

WETLAND AND WATERS OF THE U.S. TECHNICAL MEMORANDUM

Dillon Drive Flyover
Dillon Drive and Interstate 25 Interchange
Pueblo, Colorado

January 28, 2010

Prepared by:

Pinyon Environmental Engineering Resources, Inc.

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Acronyms

BMP	Best Management Practices
CDOA	Colorado Department of Agriculture
CDOT	Colorado Department of Transportation
CFR	Code of Federal Regulations
CWA	Clean Water Act
EA	Environmental Assessment
EPA	United States Environmental Protection Agency
FAC	Facultative species
FACU	Facultative upland species
FACW	Facultative wetland species
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
I-25	Interstate 25
NI	Non-indicator species
NRCS	Natural Resources Conservation Service
OBL	Obligate wetland species
PACOG	Pueblo Area Council of Governments
ROW	Right-of-Way
UPL	Upland species
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WUS	Waters of the United States

Introduction

An environmental assessment (EA) is being completed for the Pueblo Dillon Flyover project. This technical memorandum summarizes the effects of the proposed Pueblo Dillon Drive Flyover project on wetlands and waters of the United States (WUS) located within the project area. This project would provide access from Interstate (I-25) to Dillon Drive/Platteville Boulevard near the existing Eden Road and I-25 Interchange (Eden Interchange) in Pueblo County, Colorado. Exhibit 1 shows the location of the proposed project.

The United States Army Corps of Engineers (USACE) regulates WUS, including wetlands, under the authority of Section 404 of the Clean Water Act (CWA). Wetlands are defined by the USACE (Title 33 Code of Federal Regulations (CFR) Section 328.3, 1986) and the United States Environmental Protection Agency (EPA) (40 CFR 23.3, 1890) as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” The protection of these areas is critical for maintaining the physical, chemical, and biological integrity of the WUS.

Wetland and WUS features under the jurisdiction of the USACE are subject to permitting by the USACE, for any discharge of dredged or fill material into these features. The USACE is responsible for determining if a feature is jurisdictional. Transportation projects with not more than one-half (0.5) acre of impacts to wetlands and/or WUS are typically subject to provisions of a Nationwide Permit. Projects with impacts greater than one-half acre must apply for coverage under an Individual Permit. Final authority in wetland permitting rests with the USACE.

Non-jurisdictional wetlands are not subject to permitting by USACE under Section 404; however, all federal agencies are required to avoid and minimize wetland impacts to the extent possible per Executive Order 11990 (United States of America, 1977). In order to be consistent with Federal Transit Administration (FTA) and Federal Highway Administration (FHWA) policies, the Colorado Department of Transportation (CDOT) follows the same guidelines. Thus, CDOT requires mitigation of impacts to non-jurisdictional wetlands on a 1:1 ratio. Non-jurisdictional wetlands subject to CDOT mitigation requirements include areas with wetland soils, hydrology and vegetation. CDOT does not, however, require mitigation of non-jurisdictional open waters.

The information in this technical memorandum is based on information readily available as of July 2009. This technical memorandum will not be updated. New information and data, such as impacts, may be incorporated into subsequent documents.

Methods

The project area (Exhibit 2) was used as the wetland study area (study area). An initial assessment of the study area was made using aerial photographs to identify potential constraints associated with wetlands and WUS that would be impacted by the project.

The project team then completed a field assessment of the study area on November 23, 2008. The assessment was performed in conformance with the 1987 “Army Corps of Engineers Wetland Delineation Manual” (Wetland Training Institute, 1995). The “US Army Corps of Engineers Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region” was also used as a reference (USACE, 2008).

The Pueblo Regulatory Office of the Albuquerque District USACE office was also consulted at the beginning of the project. Information was sent to the Pueblo Regulatory office to obtain a jurisdictional determination of potential wetlands and WUS identified in the study area.

Wetlands were defined by vegetative, hydrologic and soil features. Wetland indicator plant species were classified as OBL (obligate wetland species), FACW (facultative wetland species), FAC (facultative species), FACU (facultative upland), or UPL (upland species). A plus (+) or minus (-) sign represents species nearer to wetter or drier ends of the indicator categories, respectively. Plant species classified as FAC, FACW, or OBL, are considered hydrophytic plants, and are wetland indicators.

Hydrology and soils data were also collected for potential wetland areas. Hydrology indicators may include topographic positions, presence of standing water and/or saturated soil, profiles conditions, drainage patterns, water marks, sediment deposits, and/or oxidized root channels in the upper 18 inches of the soil profile. Wetland soil indicators may include presence of color streaking (mottling), gleying (grayish coloration), reducing conditions, sulfidic odor, high organic content and organic matter streaking in the surface layer of sandy soils

Affected Environment

The study area is a narrow corridor which includes paved and unpaved roads, vegetated roadsides, undeveloped grasslands, CDOT right-of-way (ROW), a stormwater drainage basin, unnamed drainage ditches, and commercial and industrial properties. Project-related activities within the study area would likely include: road construction on I-25 in CDOT ROW and on auxiliary roads; grading and slope reconstruction within the I-25 corridor; mowing of shoulder, median and roadside areas; center median construction; construction of a bridge spanning the I-25 corridor; guardrail construction; landscaping; and the construction of stormwater channels and retention basins.

Three features were identified in the assessment as having the potential to be a wetland or WUS (Exhibit 3). All features were determined not jurisdictional by the Pueblo Regulatory Office (Appendix A). The three features are discussed below.

Feature 1

The first feature is a stormwater retention basin located west of the I-25 frontage road, and approximately 0.13 mile south of Platteville Boulevard/Dillon Drive (Exhibit 3).

This area receives surface stormwater from the commercial development property located up-gradient to the west of I-25 via a constructed underground diversion channel.

This area was assessed as a potential wetland. There was no surface water within the basin at the time of the assessment. The basin soils exhibited evidence of shrink-swell, a characteristic common to soils that receive water intermittently and then quickly lose moisture to evaporation, leaving the soils cracked at the surface. The soils lacked organic matter and hydrology, and did not meet the criteria of a wetland.

The basin itself is approximately 90 percent void of vegetation cover. Approximately five percent vegetation cover was identified as inland saltgrass (*Distichlis spicata*), and the remaining five percent is comprised of kochia (*Kochia scoparia*) and Russian thistle (*Salsola tragus*). Three juvenile salt cedar (*Tamarix ramosissima*) individuals were also observed. Salt cedar is a listed noxious weed by the Colorado Department of Agriculture (CDOA) and Pueblo County Weed Management Program (CDOA, 2009; Pueblo County, 2009).

Kochia and Russian thistle are listed as FACU species, and inland saltgrass is listed as a non-wetland indicator (NI) species (USFWS, 1988). Salt cedar is listed as FACW; however, this species is known to occasionally occupy non-wetland areas throughout the western United States where soil moisture is sufficient for germination and establishment, although at a lesser frequency than in wetland areas.

Adjacent perimeter vegetation was dominated by kochia and Russian thistle, and less dominant species tall tumbled mustard (*Sisymbrium altissimum*). Perimeter vegetation appears to have been recently revegetated as evidenced by the incorporation of an excelsior mat and seeded rows.

Feature 2

This feature is an ephemeral drainage that generally runs north-south in direction; however, there is connectivity to the I-25 median area through constructed box culverts (Exhibit 3). The drainage channel ranges from as narrow as two feet wide in portions of the ditch below surface elevation, to as much as 15 feet wide at surface elevation. The depth below surface elevation ranged from approximately six feet to 12 feet. Bank slopes were generally precipitous, with slopes ranging from vertical, to multi-tier.

Surface water was observed in a portion of this drainage, located at the northern extent of the feature, in a well-shaded box culvert beneath the existing railroad tracks. The source of the water appeared to be snowmelt. The remaining portions of the drainage were dry and not flowing.

Soils within the drainage are primarily sandy. There is evidence of excessive erosion from bank slopes, and soils had been completely eroded leaving exposed interbedded claystone and sandstone bedrock. Salt deposits were observed on surficial soils in portions of the drainage, primarily in areas void of vegetation.

Bank vegetation along the drainage consists primarily of UPL forbs and shrubs. Dominant species include kochia, salt cedar, saltbush (*Atriplex canescens*), and rabbitbrush (*Ericameria nauseosa*). Less dominant species include the native UPL grasses slender wheatgrass (*Elymus trachycaulus*) and blue grama (*Bouteloua gracilis*).

Salt cedar was the only FACW species observed along the drainage. Occurrence of salt cedar was observed to be greatest at or near stormwater outfalls where soil moisture conditions are likely more ideal when compared to portions further from the outfalls; however, occurrence of UPL species was also increased at these locations.

A review of the United States Geological Survey (USGS) topographical map for the study area did not show a nexus to Fountain Creek for this drainage area. The field assessment verified these findings.

Feature 3

This feature is also an ephemeral drainage that generally runs east-west in direction, on the east side of I-25 at the northern end of the project area (Exhibit 3). Only a small portion of this drainage is located within the project area. The drainage channel ranges from as narrow as ten feet wide in portions of the ditch to as much as 30 feet wide. The depth below surface elevation ranged from approximately six feet to 12 feet. Bank slopes were generally precipitous, with slopes ranging from vertical, to multi-tier.

Soils within the drainage are primarily sandy. There is evidence of excessive erosion from bank slopes, and soils had been completely eroded leaving exposed interbedded claystone and sandstone bedrock. The drainage was dry during the site visit.

Impact Evaluation

No-Action Alternative

Regardless of whether the Dillon Drive flyover is constructed or not, growth and development would continue to occur in the Pueblo region (Pueblo Area Council of Governments (PACOG), 2002). Under the No-Action Alternative, the study area would not remain as is. Urban expansion would continue to occur throughout the study area and undeveloped land, where zoned, would likely be developed for commercial, industrial and residential purposes.

Direct Impacts

There are no wetlands and WUS in the study area; therefore, there would be no direct impacts to these features (Appendix A). However, with continued development in the study area as a result of the No-Action Alternative, there could be changes to surface water flow and direction with construction and development of impervious surfaces. These impacts would be evaluated on a project-specific basis.

Indirect Impacts

There are no wetlands and WUS in the study area; therefore there would be no indirect impacts to these features. The No-Action Alternative would change surface hydrologic

processes, soils and vegetation of the study area in the long term. As part of PACOG's build-out scenario, commercial, residential, and transportation-related development would continue with increased population growth, further fragmenting the study area (PACOG, 2002). Indirect impacts as a result of the No-Action Alternative could include changes to surface water flow and direction to potential wetlands and WUS outside the study area.

Temporary Construction Impacts

There are no wetlands and WUS in the study area; therefore, there would be no temporary construction impacts (Appendix A) from future projects in the area.

Preferred Alternative

The Preferred Alternative for this project generally runs parallel to I-25, north and south of the proposed Dillon Drive/I-25 flyover, on the west side of the project area (Exhibit 2). Improvements to approximately 800 feet of the existing Frontage Road, west of I-25 and north of the proposed interchange, and 1,000 feet of the existing Platteville Boulevard/Dillon Drive, west of the Dillon Drive and Frontage Road intersection at I-25, are included in the Preferred Alternative. Additionally, construction of an I-25 northbound exit/bridge to Dillon Drive, on the east side of I-25, and northbound Frontage Road east of I-25 between the proposed Dillon Drive Bridge and the existing Eden interchange, is included in the proposed Preferred Alternative.

Direct Impacts

There are no wetlands and WUS in the study area; therefore there would be no direct impacts to these features (Appendix A).

Indirect Impacts

There are no wetlands and WUS in the study area; therefore there would be no indirect impacts to these features (Appendix A). However, changes to surface water flow and direction within the project area have the potential to indirectly impact potential wetlands and WUS outside the study area. The distance to the nearest potential wetland and WUS is approximately 300 feet. It is unlikely that impacts would lead to change in wetland function or water quality outside the project area as construction Best Management Practices (BMPs) will prevent indirect impacts.

Temporary Construction Impacts

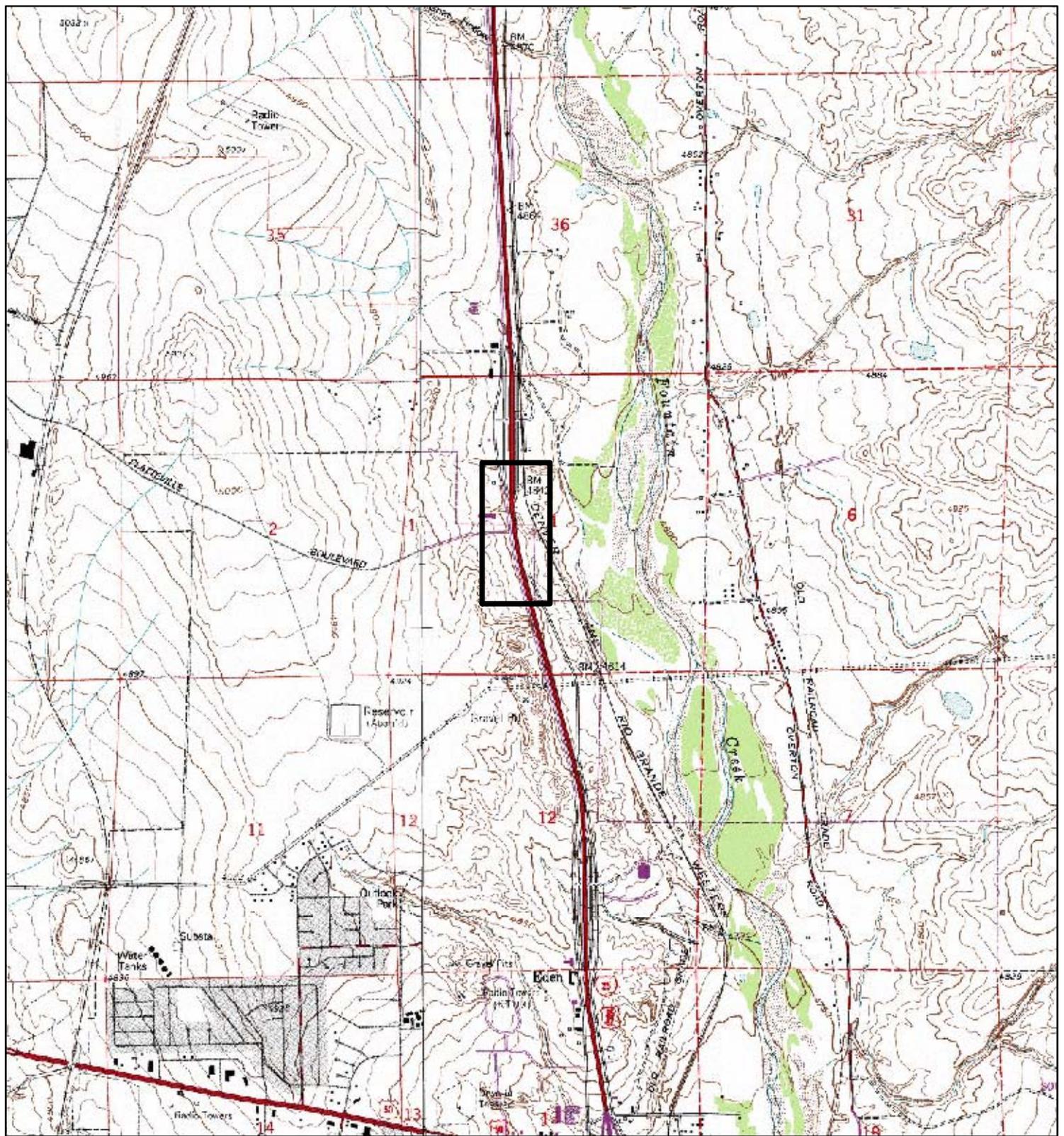
There are no wetlands and WUS in the study area; therefore, there would be no temporary construction impacts (Appendix A).

Mitigation

There are no wetlands or WUS within the study area; therefore, mitigation for these resources is not required. Installation of silt fences, erosion logs, temporary berms, and other BMPs will be used to prevent degradation of vegetation communities adjacent to the construction area by transport of eroded sediment.

References

- Colorado Department of Agriculture (CDOA), 2009. "Noxious Weeds List," Colorado Department of Agriculture. Accessed on-line at <http://www.ag.state.co.us/CSD/Weeds/statutes/Final%20text%208%20CCR%201206-2%20Noxious%20Weed%20Act%20Rules.pdf>. July 2009.
- Pueblo Area Council of Governments (PACOG), 2002. *Pueblo Regional Development Plan*. Pueblo, Colorado. July 25, 2002.
- Pueblo County, 2009. Pueblo County Department of Planning and Development, Noxious Weed Management Program "Noxious Weeds List." Accessed on-line at http://www.co.pueblo.co.us/planning/landuse/weed_management.aspx?id=783&terms=Noxious+weeds#Noxious_Weeds. July 2009.
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory, 1988. "The 1988 National List of Plant Species That Occur in Wetlands - Region 5". Accessed on-line at http://www.fws.gov/nwi/Plants/downloads/1988/nat_list.txt. January 2009.
- United States Army Corps of Engineers (USACE), 2008. "Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region," United States Army Corps of Engineers, April 2008.
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), 2009. Plants Database. Accessed on-line at <http://plants.usda.gov>. July 2009.
- Weber, W.A., and R.C. Wittmann, 2001. *Colorado Flora East Slope*. University of Colorado Press.
- Wetland Training Institute, Inc., 1995. *Field Guide for Wetland Delineation; 1987 Corps of Engineers Wetlands Delineation Manual*. Glenwood, NM. WTI 02-1, 143pp., 1995.



Legend

USGS 7.5' Topographic Map
 Northeast Pueblo, Colorado 1974
 Northwest Pueblo, Colorado 1994

 Site



Pinyon Environmental Engineering
 Resources, Inc.

SITE LOCATION

Dillon Drive Flyover
 Dillon Drive and Interstate 25
 Pueblo, Colorado

Site Location: Section 1, Township 20S, Range 65W, 6th Principal Meridian

Drawn By: MJS

Exhibit 1

Projects:\10857902 Pueblo Dillon Flyover\Bio\Autocad Figures\Pueblo Fig 1

Job No. 1/08-579-02.8300

Reviewed By: OWW

Revision 0



	<p>LEGEND</p> <p>— Project Impact Area</p> <p>— Project Study Area</p>	<p>0 500</p> <p>Approximate Scale in feet</p>	<p>Pinyon Environmental Engineering Resources, Inc.</p> <p>PROJECT AND STUDY AREA Dillon Drive Flyover Dillon Drive and Interstate 25 Pueblo, Colorado</p>	
<p>Site Location: W 1/2, Section 1, Township 20S, Range 65W, 6th Principal Meridian</p>				<p>Drawn By: OKK</p>
<p>Z:\PROJECTS\10857902 Pueblo Dillon Flyover\Bio\Autocad Figures\Figure 2 - Site Layout.dwg</p>		<p>Job No. 1/08-579-02.8100</p>	<p>Reviewed By: MJS</p>	<p>Revision 0</p>

Exhibit 3: Wetlands and Other Waters
Dillon Drive Flyover
Dillon Drive and Interstate 25
Pueblo, Colorado

Legend

- Ephemeral Drainage
 - Ephemeral Drainage Impacts
 - - - Area of Impact
- 0 100 200 400 Feet
-





DEPARTMENT OF THE ARMY
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
SOUTHERN COLORADO REGULATORY OFFICE
200 S. SANTA FE, SUITE 301
PUEBLO, COLORADO 81003

REPLY TO
ATTENTION OF:

February 3, 2009

Operations Division
Regulatory Branch

Brett Weiland
CH2MHill
90 S Cascade
Suite 700
Colorado Springs, CO 80903

Dear Weiland:

This replies to your February 2, 2009 e-mail regarding the proposed CDOT's Dillon Drive Project in Pueblo, Pueblo County, Colorado. We have assigned Action No. SPA-2009-00050-SCO to this activity.

We have evaluated the information you provided and studied the project description, other records, and documents available to us. It appears that no waters of the United States are located within the project site. However, a site visit was not made and waters of the United States may be located on the site. The project is not regulated under the provisions of Section 404 of the Clean Water Act and a Department of the Army permit will not be required if there are no Corps of Engineers' jurisdictional waters on the site.

Our disclaimer of jurisdiction is only for Section 404 of the Federal Clean Water Act. Other Federal, state and local laws may apply to the activities. Therefore, the Colorado Department of Transportation should also contact other Federal, state and local regulatory authorities to determine whether the activities may require other authorizations or permits.

This letter contains an approved jurisdictional determination for your proposed project. If you object to this determination, you may request an administrative appeal under Corps' regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the South Pacific Division Office at the following address:

Douglas R. Pomeroy, Appeal Review Officer
U.S. Army Corps of Engineers, CESPDPDS-O
1455 Market Street, Room 1760
San Francisco, CA 94103-1399
Tel. (415) 503-6574 FAX (415) 503-6646

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by April 4, 2009.

It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

This determination will be valid for 2 years from the date of this letter unless new information warrants revision of the determination within that time. Please be aware that since no site visit was made, waters of the United States may be present on the project site and a Section 404 permit may be needed for some work.

If you have any questions, please feel free to contact me at 719-543-6915 or e-mail me at van.a.truan@usace.army.mil. For more information about the regulatory program, please see our web site at www.spa.usace.army.mil/reg.

Sincerely,



Van A. Truan
Chief, Southern Colorado
Regulatory Office

Enclosures:

REQUEST FOR APPEAL (RFA)

Name of Appellant: _____

Corps File Number: SPA-2009-00050-SCO

Date Filed: _____
(for Corps Use Only)

Reason(s) for Appeal: (attach additional pages as needed)

CONDITIONS:

1. The reason(s) for requesting an appeal should be clearly stated, and your explanation must contain detailed information explaining the grounds for your appeal of the permit decision, or your appeal of the declined individual permit.

2. The appeal of a permit denial, or a declined individual permit, is limited to a review of the administrative record, the record of the appeal conference, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant or the Corps may raise new issues during the appeal process, but both parties may provide additional information as needed to clarify issues already identified in the administrative record.

3. You must grant right-of-entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a **15 day notice** of any site investigation, and will have the opportunity to participate in all site investigations.

I have read and fully understand the above conditions. I am signing this document to request initiation of an administrative appeal.

Appellant