08/12/04











07/19/04

















Appendix D

Routine Wetland Determination Data Forms

DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Do Normal Circumstances exist on the site? Yes No Community ID: State Is the site significantly disturbed (Atypical Situation)? Yes No Transect ID: Plot ID: Itansect ID: Is the area a potential Problem Area? (If needed, explain on reverse.) Yes No Plot ID: Italsect ID: VEGETATION VEGETATION Indicator Italsect ID: Italsect ID: Italsect ID: 1. Type Italsect ID: Italsect ID: Italsect ID: Italsect ID: 2. Italsect ID: Italsect ID: Italsect ID: Italsect ID: Italsect ID: 3. Italsect ID: Italsect ID: Italsect ID: Italsect ID: Italsect ID: 4. Italsect ID: Italsect ID: Italsect ID: Italsect ID: Italsect ID: 3. Italsect ID: Italsect ID: Italsect ID: Italsect ID: Italsect ID: 3. Italsect ID: Italsect ID: Italsect ID: Italsect ID: Italsect ID: 4. Italsect ID: Italsect ID: Italsect ID: Italsect ID: Italsect ID: Italsect ID: 5. Italsect ID:	Project/Site: <u>US550</u> Applicant/Owner: <u>COOT</u> Investigator: <u>S. Dauren and</u> A.M.	~ <u></u>	Date: $\frac{\left 0 \right ^{23} \left \right }{County: (a flabe)}$ State: Co
Dominant Plant Species. Stratum Indicator Dominant Plant Species. Stratum Indicator 1	Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situat Is the area a potential Problem Area? (If needed, explain on reverse.)	tion)? Yes No Yes No Yes No	Community ID: <u>5454</u> Transect ID: Plot ID: Layoon -wtSt
Dominant Plant Species, Stratum Indicator 1Ma / ut/fulta 1 0 9. 2 10. 3 11. 4	/EGETATION		Photo
8 16	Dominant Plant Species, Stratum Indicator 1 1 1 0.5L 2 3	Dominant Plant Species 9	<u>Streturn</u> Indicetor

(oxcluding FAC-). ________ Romarks: M. onthal, H. annuns on edge

HYDROLOGY

1

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Aveilable	Wetland Hydrology Indicators: Primary Indicators:
Field Observations: Depth of Surface Water: 0-24 (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Romarks: Typical layorn ~ 50;	1/2 Water

Map Unit (Sories an Taxonomy	Name d Phase): / (Subgroup):	Falfa U	ay Iron 3.	- Drainage C Field Obse Confirm 1	Jass: <u>Well-drown</u> d rvations Mapped Type? Yes No
<u>Profile De</u> Depth <u>(inches)</u>	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundence/Contrast	Texture, Concretions,- Structure, etc.
	· · · · · · · · · · · · · · · · · · ·				
· ·		·			
<u></u>					
Hydric Soi - - - - - -	l Indicators: Histosol Histic Epi Sulfidic O Aquic Ma Reducing Gleyed or	pedon Idor isture Regime Conditions · Low-Chrome Colors	Cc Hi Or Lis Ot	encretions gh Organic Content in Su ganic Streaking in Sandy sted on Local Hydric Soils sted on National Hydric S her (Explain in Remarks)	Irface Layer in Sandy Soils Soils Suist oils List
Remerks:	No	pit			

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WETLAND DETERMINATION

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Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	(Circle) Is this Sampling Point Within a Wetland? (res) No	
Romarks: Typical Japan		
Project/Site: UISSU Applicant/Owner: COrt Investigator: J. Dawson and B. Herb		Date: $\frac{g/20}{0}$ County: 20 p State: \underline{c}
--	----------------------------	--
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: 750 () Transect ID: Plot ID: Ditth/inste (EASt)
/EGETATION		/ Photo 1-20

					-	
	Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	1. Efeocharis palustas			9		
	2 Runex friang,	H	FACU 5	7. 10		•
	3. Tuha latifith	h	58L 5	2/ 11	· ·	
	4. Honleum Jabatum	4	thut 5	/ 12		
ϑ	5. Phlenn oratanse			13		
	6 Salix Exama	2	OBL 4	% 14		
	7. Scirpus microcarpus	H	VIL 10	7 15		
	8. Salix Jasiandra	2	ULL 10	// 16		
						2
	Percent of Dominant Species that are OE (excluding FAC-).	SL, FACW of	FAC	100%		
	Remarks: Northern Must en	it S.e	XBAA W/SC	went understory lower	- reach i	's more
	Never + Hordenn Nor	There a	nia has	com. Seal without (1)	in this of	
			· · · · · · · · · · · · · · · · · · ·	S. /as	anana). B	. marmiz
	on edges				# Nut	Down

HYDROLOGY

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Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	 Sediment Deposits Drainage Pattems in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Staned Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Small Swall Mat I kel Mein Vuntte	res ivriz. overflow + surface

Map Unit I (Series an Taxonomy	Vame od Phase): (Subgroup): _	Felfa	Ung Isam	3-8% Dr. Fit	ainage Class: eld Observations onfirm Mapped Type? Ye	ell
Profile De: Depth (inches)	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Çolors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions	•
Hydric Soil H H S S G	Indicators: Istosol Istic Epipedon ulfidic Odor quic Moisture reducing Cond leyed or Low-	Regime litions Chroma Colors	Concreti High Org Organic Listed on Listed on Other (E	ons anic Content in Surface Li Streaking in Sandy Soils Local Hydric Soils List National Hydric Soils List xplain in Remarks)	ayer in Sandy Soils	
Remarks:	Ni g	;+				*

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No Assumed	(Circle) Is this Samplig Point Within a Wetland? (Ves) No	
Remarks: Smale Spinle	m edge of h	ay field.	
		Approved by HQUSACE 3/92	2

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DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: US 550 Applicant/Owner: COUT Investigator: Dawing and Herb	Date: $\frac{9/20/11}{County: 1 + 10 + 10}$ State: CU				
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	? Yes No Yes No Yes No	Community ID: 24-13 Transect ID: Plot ID: /ond (east)			
VEGETATION		Anoto 1-16			
Dominant Plant Species Stratum Indicator 1. Eleocharrs publistres H UBL 10% 2. Scrigers valoders H GBL 10% 3. Echinochloa crusgali H H KCV 5% 4. Unic aguatic A GBL 30% 5. Eleocharrs aimace 6. Hordenen forbutum 2% 7. 8.	Dominant Plant Species 9				
Percent of Dominant Species that are OBL, FACW or FAC					
Remarks: Small port uf Horsteum + Echinoch De oPer listed species	loa along we e	dye ad prekets of			

HYDROLOGY

7.1

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: (in.)	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits - also debrig Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Small pord currently dry but	water marts, sediment deposits +
debris present. Small swale proves	des mater How during prop. events.

Appendix B Blank and Example Data Forms

Map Unit Name (Series and Phase): Taxonomy (Subgroup): _	Falfe	Joy Iron -	3 - 8 Drai Fiek Cont	nage Class: <u>Well</u> d Observations firm Mapped Type? Yes No	
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture R Reducing Condit Gleyed or Low-C	legime ions hroma Colors	Concre High Or Organic Listed o Listed o Other (I	tions ganic Content in Surface Lay Streaking in Sandy Soils In Local Hydric Soils List In National Hydric Soils List Explain in Remarks)	ver in Sandy Soils	•
Remarks: No p	r,` 7-				

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No Ajmad	(Circle) Is this Samplig Point Within a Wetland?
Remarks: Dry pord	w/aquate veg.	(dead/dying)
		Approved by HQUSACE 3/92

Appendix B Blank and Example Data Forms

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IN 1-1.

Project/Site: <u>W 555</u> Applicant/Owner: <u>ODUT</u> Investigator: <u>5. Dawman and A</u> Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situat Is the area a potential Problem Area? (If needed, explain on reverse.)	Date: 10/23/01 County: La Mate State: Co Community ID: State Transect ID: (4) Plot ID: fond - west Mosto				
VEGETATION					
Dominant Plant Species Stratum Indicator 1. Typha Infinite H USL 2. Poa Sp H Fhilite 3. Rumey Mangelands H Fhile 4. Solite Exignal S Oble 5. - - - 6. - - - 7. - - - 8. - - - Percent of Dominant Species that are OBL, FACW or FAC (axcluding FAC-) - -	Dominant Plant Species 9	<u>Stratum</u> <u>Indicator</u>			
Romarks: Some Populus angustikolin along edges. Small pord at porer end dominated by tattail.					
Mfringe IYDROLOGY					
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Asrial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: (in.) Depth to Saturated Soil: O (in.)	Wetland Hydrology Indic Primary Indicators: 	eators: in Upper 12 Inches ks Deposits atterns in Wetlands (2 or more required): oot Channels in Upper 12 Inches ned Leaves Survey Data al Test lain in Remarks)			
Romarks: Natural drainage - continuation of WL 84-2. Small pond at lower and					

(4)

(Series and P Taxonomy (S	no haso): ubgroup):	Fold	dy loan	J-d C. Drainage C. Field Obse Confirm I	Ilass: <u>Well-P</u> rvations Mapped Type? Yes No
<u>Profile Descri</u> Depth <u>(inches)</u> <u>H</u>	ption: orizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, - Structure, etc,
				· · · · · · · · · · · · · · · · · · ·	-
		-			
Romarks:	Gloyed or	Low-Chroma Colors	C	Othor (Explain in Romarks)	
ETLAND D	ETERMI	NATION	~~~~~		
Hydrophytic V Wetland Hydro Hydric Soils Pr	egetation blogy Pres esent?	Present? Yes ent? Yes Yes	No (Circle) No No I:	s this Sampling Point With	(Circle) in a Wotland? Vos No
· •					

Approved by HOUSACE 3/92

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Project/Site: US 550 Applicant/Owner: <u>CDIT</u> Investigator: <u>S. Dowsn. ml. A. Hew</u>	Date: $\frac{2/20/01}{County: Lo flate}$ State: Co				
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: 5 Transect ID: Plot ID:				
EGETATION		Photos 1-17, 18, 19			
Dominant Plant Species Stratum Indicator 1. Typha latitulia 4 GBL 15%. 2. Agroshs (Atlantian 4 GBL 15%. 3.* Epilolium cilianum 4 Fhew 40%. 3.* Epilolium cilianum 4	Dominant Plant Species 9. Cornus Series 10.	<u>Stratum</u> <u>Indicator</u>			
Percent of Dominant Species that are OBL, FACW or FAC					
Remarks: C. arvense along perimeter. Pirion/Univer Throughout + around, Rottonwords W/Solidayo perimeter. Pirion/Univer Throughout + around, Rottonwords are whin + around some areas (mostly P. angnitiklin). 4 Not Avminont					

HYDROLOGY

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 $\frac{1}{2} = \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1$

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Jundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test
Remarks: Few small arreas inundated - of hillside seeps	- Most is catumtel, there's

Appendix B Blank and Example Data Forms.

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Remarks: A service of hillside seeps - some mature cottonwoods + Mumerons dead piron/juniper, Some areas very mossy w/small pools of Stording water.

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Appendix B Blank and Example Data Forms

9/2010 43 220 Project/Site: Date: Applicant/Owner: CONT County: Ł A. Hars J. 1) avim and Investigator: ____ State: S Do Normal Circumstances exist on the site? Yes Community ID:>+720 No Transect ID: Is the site significantly disturbed (Atypical Situation)? Yes W0 Is the area a potential Problem Area? Plot ID: Yes No. Craig Ranch (If needed, explain on reverse.) yoon/east No photo VEGETATION Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator pha popifilon DEL 9. inlatur FACT Seum 2 10.____ lasth: filmm GRL Polysonum • 11. Unk. agentic OFL 12.__ 13 14. 6 15 16._ Percent of Dominant Species that are OBL, FACW or FAC 100 (excluding FAC-) Typical lagoon - ~ 60% agnates Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other Other No Recorded Data Available Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Wetland Hydrology Indicators: Primary Indicators:
Remarks: Typical Jagoon ~ 60%	aquatiz

J,

B2

Map Unit Name (Series and Phase): Taxonomy (Subgroup):	Falfa da	ey (van s	P-A'L Drai Fiek Con	nage Class: <u>Well-</u> d Observations firm Mapped Type? Yes N	drowing
Profile Description: Depth (inches). Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
Hydric Soil Indicators: Histosol Histic Epipedor Sulfidic Odor Aquic Moisture Reducing Conr Gleyed or Low	n Regime Ititions Chroma Colors	Concre High O Organi Listed Other	etions rganic Content in Surface Lay c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils List (Explain in Remarks)	er in Sandy Soils	
Remarks: N,	o;+		,		2

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No - Azma	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks: Typical logu	m	

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Project/Site: US 550 Applicant/Owner: COOT Investigator: Dawson and Hers		Date: $\frac{9/20/01}{\text{County: } Le \text{ Make}}$ State:	
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	? Yes No Yes No No	Community ID: Transect ID: Plot ID: b. tch (east)	
VEGETATION		Photo 1-12	
Dominant Plant SpeciesStratumIndicator1. Ihalens annahraceaM. VISL2. Echnichten ConfgalliH. FACW3. Scients valodusH. PSL4. Aguists chelmitternH. FACW5. PordweidH. VISL6. Sale this analisS. Colling7. Clycenn grandisH. TSL8. Philem gratonicH. FACW	Dominant Plant Species 9. Junus futtor 10. Horsteam white 11. Typha hittifulra 12. Epilobium cilia 13. 14. 15. 16.	Stratum Indicator 16 H FBCW 14 FBCW 14 FBCW 14 FBC 14 OSL 14 FBC	
Percent of Dominant Species that are OBL, FACW or FAC 92			
Remarks: Typical litch - average WL bank with = 4-5' lock wall, togetent yolds are alfullenthey. Some areas love dense & exizin storts mell			

HYDROLOGY

juna.

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water:	 Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Typical ditch - avg channel	with = 4'

Map Unit Name (Series and Phase): Taxonomy (Subgroup): _	Folfa	dy Iran	3 F 8 Drai Fiel Con	inage Class: <u>VII</u> d Observations firm Mapped Type? Yes	 No
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure. etc.	
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Hydric Soil Indicators:	 		- <u> </u>		
Histosol Histic Epipedon Sutfidic Odor Reducing Condi Gleyed or Low-C	Regime tions Chroma Colors	Concret High Org Organic Listed o Cisted o Other (E	ions ganic Content in Surface Lay Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils List Spolain in Remarks)	ver in Sandy Soils	•
Remarks: N ₈	nit.				· · · ·
v					2

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	res No (Circle) Yes No Yes No -Armd	(Circle) Is this Samplig Point Within a Wetland? Tes No
Remarks: Large iN.3. parallel The Main Wil reg.	ditch m/pocks n ditch, but	its of BS. Screen ditches no string have a predominance of

Approved by HQUSACE 3/92

Project/Site: <u>US 550</u> Applicant/Owner: <u>CDUT</u> Investigator: <u>S. Dourses</u> & Heus	· · · · · · · · · · · · · · · · · · ·	Date: $\frac{9/20/01}{County: 20/01}$ State: CN	
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: 422-28 Transect ID: Plot ID: (ageon/casr)	
••••••••••••••••••••••••••••••••••••••		Photo 1-11	

VEGETATION

Dominant Plant Species Straturn Indicator 1. Type Intifier I 013 L 2.	Dominant Plant Species 9	Stratum Indicator	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).			
Remarks: Typical lagroom - perimeter is weedy (Hannung, et.al.)			

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Nundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: 0-12-(in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: 0	 Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stahed Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Typical lagoon	

Map Unit Name (Series and Phase): Taxonomy (Subgroup): _	Fold	day luan	3-58 Drai Fiek Cont	nage Class: <u>Well</u> d Observations firm Mapped Type? Yes No
Profile Description: Depth (inches)Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
		- · · · · · · · · · · · · · · · · · · ·		
Hydric Soil Indicators: Histosol Histic Epipedon Suffidic Odor Aquic Moisture R Reducing Conditi Gleyed or Low-Cl	egime ons hroma Colors	Concretio High Orga Organic 3 Listed on Listed on Other (Ex	ns anic Content in Surface Lay Streaking in Sandy Soils Local Hydric Soils List National Hydric Soils List plain in Remarks)	er in Sandy Soils
Remarks:	p.+-			

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No - 11 md	ls this Samplig Point Within a Wetland?	(Circle)
Remarks: Typ. I. al lag	oon	·	

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Project/Site: <u>UL 550</u> Applicant/Owner: <u>COUT</u> Investigator: <u>Decumy and</u> Herr		Date: $\frac{9/20/01}{County: La \frac{9}{10+0}}State: Cu$	
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: 424-35 Transect ID: Plot ID: Ditch (cas A)	
/EGETATION		/ Auto 1-12	
Dominant Plant Species Stratum Indicator 1. Scier pus Microcarpus H O.S.L 2. Azrosty cholonikan H FACW 3. Solix exitina S O.B.L 4. Iliferen fortunse H FACY 5. Malon's andiracea H UIS L 6.	Dominant Plant Species 9		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	80		
Remarks: Typical Small ditch - Fringe we al' on each side			

HYDROLOGY

5 3

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Other Depth to Free Water in Pit: (in.) Depth to Saturated Soil:	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Pattems in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Small ditch - channel n	l'wide

Appendix B Blank and Example Data Forms

Map Unit Name (Series and Phase): Taxonomy (Subgroup):	FAIR	hay Iran	J Mi Drai Fiek Coni	nage Class: <u>WCI</u> d Observations firm Mapped Type? Yes No	
Profile Description: Depth (Inches). Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, <u>Structure, etc.</u>	
		· · · · · · · · · · · · · · · · · · ·			- - -
Hydric Soil Indicators:	· · ·				
Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Conc Gleyed or Low-	n Regime litions Chroma Colors	Concret High Or Organic Listed o Listed o Other (E	ions ganic Content in Surface Lay Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils List Explain in Remarks)	rer in Sandy Soils	•
Remarks: No	p, t	<u> </u>		······	
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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No-Azund	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks: Typital di	tch - small	

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45 550 Project/Site: Date: CAOT La plat Applicant/Owner: County: DAWEEN and Harb Investigator: State: CO Community ID: 164 (Yeş-Do Normal Circumstances exist on the site? No Is the site significantly disturbed (Atypical Situation)? (No ' Transect ID: Yes Is the area a potential Problem Area? Plot ID: Yes No morg. Litch (If needed, explain on reverse.) Photo 1-9 VEGETATION Dominant Plant Species Dominant Plant Species Stratum _ Indicator Stratum Indicator OBE Sciepus Mizmanpus 9.__ VBL. x exizua 10. 0 BL lanz ambinen И grosts stolonition FACW H 12 FACH Junene filtrane 4 ondweed OBL A FACH 4 Phlenn patince 15 H FAC-VBL 16. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC). Remarks: Supromuling area : goldenood, Latuce, Brome, Holianthus annuns, A. speciosa, guniked, Equisition A few S. anglabriles on bants. We bants average ~ 3' each side width - Mist area Tonis Husses 87

HYDROLOGY

are fem

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Injundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water: $\frac{\partial - 24}{(in.)}$	Secondary indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches
Depth to Free Water in Pit:(in.)	Water-Staned Leaves Local Soil Survey Data
Depth to Saturated Soil:	FAC-Neutral Test Other (Explain in Remarks)
Remarks: Typical ditch - channel & with Grup Ditch	LH. 3'

SOILS

Map Unit Name (Series and Phase): F ~ / A U Taxonomy (Subgroup):	ay Ivan J	- 84 Drain Field Conf	nage Class: <u><u></u><u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u>	
Profile Description: Depth Matrix Color (inches) Horizon (Munsell Molst)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	-
	-			
	· · · · · · · · · · · · · · · · · · ·			
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors	Concretion High Organ Organic SI Listed on I Other (Exp	ns nic Content in Surface Layo reaking in Sandy Soils .ocal Hydric Soils List tational Hydric Soils List tain in Remarks)	er in Sandy Soils	•
Remarks: No pit			2	

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Ves No (Circle) Ves No Ves No-Asm L	(Circle) Is this Samplig Point Within a Wetland?
Remarks: Typical ditch -	- Some areas co	ntain dense S. exigua Stads
	<u></u>	Approved by HQUSACE 3/92

Appendix 8 Blank and Example Data Forms

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Project/Site: US 550 Applicant/Owner: COVT Investigator: S-Dowlon and A H	end	Date: $\frac{9/20}{01}$ County: Lo Plata State: Co
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: Transect ID: Plot ID: Layoon
/EGETATION		No photo

VEGETATION

in the second

Dominant Plant Species Stratum Indicator 1ha 1 at hola U UBL 2.	Dominant Plant Species 9	<u>Stratum</u>	Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).			·
Remarks: Typical layoon. H. annune + other Imm area. Observed from afar - no o	upl. wieds on banks.	Typhe	formintes

HYDROLOGY

Pecorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: foundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: $0 - 24'$ (in.) Depth to Free Water in Pit: (in.)	Sediment Deposits Drainage Pattems in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data
Depth to Saturated Soil:	FAC-Neutral Test Other (Explain in Remarks)
Remarks: Typical lapon	

(lí)

Map Unit Name (Series and Phase): Taxonomy (Subgroup):	Falle c	lay (vem	子子化 Dra Fiel Con	inage Class: <u>//cl1</u> Id Observations firm Mapped Type? Yes No	
Profile Description. Depth (inches). Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
	······································				
Hydric Soil Indicators: Histosol Histic Epipedor Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Low	n Regime ditions Chroma Colors	Concre High O Organi Listed Listed Other	etions rganic Content in Surface Lay ic Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils List (Explain in Remarks)	ver in Sandy Soils	
Remarks: No	Pit	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	······································	

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No Armod	(Circle) Is this Samplig Point Within a Wetland?
Remarks: Typical lagoon	n — obcur	ved from abar (no access)
		Approved by HOUSACE 3/92

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Project/Site: <u>US 550</u> Applicant/Owner: <u>CD ut</u> Investigator: <u>S-Durm on A. Hon</u>		Date: $\frac{9/21/01}{County: 0.00000000000000000000000000000000000$
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: <u>4842-3</u> Transect ID: <u>(2)</u> Plot ID: <u>(ayorn (wist)</u>	
/EGETATION		No photo
Dominant Plant Species Stratum Indicator 1. Sciepus entropy 4 GSL 2. Eichnischlös Cruggeli H GSL 3.	Dominant Plant Species 9	StratumIndicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	100	
Remarks: Typital lagoon - Mostly ope	n water. UL	fringe ~ 2' wide

HYDROLOGY

t the

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: fundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits
Field Observations: Depth of Surface Water: Depth to Free Water in Pit: (in.) Depth to Saturated Soil:	Drainage Pattems in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Typical Jagoon	

Appendix B Blank and Example Data Forms

Aap Unit Name Series and Phase): axonomy (Subgroup):	Fala	day Ivan	3-5 % Drai Field Cont	nage Class: <u>//c / /</u> d Observations firm Mapped Type? Yes	No
rofile Description: lepth nches)Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure. etc.	
udric Soil Indicatore:					
Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Conc Gleyed or Low-	Regime litions Chroma Colors	Concret High Org Organic Listed o Listed o Other (E	ions ganic Content in Surface Lay Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils List Splain in Remarks)	rer in Sandy Soils	•
emarks: No	pit			· · · ·	,

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks: Typical le	yon	
	19	Approved by HOUSACE 3/92

Project/Site: US 550 Applicant/Owner: CAUT Investigator: S. Dawton and A Herd		Date: $\frac{9/20/01}{County: La rlate}$ State: CN
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: #### (1) Transect ID: Plot ID: Lardfirde Litch (east)
		Photo 1-8

VEGETATION

Dominant Plant Species Stratu 1. Carck lanufmosa H 2. Scrpns Microcarpis H 3. Philaris androusa H 4. fordeum jusatum H 5.	n <u>hdicator</u> O <u>BL</u> O <u>BL</u> <u>O</u> <u>BL</u> F AC X	Dominant Plant Species 9	<u>Stratum</u>			
Percent of Dominant Species that are OBL, FACV (excluding FAC-).	V or FAC	107				
Remarks: Small rootfide witch - wettest mas me Scoppes. Surrouting an Mostly frome. + cheatgrass						

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water:(in.)	Oxidized Root Channels in Upper 12 Inches
Depth to Free Water in Pit:(in.)	Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test
Depth to Saturated Soil:	Other (Explain in Remarks)
Remarks: Small roadfishe ditch WL - 1. irrig. pipe crossing WL	kely receiving water from leaty

Map Unit Name (Series and Phase): Taxonomy (Subgroup):	Falfi	day le	the Job (1) Field Cont	nage Class: <u>WLU</u> I Observations irm Mapped Type? Yes N	No
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	· · · · · · · · · · · · · · · · · · ·
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- <u>-</u>					
		· · · · · · · · · · · · · · · · · · ·			······································
ydric Soil Indicators: Histosol Histic Epipedo Sutfidic Odor Aquic Moisture Reducing Con Gleyed or Low	n 9 Regime ditions +Chroma Colors	Concreti High Org Organic Listed on Usted on Other (E	ons anic Content in Surface Lay Streaking in Sandy Soils t Local Hydric Soils List I National Hydric Soils List splain in Remarks)	er in Sandy Soils	<u> </u>
ernarks: No p	it - 802	doms		· ·	2

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No - 1734 mod	(Circle) Is this Samplig Point Within a Wetland? (Tes) No
Remarks: Smill Nodlide Pipe.	ditch — a r()	at it itig. water from a kenty

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Project/Site: <u>US 550</u> Applicant/Owner: <u>CP&5</u> Investigator: <u>Sewron & Herb</u>	······································	Date: $\frac{9/20/01}{County: La 9/4}State: C_{4}$
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: Transect ID: Plot ID: Dittle (east)
		1 Photo 1-7

VEGETATION

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Dominant Plant Species Stratum Indicator 1. Sulix UNIMA S UBL 2. Dromus inwrmis H AL 3.	_951. _ 57. _	Dominant Plant Species 9		Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).		20		•••
Remarks: PSS we w/narrow trivge (2 undustory in some aneas,	'en	ch ride). Colix domarate	1 - Br	ome 17

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Sediment Deposits Drainage Pattems in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: No water prejent, but evidence (Small ima, litch	channel, obebriz, etc) exiztz

Map Unit I (Series an Taxonomy	vame d Phase): v (Subgroup): _	Falle	May loom,	3-87 Drai Fiek Cont	nage Class: <u>%64</u> d Observations firm Mapped Type? Yes No	
Profile De Depth (inches)	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
· · ·						
Hydric Soil Indicators: Concretions Histosol Concretions High Organic Content in Surface Layer in Sandy Soils Organic Streaking in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks) Remarks: MMMMMM						
	No pr				2	

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soits Present?	Yes No (Circle) Yes No Yes No - Azhurud	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks: Small ditch — to ditch Guttorm + ec	currently dry 1955 Surrond	4. Solve is 6-8' tall + contained in and dominated by browne.
		Approved by HOUSACE 3/92

B3

Project/Site: UJ 35V Applicant/Owner: COTT Investigator: DRWIN (Hew) Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation Is the area a potential Problem Area? (If needed, explain on reverse.)	n)? Yes No Yes No Yes No Yes No	Date: $\frac{9/20/0}{County: La Plate}$ State: CO Community ID: 799 (15) Transect ID: $Plot ID:$ Imrg D.th(West	
VEGETATION		/MOTO 1-6	
Dominant Plant Species Stratum Indicator 1. Surgas Milmanyuns H Okh 2. Arostris sklowlera H GBCV 3. Shit eurgina S GBL 4. Unicus baltrens H GBL 5. Cark lancymosa H OBL 6. Andorg andiracca H OBL 7. Echinochloa cruigalli H FACV 8. Epilosium cilliatum H EAC Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC). Remarks: Photo is inaccurate - recent Some WL vey Surrounding ania is cr with Some Ascheping + Consistent anouse. Truge WL is a 3' on each size, it HYDROLOGY	Dominant Plant Species 9. Whitchgrass 10	Average for the state of the st	ient near gas well
Recorded Data (Describe in Remarks):Stream, Lake, or Tide GaugeAerial PhotographsOtherNo Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Free Water in Pit: Depth to Saturated Soil: Remarks: Typi2ad distah - Channel X re Locop Disted	Wetland Hydrology Indicator Primary Indicators: 	ors: r 12 Inches in Wetlands or more required): nnels in Upper 12 Inches /es Data emarks)	

B

in destruction

in the second se

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Map Unit I (Series an Taxonomy	Name Id Phase): (Subgroup):	Fella	day lucm	<u>,3-)' </u> Fiel Con	nage Class: <u>WU1</u> d Observations firm Mapped Type? Yes No	
Profile De Depth (inches)	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
	- <u></u>	an a <u>n an an</u>				
·····		-		·····		<u> </u>
lydric Soil H H S S A R G	Indicators: istosol stic Epipedon ultidic Odor quic Moisture educing Cond leyed or Low-	Regime litions Chroma Colors	Concret High Or Organic Listed o Usted o Other (E	ions ganic Content in Surface Lay Streaking in Sandy Soils n. Local Hydric Soils List n. National Hydric Soils List Splain in Remarks)	er in Sandy Soils	
emarks:	чч	p,t				
					••••••••	*

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks: Typical ditch	warens of	PSS
	and and the second state of the	

Approved by HQUSACE 3/92

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i j

Project/Site: 41 220 Date: Applicant/Owner: COUT County: _ Danim and Herb Investigator: State: CA (Tes) Do Normal Circumstances exist on the site? No Community ID: 202 Is the site significantly disturbed (Atypical Situation)? Yes No Transect ID: No Is the area a potential Problem Area? Plot ID: Yes (If needed, explain on reverse.) east Photo 1-21

VEGETATION

Dominant Plant Species 1. Scirpes Mizrozonopus 2. Polygramm laporthitodium 3. Eleschen; polustas 4. Echinochlod conserved 5K. W: techerass 6: Scirpels Valishig 7K. Typha IntiXolin 8. Brochved	Stratum H H H H	Indicator OBL 10% Fricw 20% VBL 40% Fricw 5%	Dominant Plant Species 9	<u>Stratum</u>	Indicator
Percent of Dominant Species that are OB (excluding FAC-).	L, FACW or	FAC	150		
Remarks: Pord, w/frisige agaatre anten Sup * Not dominant	ine ag	~ 2' ~~~	te. Porlivered covers	210; m	l. ox

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other Other No Recorded Data Available Field Observations: Depth of Surface Water: O-6(in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil:	Wetland Hydrology Indicators: Primary Indicators:
Remarks: Pord / purp at dam - appen	rantly an imz. pord

Map Unit Name (Series and Phase): Taxonomy (Subgroup	F4/fe	clay Iran	3-2% Drai Fiel Con	inage Class: <u>Vell</u> Id Observations firm Mapped Type? Yes No	
Profile Description: Depth (inches) Horizon	Matrix Color (Munsett Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	- · ·
Hydric Soil Indicators: — Histosol — Histic Epipede — Sulfidic Odor — Aquic Moistur — Reducing Cor — Gleyed or Lor	on e Regime nditions w-Chroma Colors	Concre High Or Organic Listed o Listed o Other (1)	tions ganic Content in Surface Lay Streaking in Sandy Soils In Local Hydric Soils List In National Hydric Soils List Explain in Remarks)	yer in Sandy Soils	•
Remarks: //g	p,t				١

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No	(Circle) Is this Samplig Point Within a Wetland? (Yes) No
Remarks: figh offerved	Iniz. pord	«/frige ad some aquatic bed

Approved by HQUSACE 3/92

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17

Project/Site: US 550 Applicant/Owner: COUT Investigator: Dawsey & Herb		Date: <u>9/19/01</u> County: <u>Lo Plate</u> State: <u>C U</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: 3774
/EGETATION		/ Photo #4

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Scirpus Mizrocarpus	H	UBL	9. Phteun protense	H	FACY
2. thaland arindmessa	4	OBL	10 <i>U</i>	•	
3. Water hemlock ?	Н	GBL	11		
4. Unk Carek Sp. #1	<u>H</u>	-bch-crac	12		
5. Tropa latitolon	H	USL.	13		
6. Agrost's stolonitera	4	FACW	14	-	
7. Imens baltrens	4	HACW	15.		
8. Pordweed	4	GBL	16		
Percent of Dominant Species that a (excluding FAC-).	re OBL, FA	CW or FAC	78-89%		
Romarks: Time litch w/	in ho	mal Re-	to and : clidago liner	CA. T. A.	

Latuca Ma ten Sentend Chindle elm. minge We is n X of I'm each Sid Mand Hax Area gravel by porsec.

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators:
Field Observations: Depth of Surface Water: 0-24 (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: 0 (in.)	Seament Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Romarks: Img. dith Howing ~ 3' wide	chonnel

Rochade: I'ch. I'x 2 by They 3'ch 2'x2 by

SOILS

Map Unit (Series ar Taxonom	Name nd Phase): ny (Subgroup)	Falta day (1-2 1/2 ram 2-2 1/2	Dreinage (Field Obse Confirm	Class:il/ irvations Mapped Type? Yes No
Profile De Depth (inches)	<u>scription:</u> <u>Horizon</u>	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle <u>Abundance/Contrast</u>	Texture, Concretions,- Structure, etc.
	·	·			
Hydric Soi	I Indicators: Histosol Histic Epi Sulfidic O Aquic Mo Reducing Gleyed or	pedon Idor isture Regime Conditions Low-Chroma Color:	Cor Hig Orç List List List List	ncretions h Organic Content in Su janic Streaking in Sandy ted on Local Hydric Soil: ted on National Hydric S ter (Explain in Remarks)	" Irface Layor in Sandy Soils Soils S List Soils List
Remarks:	No p.t	- OBL/FAC	w Veg, hyd.	ndgg	

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No Yes No	(Circle) Is this Sampling Point Within a Wetland? (Yes) No
Romarks: Typ, Tal img. ditch m/an a 3' wide channel. Some oreas or of The ditch. Active p. dog colony momenne garter snakes observed.	vg. trige of 2' (each sole) on a e water, degending on The condition along banks in some aneas, Frogs +



Project/Site: US 550 Applicant/Owner: COST Investigator: Dawson and Herl	······	Date: $9 19 01$ County: 200 A a Je State: 200
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	1? Yes No Yes No Yes No	Community ID:(8) Transect ID: Plot ID:
イ _そ メ VEGETATION		
Dominant Plant Species Stratum Indicator 1. Scimul Wiew Cargo, H OBL 2. As rish's alls H Hack 3. Intern anteres M AACU 4. fotomestim IA GAL 5. Augusta Labertic H EBL 6. Idily externa f GBL 7. Anternational H. OBL	Dominant Plant Species 9	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	85	
Remarks: In product pasture.		

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Difth with with wetland b strong high Flow	2' channel, 5' VL why side

Vlap Unit M Series an Faxonomy	Name od Phase): v (Subgroup): _	Falfe d	ay loon	<u>」それ</u> Drai Fiel Con	nage Class: <u>Well</u> d Observations firm Mapped Type? Yes No	
Profile De: Depth inches)	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
			• • • • • • • • • • • • • • • • • • • •			
			- <u></u>		-	
/dric Soil H H S A R G	Indicators: istosol istic Epipedon ulfidic Odor quic Moisture educing Cond leyed or Low-	Regime litions Chroma Colors	Concre High Or Organic Listed c Other (I	tions rganic Content in Surface Lay Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils List Explain in Remarks)	ver in Sandy Soils	
emarks:	N1 6	ð				

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks:		

Approved by HQUSACE 3/92

Project/Site: UJ 550 Applicant/Owner: COOT Investigator: J. Oawron and J. Here	Å	Date: $9/18/91$ County: <u>Co</u> Plate State: <u>Co</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	(Yes No Yes No Yes No	Community ID: 2000 [S Transect ID: Plot ID:
ر م VEGETATION		
Dominant Plant Species Stratum Indicator 1. G. Lix Marris polaritis A. G. BL 2. Rumar salles, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Dominant Plant Species 9	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	67	·
Remarks:		

HYDROLOGY

[]]

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil:	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Clean water, Allen for her No abriers inter promitter, bui bern	by invite the floor, not surveyed + full to 6' flow lower yearty.

19)

Map Unit Name (Series and Phase): Taxonomy (Subgroup):	Fall	elas (ran	ーフト Drai Fiel Con	nage Class: d Observations firm Mapped Type? Yes No	 }
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Molst)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	······································
				<u> </u>	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Low-	Regime ittions Chroma Colors	Concre High Or Organk Listed o Listed o Other (1	tions ganic Content in Surface Lay Streaking in Sandy Soils In Local Hydric Soils List In National Hydric Soils List Explain in Remarks)	er in Sandy Soils	•
Remarks: M	sit - inm	ma once			2

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Ves No (Circle) Ves No Ves No	(Circle) Is this Samplig Point Within a Wetland? Yes/ No
Remarks: Imall lajon,	pond - size but mater d	vit typsed humihold samore

Appendix B Blank and Example Data Forms
$\frac{1100}{20}$

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Project/Site: <u>(1550</u> Applicant/Owner: <u>CPOT</u> Investigator: <u>5-Dawmanc</u> A. Hur	<u> </u>	Date: 9/19/01 County: Lo Plate State: 00
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situat Is the area a potential Problem Area? (If needed, explain on reverse.)	tion)? Yes No Yes No Yes No	Community ID: 3004 Transect ID: 20 Plot ID: 20 Lagoon
VEGETATION		<i>D</i>
Dominant Plant Species Stratum Indicator 1. Typha latifue H. UBL 7% 2. Echinochlon Crusgelli H. GBL 7% 3.	Dominant Plant Species 9	Stratum Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	100	
Remarks: Typical lagron - E. Crusgale grazid + weeky	t. on edges S	unoundy area heavily

HYDROLOGY

Anna -

- Line

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators:
Field Observations: Depth of Surface Water: 0-9 (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Romarks: Typital lapoon	

Taxonomy	(Subgroup):	Thire May	I Vam 1-0 10	Field Obse	Aass: <u>V CII</u> rvations Mapped Type? Yes No
Profile Des Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color s (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, - Structure, etc.
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		-			
lydric Soil 	Indicators: Histosol Histic Epip Sulfidic Oo Aquic Moi Roducing Gloyed or	oedon dor sture Regime Conditions Low-Chrome Colors	Cor Hig Org List List Oth	ncretions h Organic Content in Su anic Streaking in Sandy ad on Local Hydric Soils ad on National Hydric S er (Explain in Romarks)	rface Layer in Sandy Soils Soils : List oils List

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No No No Asymptot	is this Sampling Point Within a Wotland	(Circle) R Yes No
Romarks: Typical labor	M		-
			•

Approved by HQUSACE 3/92

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Project/Site: US 550 Applicant/Owner: Obor Investigator: Dansing and Herb		Date: $7/18/91$ County: L Plate State: Co
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: 2 (2) Transect ID: Plot ID:

VEGETATION

Dominant Plant Species, 1. Description in the Alphane	Dominant Plant Species Stratum Indicator 9. 10. 28L 10. 35. 341 11. 11. 37. 34. 11. 12.
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	
Remarks: Water fil wide. We average	all catheride 1-2' total
some sunflower, when weads	iden. Ager banks are browner income

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit:(in.) Depth to Saturated Soil:(in.)	 Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stahed Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Irrigation Ditch Mod	erate flow

Map Unit Name (Series and Phase) Taxonomy (Subgro	: <u>Falfa ila</u> up):	glvam 1	-3 h Dra Fiel Con	inage Class: <u>\Ve()</u> Id Observations Ifirm Mapped Type? Yes No	
Profile Description: Depth (inches) Horizor	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
					·
Hydric Soil Indicator: Histosol Histic Epipe	s: edon	Concre High O	ations rganic Content in Surface Lay	yer in Sandy Soils	
Sulfidic Od Aquic Moist Reducing C Gleyed or L	or ture Regime Conditions Low-Chroma Colors	Corgani Corgani Cisted Cisted Cother (c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils List (Explain in Remarks)		
Remarks:	No Pit				•

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No	(Circle) Is this Samplig Point Within a Wetland? (es) No	
Remarks:			•
	· · · · · · · · · · · · · · · · · · ·		
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Approved by HQUSACE 3/92

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Project/Site: US 550 Applicant/Owner: CO &T Investigator: <u>J (Daws and A Her</u> Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situal Is the area a potential Problem Area? (If needed, explain on reverse.)	tion)? Yes No Yes No Yes No	Date: 9/19/61 County: La Pla Is State: Cv Community ID: 5 Transect ID: 22 Plot ID: 22 Aggreyhion	•
VEGETATION		1 Photo #le	러
Dominant Plant SpeciesStratum Indicator1. Eleozhans palustorsH2. Echinschlen - crusselliH3. Lumex promy misalvingH4. Hordeum NorthinnH5. Salt erisnaS6. Typha latipulareH7. folygonum gwenlereH6. TyphaOBL 2%7. folygonum gwenlereH6. TyphaS7. folygonum gwenlereH6. TyphaG7. folygonum gwenlereH7. folygonum gwenler	Dominant Plant Species 9. Image: Augusta box 10. Image: Augusta box 11. Image: Augusta box 12. Image: Augusta box 13. Image: Augusta box 14. Image: Augusta box 15. Image: Augusta box 16. Image: Augusta box	<u>Stratum</u> <u>Indicator</u>	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	86		
Romarks: Weedy WL area on edge of dominated by S. exigue Tamon & S. amygd. ufthe mingerity of Echimochlon along dy	pestare, One er wettest was	d has a small ditch up contain Eleochanis * NV+ D.	The bank
IYDROLOGY			1

Recorded Data (Describe in Remarks):Stream, Lake, or Tide GaugeAerial PhotographsOtherNo Recorded Data Available Field Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit:(in.) Depth to Saturated Soil:(in.)	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Varianage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Romarks: No Water present - area " /. Nr. V.3. U.C. Some pars of small he	the are damp

al anno 1

Series an axonormy	Phese): (Subgroup):	Folle May	, (van 1-3	Lo Drainage C Field Obse Confirm	Jess: <u>Lrc4</u> Irvations Mapped Type? Yes No
rafile Des lepth nches)	<u>noitan:</u> <u>Horizon</u>	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, - Structure, etc.
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ydric Soil	Indicators:			•	
	Histosol Histic Epir Sulfidic O Aquic Moi Reducing Gleyed or	pedon Idor Isture Regime Conditions Low-Chroma Colors	Cor Hig Org List List List	ncretions in Organic Content in Su janic Streaking in Sandy ted on Local Hydric Soils ted on National Hydric S ter (Explain in Remarks)	ırface Layer in Sandy Soils Soils : List oils List

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? No Mes No Bjuwy	(Circle) Is this Sampling Point Within a Wetland? Yes No
Romarks: Small emergent we on edge by needy we speciels	ge of hay field / pasture. Doministral

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Project/Site: (4) 550 Applicant/Owner: CDUT Investigator: (Dowsmand Her	Date: <u>9/11/01</u> County: State:
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situat Is the area a potential Problem Area? (If needed, explain on reverse.)	tion)? Yes No Yes No Yes No Yes No Plot ID:
イトート EGETATION	
Dominant Plant Species <u>Stratum Indicator</u> 1. <u>Bleochan's poliustris</u> <u>H</u> <u>CBL</u> 2. <u>Rumex Sp.</u> <u>H</u> <u>MAL</u> 3. <u>Eleochan's quingudolia</u> <u>H</u> <u>VBL</u> 4. <u>Marcilia Sp.</u> <u>H</u> <u>UBL</u> 5. <u>Hordinan infatum</u> <u>H</u> <u>FAL</u> 6. <u>fordinued</u> <u>A</u> <u>UBL</u> 7. <u>White Water Insterrups</u> <u>H</u> <u>OBL</u> 8. <u>folgonum lapethilobium</u> <u>H</u> <u>VBL</u>	Dominant Plant Species Stratum Indicator 9
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	<u> </u>
Romarks: Drawn down pord w/ WL fringe Idge: Rumex, Hordeum + Curlycup guma ic aquistic fid Phileum	- Mostly Eterians. At uppermost WL veed. Frize is ~ \$ of 3' wrole -
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other Other No Recorded Data Available ield Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Wetland Hydrology Indicators: Primary Indicators:
	1 for - 111 for it upon

axonomy (Subgroup):	- <u></u>	(VEM -	Field Obse Confirm	rvations Mapped Type? Yes No
rofile Description: epth nches) - Horizon	Matrix Color (Munsoll Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, - Structure, etc.
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ydric Soil Indicators:		······································	<u>,</u>	
Histosol Histic Epig Sulfidic O Aquic Moi Reducing	pedon dor isture Regime Conditions Low-Chroma Colors	Co Hig Or Lis Lis Ot	ncretions In Organic Content in Su Janic Streaking in Sandy ted on Locel Hydric Soils ted on National Hydric S ver (Explain in Remarks)	Irface Layer in Sandy Soils Soils : List oils List

Hydrophytic Vegetation Present? (95 No (Circle) Wetland Hydrology Present? (95 No Hydric Soils Present? (95 No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Romerks: Small pord w/standing water ad water contains numericans agen	r. Edge areas are emergent WCS atics. Area is grazed by horses,

24

		and the second
Project/Site: <u>(11 550</u> Applicant/Owner: <u>c00T</u> Investigator: <u>5-0arron</u> and A.	Date: Test Mest State:	10/23/01 La Plate Co
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situa Is the area a potential Problem Area? (If needed, explain on reverse.)	tion)? Yes No Commun Yes No Transect Yes No Plot ID:	$\frac{1}{2}$ ID: $\frac{39}{(2.4)}$
VEGETATION		
Dominant Plant Species Stratum Indicator 1. Typha at Wirz & (18)	Dominent Plent Species	Stratum Indicator
2	10.	· · · ·
3.		
4	12.	
5	13	
6	14	-
7	15	
8	16	·
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	100	
Romarks: Typical lagoon		
IYDROLOGY		
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: 	Inch o s
Field Observations:	Drift Lines Sediment Deposits Drainage Patterns in W Secondary Indicators (2 or more	otlands roquirod):
Depth of Surface Water: 0-24 (in.)	Oxidized Root Channels Water-Stained Leaves	s in Upper 12 Inches
Depth to Free Water in Pit:	Local Soil Survey Data	
Depth to Saturated Sail:	Other (Explain in Reme	rks

Lagoon ~ 50% water Remarks:

Map Unit N (Series and Taxonomy	ame Phase): (Subgroup):	Falfa M	my Irom	3-8%	Drainage (Field Obse Confirm (Hass: Wely rvations Mapped Type? Y	es No
Profile Dese Depth (inches)	cription: Horizon	Metrix Color (<u>Munsell Moist)</u>	Mottle Color s (Munsell Moist)	Mottle Abundance	o/Contrast	Texture, Concret Structure, etc.	ions, -
		• •					
				· · · ·		·	
		· · · · · · · · · · · · · · · · · · ·			· ·		
		-					
Hydric Soil	Indicators:		<u></u> ,	· · ·			<u>.</u>
-	Histosol Histic Epi Sulfidic O Aquic Mo Roducing Gloyed or	podon dor isture Regime Conditions Low-Chrome Colors		Concretions High Organic Co Organic Streaki Listed on Local Listed on Nation Other (Explain i	ontent in Su ng in Sandy Hydric Soil Nal Hydric S n Remarks)	urface Layer in San / Soils s List Soils List	dy Soils
Romarks:	No ro	with the second					

-

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circte) Yes No Yes No	(Circle) Is this Sampling Point Within a Wetland?
Romarks: Typ, Tol Jaya	oon - All	ess denied - Obs from road

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Approved by HQUSACE 3/92

2

Project/Site: US 550 Applicant/Owner: COUT Investigator: Downon and Here		Date: 19/23/01 County: 16 Made State: 60
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situa Is the area a potential Problem Area? (If needed, explain on reverse.)	tion)? Yes No Yes No Yes No	Community ID: 30 Transect ID: 43 Plot ID: 43 Pord - west
VEGETATION		Photo
Dominant Plant Species Stratum Indicator 1. Typha latiflia H USL 2. Unk aghatris N OBL 3	Dominant Plant Species 9 10 11 12 13 14 15 16	<u>Stratum</u> Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	16 3	
Romarks: Pord offervied from road -	- no access	

HYDROLOGY

1

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1.3

Recorded Data (Describe in Remarks): Streem, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: 0 - 36 (in.)	Wetland Hydrology Indicators: Primary Indicators:
Depth to Saturated Soil:	FAC-Neutral Test Other (Explain in Remarks)
Romarks: Large orea of spen wait appear to dominate The dria	ter - although squals plants

(25)

Map Unit Name (Series and Phase): _ Taxonomy (Subgrou	Falfa U	las luon 3	-f"(a Dreinege (Field Obse Confirm	Hess: <u>Vel</u> Invations Mapped Type? Yes No
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
				- ···
lydric Soil Indicators Histoso Histic E Suffidic Roducin Gleyed	: pipedon Odor foisture Regime ng Conditions or Low-Chrome Colors	Co Hig Org List List Ott	ncretions h Organic Content in Su Janic Streaking in Sandy ted on Local Hydric Soils ted on National Hydric S Jor (Explain in Romarks)	Irface Layer in Sandy Soils 7 Soils 8 List 6 Jist List
Romarks: NO	$i + N^{2}$	Acces		

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No	Is this Sampling Point Within a Wetland?	(Circle)
Romarks: No alless -	- observed	from road.	•
Ducks obs	erved.		

Approved by HQUSACE 3/92

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Laurence + Sandra

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Zalberus

23)

(1987 COE Wetlands Deline	eation Manual		(August)
Project/Site: U.J. 550 Applicant/Owner: <u>CPOT</u> Investigator: <u>Dewsen</u> and Herb		Date: 9/18/01 County: 60 8 000 State: 60	•
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: 29-2 Transect ID: 26 Plot ID: Pond	

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Dominant Plant Species	<u>Stretum</u> Indice	tor Dominent Plant Species	Stratum Indicator
. Elexhans palmitis	H Ghi	20% 9	
. Phleum pratense -	H FACH	<u> 45%</u> 10	·
Eleochanz quinquetoliz	H UBL	<u>40%</u> i1	
•		12	· · · · · · · · · · · · · · · · · · ·
•	-	13	
		14	•
· · · · ·		15	
		16	
secont of Dominant Species that a (excluding FAC-).	re OBL, FACW or I	AC G7	

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines		
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):		
Depth of Surface Water:(in.)	Oxidized Root Channels in Upper 12 Inches		
Depth to Free Water in Pit:	Local Soil Survey Data FAC-Neutral Test		
Depth to Saturated Soil:	Other (Explain in Remarks)		
Romerks: Old pord/lagoon - no water prisent, but evidence of recent water (mind, water marks). Saturated in some areas.			
Two small onthet ditches - both	dry (non-wy)		

exonomy	(Subgroup)	:	· · · · · · · · · · · · · · · · · · ·	Confirm	rvations Mapped Type? Yes No
rofile Des epth nches)	<u>scription:</u> <u>Horizon</u>	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions,- Structure, etc.
	•		· · · · · · · · · · · · · · · · · · ·		
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		-		· · · · · · · · · · · · · · · · · · ·	
	.	•	•		
dric Soil 	Indicators: Histosol Histic Epi Sulfidic C Aquic Mo Reducing Gleyed or	pedon Idor isture Regime Conditions Low-Chroma Colors	Co Hig Or Lis Lis Ott	ncretions In Organic Content in Su ganic Streaking in Sandy ted on Local Hydric Soils ted on National Hydric S ter (Explain in Remarks)	irface Layor in Sandy Soils Soils s List oils List

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Hydrophytic Vegetation Present? (Pes No (Circle) Wetland Hydrology Present? (Se No Hydric Soils Present? (Se No Ayund	(Circle) Is this Sampling Point Within a Wetland? Yes No
Romarks: Small pord dominated by Some areas are saturated. Edge draining pord are not WL.	Eleocharis. No water present but is & port are Phileum + ditches

Approved by HQUSACE 3/9:

Project/Site: <u>UJ 550</u>	Date: <u>9/18/v/</u>
Applicant/Owner: <u>CPOT</u>	County: <u>Lo Plate</u>
Investigator: <u>J Pownen</u> and A. Herb	State: <u>Co</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID:

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VEGETATION

Dominant Plant Species Stratum Indicator 1. Typic Landinaces H Ull L 40 2. Phale vity grundinaces H GBL 80 3. Sesyme mispocarpas H GBL 5 4. Critic convendent H GBL 5 5. Aprentis stationalized H GBC 95 6.	Dominant Plant Species 9		Indicator		
Percent of Dominant Species that are OBL, FACW or FAC 8-1/1					
Remarks: Differet linear wettend in an alfolle field wetland vag chicker ditch.					

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stahed Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Jurgabin Diba 8-16	concrete cultert uder rocal

27

ap Unit Name Series and Phase): axonomy (Subgroup): _	Falfa	day luam	3-8% Drain Fiek Conf	nage Class: <u>Vel1</u> I Observations irm Mapped Type? Yes No	
rofile Description: epth hches) Horizon	Matrix Color (Munsetl Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
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· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		- · · · · · · · · · · · · · · · · · · ·	
				•	
/dric Soil Indicators:		· · · · · ·		· · · · · · · · · · · · · · · · · · ·	
Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Lowd	Regime itions Chroma Colors	Concret High Org Organic Listed o Listed o Other (E	ions ganic Content in Surface Lay Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils List oplain in Remarks)	er in Sandy Soils	•
emarks: NV Y	574- 1		стана и на селото на См.		
					.

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Hydrophytic Vegetation Present? (Ves) No (Circle) Wetland Hydrology Present? No Hydric Soils Present? No	(Circle) Is this Samplig Point Within a Wetland? (Yes) No
Remarks:	
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Approved by HQUSACE 3/92

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(1987 COE Wetlands Delin	eation Manual	28)
Project/Site: US 550 Applicant/Owner: CBUT Investigator: S Daw Ann and A. Hurb		Date: 10/23/01 County: Lo Plate State: Co
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: 32-7- Transect ID: (28) Plot ID: (28) Ditch - WIST

VEGETATION

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Dominant Plant Species Stratum Indicator 1. Typha 1 atilize H ORL 2. Oilix exigna S UBL 3. Tholony companying and the cost S UBL 4.	Dominant Plant Species 9		Indicator	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).				
Romarks: Typical litch w/a wrole arrea at culvert 3'×2 we area				

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Aveilable	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain In Remarks)
Romarks: Some ancus saturated	but dikh not flowing

Series and Phase): axonomy (Subgroup):	Falle (log Iran i	Proinage C Field Obse Confirm I	lass: <u>V/LU</u> rvations Mepped Type? Yes No
rofile Description: Jepth nches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle <u>Abundance/Contrest</u>	Texture, Concretions, - Structure, etc.
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			···· · · · · · · · · · · · · · · · · ·	
		•	<u></u>	
ydric Soil Indicators:		······································		
Histosol Histic Epi Sulfidic O Aquic Mo Reducing	pedon dor isture Regime Conditions	Con Hig Org List List	cretions h Organic Content in Su anic Streaking in Sandy ad on Local Hydric Soils ad on National Hydric S	rface Layer in Sandy Soils Soils List oils List
Gleyed or	Low-Chroma Colors	;Oth	or (Explain in Romarks)	

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No	(Circle) Is this Sampling Point Within a Wetland?
Romarks: Typical ditch - Cont	Sinnation of WL 31-1 and 29-1

Approved by HQUSACE 3/92

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Do Normal Circumstances exist on the site? Image: Statum starces exist on the site? Is the area a potential Problem Area? (if needed, explain on reverse.) Image: Statum starces exist on the site? Image: Statue starces exist on the site? Image: Starces exist on the site? Ima	Project/Site: US 550 Applicant/Owner: CO 55 Investigator: S Dawson and A. Hent	Date: $9/21/11$ County: Ca flat. State: Co			
Product 1-23 Deringent Plant Species Stratum Indicator 2. Abultari and Aburtine Adultation Image: Stratum Indicator 3. Sciences relatives Model Image: Stratum Indicator 3. Sciences relatives Model Image: Stratum Indicator 3. Sciences relatives Model Image: Stratum Indicator 4. Advicting the Adviction Model Image: Stratum Indicator 5. Sciences relatives Model Image: Stratum Indicator 6. Sciences that are OBL, FACW or FAC Image: Stratum Image: Stratum Image: Stratum 7 Image: Stratum Model Image: Stratum Image: Stratum Image: Stratum 8 Image: Stratum Model Image: Stratum Image: Stratum Image: Stratum 9 Image: Stratum Model Image: Stratum Image: S	Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) Community ID: Yes No Yes No Yes No Yes No Ditah (west)				
Dominant Plant Species Stratum Indicator 1. Subre Argunda 1 1 2. Alculard own driver and the species 10 3. Subre Argunda 1 3. Subre Argunda 1 3. Subre Argunda 1 4. Ansider 1 5. Supher Left Indian 1 6. Subre Argunda 1 7	VEGETATION		Photo 1-23		
Recorded Data (Describe in Remarks): Wetland Hydrology Indicators: Stream, Lake, or Tide Gauge Primary Indicators: Aerial Photographs Inundated Other Water Marks No Recorded Data Available Water Marks Other Sediment Deposits No Recorded Data Available Other Other Other Field Observations:	Dominant Plant Species Stratum Indicator 1. Selve example 2. Analaris annolitimena H GBL 3. Scirpas valodus H GBL 4. Arrisht stolen flan H PAEW 5. Juphe latifistica H UBL 6. Shows Microcarpors H OBL 7	Dominant Plant Species 9	WSt. Some oreas are on each site Willow the cre don, by Typha adjor the		
Remarks: TupRal ditch - Channel a v = 2'wrole	Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available No Recorded Data Available No Secorded Data Available No face Water: (in.) Depth of Surface Water in Pit: (in.) Depth to Free Water in Pit: (in.) Remarks: Tum and ditth - Channel of the second of	Wetland Hydrology Indicato Primary Indicators: Inundated Caturated in Upper Water Marks Drift Lines Sediment Deposits Crainage Patterns in Secondary Indicators (2 o Oxidized Root Chan Water-Stained Leav Local Soil Survey Da FAC-Neutral Test Other (Explain in Re	rrs: 12 Inches n Wetlands or more required): nnels in Upper 12 Inches es ata emarks)		

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Map Unit Name (Series and Phase): Taxonomy (Subgroup):	Falfa U.	y low 3	- j Drai Field Cont	nage Class: <u>Wcl</u> d Observations firm Mapped Type? Yes No	
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
<u></u>	······································			· · · · · · · · · · · · · · · · · ·	
		- <u></u>			
Hydric Soil Indicators: Histosol Histic Epipedor Sulfidic Odor Aquic Moisture Reducing Conx Gleyed or Low	n Regime Jitions Chroma Colors	Concretic Hgh Orga Organic S Listed on Listed on Other (Ex	ons anic Content in Surface Lay Streaking in Sandy Soils Local Hydric Soils List National Hydric Soils List plain in Remarks)	er in Sandy Soils	
emarks: Nb B	* +			-	2

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? No	(Circle) Is this Samplig Point Within a Wetland? Kes No
Remarks: Typical Litch w/some areas	of PSS.

Approved by HQUSACE 3/92

Project/Site: US 550 Applicant/Owner: COST Investigator: S Dawson and A He	Date: $\frac{9/21/01}{County: County: Cou$
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	? Yes No ? Yes No Yes No Yes No ? Yes No
VEGETATION	/ thuto 2-1,2-
Dominant Plant Species Stratum indicator 1. Typha latheria H OBL 2. Rumer Trizvy. H USL 3. Blygsnum bonthitligger H OBL 4. Epitobium ciliatum H PAL 5. Sulit anydelosdus T PACW 6. Malaris andriveren H UBL 7 8 Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Remarks: Swall dominatul by Typha. Dre dominated Suproveding areas Rout any Sagebrych done annually (says Jack M'Intime HYDROLOGY	Dominant Plant Species Stratum Indicator 9
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: O-/2_(in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Wetland Hydrology Indicators: Primary Indicators:
Remarks: Swele fed by irrig. ditch. Ditch	is flowing + spreads out Min The we no lefined channel

100

A second second

SOILS					
Map Unit Name (Series and Phase): Taxonomy (Subgroup): _	Falfa c	lag / ran	3-2-4.	Drainage Class: <u>//Ll/</u> Field Observations Confirm Mapped Type? Yes No	
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundanc	ce/ Texture, Concretions, Structure, etc.	
	·				······································
	·				
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture F Reducing Condi Gleyed or Low-C	Tegime tions Chroma Colors	Concre High O Organi Listed Listed Other (etions rganic Content in Surfac ic Streaking in Sandy Soi on Local Hydric Soils Lis on National Hydric Soils I (Explain in Remarks)	ve Layer in Sandy Soils ils t List	•
Remarks: Ne g	7.				2

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes Yes Yes No No	(Circle) Is this Samplig Point Within a Wetland?
Remarks: Inriz, dited The bottom	n loses it's bar of a surle	ats + created a longe we in
		•

Approved by HQUSACE 3/92

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Project/Site: <u>4550</u> Applicant/Owner: <u>00 vT</u> Investigator: <u>J. Pawin and A. Heris</u>		Date: 9/18/01 County: Lo flate State: G
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes Yes	Community ID: Transect ID: Plot ID:

VEGETATION

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Month & rocker

Dominant Plant Species	Stratum_ Indicator	Dominant Plant Species	Stratum	Indicator	
1. Tupha latifalia	H OBL MA	9			
2: Centra miter -	X 631 45%	10		-	
3. Solix amystalides	S FAM 10%	i1	-		
4. Eleveluns galusting	<u>H . PBL 5%</u>	12			
5	· · · · · · · · · · · · · · · · · · ·	13	-		
6		14	•		
7	·	15	· ·		
8		16			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).					
Romarks: Typital layoon -	- Sunoundig ar	wa B. inerms, Kochia	+ Latur	ca l	
· · · ·				. • •	

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators:
Field Observations: Depth of Surface Water: 0-2-4 (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: 0 (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Romarks: Typical lagoon	

SOILS	· · · · · · · · · · · · · · · · · · ·	•		
Map Unit Name (Series and Phase); Taxonomy (Subgroup):	Falfa do	ylvon S.	P [*] [. Dreinage (Field Obse Confirm	Mess: <u>Vilj</u> rvetions Mapped Type? Yes No
<u>Profile Description:</u> Depth <u>(inches)</u> <u>Horizon</u>	Matrix Color (Munsoll Moist)	Mottle Colors (Munsell Maist)	Mottle <u>Abundance/Contrast</u>	Texture, Concretions, - Structure, etc.
		·		
				-
		•		
Hydric Soil Indicators:		****		
Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Suffidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Uisted on Local Hydric Soils List Reducing Conditions Uisted on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)				
Remarks: No git	-MU/FAC	W downhout	s, hydrology	V
			•	

Hydrophytic Vegetation Present? (Yes No (Circle) Wetland Hydrology Present? (Yes No Hydric Soils Present? (Yes No Allurud)	(Circle)
Romarks: Typical lagoon "/pockets one small Peachtef willow	of Typha + Eleocharis —.



VEGETATION

Dominant Plant Species Stratum Indicator 1. Azrostz Stoten, Korn A Fiber 2. Saltz exigna S VBL 3. Canzus Mitrocanzus A GBL 4.	Dominant Plant Species 9	<u>Stratum</u>	Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	00		
Remarks: Typizal fring 2 2' Wide Can Eprayou	ch. Most exigna	is dei	ad -lock

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other Other No Recorded Data Available Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.)	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Drift Lines Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test	
Depth to Saturated Soil:O(in.)	Other (Explain in Remarks)	
Remarks: Small imig. ditch		

Map Unit M (Series an Taxonomy	Varne d Phase): (Subgroup):	Falfa U	my locan 3	28% Drai Field Con	nage Class: <u>V(1)</u> d Observations firm Mapped Type? Yes No	-
Profile Des Depth (inches)	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munseil Moist)	Mottle Abundance/ <u>Size/Contrast</u>	Texture, Concretions, Structure, etc.	
	······································	-				
	·		· ·			
lydric Soil Hi Hi Si Ac Gi	Indicators: stosol stic Epipedon utfidic Odor quic Moisture educing Cond leyed or Low-	Regime litions Chroma Colors	Concret Ligh Or Corganic Listed o Listed o Cher (E	tions ganic Content in Surface Lay Streaking in Sandy Soils In Local Hydric Soils List In National Hydric Soils List Splain in Remarks)	er in Sandy Soils	
iemarks:	<u>, , , , , , , , , , , , , , , , , , , </u>	Nr P,7	-		······································	
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VEILAND DETERMINATION	<u> </u>	
Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No	(Circle) Is this Samplig Point Within a Wetland?
Remarks: Small ditch - typical		

Approved by HQUSACE 3/92

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Project/Site: US 550 Applicant/Owner: CD 97 Investigator: Devise out Mark		Date: <u>9/17/01</u> County: State:	
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situa Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: 522.33 Transect ID: Plot ID: Jwg. Ditch		
VEGETATION		Ahoto #20	
Dominant Plant Species Stretum Indicator 1. Agrostys stolonifiera M Facus 2.* Stirpns unlidus - - 3. Eliochant pulustus - - 4.* Juncus torrey: - - 5.* Echnischlere crugall: - - 6.* Epilobium cillintum - - 7.* Equisitan: arvente - - 8. Phalenz crudinacea - -	Dominent Plant Species 9. Salix enjourne 10. Interm prate 11. Sirgas mizre 12.* Typh a latif 13.	<u>Stratum</u> <u>Indicator</u> <u>A</u> <u>S</u> <u>B</u> <u>B</u> <u>B</u> <u>B</u> <u>B</u> <u>Carpus</u> <u>H</u> <u>CB</u> <u>Carpus</u> <u>H</u> <u>CB</u> <u>Carpus</u> <u>H</u> <u>CB</u>	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).			
Romarks: Typical irriz. ditch - upland ban and other energy forbs, WL banks vary * Not dominant dives along ditch and	to contain Verbasi from 1-4' , h win pockets of dense	Hum Thepsus, Helianthus anniuns. Sthe (each). Some Russian 5. exigue	

B. inerms Asclepius species Cirsium arvense

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HYDROLOGY

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Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators:
Field Observations: Depth of Surface Water: $0-24$ (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Oxidized Root Channels in Upper 12 Inches
Romarks: Typical dith - channel 7	le'wrde (average)

-

Map Unit I (Series en Texenomy	Namo d Phase): (Subgroup):	Folfe day	luam 3	- <mark>P. V/1 Dreinage (</mark> Field Obse Confirm	Jass: <u> </u>
<u>Profile Des</u> Depth (inches)	<u>eription:</u> <u>Horizon</u>	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundence/Contrest	Texture, Concretions, - Structure, etc.
					-
					-
Hydric Soil Indicators:					
Romarks:	No pit	- OBL FAC W	Veg + hydro	logy	

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WETLAND DETERMINATION

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	No (Circle) Top No No Assumed	(Circle) Is this Sampling Point Within a Wetland? Yes No
Romarks: Typical in.g. d Janks varying Kr are weedy. Very	litch - chan om 1-4, fer little shrub	et wide. "Atjacent upland areas cover in most areas.
		Approved by HQUSACE 3/92

34)

Project/Site: US 550 Applicant/Owner: CPVT Investigator: Downwork Herb		Date: <u>9/19/01</u> County: <u>La Plate</u> State: <u>CU</u>	
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: Transect ID: Plot ID: And	
/EGETATION		I Photo #7	:

VEGETATION

-*2* -

Dominant Plant Species S	tratum Indicator	Dominant Plant Species	Stratum	Indicator]
1. Carex Vulgerordea	H CIL 30%	9			
2. Sirpus Mitricarpus -	H GBL 30%	10			
3. Phalans anunliacen	H UBL ST.	11			·.
4. Pordweed	A OIL	12.			
5. Agrost 3 store itera	H FACH 10%	13.		· · · · · ·	
6# Echnochlon consgalli		14.	-		
7. Sajitarius sp.		15.			
8		16			
Percent of Dominant Species that are C (excluding FAC-).	DBL, FACW or FAC	140			
Romarks: Port N/aquitics	overing ~ 15:	h of open water ad	a nar	vou en	vgent-
fringe, banks (non-we)) are: A. Specio.	sa, E. angustiklia, B.	inermi3,	M. öffizing	le, S. amyd.

HYDROLOGY

Recorded Data (Describe in Remarks): 	Wetland Hydrology Indicators: Primary Indicators: 			
Field Observations: Depth of Surface Water: <u>4-6'</u> (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: 0(in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)			
Romarks: Pord w/irriz. ditch feeding	it Appears to be >4' deep.			
Supage from pump + dans, on south size west, but onthet not observed.	4. A alvert mains some water to			

Map Unit (Sorios ar Taxonom	Name nd Phase): y (Subgroup):	Falfe d	aylorn 3-	Drainage (Field Obse Confirm	Class: Invations Mapped Type? Yes No
<u>Profile De</u> Depth <u>(inches)</u>	<u>scription:</u> <u>Horizon</u>	Matrix Color (Murrsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, - Structure, etc.
	· · · · · · · · · · · · · · · · · · ·				
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
Hydric Soi - - - -	I Indicators: Histosol Histic Epi Sulfidic O Aquic Mo Reducing Gleyed or	pedon dor isture Regime Conditions Low-Chroma Colors	Cor Hig Org List List Oth	ncretions h Organic Content in Su anic Streaking in Sandy ad on Local Hydric Soils ad on National Hydric S or (Explain in Romarks)	Irface Layer in Sandy Soils Soils List oils List
Romarks:	No pit	-AMR	and DBU/FARCH	1 doms	· · · · · · · · · · · · · · · · · · ·

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WETLAND DETERMINATION

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	No (Circle) No No No - Ashrow	(Circle) Is this Sampling Point Within a Wetland? No
Romarks: ford w/fringe Peach/suf willows along Ivrigation purposes.	~ 5' avera banks. Ducks	ye wordth. Several R. clive +.
		Approved by HQUSACE 3/92

Project/Site: <u>(11 550</u> Applicant/Owner: <u>CD 47</u> Investigator: <u>S. Dawsn Gul M 4</u> Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situal Is the area a potential Problem Area? (If needed, explain on reverse.)	Date: $9/18/01$ County: $___$ 1^{-} 1^{-} 3^{-} State: $_$ Co Community ID: $_$ 5^{-} 4^{-} 3^{-} Transect ID: $_$ Plot ID: $_$ Charom					
regetation / Photo #21						
Dominant Plant Species Streturn Indicator 1. Iphn latifulia H UL 20% 2. Lemma ninor A UL 10% 3. A UL 10% 4. B B B 5. B B B 8. B B B	Dominant Plant Species 9 10 11 12 13 14 15 16	<u>Stratum</u> <u>Indicator</u>				
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Remarks: Lagron W/Typha along edges + Lemma on open water. Perimeter of WL is dominated by C. anvense + B. ihermis						
of WL is dominated by C. anvense	+ B. inermis					

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators:
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water: $0-24$ (in.)	Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves
Depth to Free Water in Pit:(in.)	Local Soil Survey Data
Depth to Saturated Soil:O(in.)	Other (Explain in Remarks)
Romarks: Standing water in kypoon	77 7

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isonos an Taxonomy	d Phase): (Subgroup):		ny Iran, s	Field Obse Confirm	Aess: <u>VII</u> rvations Mapped Type? Yes No
Profile De Depth (inch es)	<u>scription:</u> <u>Horizon</u>	Matrix Color (Mun so ll Moist)	Mottle Colors (Munsell Moist)	Mottie <u>Abundance/Contrast</u>	Texture, Concretions,- Structure, etc.
	- <u></u>	·		· ·····	
		· ·····			
iydric Soi - - - -	l Indicators: Histosol Histic Epi Sulfidic C Aquic Ma Reducing Gleved or	podon Idor isture Regime Conditions Low-Chroma Color:	Co Hig Or Lis Lis sOt	ncretions gh Organic Content in Su ganic Streaking in Sandy ted on Locel Hydric Soil: ted on National Hydric S hor (Explain in Remarks)	Irface Layer in Sandy Soils Soils s List oils List

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WETLAND DETERMINATION

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	(Yes No (Circle) (Tes No (Tes No (Tes No Affymed	(Circle) Is this Sampling Point Within a Wetland? Yes No
Romarks: Typical Schage by Thistle + brome,	agoon of b adjacent to	it veg along edgig. Surrounded a hay field
	· · · · · · · · · · · · · · · · · · ·	

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Project/Site: U.S. 550 Applicant/Owner: Oot Investigator: Dawray and Herb		Date: 9/19/01 County: La Plada State: Co			
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) Yes No Yes No Yes No Yes No Yes No Yes No Plot ID: Is the area a potential Problem Area?					
۲۶۱٬۰ VEGETATION		, ·			
Dominant Plant Species Stratum Indicator 1. Eliocheris pulustors H. VBL 2. + Kolypmum & Witculary 3. fond weed A VBL 4. September A VBL 5. + Echinochloa cruigalli 6. Hordenn jubetum 7 8 Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Remarks: Namew amergent fringe upga Jarry are dominated by Knotweed. It u/some Circum arvense, alfulta; H. and 1); Shumed upland TYDROLOGY	Dominent Plent Species 9	r 50% of ogan water Musting, Americath wed #=Notoin			
	Wetland Hydrology Indic Primary Indicators: Ipundated Saturated ii Water Mark Drift Lines Drainage Pa Secondary Indicators Oxidized Ro Water-Stain Local Soil S FAC-Neutra Other (Expla	ators: n Upper 12 Inches cs Deposits atterns in Wetlands (2 or more required): tot Channels in Upper 12 Inches ted Leaves urvey Data I Test ain in Remarks)			
Romarks: ford fed by irrig ditch.					

35)

Texonom	y (Subgroup)):		Field Obse Confirm	rvetions Mapped Type? Yes No
<u>Profile De</u> Depth (inches)	<u>scription:</u> <u>Horizon</u>	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions,- Structure, etc.
	· <u></u>	- 		· <u>· · · · · · · · · · · · · · · · · · </u>	·
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
			· · · ·		
		-	· .	· · · · · · · · · · · · · · · · · · ·	
			•	<u></u>	+
Hydric Soi	I Indicators:				
-	Histosol Histic Epi Sulfidic C Aquic Ma Reducing Gleyed or	ipedon Xdor visture Regime Conditions r Low-Chroma Colors	Con Hig Orr Lis Lis Ott	ncretions Ih Organic Content in Su Janic Streaking in Sandy ted on Local Hydric Soils ted on National Hydric S ter (Explain in Remarks)	ırface Layer in Sandy Soils · Soils : List oils List

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WETLAND DETERMINATION

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Romarks: Large pond (~ 3/4 acre) "/aqui	atre veg and convergent banks. Banks
avange ~ 4' in worth. Surrounding a	arm weedy. Malland ducks obs.
hump located on dam - apparently used	- for irrigation purposed

Project/Site: US 55V Applicant/Owner: COVT Investigator: Down on Aws		Date: $\frac{9}{18}/91$ County: <u>Lo Plada</u> State: <u>Co</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? \swarrow (If needed, explain on reverse.)	? Yes No Yes No Yes No	Community ID: Transect ID: Plot ID:
ر الم VEGETATION		
Dominant Plant Species corpus Stratum Indicator 1. Jessyn micro ptear II UBL 50 2. Phalaris armodivaces II OBL 50 3. Job Internet II Place UBL 5 4. Nover for the Initer II Flace UBL 5 5. Carrox of II Place UBL 5 6	Dominant Plant Species 9	Stratum Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	80-100	
Remarks: 3' John we think (1+2) Im mysled field Deed willow on 2%	+ 2' water	

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Pripary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits
Field Observations:	Drainage Patterns in Wetlands
Depth of Surface Water:	Secondary indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches
Depth to Free Water in Pit:(in.)	Water-Staned Leaves Local Soil Survey Data EAC-Neutral Test
Depth to Saturated Soil:(in.)	Other (Explain in Remarks)
Remarks: Irrigation Distri. We with	his banks. 21 dhannal

SOILS					
Map Unit Name (Series and Phase): Taxonomy (Subgroup): _	Falf U	ey loan 3	-ð Dra Fie Col	ainage Class: <u>Vcl</u> Id Observations Ifirm Mapped Type? Yes No	······
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, <u>Structure, etc.</u>	
	i	·	· · · · · · · · · · · · · · · · · · ·		
			-		
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture F Reducing Condi Gleyed or Low-C	Regime tions Shroma Colors	Concretion High Organic S Listed on I Listed on I Other (Exp	ns nic Content in Surface La treaking in Sandy Soils Local Hydric Soils List National Hydric Soils List National Hydric Soils List Nain in Remarks)	yer in Sandy Soils	
Remarks:	(10 Pi)				N

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes Yes Yes No No	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks:		
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Approved by HQUSACE 3/92

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Project/Site: <u>US 550</u> Applicant/Owner: <u>CAOT</u> Investigator: <u>Donate</u> Cont Harb		Date: $9/18/91$ County: Lo Plate State: 2
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: 38 Transect ID: Plot ID:
1918,15		
VEGETATION	·	
Dominant Plant Species Stratum Indicator 1. PLateris aroundineou H OBL 70 2. Jeingur microcongue H OBL 10 3. Igraduit statements H FBCU 5 4. Aggina labinition H FBCU 5 5. Sality on gue G OBL 2 6.	Dominant Plant Species 9	
Percent of Dominant Species that are OBL. FACW or FAC (excluding FAC). Remarks: Salix are put morely dead - grad 2nd differ Phen - Huisty boundaries phan on vidg	100 151 y Sproyed e rechaide	
2 Ditchen on (812) on a Mon-We HYDROLOGY Westand Fisterch side	thank - we grid	rminane of by darging
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicato Primary Indicators: Inundated Saturated in Upper Water Marks Drift Lines	ors: 12 Inches
Field Observations: [2] 2 Depth of Surface Water: [2] 2 Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Sediment Deposits Orainage Pattems is Secondary Indicators (2 of Oxidized Root Char Water-Stained Leave Local Soil Survey D FAC-Neutral Test Other (Explain in Re	n Wetlands or more required): nels in Upper 12 inches es ata emarks)
Remarks: Imigalin Mannel, Vakgung 2nd dita Ailbwaha, low at 301 dita	Fen 41 read] 577	Tout

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SOILS					· · · · · · · · · · · · · · · · · · ·	
Map Unit N (Series an Taxonomy	lame d Phase): (Subgroup):	Falla Uay	, Iron 1-	کنی کار Dra Fiel Con	inage Class: <u>Well</u> Id Observations firm Mapped Type? Yes No	
Profile De: Depth (inches)	scription: Hortzon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
·						·
	· · · · · · · · · · · · · · · · · · ·	- <u> </u>				
Hydric Soil H H S A R G	Indicators: stosol stic Epipedon uffidic Odor quic Moisture educing Cond leyed or Low-	Regime itions Chroma Colors	Concret High Or Organic Listed o Listed o Other (I	tions ganic Content in Surface Lay Streaking in Sandy Soils In Local Hydric Soils List In National Hydric Soils List Explain in Remarks)	ver in Sandy Soils	•
Remarks:	N.	git	•			

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	No (Circle) (Yest No (Yest No	ls this Samplig Point Within a Wetland?	(Circle) (Yes No
Remarks:			
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Approved by HQUSACE 3/92

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Project/Site: US 550 Applicant/Owner: COV5 Investigator: Dowson and Yevb		Date: 10/23/01 County: <u>(2) Plase</u> State: <u>Cu</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: 2-4-39 Transect ID: Plot ID: D.th - west

VEGETATION

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Dominent Plent Species Stratum Indicator 1. Indicator Indicator 2. Indicator Image: Im	Dominant Plant Species 9	<u>Stratum</u> <u>Indicator</u>
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Remarks: H. July Atem along edges -	100	

HYDROLOGY

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Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Aveilable	Wetland Hydrology Indicators: Primary Indicators:
Field Observations:	Sediment Deposits Dreinage Patterns in Wetlands Secondary Indicators (2 or more required):
Dopth of Surface Water:(in.)	Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves
Depth to Free Water in Pit:(in.)	Local Soil Survey Data FAC-Neutral Test
Depth to Saturated Soil:(in.)	Other (Explain in Remarks)
Romarks: Julet to pord (WC 7-1 inizated field	4) - small ditch from

i.

(Subgroup):	Taxonomy (Subgroup): Confirm Mapped Type? Yes No					
<u>cription:</u> Horizon	Matrix Color (Munzell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrest	Texture, Concretions, - Structure, etc.		
	-					
	·	· · · ·				
			····			
	•	· ·				
	:	•		a 2004		
Indicators:						
Histosol			oncretions	· .		
Histic Epi Sulfidic C	ipedon Idor	Hi	gh Organic Content in Su raanic Streaking in Sandy	Irface Layer in Sandy Soils Soils		
Aquic Moisture RegimeU			sted on Local Hydric Soils	s List		
Reducing	Conditions	U	sted on National Hydric S	oils List		
	Indicators: Histosol Histosol Histoc Epi Sulfidic C Aquic Mo	Indicators: Histosol Histosol Histosol Aquic Moisture Regime	cription: Matrix Color Mottle Colors Horizon (Munsell Moist) (Munsell Moist)	cription: Matrix Color Mottle Colors Mottle Horizon (Munsell Moist) (Munsell Moist) Abundence/Contrast		

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No Yes No	(Circle) Is this Sampling Point Within a Wetland?			
Romarks: Small ditch / channel feeding WL 7-4. Imzation Van OFF printlow				

Approved by HOUSACE 3/92

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Project/Site: US 550 Applicant/Owner: CQ 97 Investigator: T. Deway and b	- Herb	Date: /0/23/ County: La P State: Ci	late_
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situa Is the area a potential Problem Area? (If needed, explain on reverse.)	ntion)? Yes No Yes No Yes No	Community ID: Transect ID: Plot ID: Layoon - we	7-5 (4) 5t-
VEGETATION		Photo #	7
Dominant Plant Species Stratum Indicator 1. Elcochans polastris H OBU 2. Polygonum Tapathiklum 4 BL 3. Philony amolinance 4 GBL 4.	Dominant Plant Species 9	<u>Stratum</u>	Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).			
Romarks: Permiter Latria, Chumense Typical layoon			

HYDROLOGY

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Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: 0 - 24 (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: 0(in.)	Wetland Hydrology Indicators: Primary Indicators:
Romarks: Servinge lagoon ~ 40	1. open water

cries and Phi ixonomy (Su	nse): bgroup): _	talle day	1van 3-5	<u>A</u> Dreinage (Field Obse Confirm	Jass: <u>Well</u> rvations Mapped Type? Yes No
ofile Descrip opth ches) Ho	<u>tion:</u> rizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, - Structure, etc.
				· · · · · · · · · · · · · · · · · · ·	-
					-
•		-			
dric Soil Iodi	cators.	·	•		
	istosol istic Epip ulfidic Od quic Mois oducing C loyod or L	edon or sture Regime condition s .ow-Chrome Colors	Co Hig Org List List	ncretions In Organic Content in Su Janic Streaking in Sandy ted on Local Hydric Soik ted on National Hydric S ter (Explain in Remarks)	ırface Layer in Sandy Soils Soils s List oils List

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes Yes Yes No No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Romarks: Typizal Jago	et n	

Approved by HQUSACE 3/92

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Project/Site: US 550 Applicant/Owner: UD UT Investigator: Dawmany Herl		Date: $\frac{\frac{10}{23}}{1}$ County: $\frac{10}{23}$
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: 774(4) Transect ID: Plot ID: Poml - west
/EGETATION		Photos # 8,9

VEGETATION

Dominant Plant Species Stratum Indicator 1. Ekochan's polystnik H Ubl. 2. Analan's anurolinacia H Vbl. 3. Polysmum / agathiklinm H Ubl. 4. Hordenm jugathiklinm H Ubl. 5. Eleochan's Cinque florm H Ubl. 6.	Dominant Plant Species Stratum Indicator 9
8	. 16
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	(00
Romarks: Hordium abory elges - Pord end. Inlet we are is di	w/shallow area on upper 3 connected / WL 7-6)

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: fnundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: <u>D-34</u> (in.) Depth to Free Water in Pit:(in.) Depth to Saturated Soil: <u>O(in.)</u>	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Romarks: Small pond W/Stading	nuter

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(Series an Taxonomy	d Phase): (Subgroup):	Falle day	lien 3-8	[™] /→ Drainage (Field Obse Confirm	Cless: <u>Will</u> rvations Mapped Type? Yes No
Profile De: Depth (inches)	scription: Horizon	Matrix Color (Munsoll Moist)	Mottle Colors (Munsell Moist)	Mottle <u>Abundance/Contrast</u>	Texture, Concretions, - Structure, etc.
				<u>.</u>	-
ydric Soil 	Indicators: Histosol Histic Epip Sulfidic Oc Aquic Moi Reducing (Gleyed or	odon Ior sture Regime Conditions Low-Chrome Colors	Con Higl Org Listo Listo Oth	cretions n Organic Content in Su anic Streaking in Sandy ad on Local Hydric Soils ad on National Hydric S ar (Explain in Remarks)	Irface Layer in Sandy Soils Soils s List oils List
marks:	No g	,; /			

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	res No (Circle) Yes No Yes No	Is this Sampling Point Within a Wetland?	(Circle)
Romarks: Small pord -	- likely us	and for ingation	
Wetland 7-3	crosses d	am (ditch)	

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Project/Site: US 550 Applicant/Owner: COUS Investigator: Dam/m ond Hurs		Date: 12/23/01 County: State:
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situa Is the area a potential Problem Area? (If needed, explain on reverse.)	tion)? Yes No Yes No Yes No	Community ID: Transect ID: Plot ID: J:M-west
VEGETATION		Auto # 5, 6
Dominant Plant Species Stratum Indicator 1. Pholan's arandiñacea H CIBL 2. Epile Sum ciliútum H FAL 3. Tidm latifulm H OBL 4. Scirpus pallistus H OBL 5. 6.	Dominent Plant Species 9	<u>Stratum</u> Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	100	
Romarks: Ajclepis szecista, B. inermiz + ch WL = 3' × 2 fringe. Scirpus	inchorg m edg	es st ditch. ditch widens

HYDROLOGY

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Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Romarks: Some areas Saturated - 1' Manual	- ditch is not flowing

Map Unit (Sories an Taxonomy	Name d Phase): / (Subgroup):	Felfe (las loren	-3 % Drainage (Field Obse Confirm I	Tess: <u>Well</u> rvations Mapped Type? Yes No
Profile De Depth (inches)	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle <u>Abundance/Contrast</u>	Texture, Concretions, - Structure, etc.
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tydric Soi - -	l Indicators: Histosol Histic Epi Sulfidic O	pedon Idor	Cor Higi Ora	cretions h Organic Content in Su anic Streeking in Sandy	irface Layer in Sandy Soils Soils
	Aquic Mo Reducing Gleyed or	isture Regime Conditions Low-Chrome Color:		ed on Local Hydric Soils ed on National Hydric S er (Explain in Remarks)	: List oils List
lomarks:	No P	.+-			-

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No	Is this Sampling Point Within a Wetland?	(Circle) (ros) No
Romarks: Typical dis	th		

Approved by HQUSACE 3/92

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Project/Site: US 550 Applicant/Owner: COST Investigator: Oaws on A Hers		Date: /6/23/ County: La P State: Co	o/ at
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situat Is the area a potential Problem Area? (If needed, explain on reverse.)	tion)? Yes No Yes No Yes No	Community ID: Transect ID: Plot ID: Jurig Pipe-we	
VEGETATION		Photo	#4
Dominant Plant Species Stratum Indicator 1. Indicator Indicator 2. - - 3. - - 4. - - 5. - - 6. - - 7. - - 8. - -	Dominant Plant Species 9	<u>Stretum</u>	Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC). Remarks: Pocket of the ar at irrigan Subarantin when it in marks (. and	tion pipe jur	uction (leaky which milkwee	?)

HYDROLOGY

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Recorded Data (Describe in Remarks):Stream, Lake, or Tide GaugeAerial PhotographsOtherNo Recorded Data Available Field Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit:(in.)	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data
Depth to Saturated Soil:(in.)	FAC-Neutral Test Other (Explain in Remarks)
Romarks: No indicators - imzation on n10/15	dowen - water turned off

Profile Description: Matrix Color Mottle Colors Mottle Texture, Concretions, - (Inches) Horizon (Munsell Moist) Abundance/Contrast Structure, etc.	Map Unit (Series ar Taxonom	Namo vd Phase): y (Subgroup):	Felfe day	lven 3-84h	Drainage (Field Obse Confirm (Tass: <u>Veli</u> rvations Mapped Type7 Yes No
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor 	<u>Profile De</u> Depth (inches)	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, - Structure, etc.
iydric Soil Indicators:		• ••••••				·
fydric Soil Indicators:						
lydric Soil Indicators: HistosolConcretions Histic EpipedonHigh Organic Content in Surface Layer in Sandy Soils Sulfidic OdorOrganic Streaking in Sandy Soils		·	· · · · · · · · · · · · · · · · · · ·			
Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleved or Low-Chroma Colors Other (Explain in Remarks)	lydric Soi - - - -	il Indicators: Histosol Histic Epij Sulfidic O Aquic Moi Reducing Gleyed or	pedon dor isture Regime Conditions Low-Chrome Colors	Con Higl Org List List	cretions n Organic Content in Su anic Streaking in Sandy ad on Local Hydric Soils ad on National Hydric S ar (Explain in Remarks)	arface Layer in Sandy Soils Soils s List oils List

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WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes No (Circle) Wetland Hydrology Present? Yes No Hydric Soils Present? Yes No	(Circle) Is this Sampling Point Within a Wetland? Yes No
Romarks: Normal circumstances de hydrology - irrigation o	not exist due to lack it

Project/Site: US 557 Applicant/Owner: CONT Investigator: Dansmont Hurs		Date: <u>10/23/01</u> County: State:
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No	Community ID: 1755 Transect ID: 49 Plot ID: D.t.m - cast

VEGETATION

Dominant Plant Species Stratum, Indicator 1. Eliochans, pulastors H. (Tbl. 2. Apporty, coloritem H FACH 3. Photens enumlimula H OAL 4# Juneus torreyi 5. Juncus baltrong H FACH 6. Carex langinosa H (Tbl. 7# Juncus articulatus 8.	Dominant Plant Species 9	Stratum Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	104	
Remarks: formeter Continon plantain, C.a.	wense, Latuca, Met	totus, Russian
dive, mullion. Two parallel	lother *=	Not dommant

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Sediment DepositsDrainage Pattems in Wetlands Secondary Indicators (2 or more required):Oxidized Root Channels in Upper 12 InchesWater-Stained LeavesLocal Soil Survey DataFAC-Neutral TestOther (Explain in Remarks)
Remarks: Typical ditchig - wal	ter stading in larger one

Map Unit I (Series an Taxonomy	Name vd Phase): / (Subgroup):	Filf de	ylvam 1-3	Drai Fiel Con	inage Class: <u>Well</u> d Observations firm Mapped Type? Yes No	
Profile De Depth (inches)	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
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				······································		
H H S S G	istosol istic Epipedon ulfidic Odor quic Moisture educing Cond leyed or Low-	Regime litions Chroma Colors	Concreti High Org Organic Listed or Cisted or Other (E	ons panic Content in Surface Lay Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils List xplain in Remarks)	rer in Sandy Soils	•
Remarks:	No	n;t-				>
ETLAN	DDETER	MINATION	· · · · · · · · · · · · · · · · · · ·			
lydrophytic Vetland Hy Ivdric Soils	c Vegetation I /drology Pres s Present?	Present? ent?	es No (Circle) es No es No	ls this Samplig Point W	(Circle) (ithin a Wetland? (Yes) No	

Typical ditches - 2'x2 wetherd 3' channel

Approved by HQUSACE 3/92

Remarks:

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Project/Site: <u>US 550</u> Applicant/Owner: <u>COOT</u> Investigator: <u>Devrsm omd Herb</u>		Date: $10/23/01$ County: $10/23/01$ State: $10/23/01$
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes XO	Community ID: 18-14 Transect ID: 45 Plot ID: 45 Ditch - wist

VEGETATION

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Dominant Plant Species Stratum Indicator 1. fhalam andmuna J CBL 2. Agres tri statemilieren J CBL 3.	Dominant Plant Species 9	Stratum Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	100	
Remarks: Typical litch 1'K2 WL,	1' channel	

HYDROLOGY

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Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:	Sediment Deposits Drainage Pattems in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water:(in.)	Oxidized Root Channels in Upper 12 Inches
Depth to Free Water in Pit:(in.) Depth to Saturated Soil:(in.)	Water-Staned Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: D. July to wet but not flo	wirz

Map Unit I (Series ar Taxonomy	Name nd Phase): / (Subgroup): .	Folfe da	y Ivan	/- <u>}</u> Fiel Con	inage Class: <u>VH1</u> d Observations firm Mapped Type? Yes No	
Profile De Depth (inches)	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
Hydric Soil H S S R G	Indicators: istosol istic Epipedon ulfidic Odor quic Moisture educing Cond leyed or Low-	Regime itions Chroma Colors	Concretion High Orga Organic S Listed on Listed on Other (Exp	ns nic Content in Surface Lay treaking in Sandy Soils Local Hydric Soils List National Hydric Soils List olain in Remarks)	ver in Sandy Soils	•
Remarks:	No 0	pit				

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? No Yes No Yes No	(Circle) Is this Samplig Point Within a Wetland? Key No
Remarks: Typical ditch - narrow	fringe wettends
	Approved by HQUSACE 3/92

Appendix B Blank and Example Data Forms

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Project/Site: US 550 Applicant/Owner: SOUTHER AND Investigator: J. Dawlin and A.M	Date: 10/23/01 County: La Plate State: Cw	
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situa Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: 18-2 Transect ID: (46) Plot ID: Rowline ditch-west	
VEGETATION		Photo #2
Dominant Plant Species Stratum Indicator 1. Typha latifuita H 6 BL 2. Eleochems galustres H ØB L 3. Echnidchloc Conscalli H FALW 4.	Dominant Plant Species 9	<u>Stratum</u> Indicator
Romarks: field, de dith od shallow Sn D. inermiz	sale, Perimete	- dominated by

HYDROLOGY

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Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:	
Depth to Free Water in Pit:(in.) Depth to Saturated Soil: 0 (in.)	Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Romarks: Rozdfide ditch and shallon pounds inization over Flow	v swale w/no onthet. likely

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(Series an Taxonom	d Phase); y (Subgroup);	Falle d	ay Ivan	<u>-5</u> Dreinage (Field Obse Confirm	Hass: <u>Veli</u> rvations Mapped Type? Yes No
<u>Profile De</u> Depth <u>(inches)</u>	scription: Hotizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle <u>Abundance/Contrast</u>	Texture, Concretions, - Structure, etc.
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Hydric Soi - - - - -	l Indicators: Histosol Histic Epij Sulfidic O Aquic Mo Reducing Gleyed or	pedon dor isture Regime Conditions Low-Chrome Colors	Cor Hig Org List List Oth	ncretions h Organic Content in Su anic Streaking in Sandy ad on Local Hydric Soils ad on National Hydric S er (Explain in Remarks)	rrface Layor in Sandy Soils Soils List oils List
Romarks:	No p	it -assu	md	<u></u>	

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Romarks: Mound finde ditch / Swale

Approved by HOUSACE 3/92

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Project/Site: U.S. 550 Applicant/Owner: COUT Investigator: Hers Dauson			Date: 9/17/01 County: 60 Plete State: CO
Do Normal Circumstances exis Is the site significantly disturb Is the area a potential Problem (If needed, explain on rever	it on the site? ed (Atypical Situat) Area? se.)	(Yes No ion)? Yes (No Yes (No)	Community ID: Here (47) Transect ID: Plot ID: Large Skinle (est Side)
physics 5 and 6 EGETATION			
Dominant Plant Spocies S 1. Eleochanz palnistriz 2. Phalaris arundinaceac 3. Typha Intifetira 4k Hordenm jubatum 5 6 7 8	itretum Indicator H S BL 10% H OBL 80% H OBL 2% H OBL 2% H OBL 2%	Dominant Plant Species 9 & Phleum prater 10 & Echimochlon C. 11 & Inneus balticu 12 & Rumex sp. 13 & Sugitaria s 14 15 16	<u>Stratum</u> Indicator 1 Se <u>H</u> rusgalli <u>H</u> S <u>H</u> K G <u>H</u> H
Percent of Dominant Species that are ((axcluding FAC-). Remarks: Site is Currently g Wettest areas. Area along Not dominant	OBL, FACW or FAC razed. Abordenan US 550 is down Venst side)	11 1/2 is only along - matel by P. anis Soficienta Eon	edges + Typha in lowest, dinarca

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Infundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Dreinage Patterns in Watlands- Sculate	
Heid Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit:(in.) Depth to Saturated Soil:(in.)	Drainage Patterns in Wetlands- Swale. Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	
Romarks: Evidence of recent ponding - sate WL and - ditch not currently He	rated to surface. Small ditch feels The	
ANIT IS A WE		

(Series and Phase):	Falfa day	loan 3-8	V/v Dreinege Field Obs	Class: <u>Vey</u> ervations	
Rection Direction		<u></u>	Continue	wapped typer tes no	
Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, - Structure, etc.	
0-1	104R3/1			Clay loan ; Numes	my pots, f.
1-16	7.54R.5/2	7.54n.5/8	Numerons 'small	Clay bam . Munner	my prits to
- 78" in .	legth areas of	Lepletions (g	iray areas) beco	me More numerous	<u> </u>
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✓ Sulfidic C — Aquic Ma — Roducing ✓ Gloyod a	odor Nisture Regime Conditions r Low-Chroma Colors	Or Lis Lis Ot	ganic Streaking in Sand ted on Local Hydric Soil ted on National Hydric S her (Explain in Remarks)	y Soils s List Soils List	
Zutitidic C Aquic Ma Roducing Zoloyod on Romarks: Soil pit Witter portions Surfaces of De	odor Disture Regime Conditions r Low-Chroma Colors t pear edge A merite h. Soil pit	in stand of ave sulfidic	ganic Streaking in Sand ited on Local Hydric Soil ited on National Hydric S her (Explain in Remarks) E. pathstri H. adar, Some Salts	y Soils s List Soils List jub atom + E crusg. Visible on expected	~ <i>lli</i>
Zutfidic C Aquic Ma Roducing Gloyod a Romarks: Soil pit Witter portions Surfaces of The ETLAND DETERMI	Nor Sisture Regime Conditions Low-Chroma Colors t pear edge of mente h. Soil pit	Or Lis Ot in stand of ave sulfifier	ganic Streaking in Sand ited on Local Hydric Soil ited on National Hydric S her (Explain in Remarks) E. padustr3, H. ador, Some Salts	y Soils is List Soils List jub atom + E cruzg. Visible on exposed	~ <i>lll</i>
Zutfidic C Aquic Ma Roducing Zoloyod of Romarks: Soll pit Witter portions Surfaces of De ETLAND DETERMI	Ador Disture Regime Conditions r Low-Chroma Colors t pear edge A merite h Soil pit INATION Present?	Or Lis Ot in stand of ave sulfifier	ganic Streaking in Sand ited on Local Hydric Soil ited on National Hydric S her (Explain in Remarks) E. padustro3, H. adar, Some Salts	y Soils s List Soils List jub atom + E crusg. Visible on exposed (Circle)	~ <i>lli</i>
Zutfidic C Aquic Ma Reducing Gloyod of Watter partisms Surfacts of De ETLAND DETERMI Hydrophytic Vegetation Wetland Hydrology Pre Hydric Soils Present?	Ador Disture Regime Conditions r Low-Chroma Colors t pear edge A Archite h Soil pit INATION Present? Yes Yes Yes	Or Lis Ot in stand of ave sulfifier ave sulfifier No (Circle) No Is	ganic Streaking in Sand ited on Local Hydric Soil ited on National Hydric S her (Explain in Remarks) E. padmstro3, H. adar, Some Sulfs this Sampling Point With	y Soils is List Soils List Jub atom + E cruzg. Visible M expected (Circle) No a Wotland? (Yes) No	~ <i>lli</i>
Zutfidic C Aquic Ma Reducing Gloyod of Romarks: Soll pit Witter partims Surfacts of De ETLAND DETERMI Hydrophytic Vegetation Wetland Hydrology Pre Hydric Soils Present?	Ador Disture Regime Conditions Low-Chrome Colors t pear edge of Active hi Soil pit INATION Prosent? Yes Yes	Or Lis Ot in stand of ave sulfibilit No (Circle) No Is	ganic Streaking in Sand ited on Local Hydric Soil ited on National Hydric S her (Explain in Remarks) E. padustro3, H. ador, Some Solfs this Sampling Point With	y Soils is List Soils List Jub Atum + E cruzg. Visible M experied (Circle) in a Wotland? Yes No	
Zulfidic C Aquic Ma Roducing Gloyod of Romarks: Soil pit Witter portions Surfaces of The ETLAND DETERMI Hydrophytic Vegetation Wetland Hydrology Pre Hydric Soils Present? Romarks: Swale in	Ador Nor Netre Regime Conditions Low-Chroma Colors t pear edge A merite h Soil pit INATION Present? Yes Yes Pasture W/SW		ganic Streaking in Sand ited on Local Hydric Soil ited on National Hydric S her (Explain in Remarks) E. pathstro3, H. actor, Some Sulfs this Sampling Point With hy reformable for	y Soils is List Soils List jub atom + E cruzg. Visible on expected (Circle) in a Wotland? Yes No Whydrology. Wate	
Z Sulfidic C Aquic Ma Romarks: Soil pit Witter portions Surfaces of no ETLAND DETERMI Hydrophytic Vogotation Wetland Hydrology Pro Hydric Soils Prosent? Romarks: Swale in Spylade as it a	Ador Nor Neture Regime Conditions Low-Chroma Colors There edge A mente h Soil pit INATION Present? Yes Yes Posture W/sw oproaches US 5		ganic Streaking in Sand ited on Local Hydric Soil ited on National Hydric Soil ited on National Hydric Soil ited on National Hydric Soil E. padusto3, H. ador, Some Solfs this Sampling Point With hy reformable for whey South of	y Soils is List Soils List jub atom + E cruzg. Visible on expected (Circle) in a Wotland? Yes No Whydrology. Wate This Whan irrig.	
Zutfidic C Aquic Ma Romarks: Soil pit Witter portions Surfaces of ne ETLAND DETERMI Hydrophytic Vogotation Wetland Hydrology Pro Hydric Soils Prosent? Romarks: Swale in Spreads as it a isturn Flows pipe	Ador Nor Neture Regime Conditions Low-Chroma Colors There edge A merite hi Soil pit INATION Prosont? Yas Yas Yas Yas Yas Yas Yas Yas	No (Circle) No (Circle) No (Circle) No Is nall ditch /ike irrig. 550, Jimmed WL (n 2-3cfs)	ganic Streaking in Sandy ited on Local Hydric Soil ited on National Hydric S her (Explain in Remarks) E. padustro3, H. ador, Some Sulfs this Sampling Point With ly rifponkille for why South of	y Soils is List Soils List jub atom + E cruzg. Visible on expected (Circle) in a Wotland? Yes No WL hydrology. Wate This WL an irrig.	
Zutfidic C Aquic Ma Romarks: Soil pit Witter portions Surfaces of De ETLAND DETERMI Hydrophytic Vegetation Wetland Hydrology Pre Hydric Soils Present? Romarks: Suble in Spreads as it ap 's thurn Hows pipe	Ador Note Regime Conditions Low-Chroma Colors The near edge A merite hi Soil pit INATION Present? Posture Was pasture Was proaches us s 'Creates a ditur	No (Circle) No (Circle) No (Circle) No Is nall ditch like irrig. 550, Immed WL (n 2-3cfs)	ganic Streaking in Sand ted on Local Hydric Soil ted on National Hydric S her (Explain in Remarks) E. palustn3, H. ador. Some Sulfs this Sampling Point With hy reformable for integ South of	V Soils s List Soils List jud atum + E cruzg. Visible on exposed (Circle) in a Wotland? Yes No Whydrology. Wate This Whan irrig.	
Zutfidic C Aquic Ma Romarks: Soil pit Witter portions Surfaces of The ETLAND DETERMI Hydrophytic Vegotation Wotland Hydrology Pre Hydric Soils Present? Romarks: Swale in Spreads as it a, isturn How pipe	Ador Neture Regime Conditions Low-Chroma Colors T pear edge A mente h Soil pit INATION Present? Pasture Wes pasture Wes Creates a ditur	Or Lis Ot Lis Ot	ganic Streaking in Sand ted on Local Hydric Soil ted on National Hydric S her (Explain in Romarks) E. padustn3, H. ador. Some Sulfs this Sampling Point With ly rifponk lie for why South of a	(Circle) in a Wotland? Yes No Wil hydrolgy. Wate This Wil an irrig.	
Zutfidic C Aquic Ma Roducing Zoloyod of Romarks: Soil pit Witter portions Surfaces of De ETLAND DETERMI Hydrophytic Vegetation Wetland Hydrology Pre Hydric Soils Present? Romarks: Suble in Spriads as it a 's thurn Flows pipe	Ador Disture Regime Conditions Low-Chroma Colors T pear edge A marite hi Soil pit INATION Present? Pasture W/SW oproaches US 5 '(creates a ditch	Or Lis Ot Lis Ot	ganic Streaking in Sand ted on Local Hydric Soil ted on National Hydric S her (Explain in Remarks) E. padustn3, H. ador. Some Selfs this Sampling Point With ly risponsible for why South of Appr Appr	y Soils s List Soils List jud Ahm + E crusg. Visible m expired (Circle) in a Wotland? Yes No We hydrology. Wate This We an irrig.	

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Project/Site: <u>U.S. 550</u> Applicant/Owner: <u>COST</u> Investigator: <u>Herb / Dawgon</u>		Date: <u>9/17/01</u> County: <u>Co Pio la</u> State: <u>Co</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situa Is the area a potential Problem Area? (If needed, explain on reverse.)	tion)? Yes No Yes No Yes No	Community ID: 48 Transect ID: Plot ID: Ditub (cast side)
VEGETATION		· Photo #7
Dominant Plant Species Stratum Indicator 1. Phalari arurdinacea H UBL 100% 2:	Dominant Plant Species 9	Stratum Indicator
Romarks: Phalans Mousculture along with 1	ides of a flowing	ng irrization ditch

HYDROLOGY

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Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: 	
Field Observations:Depth of Surface Water: $D - 10$ (in.)Depth to Free Water in Pit:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	
Romarks: Troization ditch formy (~ 2-3 a return flow pipe (s) at the NW con	(F3) - Source appears to be an a mer of an altalta field	

Profile Description: Matrix Color Mottle Colors Mottle Texture, Concretions, - Sinches) Horizon [Mursell Moist) Abundance/Contrast Structure, etc. No p.t hydric Soils assumed fr pridematic structure, concretions, - No p.t hydric Soils assumed fr pridematic structure, etc.	Map Unit Name (Series and Phase): Taxonomy (Subgroup): _	Falfe U.	y I van 3.	Bth Drainage Cl Field Obser Confirm N	ess: <u>Will</u> vations lapped Type? Yes No
Hydric Soil Indicators: 	Profile Description: Depth (inches) Horizon No p.t - hyd	Matrix Color (Munsell Moist) Yn Z So./S	Mottle Colors (Munsell Moist) assumed due	Mottle <u>Abundance/Contrast</u> 5 pNkme of	Texture, Concretions, - Structure, etc. - OBL Loin, hen
Iydric Soil Indicators: Concretions Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List					
lydric Soil Indicators: HistosolConcretions Histic EpipedonHigh Organic Content in Surface Layer in Sandy Soils Sulfidic OdorOrganic Streaking in Sandy Soils Aquic Moisture RegimeListed on Local Hydric Soils List Reducing ConditionsListed on National Hydric Soils List		· · · · · · · · · · · · · · · · · · ·			
Gleyed or Low-Chroma Colors Other (Explain in Remarks)	lydric Soil Indicators: — Histosol — Histic Epipe — Sutfidic Ode — Aquic Mois — Reducing C — Gleyed or L	idon or ture Regime onditions ow-Chroma Colors	Con Higt Org, Lista Lista Otho	cretions n Organic Content in Sur anic Streaking in Sandy S ad on Local Hydric Soils ad on National Hydric So ar (Explain in Remarks)	face Layer in Sandy Soils Soils List ils List

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WETLAND DETERMINATION

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Hydrophytic Vegetation Present? (Ves No (Circle) Wetland Hydrology Present? (Ves No Hydric Soils Present? (Ves No Asrumul	(Circle) Is this Sampling Point Within a Wetland? Yes No
Romarks: Nerrow ditch WL from irrig Urder U.S. 550. ~220 feet South ON roadside on edge of alfollo field	ation Flows - ditch crosses. If WL 18-1. Ditch located

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- 7

Project/Site: <u>W 550</u> Applicant/Owner: <u>COUT</u> Investigator: <u>J, Pawron</u> and A, W Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situat	Date: $9/17/01$ County: $6 910+1$ State: 5 Community ID: 43 Transect ID: 97			
Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes 🙋	Plot ID:		
/EGETATION		Photo #8 (north end)		
Dominant Plant Species Stratum Indicator 1. Ihalanz anundinacu H UBL 2. Typha Intibulia H UBL 3. Incus Intibulia H UBL 4.	Dominant Plant Species 9. # Met. bty offer 10.* Ph/eum prztu 11.# Carek Sp. 12. 13. 14. 15. 16.	Stratum Indicator		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).				
Romarks: M. otherinale above edges - not white banks of diten - mast or channel is * Not dominant	WL. All WL vegetated	Veg contained whin		
YDROLOGY				

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: 0 Depth to Free Water in Pit: 0	Wetland Hydrology Indicators: Primary Indicators: 	
Romarks: Ditch Flowing ~ 10" deep ~	4' wide	

539 - OK 647 - OK (Knick) Worki + hom

1.140

559 - out of town

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SOILS

Map Unit (Series an Taxonomy	ap Unit Name eries and Phase): FCIE day (FAM 3-8V% Drainage Class: Well Field Observations Confirm Mapped Type? Yes No					
Profile Der Depth (inches)	<u>ectiption:</u> <u>Horizon</u>	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Motti o <u>Abundanco/Contrast</u>	Texture, Concretions, - Structure, etc.	
		·		·		
	<u> </u>	·		·		
Hydric Soil	Indicators:					
Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Uisted on Local Hydric Soils List Reducing Conditions Uisted on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)						
Remarks:	Remarks: No p,t - OBL dominants					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? No Assumed	(Circle) Is this Sampling Point Within a Wetland? Yes No
Romarks: Irrig. ditch along US 550 - WZ 18-2.	water Flowing. Continuation of

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Project/Site: <u>UJ 550</u> Applicant/Owner: <u>CAOT</u> Investigator: <u>Hurs</u> + Dawson Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situal Is the area a potential Problem Area? (If needed, explain on reverse.) - 2 Mark VEGETATION	ntion)? Yes No Yes No Yes No	Date: 9/17/01 County: La flate State: <u>CO</u> Community ID: 17-2 Transect ID: <u>SU</u> Plot ID: Leaky difty funce
Dominant Plant SpeciesStratumIndicator1. Agrosti stoloniteraHGrev 50%2. Corex #1-2%3. Eleochani galustasHUBL 5%4. Juncus bulticusHOBL 10%5. Tipha latificaHOBL 10%6.K. Ridens p7. Hordeum inbutumHGAL 15%8. & Plantago loncelation2%	Dominant Plant Species 9. Cirsing arven 10. Phleum provi 11. Mumek Ip. 12. Common glan 13. Epilobium C 14. Aba Sp. 15 16	<u>Stratum</u> <u>Indicator</u> <u>ise</u> <u>timse</u> <u>tim</u> <u>tim</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>if</u> <u>i</u>
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Remarks: Typha in Jowest Juettest areas, and Ploys from east sole of US 55 # Not formant recently head (whin 2-3yrs) ju HYDROLOGY	100% We veg follows a D. SE "arm" of uniperso finon. M	urlas wet from leaky ditch we contains Typha urbe ellien + horseweed along edges - outside we bonday
 Keecorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: 0-4 (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: 0 	Primary Indicators: Inundated Saturated ii Drift Lines Sediment D Drainage Pa Secondary Indicators Cxidized Ra Water-Stain Local Soil S FAC-Neutra Other (Expla	n Upper 12 Inches leposits atterns in Wetlands (2 or more required): Not Channels in Upper 12 Inches led Leaves urvey Data I Test sin in Remarks)
Romarks: ~ 75% of area is inurdated. in two areas & flows from east Main one of The leaks appear to be recent (The ditch contains No obvious breech	Water Source Side of US 5 Three to recently den has - Supping b	is teaky ditch - 50 (Swalle). At least d junipers / in w/ catter / understory). Sereath banks

(Series an Taxonomy	d Phase): / (Subgroup)	Falfe (1	sy (ren 3	-& () Drainage (Field Obse Confirm	Cless: <u>Well</u> srvations Mapped Type? Yes No
<u>Profile De</u> Depth (inches)	scription: Horizon	Matrix Color <u>(Munsell Moist)</u>	Mottle Colors (Munsell Moist)	Mottle Abundence/Contrast	Texture, Concretions, - Structure, etc.
	<u></u>			<u> </u>	-
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	<u>-</u>	· · · ·	<u></u>		
· · · · · · · · ·	······································	· · · · · · · · · · · · · · · · · · ·	•• <u>••</u> ••••••••••••••••••••••••••••••••	<u> </u>	
		- -		· · · · · · · · · · · · · · · · · · ·	
	•		•		
omarks:	No pit	- 052 /Fut	tw domps, e	rdence of hyp	Indogy
TLAND	DETERM	INATION			
ydrophytio /etland Hy ydric Soils	c Vegetation drology Pres Present?	n Present? Yes sent? Yes Yes Yes	No (Circle) No No Assumed Is	and <i>f</i> this Sampling Point With	in a Wotland? (Ves No
omarks:	Swale g	ording leaks	y ditch wate	r Ditch lead	ing in two main
-	- WI	L'nárrows.	up to each	leak. WL a	ntinues under
avea		4 4			
u.l.	550 1	n natural	Swale (to ea	st)	
weaj U.I.	550 1	n natural	Swale (to ea	<i>st)</i>	

K Dead juniper/primen W Typha undestroy

WL

Section Sec.

S'S' N 550.

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5)

Project/Site: US 550 Applicant/Owner: CPort Investigator: 5 Dewler and A. Hu	Date: $\frac{9/(8/31)}{County:}$ State: C	
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	? Yes No Yes No Yes No	Community ID: 51 Transect ID: 727 Plot ID:
/p.17		
Dominant Plant Species 1	Dominant Plant Species 9. http://www.jowe 10. jowe 11. jowe 12. jowe 13. jowe 14. jowe 16. jowe	Stratum Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	1002	
nemarks: •	· · ·	

HYDROLOGY

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Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs OtherNo Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: 1-2(in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stahed Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: All has showing water. Owner says that supton have	made hole/leaks in the canad on
B2 persisted long anongy to kil	I her there Appendix B Blank and Example Data Form

SOILS	<u></u>			·		
Map Unit I (Series an Taxonormy	Name Id Phase): / (Subgroup):	Falfa c	lay Iram	<u>3-8%</u>	Drainage Class: Field Observations Confirm Mapped Type? Yes No	
Profile Dep Depth (inches).	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, <u>Structure. etc.</u>	
•••••••••••••••••	<u> </u>					
Hydric Soil H H Si A R Gi	Hydric Soil Indicators: Concretions Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Listed on Local Hydric Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)					
Remarks:	No	pit - mu	in a a fed		~	

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	No (Circle) No No No	ls this Samplig Point Within a Wetland?	(Circle) (es) No
Remarks: Whenly J	v 19-2 france	. untrent	

Approved by HQUSACE 3/92

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Project/Site: UJ 550 Applicant/Owner: UP 07 Investigator: 5. Qowin and A. Med		Date: $9/10/v_1$ County: Lo $Pla be$ State: 0
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes Wo Yes Wo Yes Wo	Community ID:

Jp K

VEGETATION

Dominant Plant Species Stratum Indicator 1. Pulson amplibit H OBL 2. Supplie H OBL 3. Apple length re H OBL 4. Electric H OBL 5. Image: Stratum H 6. Image: Stratum H 7. Image: Stratum H 8. Image: Stratum Image: Stratum	Dominant Plant Species 9	<u>Stratum</u>	Indicator		
Percent of Dominant Species that are OBL, FACW or FAC $\int g b$ (excluding FAC-).					
Remarks: ~ 35% of pond has smargent vigedertron.					

HYDROLOGY

Pecorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	 Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Sew oge lagong. Surface of w	ate is frem seen

Map Unit Name (Series and Phase): Taxonomy (Subgroup): _	Falk o	ley Iran	3 - P ½ Dra Fie Cor	In age Class: <u>VL4</u> Id Observations firm Mapped Type? Yes No	
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (<u>Munsell Moist)</u>	Mottle Abundance/ Size/Contrast	Texture, Concretions, 	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture F Gleyed or Low-C Remarks: N t	Regime tions Shroma Colors	Concre High O Organi Listed Listed Other (stions rganic Content in Surface Lay c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils List Explain in Remarks)	yer in Sandy Soils	

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Very No (Circle) Vers No Vers No	(Circle) Is this Samplig Point Within a Wetland? (Circle)
Remarks:		

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Project/Site: US 550 Applicant/Owner: COUT Investigator: SDawson and A. Herb		Date: $\frac{9/15/01}{County: Lo \gamma Lo \gammaState: Co$
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes (No Yes (No)	Community ID: 53 Transect ID: Plot ID:

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VEGETATION

Dominant Plant Species Stratum Indicator 1. Carey Vul pinuidu H Ode 35 2. Fliv vhani Aeluschis H Ode 30 3. Juneus beltime H 2. 4. Typha angust Ilie H Ode 51. 5.	Dominant Plant Species 9		Indicator		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).					
Remarks: Fringe of irrigation ditch. Withing banks murthy. 1-31 wide each side Array. 1.51 each side. I typhe in ditch better 1- 2040 of length					

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other Other No Recorded Data Available Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil:	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Inrijenten ditch. Water Elag pend. Venter surten X = 4'	for inigate meadure

Map Unit Name (Series and Phase): Felledy Taxonomy (Subgroup):	1 man 2 - 14	Drainage Class: VCH Field Observations Confirm Mapped Type? Yes No			
Profile Description: Depth Matrix Color inches). Horizon (Munsell Moist)	Mottle Colors Mottle Abundand (Munsell Moist) Size/Contrast	ce/ Texture, Concretions, Structure, etc			
	· · · · · · · · · · · · · · · · · · ·				
lydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors	Concretions High Organic Content in Surfac Organic Streaking in Sandy Soi Listed on Local Hydric Soils Lis Listed on National Hydric Soils I Other (Explain in Remarks)	xe Layer in Sandy Soils ils t List			
Remarks: No pit. Mottles ensident in soil Alader 100 From					

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) (Yes No (res No	(Circle) Is this Samplig Point Within a Wetland? Kes No
Remarks: (Jonneuts	to 19-2 Ahm we	vut

Approved by HQUSACE 3/92

Project/Site: U.1. 550 Applicant/Owner: COUT Investigator: Hurs + Dawson		Date: <u>9/17/01</u> County: <u>Le flate</u> State: <u>Ce</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situat Is the area a potential Problem Area? (If needed, explain on reverse.)	tion)? Yes No Yes No Yes No	Community ID: Transect ID: Plot ID: Hillside Seep (west)
/EGETATION		Photo # 12
Dominant Plant SpeciesStratumIndicator1. Agristis stolmikraHFACW 20172. Phalans anirolmalaHVBL 10173. Juncus bulticusHVBL 10174. Eleochanis pulustrisHOBL 10175. CarawayHNL 10176. Unk. AsterHFAC - STAL 52772 Unk Carey #1B.	Dominant Plant Species 9 10 11 12 13 14 15 16	Stratum Indicator
Percent of Dominant Species that are OBL, FACW or FAC	5.5	

Romarks: Aster is generally along alges, Phalans is primarily at top of Seep. Cockebur + C. arvense along edges (intride WC bridge). Wettest areas are E. pahistrist + J. Sulfizue. * Not domine (excluding FAC-). * Not dominant

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Virundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:	Sealment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required);
Depth of Surface Water: $D-3$ (in.)	Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves
Depth to Free Water in Pit:(in.)	Local Soil Survey Data
Depth to Seturated Soil:(in.)	Other (Explain in Remarks)
Romarks: Seep/spring Saturates entire w Plowing channel w/in WL Sudry - 1	L, most is inundated. No defined water is well spread over entire anea

' .

conomy (Su	bgroup):			Confirm I	Mapped Type? Yes No
<u>file Descrip</u> oth <u>ches) Ho</u>	<u>tion:</u> rizon	Matrix Color (Munsoll Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, - Structure, etc.
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			•	<u> </u>	
lric Soil Indi H S & &	cators: istosol istic Epip ulfidic Oc quic Moi educing (leved or	edon lor sture Regime Conditions Low-Chrome Colors	Con Hig Org List List Oth	ncretions h Organic Content in Su Janic Streaking in Sandy and on Local Hydric Soils and on National Hydric S Jor (Explain in Remarks)	rrface Layer in Sandy Soils Soils : List oils List

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WETLAND DETERMINATION

Romarks: Hillsite seep just west of US. 550. Very little soil press good regulative cover. No defined channel - water is well Hillsite 25-30° slope. (estimated)	Circle) BS No	د is this Sampling Point Within a Wetland? (Yes No (Circle) Yes No Yes No Ayamad		on Pr oso nt? resent?	Hydrophytic Vegetati Wetland Hydrology P Hydric Soils Present?
	nt but Spread.	15. 550. Very little soil pre I channel - water is wel	estimated)	nst we r. No -(estim	e scep j' tive cove -30° sloge	Romarks: Hillsix Sood regetent Hillsike 25-

Project/Site: US 550 Applicant/Owner: COUT Investigator: S. Dawar ow A. Hers		Date: $7/18/01$ County: Le Pluse State: Co
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID:

VEGETATION

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Dominant Plant Species Stratum Indicator 1 1 1 1 2 1 1 1 3 1 1 1 4 1 1 1 5 1 1 1 6 1 1 1 8 1 1 1	Dominant Plant Species 9	 Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Remarks:		

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water:(in.) Depth to Free Water in Pit:(in.)	 Sediment Deposits Drainage Pattems in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stahed Leaves Local Soil Survey Data FAC-Neutral Test
Depth to Saturated Soil:(in.)	Other (Explain in Remarks) ~్రైవేటు కం

Map Unit Name (Series and Phase): Will Ivan 3-8%. Taxonomy (Subgroup):						
Profile De: Depth (inches)	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
<u></u>		· · · · · · · · · · · · · · · · · · ·	·			
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Hydric Soil Hi Hi Su Ac Gi	Indicators: stosol stic Epipedon ufficic Odor uic Moisture F educing Condi eyed or Low-C	Regime tions hroma Colors	Concreti High Org Organic Listed or Listed or Other (E	ions Janic Content in Surface Lay Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils List Xplain in Remarks)	ver in Sandy Soils	•
Remarks:	Nap	t - 08L	vy and 1	> milver		
	-					

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Veg No (Circle) Ves No Veg No	Is this Samplig Point Within a Wetland?	(Circle) Yes No
Remarks:			
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Approved by HQUSACE 3/92

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ion)? Yes No Yes No Yes No Plot ID: <u>Hitside Spring</u> (dust)
Dominant Plant Species Stratum Indicator 9.
Wetland Hydrology Indicators: Primary Indicators: / Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks) Chy, Mper Mach is whe, but Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks) Chy, Mper Mach is whe, but Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks) Chy, Mper Mach is whe, but Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks) Chy, Mper Mach is whe, but Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)

axonom	(Subgroup):			Confirm	Mapped Type? Yes No
rofile De epth nches)	scription: Horizon	Matrix Color <u>(Munsell Moist)</u>	Mottle Colors (Munsell Moist)	Mottle <u>Abundance/Contrast</u>	Texture, Concretions, - Structure, etc.
	· · · · · · · · · · · · · · · · · · ·				
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	······	~ <u></u>			
rdric Soi - - - -	Indicators: Histosol Histic Epip Sulfidic O Aquic Moi Reducing Gleyed or	oedon dor isture Regime Conditions Low-Chroma Colors	Com Higi Org List List Oth	ncretions h Organic Content in Su anic Streaking in Sandy ed on Local Hydric Soils ed on National Hydric S er (Explain in Remarks)	Irface Layer in Sandy Soils Soils : List oils List

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WETLAND DETERMINATION

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No Assand	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks: Hillside gring good Flows - We	dominated by v narrows below	il forts, Apper reach is write with source of water.
		Approved by HOUSACE 3/92

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Project/Site: US 550 Applicant/Owner: CPOT Investigator: S. Dawron and A. Herb		Date: 12/23/01 County: La Plate State: Colorado
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situa Is the area a potential Problem Area? (If needed, explain on reverse.)	tion)? Yes No Yes No Yes No	Community ID: 2424 (57 Transect ID: Plot ID: Seeps - west
VEGETATION		Photos
Dominant Plant SpeciesStratum Indicator1. Sulix exiguaSGBL2. Sulix exiguaSGBL3. Na(turnium MinimaleHGBL4. Vermina americanaHGBL5. Pra Sp.HFACU-FA6. Typha IntilliaHGBL7. froulus detosdesTFACW#8. froulus detosdesTFACW#	Dominant Plant Species 9 10 11 12 13 14 15 16	Stratum Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC). Remarks: Numerons hillside seeps field Stands of willows + cottonwood Swevel small pools of water - all	87 %. ling floodplain s. Most cottons dominated by	terrace. Several words along edges. appropris. Aca is gra
		by horses

Recorded Date (Describe in Remarks):	Wetland Hydrology Indicators:
Stream, Lake, or Tide Gauge	Primary Indjcators:
Aerial Photographs	Inundated
Other	<u></u>
No Recorded Data Available	Water Marks
	Drift Lines
	Sediment Deposits
Field Observations:	Secondary Indicators (2 or more required):
Depth of Surface Water: D-34 (in)	Oxidized Root Channels in Upper 12 Inches
Deput of Surface Water	Water-Stained Leaves
Depth to Free Water in Pit; (in.)	Local Soil Survey Data
	FAC-Neutral Test
Dopth to Saturatod Soil:[in.)	Other (Explain in Remarks)
Romarks: Hillside Seeps Fred a seni	g of Shallow pools along The
	V U
Amimes River	1 <u>1</u>

Taxonom	y (Subgroup)	:	· · · · · · · · · · · · · · · · · · ·	Confirm	Mepped Type? Yes No	
Profile De Depth (inches)	<u>scription:</u> <u>Horizon</u>	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, - Structure, etc.	
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lydric Soi - - - - -	l Indicators: Histosol Histic Epi Sulfidie O Aquic Ma Reducing Gleyed or	podon Odor Nisture Regime Conditions r Low-Chrome Colors	Co Hig Org List List Oth	ncretions h Organic Content in Su anic Streaking in Sandy ad on Local Hydric Soils ad on National Hydric S ar (Explain in Remarks)	urface Layer in Sandy Soils Soils : List oils List	

Hydrophytic Vegetation Present? (res No (Circle) Wetland Hydrology Present? (Yes No Hydric Soils Present? (Yes No	(Circle) Is this Sampling Point Within a Wetland? Xes No
Romarks: Services of Small seeps on I Small tront pond at the it slop	Montplain terrale of Animas Rive- ee (of mesa) Many large cottonicad
and some fairly large stands of	F willow.

Approved by HQUSACE 3/92

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(FF) (58)

Project/Site: US 550 Applicant/Owner: <u>CPOT</u> Investigator: <u>J. Dowson and A.</u> Y	Date: $\frac{9/19/1}{County: La Plata}$ State: Co				
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: $-\frac{b-5(5000)}{(68)}$ Plot ID: $-\frac{5}{(800)}$				
VEGETATION		1 Photo 1-13			
Dominant Plant SpeciesStratumIndicator1. Carex lanuginusHOBL2. Nagturtium officiendsHOBL3. As 101 H1 Stolen viewHGBL4. Th/cum pentineHFALW5. Typha bet KlowHGBL6. Eleochans policityHOBL7. forduedAUBL8. Siden(Sp.HGBL8. Siden(Sp.HGBLPercent of Dominant Species that are OBL, FACW or FAC	Dominant Plant Species 9. Salit CHJUA 10 11 12. forpolus sp. 13. Acer regunds 14. Alans in can 15 16	<u>Stratum</u> <u>Indicator</u> <u>Ju alja cent orca</u> <u>Mist mature + /arzc</u> <u>a</u>			
(excluding FAC). Remarks: Large WL W/ Cotton woords, Chokechang + alders along edges. Center of WL IS againstiz bed dominated by possibilities. Dutlying areas are dominated by Carex + Agrostis, W/The patter areas dominated by Typha					
IYDROLOGY					
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicato Primacy Indicators: Saturated Saturated in Upper Water Marks Drift Lines	rs: 12 Inches			
Field Observations: Depth of Surface Water: $D - \frac{4B}{B}$ (in.) Depth to Free Water in Pit: $(in.)$ Depth to Saturated Soil: D (in.)	 Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks) 				
Remarks: Source of water 3 primarily his ivrig return How Center on south a	Ilsode sup (at) mel) que noter	be of slope) and some areas assumed to be			
~ 4' deep - Most other anal and lat.	to surface				

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Тахопоту	(Subgroup): _			Fiel Con	d Observations firm Mapped Type? Yes	No	drawned
Profile Des Depth inches)	cription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.		
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		·				·	, ,
/dric Soil	ndicators:			· · · · · ·			
His His Sul Aq Re	tosol tic Epipedon tidic Odor uic Moisture F ducing Condit wed or Low-C	legime ions broma Colors	Concretio High Orga Organic S Listed on Listed on	ns anic Content in Surface Lay Streaking in Sandy Soils Local Hydric Soils List National Hydric Soils List plain in Bemarks)	er in Sandy Soils	•	
emarks:	No 4	2,	0000 (24		<u></u>		· ·
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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? No	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks: Large WL w/ aquatre bed,	, emergent · Servis /sbruf
communities. Mature cotton/war	13 are on all sides. We located
adjacent to Animus River but no	ad Boxellers
hydrologically connected.	+ litely

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Project/Site: US 550 Applicant/Owner: COUT Investigator: S. Dawson and A. H		Date: $9/19/01$ County: $C = M = \frac{1}{2}$ State: \Box
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	? Yes No Yes No Yes No	Community ID: <u>5-1715mm</u> Transect ID: <u>(S?)</u> Plot ID: Seep (east)
VEGETATION		Photos 1-14, 15 wes
Dominant Plant Species Stratum Indicator 1. Agrost 43 Statomitera H FALW 2. Scirpus ameritanue H OBL 3. Hordicam industrum H FALST 4. Typha latteliza H FBL 5. Cirpus validans H VBL 6. Carex lanuginosa H VBL 7. Lidens Sp. H FALW-VBL 8. Epilobulan ciliatum H FAL	Dominant Plant Species 9. <u>1. yemum Inp</u> 10. Juncus art w 11. <u>Eleotharis pr</u> 12. <u>Echhorduloa Cr</u> 13. <u>Nasturbium 8thiù</u> 14. <u>Vermila amen</u> 15.	Aithing A USL Jarts H OBL Lats H OBL Lytos H UBL uggeli H GACW vale H UBL
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	00/1	
Remarks: Hill side seep - 100% vegetative cover. Nasturtium in wet areas also. Upland areas do	Typha in wetter minned by wild	st creat and pockets of lizenze + M. aspertolin?

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: D - 1/b(in.) Depth to Free Water in Pit: (in.)	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data				
Depth to Saturated Soil:	FAC-Neutral Test Other (Explain in Remarks)				
Remarks: Seep @ tol of slope on The Animas Abortplain. Most areas inundated 2-10" Mur areas Saturated to Sarface. Invigation ditch return					
How also contributes Markedly to n	e hydrology				
32	Appendix B Blank and Example Data Forms				

Map Unit Name (Series and Phase): Taxonomy (Subgroup):	stright on land Tertonge	ids- ushi da	o v v i V v J h bunda Drai Fieł Con	I amented and inage Class: <u>It net</u> d Observations firm Mapped Type? Yes No	centively during
Profile Description: Depth (inches) Horizon	Matríx Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
Hydric Soil Indicators:			·		
Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Low-	Regime litions Chroma Colors	Concrei High Or Organic Listed o Listed o Other (f	tions ganic Content in Surface Lay : Streaking in Sandy Soils In Local Hydric Soils List In National Hydric Soils List Explain in Remarks)	er in Sandy Soils	
Remarks: N, p);t-				2

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks: Very large + a Frozs objerved	liverse WL Situa	ted on The Animas Niver Hoolglain

Approved by HQUSACE 3/92

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ur 550 #/11/03 Project/Site: _ Date: COUT Applicant/Owner: County: _ 5 Danison K Conolisic Investigator: Cu State: Do Normal Circumstances exist on the site? (Yes) Community ID: 294 59A Transect ID: Is the site significantly disturbed (Atypical Situation)? Yes 10 Is the area a potential Problem Area? Yes Plot ID: (If needed, explain on reverse.) Wexland Fr Sg VEGETATION Stratum Indicator Dominant Plant Species Dominant Plant Species Stratum Indicator Aprila isting 9. OBL Validus I the port 10. Fbe hurda 11. Mullen Very 2 augerifilia FACWA H 12 Simon Ж FACUT 13. 14 15 16 Percent of Dominant Species that are OBL, FACW or FAC NBL (excluding FAC-). him Por Remarks: Munts 2 a worth y gradual abrust has the believe on messalt

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other Other	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: '/(in.) Depth of Surface Water: '/(in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Sediment Deposits Drainage Pattems in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Marthy has surfax water Scepage and at barc slope.	WL Panallels Love of the slope.

Appendix B Blank and Example Data Forms

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Map Unit Name (Series and Phase): Taxonomy (Subgroup):	TeA	m Iram	Dra Fiel Con	inage Class: Id Observations firm Mapped Type? Yes No
$\frac{\text{Profile Description:}}{\text{Depth}}$ (inches). Horizon $(1 - 5)$ $(-8 + -)$	Matrix Color (Munsell Moist) 107R4/2 107R4/2	Mottle Colors (Munsell Moist) Nrm 24257R4	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure. etc. Fillery J.C JCC
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Gleyed or Low- Remarks:	Regime litions Chroma Colors	Concretio High Orga Organic S Listed on Listed on Other (Exp	ns Inic Content in Surface Lay treaking in Sandy Soils Local Hydric Soils List National Hydric Soils List National Hydric Soils List Dain in Remarks)	yer in Sandy Soils
				-

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Ves No (Circle) Ves No (Yes) No	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks:		

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59-B yland soil pit

Project/Site: <u>US 550</u> Applicant/Owner: <u>O 7 T</u> Investigator: <u>T Dawren</u> (L. Ca	and the	Date: $(1/12/5)$ County: (a) State: (a)
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: Transect ID: <u>79-8-59</u> Plot ID:
Animas Rin Alorgia		
VEGETATION	· · · · · · · · · · · · · · · · · · ·	
Dominant Plant Species Stratum Indicator 1. Multich Very in as point in H FAC - 2. Clyccontrile H FAC - 3. Morden of Johann H FAC - 4. Kennit H FAC O 5. Universition cloure H FAC O 6. Terroren Marinah H FAC O 7. Christop M ML 8. Clourty Consolet a H FAC O	Dominant Plant Species 9	<u>Straturn</u> Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	25	
Remarks: likedy noccin against to welle currently prevent, but ha Graduat Sunday	nt. Irmerthat to t all cour pier	tory - function

HYDROLOGY

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Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Market in Pit: Market in Pit: <th>Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Pattems in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)</th>	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Pattems in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: No Endricatoror,	

Vap Unit Name Series and Phase): Faxonomy (Subgroup): _	Jert	m luem	Drai Fiel Con	Inage Class: d Observations firm Mapped Type? Yes No	
Profile Description: Depth Inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	-
0-12	7.57K+13	Ninc		ĊĻ	
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lydric Soil Indicators: Histosol Histic Epipedon Suffidic Odor Aquic Moisture I Reducing Condi Gleyed or Low-C	Regime tions Chroma Colors	Concretion High Orga Organic S Listed on I Listed on I Other (Exp	ns nic Content in Surface Lay treaking in Sandy Soils Local Hydric Soils List National Hydric Soils List Islain in Remarks)	ver in Sandy Soils	
emarks: f;} ix	mitet vy	creerebet	, ebaset set ,	Leat of JEA 59A	

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes (Ng (Circle) Yes (Ng Yes (Ng	(Circle) Is this Samplig Point Within a Wetland? Yes (No
Remarks:		

Approved by HQUSACE 3/92

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Project/Site: US 550 Applicant/Owner: COUT Investigator: Dows of Hub		Date: <u>9/19/01</u> County: <u>Captade</u> State: <u>Ca</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	? Yes No Yes No No	Community ID: <u>6-26013</u> Transect ID: <u>60</u> Plot ID: <i>Jurg</i> , Dibth (lact)
VEGETATION		1 Photo 1-5
Dominant Plant Species 1. Elcocherrs polystris H ULL 2. Echinochloa Cruigelli H FARW 3. Agnists stoloniverna H FARW 4. John exigna S UBL 5. Juncus articulatus H UBL 6. Juncus forcesi H FARW 7. Hordenn Julatun H FARW 8. Rument Mary H FARW	Dominant Plant Species 9	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	100	
Remarks: Non-WL banks . Chickeny, plants WL banks ~ 1/2' each side	ago, Tribolium, Curly	, cyp grimweed,

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: D-B(in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Seament Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Staned Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Small ditch of channel	

Map Unit I (Series ar Taxonomy	Name Id Phase); (Subgroup);	JEANIN &	movelly lean	0-316 Dra Fiel Con	inage Class: <u>レリー・d〜</u> Id Observations firm Mapped Type? Yes No	ined
Profile De Depth (inches)	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munșell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
			· · · · · · · · · · · · · · · · · · ·			<u> </u>
Hydric Soil H H S A R G	Indicators: istosol istic Epipedon ulfidic Odor quic Moisture educing Cond leyed or Low-	Regime litions Chroma Colors	Concretion High Orga Organic S Listed on Listed on Other (Ex	ns anic Content in Surface Lay Streaking in Sandy Soils Local Hydric Soils List National Hydric Soils List plain in Remarks)	yer in Sandy Solls	•
Remarks:	No b	nit - cla	y soil drim	15		<u> </u>

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No Yes No	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks: Small ditch w/one short bra	whe Channel is ~ 1' wide and
WL banks and ~ 1/2' each. Some	areas that are regularly
Aborded adjacent to ditch contain	Some we very (Ehochans) but also
Contain yoland Veg (chickory + clover).	These areas not include

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Project/Site: <u>US 550</u> Applicant/Owner: <u>CD 0T</u> Investigator: <u>5. Dawsen and A-4</u>	اوسل	Date: $\frac{9/19/01}{County: Ca Plata}$ State: Cu
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Site Is the area a potential Problem Area? (If needed, explain on reverse.)	vation)? Yes No Yes No Yes No	Community ID: <u>13</u> 61 Transect ID: Plot ID: <u>Hillinde Suegs</u>
VEGETATION		· · ·
Dominant Plant Species Stratum Indicator 1. Juncus articulatius H OBL 2. T. pha latilita - H OBL 3. Agrosts Stolon Fun H FACW 4. Lidens Sp. H FACW-41 5. Eleochans publishing H URL 8. Sphagnum Sp. 7. * Aster 8.2 Epilebium ciliatum H FAL	Dominant Plant Species 9. Junicut bilt 10. Ly wp.s 11. 12. 13. 14. 15. 16.	Stratum Indicator ZUI H FACW
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	86%	
Romarks: Arca & hummork, + grazed in Floating mass dominated by J. baltrens # Not sominat	diver areas. We (~15' drameter).	ttest area il a
IYDROLOGY		
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology India Primary Indicators: loundated Saturated i Water Man	ators: in Upper 12 Inches ks

Field Observations:

Depth of Surface Water:

Depth to Free Water in Pit:

Depth to Saturated Soil:

Drift Lines Sediment Deposits **Drainage Patterns in Wetlands** Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data

- ____ FAC-Neutral Test
- Other (Explain in Remarks)

hummocky - pockets of open water be spring/sup source Romarks: WL vtry Mass appears Þ

0-12 (in.)

0

(in.)

_(in.)

axenomy	d Phase): <u>V</u> (Subgroup):	1	34493 - 11 741	<u>لمن من المن ال</u>	Class: <u>Jerneman</u> V/(4) Invations Mapped Type? Yes No
ofile Des opth ches)	<u>ecription:</u> Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, - Structure, etc.
1-12	0	Fibrons sigo	niz muterral	- mixed w/clay	- 2.5/N color
, +		2.5/1		-	Clay

	1.5			· · · · · · · · · · · · · · · · · · ·	
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	· · ·			· · · · · · · · · · · · · · · · · · ·	
ric Soil 	Indicators: Histosol Histic Epip Sulfidic Od Aquic Moi Reducing Glaved or	edon lor sture Regime Conditions Low-Chrome Colors	Co Hig Org Lis Lis	ncretions In Organic Content in Su Janic Streaking in Sandy ted on Local Hydric Soils ted on National Hydric S ter (Explain in Remarks)	rface Layer in Sandy Soils Soils List oils List
د بــــــــــــــــــــــــــــــــــــ	Reducing Gleyed or	Conditions Low-Chroma Colors	 2"Ott	ted on National Hydric S her (Explain in Remarks)	oils List

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WETLAND DETERMINATION

Hydrophytic Vegetation Present? Kes No (Circle) Wetland Hydrology Present? Kes No Hydric Soils Present? Kes No	(Circle) Is this Sampling Point Within a Wetland? Fes) No
Romarks: Hillsde seep appears to be a pr Site very diverse vegetatively + is /or above The creek. Other seeps and landscape (outside study area)	ssible fen - prjanre svils u/hummocks rated on a furch n 20' (vertreal) visible in similar positions in Ze
Some adjacent avec appen to t Much lange aver of fullricke so registreen of Dine	Approved by HOUSACE 3/92 be old wettend without hydrology, by it located on some sloge/band

• " **)** +

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Project/Site: US 530 Applicant/Owner: CP 0T Investigator: S. Dawson and A. H.		Date: <u>9/19/01</u> County: <u>La 9 Jaba</u> State: <u>CU</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situa Is the area a potential Problem Area? (If needed, explain on reverse.)	tion)? Yes No Yes No Yes No	Community ID: 12 Transect ID: (2) Plot ID: (2) Crack
۲ اور اور VEGETATION		
Dominant Plant Species Stratum Indicator 1. Eleochan's publishes 4 FRU 2. Polypogen Mongentenses 4 FRUNT 3. Inneus anticulatus 4 GBL 4. Sciences 4 GBL 5. Watercress 4 GBL 6. Polyponum pontholium 4 FACNAT 7. Epitterium cilliatum 4 FAC 8. Rumex triany 4 FAC Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC). Remarks: Area grazed by cattle, Uplan Mustand & Ther weeds forth. We con common perdocte, Common Mallow, american Willand fringe 1-8' with IYDROLOGY	Dominant Plant Species 9. <u>Bidens</u> <u>sp.</u> 10 11 12 13 13 14 15 16 16 <i>INO*/s</i> <i>I banks contain</i> <i>Fined to Frinze</i> 3 Avery 3-4	Stratum Indicator H FIREW - USA
Recorded Data (Describe in Remarks):	Wetland Hydrology Indic Primary Indicators: 	ators: n Upper 12 Inches (s leposits atterns in Wetlands (2 or more required): bot Channels in Upper 12 Inches ted Leaves urvey Data I Test ain In Remarks)

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ndury .

SOILS

Map Unit (Series ar Taxonom	Namo nd Phase): <u> </u>	Highi James on	thents-ustic !	naplandi Dreinage Field Obse Confirm	Well-JU June Class: <u>Oftedfinely</u> du invations Mapped Type? Yes No
Profile De Depth (inches)	scription:	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, - Structure, etc.
		- <u></u>			
					5
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· · · · · · · · · · · · · · · · · · ·		•	- <u> </u>		· · · · · · · · · · · · · · · · · · ·
ydric Soi - - - - - -	l Indicators: Histosol Histic Epi Sulfidic C Aquic Ma Reducing Gloyed oi	lpedon Idor Nisture Regime Conditions r Low-Chroma Colors	Cor Hig Org List List Oth	Icretions h Organic Content in Su anic Streaking in Sandy ed on Local Hydric Soils ed on National Hydric S er (Explain in Remarks)	Irface Layer in Sandy Soils Soils s List oils List
lemarks:	No g Clay	it - OBL soil Amou	doms s		

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle) Wetland Hydrology Present? (63) No Hydric Soils Present? No -Agu-	(Circle)
Romarks: Crick W/WL firge. Area 31 cartile fredlot. Surrounding	13 grazul + 13 down-gradient area is very weedy

Project/Site: US 550 Applicant/Owner: CPOT Investigator: J-Dawrey and A.Hurb		Date: <u>9/19/01</u> County: <u>La riata</u> State: <u>Co</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: $+++$ Transect ID: (3) Plot ID: $(west)$

VEGETATION

	Dominant Plant Species Stratum Indicator	Dominant Plant Species Stratum Indicator
	1. Polypogen Monspelinsis H FAWW71	9
4	2. Anderminhatum <1%.	10
	3. Scirpus validus 11.	i1
	4. Rumex triang. 2%	12
判	5. Tupha latitotica <11	13
)	6. Ramunalus so. 12	14
	7. Eleothans pily tis H USL To !.	15
1	8. Gridens 40.	16
	Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	100%
	Romarks: Small Seep - Summaring area	gazed, disturbed + very weedy
	Area graved by cattle	+ Not dromsnowt

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Aveilable	Wetland Hydrology Indicators: Primary Indicators:
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water: <u>D-6</u> (in.)	Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves
Depth to Free Water in Pit:(in.)	Local Soil Survey Data FAC-Neutral Test
Depth to Saturated Soil:(in.)	Other (Explain in Remarks)
Romarks: Small sup adjacent to cre	cek entire we inudated
Water Source it groundwater - likely	, a repet of impation.
Some Feedlot run off present	

63

axonomy (Subgroup): Confirm Mapped Type? Yes No					
rofile De Jepth Inches)	<u>scription:</u> <u>Horizon</u>	Metrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions,- Structure, etc.
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rdric Soi	I Indicators:				
-	Histosol		Con	cretions	
-	Histic Epi Sulfidic O	pedon dor	High Org	n Organic Content in Su anic Streaking in Sandy	rface Layer in Sandy Soils Soils
-	ZAquic Mo	isture Regime	List	ed on Local Hydric Soils	List
• •	Keaucing Gleved or	Conditions Low-Chroma Colors	Ust Oth	on National Hydric So or (Explain in Romarks)	ons list

.

Hydrophytic Vegetation Present? (Yes) No (Circle) Wetland Hydrology Present? No Hydric Soils Present? No Ayuvud	(Circle) Is this Sampling Point Within a Wetland? Yes No
Remarks: Smill slep - 1. kel grunde irrighten Sulfidie oder provalen Westy + overgraded	ater doschonze as a result of throughing area very

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Project/Site: US 550 Applicant/Owner: CONF Investigator: Dankin and Herb	Date: $\frac{9/19/01}{County: Le Plate}$ State: Co		
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: <u>6-1 (Source)</u> Transect ID: <u>(4)</u> Plot ID: Img. D. Mch (east)	
VEGETATION			
Dominant Plant Species Stratum Indicator 1. Agrostin Stofunction H Providential 2. Maleum pratence H Providential 3. Rumax fring. H Providential 4. Echnochlo a Crutgalli H Providential 5. Eleocharre, faluittres H Fridential 6. biclenis sp. H Fridential 7.	Dominant Plant Species 9		
Percent of Dominant Species that are OBL, FACW or FAC	F1		
Concructing PACY.	da.		
Banks (non - WL) contain : Rosa	g., chickory, Pl	antago, Aster, Ked clover amaranth	
Aspangus, A speciesa HYDROLOGY			
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicato Primary Indicators: 	ors: 12 Inches	
Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	 Sediment Deposits Drainage Pattems in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks) 		
Remarks: Small ditch - channel ~ 1'n	hde		

64

Map Unit Name (Series and Phase): Taxonomy (Subgroup):	Witt Ivan	~ /=3 °C	Dra Fiel Con	inage Class: <u>WeH</u> Id Observations firm Mapped Type? Yes No	
Profile Description: Depth (inches). Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	······································
Hydric Soil Indicators:					
Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Low-	Regime litions Chroma Colors	Concret High Org Organic Listed o Listed o Other (E	ions ganic Content in Surface Lay Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils List Soplain in Remarks)	ver in Sandy Soils	
Remarks: Ma	p.t	· ·			

Remarks: Smull typical ivrig, ditch - lower when is-grazed+ (near wheth)	Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No No. Agunval	(Circle) Is this Samplig Point Within a Wetland?
	Remarks: Smull typical	ivry, ditch - 15	wer when is-grazed+ (near creek)

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Martin Arriva

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Photos 1-3 for WIL 65) 1-3 east 1-4 for 1-2 east

Project/Site: US 550 Applicant/Owner: CPOT Investigator: Drwsmand Herb	Date: $\frac{9/19/01}{County: Le flate}$ State: Co
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	s No s No s No Plot ID: Support (4 ast)
VEGETATION	1 Photo 1-2

Dominant Plant Species 1. <u>Eleocharra</u> folustris 2. <u>Rumex</u> tribung. 3. <u>Stix exand</u> 4. <u>Bidlar</u> so. 5. <u>Mygnung</u> hypothilting 6. <u>Artogins chollewider</u> 7. <u>Hordeum</u> 'Mastum 8.	Stratum H H S H H	Indicator <u>OBL</u> 30% <u>FACW</u> 5% <u>CAL</u> 4% <u>FACW</u> 5% <u>GBL</u> 5% <u>I%</u> <u>I%</u> <u>I%</u>	Dominant Plant Species 9. 10. 11. 12. 13. 14. 15. 16.	<u>Stratum</u>	<u>hdicator</u>
Percent of Dominant Species that are OBL, FACW or FAC (VV)					
Remarks: Slix in your anous - climbing up hillsole. Ana has been recently grazed					

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other Other Other No Recorded Data Available Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil:	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Pattems in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Staned Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Appears to be a small sup - A	ot connected to any ditches

SOILS		· · · · · · · · · · · · · · · · · · ·			
Map Unit Name (Series and Phase): Taxonomy (Subgroup):	witt lunn	n 1-3 %	Drai Fiel Con	inage Class: Well d Observations firm Mapped Type? Yes No	
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	·····
	- <u></u>	······································	· · · · · · · · · · · · · · · · · · ·		
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Low-	Regime itions Chroma Colors	Concreti High Org Organic Listed or Listed or Other (E	ons Janic Content in Surface Lay Streaking in Sandy Soils In Local Hydric Soils List National Hydric Soils List Xplain in Remarks)	ver in Sandy Soils	
Remarks: N	g,t	· · · · · · · · · · · · · · · · · · ·			

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks: Small sup	I the of slop	re
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DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: US 550 Applicant/Owner: COT Investigator: 3. Dawron and A.Y	Date: $\frac{9/11/01}{County: Co. Plade}$ State: Co	
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation Is the area a potential Problem Area? (If needed, explain on reverse.))? Yes No Yes No Yes No	Community ID: $-\frac{1}{24}$ (6) Transect ID: Plot ID: Seep (1457)
		/Photo # 14, 17
Dominant Plant Species Stratum Indicator 1. Carce Consequences M BL 2. Solve exigen S OBL 3. Machertiam othermule H GBL 4. Vermica americanus H GBL 5. Scirgars americanus H GBL 6. Bioms 52 7. Eleothans pachistris H OBL 8. Echnochlod cruc galli Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC). Company of the rood of Remarks: The wettest are as at the foll of s on The Nordplain and dominated by Correct	Dominant Plant Species. 9. Typhe Intildix 10. Storpus valod 11. X folgonum laps 12. Agrosts Art 13. 14. 15. 16. Y Not Mumis chahnels flow muchs chahnels tope and dominated	Stratum Indicator H OBL Mis H UBL Miblimut H Guran H FAW I UNY 1 UNY M Gy Nasturtian - aircas
	Wetland Hydrology Indicato Primacy Indicators: Inundated Saturated in Upper Water Marks Dritt Lines Dritt Lines Sediment Deposits Drainage Patterns i Secondary Indicators (2 G Oxidized Root Char Oxidized Root Char Oxidized Root Char Oxidized Root Char Uater-Stained Leav Local Soil Survey D FAC-Neutral Test Other (Explain in Rec Img h 	ors: 12 Inches In Wetlands or more required): nnels in Upper 12 Inches res ata emarks) UL on The Alvordplain of oTher areas are
Saturated to me surface and/or innolated	·	

Map Unit Name (Series and Phase): Taxonomy (Subgroup)	Ustic tomi	rathings - V	Uhi hupland NA Drai Field Cont	will to ri nage Class: <u>wreds rel</u> d Observations irm Mapped Type? Yes No	drain
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	· · · · · · · · · · · · · · · · · · ·
Hydric Soil Indicators: Histosol Histic Epipedo Sulfidic Odor Aquic Moisture Reducing Con Gleyed or Low	n Regime ditions -Chroma Colors	Concre High Or Organk Listed o Listed o Other (I	tions ganic Content in Surface Lay : Streaking in Sandy Soils In Notional Hydric Soils List In National Hydric Soils List Explain in Remarks)	er in Sandy Soils	
Remarks: No	pit -	OBL /FA	ten doms.		

No (Circle) Hydrophytic Vegetation Present? (Circle) No No Wetland Hydrology Present? - Assunce k Is this Samplig Point Within a Wetland? / Hydric Soils Present? Yes) No Remarks: Sep likely created, when road was built. Portion of we on floodplain has expriserenced increased Hows Hillsde seep area follows roadbed down The hill to The floodplain, Floudplain were continues South it that old road. Approved by HQUSACE 3/92 $\langle ||$ (1)HILL 4.5 550 Appendix B Blank and Example Data Forms **B**3

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DATA FORM ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site: <u>41 550</u> Applicant/Owner: <u>COUT</u> Investigator: <u>5 Down</u> W. Co-	metiere	Date: $11/11/c$ } County: c Note: c	
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	? Yes No Yes No Yes No	Community ID: Transect ID: V Plot ID:	
VEGETATION		+ 25, 24	
Dominant Plant Species Stratum Indicator 1. Ty two H OBL 2. Plan H OBL 3. Ewthemas H OBL 4. Themas constructs 5. Runner Arienterit 6	Dominant Plant Species 9	Deminne	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	100%		
Remarks: Cattar 1 Wetlands at edge of pond. Pit in phon. Knythamie and Plaland Dom ander vige			

HYDROLOGY

37 **F**

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated デジルイレントン・6 [™] Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: A+ e+ Depth of Surface Water: (in.) Depth to Free Water in Pit: 2"(in.) Depth to Saturated Soil: (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Set Edging orbibility and grassy share. Pit at edge	y we thank in phase attain
B2 Pour jeb wet Son distributed	Appendix B Blank and Example Data Form

SOILS

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Map Unit Name (Series and Phase): Taxonomy (Subgroup):		······	Drai Fiel Con	inage Class: d Observations firm Mapped Type? Yes No	A
Profile Description: Depth (Inches)	Matrix Color (Munsell Moist) WYR3/L KYR4/3	Mottle Colors (Munsell Moist) Norne	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
Hydric Soil Indicators: Histic Epipedon Sulfidic Odor Aquic Moisture Re Reducing Conditic Gileyed or Low-Ch Remarks: Pit Low- Perimetry Abropted for	egime ons roma Colors Jul ~ ~ ~ roit ~ ~ ~	Concret High Org Organic Listed o Listed o Other (E	ions ganic Content in Surface Lay Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils List Soplain in Remarks)	ver in Sandy Soils . very in muchales writing by mine char much be be by d	le schonizh i e har c
VETLAND DETERM	NATION				
⁴ Hydrophytic Vegetation Pre Wetland Hydrology Presen Hydric Soils Present?	esent? (e	Scholar (Circle) Scholar No Scholar No	ls this Samplig Point W	(Circle) /ithin a Wetland? (Yes) No	
Remarks: Alson	ne hydu	n smile 1	reconse pit (weedon probably	

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Appendix B Blank and Example Data Forms

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67-B Mund Juil pit

Project/Site: <u>41 550</u> Applicant/Owner: <u>COUT</u> Investigator: <u>5. Oowson one</u> K. Womelsuk	Date: $1/11/0.3$ County: $2/0.34$ State: $2/0.4$
Do Normal Circumstances exist on the site? (Ves No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID:
Pained plus with 64	

VEGETATION '

Dominant Plant Species Stratum Indicator 1. Declytic flownette H Place 2. Dengyon repear H Flew 3. Chicking H ML 4. Plonted leved leve h Flew 5. (mindelie specifie H Flew 6. Deserviting prograde H ML 7.	Dominant Plant Species 9	<u>Stratum</u> <u>Indicator</u>
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	U	
Remarks: Bit in danse Agre. C ynsant mans	rozed parture, thus	gh no livertak

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations:	 Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stahed Leaves
Depth to Free Water in Pit: <u>C</u> (in.) Depth to Saturated Soil: <u>C</u> (in.)	Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: 683 No indicator	

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$\mathbf{v}\mathbf{v}$	56	

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Map Unit Name (Series and Phase): Taxonomy (Subgroup):			Dra Fie Cou	ainage Class: eld Observations nfirm Mapped Type? Yes No
$\begin{array}{c c} Profile Description: \\ \hline Depth \\ (inches) & Horizon \\ \hline $	Matrix Color (Munsell Moist) 2.57/1 1.71~4/3	Mottle Colors (Munsell Moist) Non Won	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc. Ly Hund organs matter, 200
Hydric Soil Indicators: Histosol Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Low- Remarks:	Regime itions Chroma Colors	Concret High Org Organic Listed or Listed or Other (E	ions Janic Content in Surface La Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils List splain in Remarks)	iyer in Sandy Soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No	ls this Samplig Point Within a Wetland?	(Circle) Yes No
Remarks:			а.

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Project/Site: U1550 Applicant/Owner: COUT Investigator: S. Dewkm, K. Gr	nditu	Date: <u>11/11/25</u> County: <u>Lo plasa</u> State:
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation Is the area a potential Problem Area? (If needed, explain on reverse.)	h)? Yes No Yes No	Community ID: Transect ID: Plot ID:
EGETATION		
Dominant Plant Species Stratum Indicator 1. 1. 1. 0 BL 2. 1. 1. 0 BL 3. 1. 1. 1. 3. 1. 1. 1. 4. 1. 1. 1. 5. 1. 1. 1. 6. 1. 1. 1. 7. 1. 1. 1. 8. 1. 1. 1.	Dominant Plant Species 9	Straturn Indicator
(excluding FAC-). Remarks: Vyctatul pritatu bottom 4 brin, whittings Assp. Veth, 1 Connecting distor to 1 Systems on other	1 with - Adjer 1 with - Adjer Nor, 1739 moren Nor, 1939 Nor, 1	when we have with sparsely
PROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations:	Wetland Hydrology Indicato Primary Indicators: Inundated Saturated in Upper Water Marks Drift Lines Sediment Deposits Drainage Pattems in	n Wetlands
Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.) Where Pit (in.)	Secondary Indicators (2 d Oxidized Root Char Water-Stained Leaw Local Soil Survey D FAC-Neutral Test Other (Explain in Re	or more required): Inels in Upper 12 Inches es ata Imarks)
iemarks: Jround very motile i Dilu har which Dr. prod wyher with 8 D	et rurfea mostingenea di clan and cad	aring to end read to 2 UP intront and
lower than when to the vy spansor Alter - 2-3 day w	Appe	endix B Blank and Example Data Forms

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Map Unit Name (Series and Phase): Taxonomy (Subgroup):	Felfe d	az l ravor	Drai Fiel Con	inage Class: d Observations firm Mapped Type? Yes No	
Profile Description: Depth (inches) Horizon U-S S-IL	Matrix Color (Munsell Moist) I & Y R J L I V R Y I	Mottle Colors (Munsell Moist) 7.5/k4/6 Nwke	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc, <u>CL</u> SiCL	
Hydric Soil Indicators: Histosol Histic Epipedor Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Low Remarks:	Regime titions Chroma Colors	Concretion High Organic St Circle on L Listed on N Other (Exp	is nic Content in Surface Lay reaking in Sandy Soils ocal Hydric Soils List lational Hydric Soils List lain in Remarks) t	ver in Sandy Soils	•
Hemanks: Piter	m ceffil	and Loin	pro - "wette	t' location	¥

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? No Yes No	(Circle) Is this Samplig Point Within a Wetland? (Ces) No
Remarks: Gellin why from - f	senda com

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Approved by HQUSACE 3/92

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Project/Site: US 550 Applicant/Owner: ONT Investigator: S. Downy, K. (jar nelfstre	Date: <u>11/11/0</u> County: <u>La P</u> State: <u>Cr</u>	ol letr
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation Is the area a potential Problem Area? (If needed, explain on reverse.))? Yes No Yes No Yes No	Community ID: Transect ID: Plot ID:	<u>69 N</u>
VEGETATION	bry.	18 BEST	m Didd (pr
Dominant Plant Species Stratum Indicator 1 Jewa J OBL 2 Judge H FACW 3 Jeyt H FACW 4 Planting lancoling H FACW 5 T Chicology M FACW 6 Maan S T 7 S S T 8 S S S Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Remarks: Remarks: A wwahaw A body sonifered, nearly, intervent, interv	Dominant Plant Species 9 10 11 12 13 14 15 16 75°{1 75°{1 75°{1 0 16 75°{1 0 16 75°{1 0 16 75°{1 0 16 0 16 16 17 16 17 17 18 19 19 19 19 11 12 13 14 15 75°{1 0 16 75°{1 0 16 75°{1 0 16 75°{1 0 16 75°{1 0 17 75°{1 0 16 75°{1 0 17 16 75°{1 0 16 75°{1 0 16 75°{1 0 16 75°{1 0 16 75°{1 0 16 75°{1 0 16 17 16 17 16 17 16 16 17 16 17 1	Stratum k Stratum k Stratum k Syant Syant Ngh from from t	dicator
Yaher 728 Side en HYDROLOGY Satur	in titch (cosh)	y planty and v	hi voz
Recorded Data (Describe in Remarks):Stream, Lake, or Tide GaugeAerial PhotographsOtherOtherNo Recorded Data Available	Wetland Hydrology Indicato Primary Indicators: hundated Saturated in Upper Water Marks Drift Lines Sediment Deposits	rs: 12 Inches	
Field Observations: Depth of Surface Water:	Certain Performance Posts Drainage Patterns in Secondary Indicators (2 c Oxidized Root Char Water-Stained Leave Local Soil Survey Di FAC-Neutral Test Other (Explain in Re	n Wetlands Difference or more required): inels in Upper 12 Inches es ata marks)	
Remarks: Ditch 15" wide 3" der. Ditch wit wille nit ghet	weltent Flows	Ŷ	

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SUILS Map Unit Name (Series and Phase): Taxonomy (Subgroup)	Urba Imis	- thent - U	1252 Laglary W Drai Fiel Con	inage Class: d Observations firm Mapped Type?	? Yes No
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concr Structure, etc.	etions,
0-12	10463/2	57R 4/5	2~1. 1/8	CL	many woble.
	•				
· 			<u> </u>		
Hydric Soil Indicators: Histosol Histic Epipedo Suffidic Odor Aquic Moisture Reducing Con Gleyed or Low	n e Regime Iditions +Chroma Colors	Concretic High Org. Organic S Listed on Listed on Other (E)	ons anic Content in Surface Lay Streaking in Sandy Soils Local Hydric Soils List National Hydric Soils List plain in Remarks)	ver in Sandy Soils	
Remarks: Piz lon Sen) ve	ended polying 1 my crisbly com	At below 1 surface on	which an of Dayle . Willinda	Juli -	d April.
					<u>بر</u>

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	(Yes) No (Circle) Yes) No Yes) No	(Circle) Is this Samplig Point Within a Wetland? Ves No
Remarks: 72 A pit 72 (Crist	(Maria	ty but per the the most reader

Approved by HQUSACE 3/92

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DATA FOR ROUTINE WETLAND D (1987 COE Wetlands De	RM ETERMINATION lineation Manual)	(9B wyland
Project/Site: US 550 Applicant/Owner: Cort Investigator: J Dawron K. Cornelisse		Date: $(1/11) \sigma 3$ County: $L = \frac{1}{2} \sigma^{2}$ State: $C = \frac{1}{2} \sigma^{2}$
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: Transect ID: Plot ID:
		pr 18

VEGETATION

Dominant Plant Species Stratum Indicator 1. Chivery H ML 2. Torrestry on otherwise H PALUT 3. Planting lon cost of H PACU 4. Siteming hysterit H NL 5. Brown, technum H NL 6. Junigers, art (claud) 7 8	Dominant Plant Species 9	Stratum Indicator	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	0	· · ·	
Remarks: Surrounding and Samily Linet Linet worky Daulyte and from weldent part of dillar has steep product mostly Daulyte and Alam in hanned exp. For April row comme in low your chemi 72A Pripeting Row			

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines	
Field Observations: Depth of Surface Water: Ú (in.) Depth to Free Water in Pit: G (in.) Depth to Saturated Soil: Ú (in.)	 Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks) 	
Remarks: Nene		

Appendix B Blank and Example Data Forms

Map Unit Name (Series and Phase): <u>[]</u> Taxonomy (Subgroup): _.	rhic turns.	-there / ushi	have a state Drain Fiel Con	inage Class: d Observations firm Mapped Type? Yes No
Profile Description: Depth inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
<u> 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、</u>	107R3/3 107R3/4	7 xya 4/6	ter.	
7-12	10414			
· · · · · · · · · · · · · · · · · · ·				
ydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Berturing Coord	Pegime tions		ons anic Content in Surface Lay Streaking in Sandy Soils Local Hydric Soils List National Hydric Soils List	ver in Sandy Soils
emarks: Edjer	ihroma Colors	Other (B)	plain in Remarks)	•,

Hydrophytic Vegetation Present? Yes No (Circle) Wetland Hydrology Present? Yes No No No	(Circle) Is this Samplig Point Within a Wetland? Yes (No
Remarks: 720 it cost Sty but Jon way	for Samely 129 is street

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Project/Site: <u>NJ 555</u> Applicant/Owner: <u>CORT</u> Investigator: <u>J. Damen H. Runneberc</u>		Date: $11/11/03$ County: Le $1/14$ State: 0
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes Yes Yes No Yes	Community ID: Transect ID: 70 Plot ID:

VEGETATION

Dominant Plant Species Stratum Indicator 1. 7 4 6 2. 4 6 6 3. Kuman taxtur 4 7 4. 6 6 6 7. 8 6 6	Dominant Plant Species Stratum Indicator 9
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	/01
Remarks: Dente Saux above boucher. No freshy catheil in didthe bothom	have even indications in willows

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available ield Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.) emarks: N	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	Sediment Deposits Drainage Pattems in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Staned Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: No pit. Dital both week to work. and wetter part of the	a might believe here and and
Bitch incircl. Cont 32 as small field at the w	inher on other sixle of Ur 374. Appendix B Blank and Example Data Form

Map Unit I (Series ar Taxonomy	Vame Id Phase): (Subgroup):	fiail.	g-orally	ram U-3 % Dra Fie Con	ainage Class: eld Observations nfirm Mapped Type? Yes No	
<u>Profile De</u> Depth (inches)	scription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ <u>Size/Contrast</u>	Texture, Concretions, <u>Structure, etc.</u>	· · · · · · · · · · · · · · · · · · ·
Hydric Soil	Indicators:			· · · · · · · · · · · · · · · · · · ·		· <u> </u>
H 	istosol istic Epipedon ulfidic Odor quic Moisture educing Conc leyed or Low-	Regime litions Chroma Colors	Concret High Or Organic Listed o Chier (E	ions ganic Content in Surface La Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils List Splain in Remarks)	iyer in Sandy Soils	•
Remarks:	₩ ¢	Pit , UBLA	FACH WH	h marp been	day.	,

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Ves No (Circle) Ves No es No	ls this Samplig Point Within a Wetland?	(Circle) (Circle) No
Remarks:			

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wetland

71-A

Project/Site: U.S. 550 Applicant/Owner: <u>COUT</u> Investigator: <u>5. Oawsmie K. Co</u>	rnelitte	Date: $(1/(2/0))$ County: Lo Plate State: co
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation Is the area a potential Problem Area? (If needed, explain on reverse.))? Yes No Yes No	Community ID: Transect ID: Plot ID:
VEGETATION	Constructed	(m 2000)
		1-1-14, 13
Dominant Plant Species Stratum Indicator 1. Echinold V H Flow 2. Elevalupants polydrosi H OBL 3. hzeroporm Smithi: (edge) H FALU 4. [Cunur Instruct. H FALU 5.	Dominant Plant Species 9 10 11 12 13 14 15 16	Stratum Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	75	
Remarks: About 2044 of wetland it barryank grass. IYDROLOGY	t ponded m	us of much and
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Crive (in.) Depth to Free Water in Pit: (in.)	Wetland Hydrology Indicato Primary Indicators: 	rs: 12 Inches n Wetlands or more required): nels in Upper 12 Inches es ata

Depth to Saturated Soil: Infance ______ (in.) ______ FAC-Neutral Test _______ FAC-Neutral Test _______ Other (Explain in Remarks) Remarks: Newly constructed vocarts: AL disture, Flows whether the South _______ Distribution of the former with the south _______ Distribution of the south of th

Appendix B Blank and Example Data Forms

B2

Map Unit Name (Series and Phase): Taxonomy (Subgroup): _	Falle J	lay (rom	Drai Fiel Con	inage Class: d Observations firm Mapped Type?	Yes No
Profile Description: Depth (inches) Horizon	Matrix Color (Munseil Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretion Structure, etc.	ns,
0-12	1478 4/3 1478 3/3 1478 3/3 1478 5/1)	None mik		<u>Uay</u>	1.00
tydric Soil Indicators:					
Histic Epipedon Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condi Gleyed or Low-C	Regime tions Shroma Colors	Listed on Other (Ex	ns nic Content in Surface Lay Streaking in Sandy Soils Local Hydric Soils List National Hydric Soils List plain in Remarks)	ver in Sandy Soils	
lemarks: New 1 Girch of Line Man	, emplo	- depositor	gyran mis Iron ponde chancedours	nd. Pit ng. Xaru har - lerr	in an . Jihe Jhon 30

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Hydrophytic Vegetation Present?	Vest No (Circle)	(Circle)		
Hydric Soils Present?	Ves No	Is this Samplig Point Within a Wetland?	Oes No	
Remarks:				

Approved by HQUSACE 3/92

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Project/Site: UJ. 550 Applicant/Owner: <u>CDOT</u> Investigator: <u>5. Downe</u> k Competit	ML	Date: $11/12/02$ County: L_{a} plate State: Co
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: Transect ID: Plot ID:

Phuhi 14,13

VEGETATION

1. 1. 1. 1. 1. 1. 1. 1. 1.

Dominant Plant Species Stratum Indicator 1. Drugs von alungahma H NL 2. Drugs von alungahma H FACH 3. Nonneger Laulah H FACH 4. Orgensischer H NL 5. Melitahet FACValis H FACU 6. Chne 7 7. Brite Flore 8. Universe	Dominant Plant Species 9	<u>Stratum</u>	
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	0		
Remarks: Reveredations mix on hid	rug sly.		

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines	
Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: * (in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	
Remarks: No indications - skyr	upward to hipming	

Map Unit Name (Series and Phase):		advencted.	Drainage Class: Field Observations Confirm Mapped Type? Yes No		
Profile Description: Depth (inches). Horizon	Matrix Color (Munsell Moist) 57 4/3 7.57 k5/1 2.5 7 4/1 2.5 7 4/1	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
Hydric Soil Indicators; — Histosol — Histic Epipedon Sulfidic Odor — Aquic Moisture F — Reducing Condi — Gleyed or Low-C	Tegime tions Throma Colors	Concretio High Orga Organic S Listed on Listed on Other (Eq	ns Inic Content in Surface Lay Irreaking in Sandy Soils Local Hydric Soils List National Hydric Soils List Ilain in Remarks)	rer in Sandy Soils	•
Remarks: NV T	ndications missed	Som reun	it emission	tien	2

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No Yes No Yes No	Is this Samplig Point Within a Wetland?	(Circle) Yes No.
Remarks:			
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Project/Site: <u>41</u> 550 Applicant/Owner: <u>cost</u> Investigator: <u>3. Daws</u> h Gradit	·•	Date: <u>11/11/</u> County: <u>Co</u> State: <u>Co</u>	U3 Plato
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: Transect ID: Plot ID:	251 71A 71-5
Stateline Project Mitzjudin (VEGETATION	tinez	phin 3 2	
Dominant Plant Species Stratum Indicator 1. 749 H CBL 2. Telew cherry color shows H CBL 3. Azzrovihi stabuliture(edge) H FALW 4. Peter open (weighted M VLL 5. Phaleni) annotin acce O H OBL 6. (1493) 7 8 Flordage Interlate	Dominant Plant Species 9 Serie 2 6 420 10 Direzin Jela 11. Jan Jura; 12. Jelit origen 13. Epile Jum i 14 in y ce use 14 in y ce use 15 Bergari juli 16. Eliz Javi Jel	- C Stratum - C - M - - - - - - - - - - - - -	Holicator FACWA BL FAC NL FAC NL FAC BL BL FAL
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Remarks: hvity cetteil in considence of Sagage once of Jone John Lange willow Manael leads to J Anima Invidence HYDROLOGY	Anles Very m - Killing soyaban as firm on Alve stat Ana generallels	2 = 87 isrod on lun sh. Vall du adjlan (Turn V	wa ily. Elined Loch Dita
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: (in.) Depth to Frée Water in Pit: (in.) Depth to Suturated Soil:	Wetland Hydrology Indicato Primary Indicators: Inundated Saturated in Upper Water Marks Drift Lines Sediment Deposits Drainage Patterns in Secondary Indicators (2 of Coxidized Root Chan Water-Staned Leave Local Soil Survey Da FAC-Neutral Test	rs: 12 Inches 12 Inches 14 Stands (14 Stand 14 Stands) 14 Stands 14 Stands 1	es
Remarks: Open water on rome pools, port 1 Departing Fed by tail water from Programme product or end their of water in an end	firm a raterial might and.	ch are non Small pond	entre en
32 Hommand Note Songy: and has some por Sere	Appe mater was A	ndix B Blank and Ex.	ample Data Forms

Map Unit Name (Series and Phase): Taxonomy (Subgroup):	Constru	when	Drai Field Conf	nage Class: Observations irm Mapped Type? Yes No	
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure: etc.	
0-22	2.57 3/1	None		etc	
2-1-	luyruli	Man		د	
<u> </u>	10785/L 75784/4	ユナ·フ・5 ソト・ 4/1	pland mar plus	ν <u> </u>	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Cheducing Cond Gleyed or Low-4	Regime Itions Chroma Colors	Concretion High Organ Organic St Listed on t Listed on t Other (Εφ	ns nic Content in Surface Laye reaking in Sandy Soils Local Hydric Soils List Vational Hydric Soils List Iain in Remarks)	er in Sandy Soils	•
Remarks: Meany \$;} 7; E	cley, very he Ebrah 31 mil	with the pet out a pline cetteril 2 and menty	y hite one Ajroidos etiles	<u>C</u>	···

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No Yes No	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks:		
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Approved by HQUSACE 3/92

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72-B uplank

Project/Site: <u>US 550</u> Applicant/Owner: <u>COUT</u> Investigator: <u>S. Dewson</u> K. Comelik	<u>ــــــــــــــــــــــــــــــــــــ</u>	Date: $\frac{1}{12}/23$ County: $\frac{1}{22}$ Phase State: $\frac{1}{22}$
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes (No Yes No	Community ID:

VEGETATION

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Dominant Plant Species Stratum Indicator 1. It wh the system	Dominant Plant Species 9	<u>Stratum</u>	Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	0		
Remarks: laired with 78 Å ± very revyelated road bur Gregin prompi, Verlesen,	m 421 between 55	t and	WL

HYDROLOGY

B2

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: hundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: 0 (in.) Depth of Surface Water: 0 (in.) Depth to Free Water in Pit: Nime (in.) Depth to Saturated Soil: V(m) (in.)	Sediment Deposits Drainage Pattems in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: No Indicology	

Appendix B Blank and Example Data Forms

Map Unit N (Series an Taxonomy	larne d Phase): (Subgroup): _	Cmi	mited	Drai Fiel Con	inage Class: Id Observations firm Mapped Type? Yes No	
<u>Profile Des</u> Depth (inches)	cription: Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	•
0-6		\$10YA3/4	Nim	•••• •••••••••••••••••••••••••••••••••	Lian	
6-8		257(18	New		Hand S.L.	
84		Kra			White daughtone	
······································		·				
	2	· · · · · · · · · · · · ·	· .			
Hydric Soil Indicators: Concretions Histo Epipedon Concretions Sulfidic Odor Organic Content in Surface Layer in Sandy Soils Aquic Moisture Regime Corganic Streaking in Sandy Soils List Reducing Conditions Listed on National Hydric Soils List Gleyed or Low-Chroma Colors Other (Explain in Remarks)						
Remarks:	Trical incha	inall of	b. lage then This 72	how of real	deter preventation to the No Endicat	

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes No (Circle) Yes No	(Circle) Is this Samplig Point Within a Wetland? Yes
Remarks:		· · · · · · · · · · · · · · · · · · ·
	· · · ·	

Approved by HQUSACE 3/92

	NM-1
Project/Site: US 550 Applicant/Owner: COOT Investigator: J. Dawron and Andy Hers	Date: $9/19/91$ County: $24/19/91$ State: 20
Do Normal Circumstances exist on the site? (Ye Is the site significantly disturbed (Atypical Situation)? Ye Is the area a potential Problem Area? Ye (If needed, explain on reverse.)	No Community ID: S (No Transect ID: <u>NW-1</u> Plot ID: <u>NW-1</u>

VEGETATION

Dominant Plant Species Stratum Indicator 1. alex chemining particulars H V&L 6'u 2. C. Jogo lan woldt H FACH 10 3. Handown John Woldt H FACH 10 4. Fhalowis Grunding with F F 5.	Dominant Plant Species 9		Indicator
Percent of Dominant Species that are OBL, FACW or FAC 3/1 (excluding FAC). 3/1 Remarks: Part + P hy miakin /pardur	<u>-75</u>	·······	

HYDROLOGY

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5 P.

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Very faint Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits
Field Observations:	Drainage Patterns in Wetlands Secondary Indicators (2 or more required):
Depth of Surface Water:(in.)	Oxidized Root Channels in Upper 12 Inches
Depth to Free Water in Pit:(in.)	Water-Staneo Leaves Local Soil Survey Data FAC-Neutral Test
Depth to Saturated Soil:(in.)	Other (Explain in Remarks)
Remarks: Small dypressionel adde - Su higher. In For yeted field enderkment:	mp for migordam - highings along roya of available

Appendix B Blank and Example Data Forms

Map Unit Name (Series and Phase): Taxonomy (Subgroup): _	Falle Juy 1	ram 1-3"	<u>7. Ayen</u> Fiel Con	inage Class: <u>We M</u> - dreav Id Observations firm Mapped Type? Yes No	ned.
Profile Description: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.	
(V``	1vyr4/3	Format		LC Damp	-
·			· · · · · · · · · · · · · · · · · · ·		- -
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture I Reducing Condi Gleyed or Low-0	Regime itions Chroma Colors	Concretic High Orga Organic S Listed on Listed on Other (Ex	ons anic Content in Surface Lay Streaking in Sandy Soils Local Hydric Soils List National Hydric Soils List plain in Remarks)	yer in Sandy Soils	•
Remarks:	••••••••••••••••••••••••••••••••••••••				

Hydrophytic Vegetation Present?(Tes)No(Circle)Wetland Hydrology Present?Yes(Ko)Hydric Soils Present?Yes(No)		(Circle) Is this Samplig Point Within a Wetland? Yes Noi		
Remarks:				

Approved by HQUSACE 3/92

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(1987 COE Wetlands Deline	eation Manual	NW-1
Project/Site: US 550 Applicant/Owner: COST Investigator: Horb/Jawson		Date: <u>9/17/01</u> County: <u>La flade</u> State: <u>Cu</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: 1924 Transect ID: <u>NW-2</u> Plot ID: Non-WL Onta Pont

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Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. Eleocharis palustris	H OBL+1/	9	
2. Echniochi sa crusgalli	H FALLAN 21%	10	-
3. Rimek Sp.	<u> </u>	ii	· · · · · · · · · · · · · · · · · · ·
4. Hordening abatting	17 FAC+2%	12	
5. Poa Sp.	H FACY-FASY	13	
6. TAMSY Mustard	H NL 5%	14	·
7. Juncus baltorus	H 08- 2%	15	
8		16	
Percent of Dominant Species that an (excluding FAC-).	o OBL, FACW or FAC	5/2 = 7140	
Romarks: Eleochan? is M	10st dominant,	Gumweed, chickory + Jap. b.	ome and several
grall chinese ela along es	lyes		· · ·
By big Pepului Jell	reider - Elps, P	olygonous toncestation H	lým

Recorded Data (Describe in Remarks):	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Voxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	
Romarks: No primery indicators - area	likely poords water after heavy	
prcp. events and descrip ditch ones	How events	

SOILS			۴.		× .
Map Unit ((Series and Taxonomy	Name d Phase): (Subgroup):	Falfe di	my luomy 1-	3 ⁰ v Field Obse Confirm	Ness: Will-during (rvations Mapped Type? (Yes) No
Profile Des Depth (inches)	<u>scription:</u> <u>Horizon</u>	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle <u>Abundance/Contrast</u>	Texture, Concretions, - Structure, etc.
		<u>15yr3 3</u>	Small mottles,	hund in color	Clay loam
		· · · · · · · · · · · · · · · · · · ·			
		·	· · · · · · · · · · · · · · · · · · ·		
Hydric Soil Indicators:					
Romarks: No hydric soil indicators. Soil pit in Elevenewie 2nd pit 1, Populas tree - 108R4/3 fait for mottles					

Hydrophytic Vegetation Present?YesNo(Circle)Wetland Hydrology Present?YesNoHydric Soils Present?YesNo	(Circle) Is this Sampling Point Within a Wetland? Yes No
Romarks: Small area pissibly dammed by during ingjør grap. events + dur. p De north & west. Area likely in sourromeding areas).	a dirt road - likely prods water is ditch overflows. Ditch located has been disturbed (very weedy

		Nw-3
Project/Site: US 554 Applicant/Owner: <u>COOT</u> Investigator: <u>Ocusion</u> and Herb		Date: 9/19/01 County: La Plate State: <u>Cu</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes No Yes No Yes No	Community ID: 29-4 Transect ID: <u>NW-3</u> Plot ID:

ALC: N

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Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Elevenovis paluchis	-+	UBL 30	9	. ·	
2. Hardom julaburg	<u></u>	FACT IV	10		
3. Classoge law late		FACY 20	i1	•	
4. Poa protensor	M	Fhcu 5	12		
5. Trifotion	4	FRALLY'S	13		
6. plum protoner	4	FACUS	14		
7. Runix cather (?)	<u>+1</u>	FACH 5	15		
88			16		
Percent of Dominant Species that are (excluding FAC-).	BOBL, FA	CW or FAC	3/57 = 43		
Romarks: Very transition	md,	pourly d	about boundaries		

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other MSCI + yee No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines		
Field Observations:	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required):		
Depth of Surface Water:Q(in.)	Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves		
Depth to Free Water in Pit: Rel 6 (in.)	Local Soil Survey Data		
Depth to Saturated Soil: > 16 (in.)	FAC-Neutral Test Other (Explain in Remarks)		
Romarks: Pow are in really in myso Unnaned Inibutary of Florida Bore Hill and I de Florida	Kirer. Any former Duris wow		
Freezen and and a second	in my har seem and the		
leahage or regays has became	et in the pash		

SOILS Map Unit Name Falle day luan, 3-8% Will dramit Drainage Class: (Sories and Phase): Field Observations Taxonomy (Subgroup): Confirm Mapped Type? Yes No **Profile Description:** Depth Matrix Color **Mottle Colors** Mottle Texture, Concretions, ... (inches) (Munsell Moist) (Munsell Moist) Abundance/Contrast Structure, etc. Horizon 0-1 Δ - 101 10YR 4/ Faint fire CL . . . ÷.1 Hydric Soil Indicators: Concretions Histosol Nm Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Sulfidic Odor Organic Streaking in Sandy Soils **Aquic Moisture Regime** Listed on Local Hydric Soils List **Reducing Conditions** Listed on National Hydric Soils List Other (Explain in Remarks) Gloyed or Low-Chroma Colors Oxidian 120 mg v-1.5 route c Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Yes (No) (Circle) Yes (No) Yes (No)	Is this Sampling Point Within a Wetland?	(Circlo) Yes No
Remarks:			•
· · · · · · · · · · · · · · · · · · ·			

Approved by HOUSACE 3/92

Project/Site: UN 550 Applicant/Owner: CONT Investigator: J. Dowson M. Complicant	Date: County: State:
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID:

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Dominant Plant Species Stratum Indicator 1. Image: Stratum Indicator 2. Image: Stratum Image: Stratum Image: Stratum 3. Image: Stratum Image: Stratum Image: Stratum Image: Stratum 4. Image: Stratum Image: Stratum	Dominant Plant Species 9	<u>Stratum</u>	Indicator
8	16		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	(av		
Remarks: Densi Phan between forme Abunt 14 ft wither. Adjeu Ionwalate, Justelan gradense	(rlighty inside) and wro at ved is min of them, A high proved ingener	rd esyn grit, pl	41 to

Recorded Data (Describe in Remarks):Stream, Lake, or Tide GaugeAerial PhotographsOtherNo Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: hundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: (in.) Depth to Free Water in Pit: (in.) Depth to Saturated Soil: (in.)	 Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Staned Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Roodsst. Augrossim, Adjan Weta Sern colvert/ditch by	and got in cyland has no indicedor

SOILS Fella way Pran Map Unit Name 2 Drainage Class: Field Observations Confirm Mapped Type? (Yes) No (Series and Phase): Taxonomy (Subgroup): Profile Description: Depth Matrix Color Mottle Colors Mottle Abundance/ Texture, Concretions, (inches) Horizon (Munsell Moist) (Munsell Moist) Size/Contrast Structure, etc. 10/14/4 0-5 a 1 VY R 4 J 2.54 2.5/1 6-12 20% Muchande Ch 122 1071414 CL Hydric Soil Indicators: Histosol Concretions Histic Epipedon High Organic Content in Surface Layer in Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Listed on National Hydric Soils List Other (Explain in Remarks) $+^{1}$ inside. Remarks: P: Chr. 7 Westland. ins.t. 1 indi cabors, *N

Hydrophytic Vegetation Pres Wetland Hydrology Present? Hydric Soils Present?	;ent? ?	Ves No ((Ves No Ves No	Sircle)	ls this Samplig Po	pint Within a Wetland	(Circle) d? Yes No
Remarks: Small war in	the shere	on of	m as A (a .) (b .) (b .) (b .)	e in ground	e Lus Ny	monthly Arre

Approved by HQUSACE 3/92

Project/Site: <u>U.S. 550</u> Applicant/Owner: <u>LOPT</u> Investigator: <u>5</u> Dawson & Connelisite		Date: $1/11/u$ County: $L \sim Pl \wedge Je$ State: CO
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	≥ (3) Y (3) Y (3)	Community ID: Transect ID: Plot ID:
	after in	Jedin Jearm

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Dominant Plant Species Stratum Indicator 1. Tyon H OBL 2. Flexing polythis H OBL 3. Runger constructs H FACW 4. Jacx J OBL 5. Hoim H FAC 6. Asst H FACW 8.	Dominant Plant Species 9	Stratum	Indicator
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).	(00		
Remarks: 357, PL			

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: hundated Saturated in Upper 12 Inches Water Marks Drift Lines
Field Observations: Depth of Surface Water: Non(in.) Depth to Free Water in Pit: Non(in.) Depth to Saturated Soil: Non(in.)	Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Staned Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: Roodlish duproton ~5' 104 Athon adjanuat field	wer in marked souther and 2' lover

NW-5

Appendix B Blank and Example Data Forms

B2

rofile Description: Pepth nches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-12	10YR43	Nume		cifty sit
	•			
		<u> </u>		• <u> </u>
/dric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Cond Claurad ar Low	Regime litions Chroma Colors	Concretic Hgh Orga Organic S Listed on Listed on Other (Ex	ons anic Content in Surface Lay Streaking in Sandy Soils Local Hydric Soils List National Hydric Soils List plain in Remarks)	er in Sandy Soils

Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Yes No (Circle) Yes No Yes No	(Circle) Is this Samplig Point Within a Wetland? Yes No
Remarks: 22-5 Pointer	

Approved by HQUSACE 3/92

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Project/Site: US 550	Date: $(1)/(2/v)$
Applicant/Owner: COOT	County: (a) Pla Le
Investigator: A.J. Dowlon, H. Cornalizza	State: (a)
Do Normal Circumstances exist on the site?(es NoIs the site significantly disturbed (Atypical Situation)?Yes NoIs the area a potential Problem Area?Yes No(If needed, explain on reverse.)Yes No	Community ID: Transect ID: Plot ID:

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Dominant Plant Species Stratum Indicator 1. Crary Icm Idm Idm	Dominant Plant Species Stratum Indicator 9,
Remarks: internet uplant in Pican Clin Brin with any between button Shall depresent between button fail to HYDROLOGY	100 Afrebjeter, Lese, unger Negf Som nut Aistin in bron and Cottonwood firm
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other Other No Recorded Data Available Field Observations: Depth of Surface Water: Nim(in.) Depth to Free Water in Pit: Nim(in.) Depth to Saturated Soil:	Wetland Hydrology Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)
Remarks: No indicators. Rock. and Schwark hill and mal incoming channels, but pets	the sevele. Me milet. In Most employed of ponday a rome overland them

Appendix B Blank and Example Data Forms

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Series and Phase):	fosean di	ne samply la	Drai Fiel Con	inage Class: d Observations firm Mapped Type? Yes (No)
Profile Description: Depth inches). Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
<u>0-9</u> <u>1-12</u>	107R4/3 107R3/2 +ce/12	<u>+91.57\$\$4/4</u>	Fex lazzi	$-\frac{\zeta \zeta}{\zeta^2}$
			·	
ydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Reducing Cond Gleyed or Low-	Regime Itions Chroma Colors	Concretion High Orgar Organic Str Listed on L Cisted on N Other (Expl	s ic Content in Surface Lay eaking in Sandy Soils ocal Hydric Soils List ational Hydric Soils List atin in Remarks)	ver in Sandy Soils
emarks: iV v i	reticatus.			

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Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present?	Ves No (Circle) Yes (Ng Yes (No	(Circle) Is this Samplig Point Within a Wetland? Yes (No)
Remarks:		
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Approved by HQUSACE 3/92

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Appendix E Wetland Mitigation Site Selection Form

Wetland Mitigation Site Selection Form Colorado Department of Transportation Attachment to Wetland Finding

Project Name/No.: US 550 From New Mexico State Line North to County Road 220 - NH5501-011 Subaccount 12979 Region 5 Author: Jeff Dawson Firm: URS Corporation Date: August 23, 2004

(1) Mitigation bank available? No

(2) Project impacts in 1°, 2° service area? NA (3) HUC units 14080104

(4) On-site mitigation available? Yes

ptions Availab

(5) Off-site mitigation available? Yes

(6) In-lieu fee arrangement available? No

(7) Mitigation ratio(s) involved? Yes Ratio(s) 1:1

				an and a subscription of the subscription of t			2000
		Impact Site		Mitigation	Site		
mines	(8) Geographic location	US 550 - From New Mexico State Line to CR220 UTM: From 13 247653E 4122414N To 13 244656E 4098728N	Not yet determined				
acte	(9) Wetland community type	95% PEM, 5% PSS	Not yet determined				
Char	(10) Functions, values	Low rated: TE, WH, FA, SS, SR, PE, GW, U, R	Not yet determined				
Site	(11) Size of impacts, pct?	2.89 acres, 22 percent of the project area wetlands	N/A				
Waahife/Habitaf	 (12) T&E species/habitat present (13) Species? Status? (14) Migratory Bird Treaty Act? (15) Other wildlife issues? (16) Status of aquatic resource? (17) Special aquatic site? (18) Unique? Quality? Ranking? (19) Watershed, ecosystem issue 	Yes Baid Eagle, Southwestern willow flycatcher4 Federally threatened The project will comply with the Act Migration corridor No special status Wetlands Not unique, low quality, no rating ? Non-jurisdictional irrigation wetlands are comm	Will maintain migra Will create a higher on in the region beca	ttion corridor quality wetland tuse of irrigated	agricultu		
.	 (20) Likelihood of success? (21) Interagency agreement? (22) Project logistics, size/scope? site selected for mitigation. Options are (23) Cost considerations? 	N/A N/A Five new potential on-site wetland mitigation area limited for on-site mitigation. CDOT will obtain easements or other legal protec	Not yet determined None s have been identifie ction of the mitigation	l. These areas + 1 areas.	vill be inve	estigated (and a
2	(24) Individual 404 permit condit (25) 404(b)(1) Guidelines? A 404(1) practicable alternative	1011? An IP will be required, but the special conditi. b)(1) Analysis was performed as part of the EA and i	ons are not yet known the proposed project i	ı s the least envir	onmentall	y damagi	ng,

(26) NWP gen., reg. conditions? No

ISSI

Water]

(27) Regulatory letters? The location and design of the mitigation site will comply with RGL 02-2 and will incorporate a "watershed approach" to wetland mitigation

(28) S.B. 40? All mitigation requirements associated with S.B. 40 will be followed.

(29) Water rights issues? The wetland mitigation replacement ratio will be 1:1 and no open water will be included in the mitigation design, so no

additional water rights will be needed. Water rights will not be an issue.

NEPA Issues

(30) Cumulative impact issues? CDOT is committed to successful compensatory mitigation for both jurisdictional and non-jurisdictional wetlands, thus the US 500 project would not contribute to cumulative losses of non-jurisdictional wetlands.
 (31) Agency policy, input? None

(32) Public involvement? No specific requests regarding wetland mitigation

(33) Basis for Decision

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

Five new potential on-site wetland mitigation areas have been identified. One of them (Animas River Terrace) is relatively large and can be used to mitigate all of the project impacts, if necessary, and also provides a location for riparian habitat mitigation. The other four sites are smaller and address specific impacts. All 5 areas will be investigated during final design and permitting. All of the potential mitigation areas are in upland or primarily upland areas, and wetland mitigation will primarily consist of wetland creation. Final selection of sites and construction methods will depend on various factors such as the areas required, land availability, hydrology, engineering feasibility, wetland functions that can be achieved, and the surrounding habitats and relative importance in the ecological landscape. CDOT will identify and preserve larger blocks of land for wetland mitigation as early as possible. Early identification, preservation, and construction of mitigation sites will facilitate management and monitoring, increase the probability of success, and enable better long-term protection. CDOT will obtain easements or other legal protection of the mitigation areas.

(34) Decision

Pursue on-site compensatory wetland mitigation, but actual sites are yet to be determined.

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