

WESTERN ENVIRONMENT AND ECOLOGY, INC

August 24th, 2017

Joshua Carpenter
U.S. Army Corps of Engineers
Southern Colorado Regulatory Branch
200 S. Santa Fe. Avenue, Suite 301
Pueblo, Colorado 81003

Subject: The Sands Project - Channel Improvements for Approximately 110 acres within Section 33, Township 13 South, Range 65 West, Colorado Springs, Colorado. Western Environment and Ecology, Inc. Project Number 757-001-01

On behalf of Jeff Mark of the Landhuis Company, Western Environment and Ecology, Inc. (Western Environment) seeks a Jurisdictional Determination of the waters located on the above mentioned property located northeast of the intersection of Constitution Avenue and Markseffel Road (Figure 1). The site consists of three parcels totaling approximately 110.66 acres, with midpoint coordinates of 38.870615° North, -104.679707° West.

The property is currently vacant and bordered to the south by Constitution Avenue and to the west by Marksheffel Road (Figure 2). Adjacent lots to the north and east are occupied by Industrial Business Parks. A residential development and a King Soopers supermarket are located to the south across Constitution Avenue. A tributary of the East Fork of Sand Creek bisects the northern and southern portions of the property (see attached photos).

Review of historical aerial photos (attached) of the area show the subject property vacant with a portion of the Sand Creek East Fork drainage throughout the site. Photos from 1972 showed the subject site and surrounding properties were vacant, and Marksheffel Road was present to the west. The 1991 photos showed Constitution Avenue constructed to the south and several industrial properties constructed to the north and west. A straight drainage channel had been constructed through the subject property and the tributary drainage. Photos from 2003 showed significant industrial construction to the east through the Sand Creek East Fork drainage. Channel improvements were constructed along the central eastern end of the property. The photos from 2011 showed the expansion of Marksheffel Road and the addition of a detention pond and riprap drop structure within the northwest corner of the site.

Current aerial photos from 2015, showed the Sand Creek East Fork drainage north of the site is concrete lined and channeled. The drainage within northern parcel is expansive with obvious bed and bank, and evidence of erosion from historic flooding. At the southern end of the northern parcel, drainage is then collected into a riprap lined channel and conveyed to the southern portion of the site. The southern subject parcel contains another section of drainage with obvious bed and bank. Drainage continues south to Constitution Avenue through a box culvert bridge, and is then collected into another riprap lined channel.

On August 17th, 2017, Western Environment performed a wetland survey of the property and delineation of the drainage through the eastern portion of the property. The survey was performed following the US Army Corp of Engineers (ACOE), Wetland Delineation Manual (1987). Western Environment evaluated, to the best of our ability, based upon site conditions at the time of the survey, the three components of a jurisdictional wetland as defined in the ACOE. These components are: 1) Vegetation, 2) Soil and 3) Hydrology. The lateral extent of the subject drainage was also delineated identifying physical features associated with the Ordinary High Water Marks (OHWM).

2217 WEST POWERS AVENUE * LITTLETON, COLORADO 80120
PHONE (303)730-3452 * FAX (303)730-3461
WWW.WESTERNENVIRONMENT.COM

At the time of the inspection, the drainage, which occupied approximately 3.81 acres of the property, was dry and contained predominantly bare ground with minimal and sparse vegetation (see attached photos). Native grasses, curly dock (*Rumex crispus*), sunflower (*Helianthus annuus*), coyote willows (*Salix exigua*) and elm trees (*Ulmus spp.*) were observed within and along the drainage. The majority of the subject property however, consisted of vacant fields dominated by upland vegetation including smooth brome (*Bromus inermis*), cheatgrass (*Bromus tectorum*), blue grama (*Bouteloua gracilis*), Canada thistle (*Cirsium arvensis*), prickly pear (*Opuntia*), Yucca (*Yucca glauca*) and sunflower (*Helianthus annuus*). In addition to observations of vegetation, Western Environment acquired numerous soil cores to identify hydric soils associated with wetlands.

Three areas within the approximately 110 acres subject property, thought to contain components of wetlands were further evaluated and delineated.

- Wetland - 01 (WL-01) was delineated for the subtributary of the Sand Creek East Fork located within the northern parcel. The drainage obviously contained features of flow, such as bed and bank, and is located within the current 100-year flood plain. The survey area within the OHWM was approximately 1.62 acres. It is the opinion of Western Environment that this aquatic resource is likely a jurisdictional Waters of the U.S.
- Wetland - 02 (WL-02) was delineated for the subtributary of the Sand Creek East Fork located within the southern parcel. This section of drainage also contained features of flow, such as bed and bank, and was located within the current 100-year flood plain. The delineation contained an survey area of approximately 2.19 acres. It is the opinion of Western Environment that this aquatic resource is not jurisdictional due to a lack of nexus to a Waters of the U.S.
- Detention Pond - 01 (DP-01) is located within the northwestern corner of the northern parcel. This detention pond was constructed in 2011 in response to the expansion of Marksheffel Road. This structure was recently constructed in uplands, and only contained one or two criteria of wetlands. Additionally, the Corps October 1999 Guidance (33 CFR Parts 323, 328 and 329) identified Non-jurisdictional areas excavated from uplands including drainage ditches, detention basins and retention ponds as normally not jurisdictional, primarily due to the lack of hydric soil development. It is the opinion of Western Environment the detention pond is likely not a jurisdictional Waters of the U.S.
- Detention Pond - 02 (DP-02) is located within the western end of the center parcel. This detention pond was constructed also in 2011 in response to the expansion of Marksheffel Road. It is the opinion of Western Environment the detention pond is likely not a jurisdictional Waters of the U.S.

Table 1.0 Aquatic Resources within the Survey Area

Aquatic Resource Name	Aquatic Resource Classification		Aquatic Resource Size (acre)	Aquatic Resource Size (linear feet)
	NWI Cowardin Class	Location (Lat/Long)		
Wetland-01 North Parcel	R4SBA, R5UBH	38.878166° / -104.680239°	1.62	~1,050
Wetland-02 South Parcel	R4SBA	38.869760° / -104.678407°	2.19	~1,350
Detention Pond-01 North Parcel	-	38.879379° / -104.681706°	0.96	~550
Detention Pond-02 Center Parcel	-	38.873707° / -104.681843°	0.40	~270

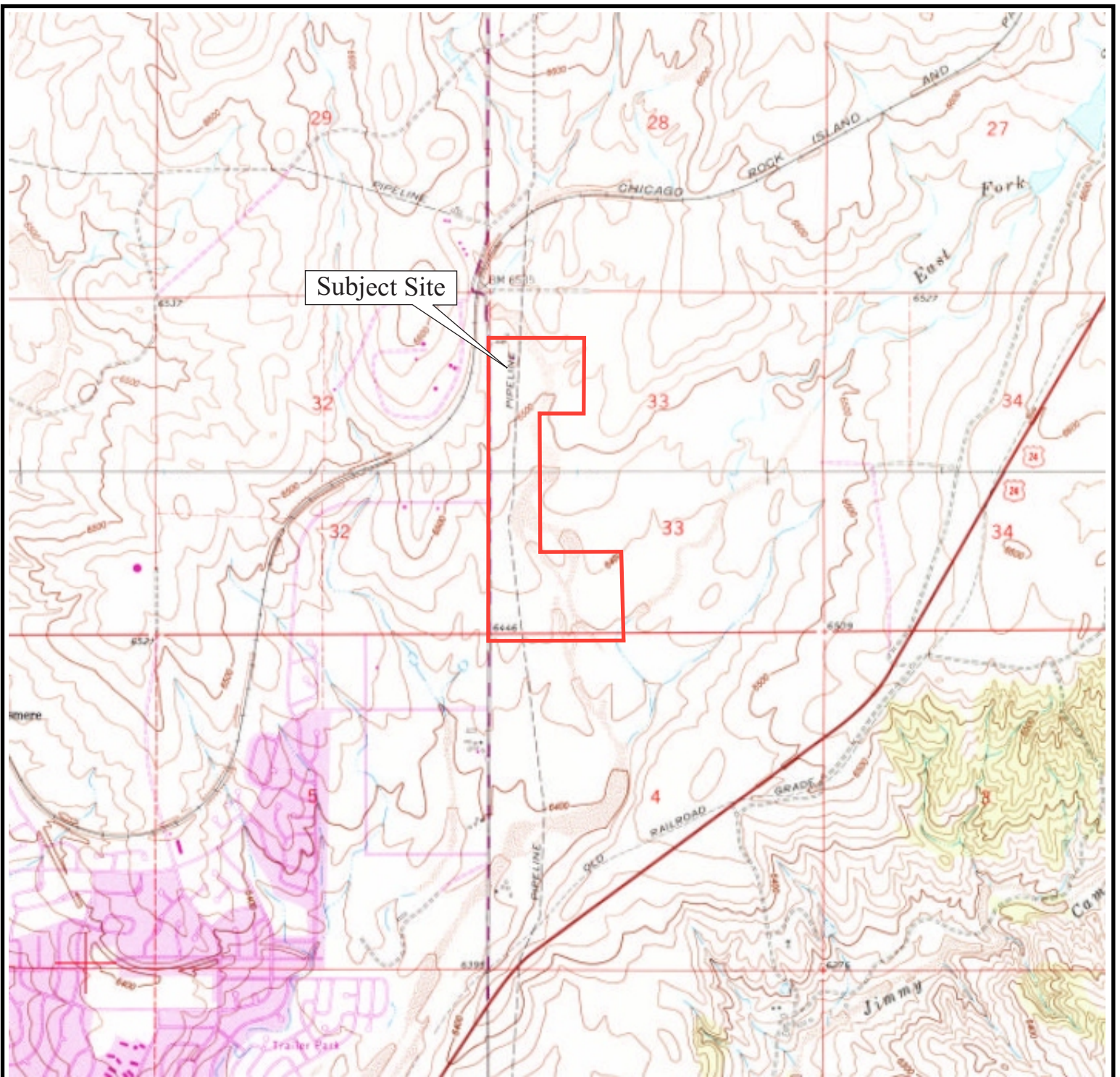
The City of Colorado Springs has requested this jurisdictional determination in response to the proposed improvements to channelize the drainage and alter the existing flood plain. With this construction, approximately 2400 linear feet of the drainage (Wetlands- 01 and 02) will be channelized to approximately 40 feet wide (see attached project plans). We understand this subtributary of Sand Creek East Fork is likely a jurisdictional Waters, and therefore channel improvements will require a Nationwide permit. We would like to request your guidance during the permit process.

Thank you again for your attention to this matter. Please call with any inquiries about the property. I look forward to receiving your response.

Sincerely,
Western Environment and Ecology, Inc.

Austin Curry
Project Manager

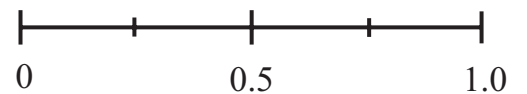




USGS Elsmere Quadrangle, 7.5-Minute Series, 1975



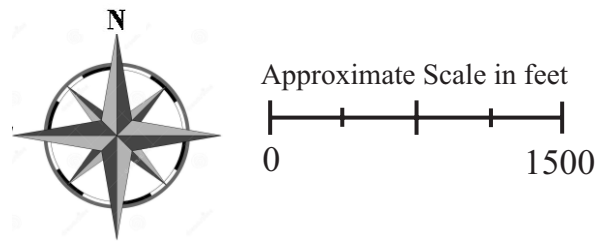
Approximate Scale in Miles



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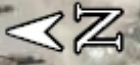
Figure 1 - Project Location Map
Sands Project - Channel Improvements
East Fork Sand Creek Subtributary
Colorado Springs, Colorado

FIGURE 16



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AND ECOLOGY, INC.
2217 West Powers Avenue
Littleton, Colorado 80120

Figure 2 - Site Map
Sands Project - Channel Improvements
East Fork Sand Creek Subtributary
Colorado Springs, Colorado
FIGURE 16



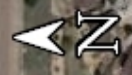
1000 ft

OHWM Point 1.0

OHWM Point 2.0

Google Earth

FIGURE 16



1000 ft

OHWM Point 3.0

OHWM Point 4.0

Google Earth

FIGURE 16

Project: The Sands Project - Channel Improvements Date: 8-17-17
 Location: Section 33, T13S, R65W Investigator(s): Austin Curry, Brendan Calonge
Colorado Springs, CO.

Project Description:

Channel Improvements to a Subtributary of the East fork of Sand creek. Subject property located Northeast of Constitution Ave. and Marksheffel Rd.

Describe the river or stream's condition (disturbances, in-stream structures, etc.):

The drainage contains features of flow, such as bed and bank, with evidence of erosion from flooding. At the time of the inspection, the drainage was dry and contained primarily bare ground with minimal vegetation. Channel improvements (ie. concrete lining and riprap) are present in several separate portions of the drainage.

Off-site Information

Remotely sensed image(s) acquired? Yes No [If yes, attach image(s) to datasheet(s) and indicate approx. locations of transects, OHWM, and any other features of interest on the image(s); describe below] Description:

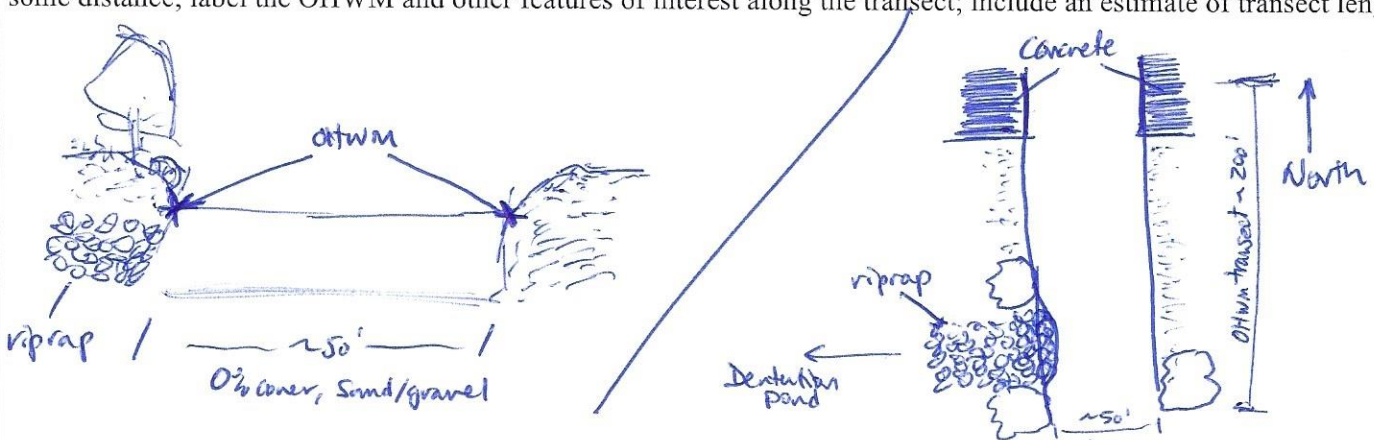
Hydrologic/hydraulic information acquired? Yes No [If yes, attach information to datasheet(s) and describe below.] Description:

List and describe any other supporting information received/acquired:

Historic Aerial photos and site photos (see attached)

Instructions: Complete one cover sheet and one or more datasheets for each project site. Each datasheet should capture the dominant characteristics of the OHWM along some length of a given stream. Complete enough datasheets to adequately document up- and/or downstream variability in OHWM indicators, stream conditions, etc. Transect locations can be marked on a recent aerial image or their GPS coordinates noted on the datasheet.

Transect (cross-section) drawing: (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)



Break in Slope at OHWM: Sharp (> 60°) | Moderate (30–60°) | Gentle (< 30°) | None

Notes/Description:

Sediment Texture: Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 – 2mm	Gravel 2mm – 1cm	Cobbles 1 – 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	50	30	20			
Below OHWM		50	50			

Notes/Description:

Vegetation: Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

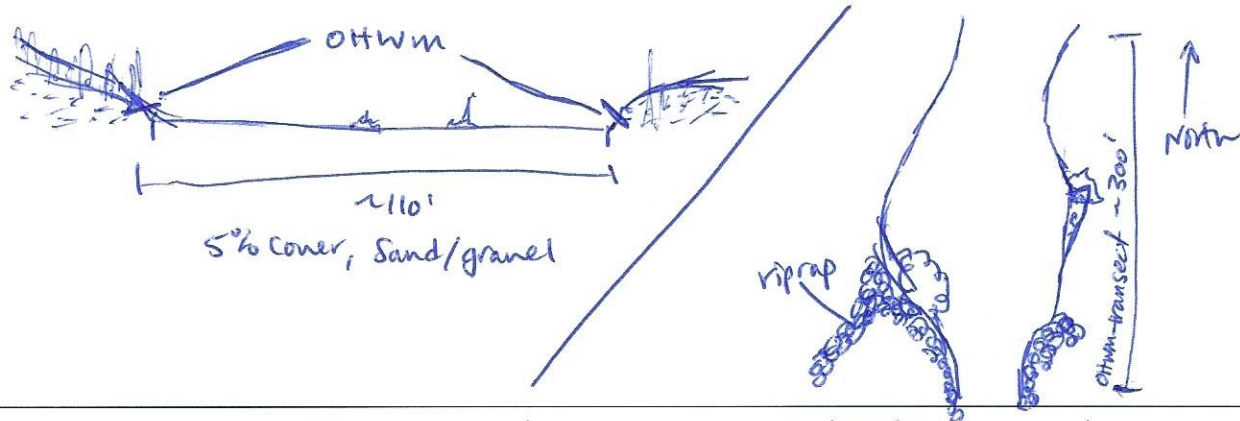
	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	5	25	95	25
Below OHWM	0	0	0	100

Notes/Description:

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation

FIGURE 16

Transect (cross-section) drawing: (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)



Break in Slope at OHWM: Sharp (> 60°) | Moderate (30-60°) | Gentle (< 30°) | None

Notes/Description:

Sediment Texture: Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 - 2mm	Gravel 2mm - 1cm	Cobbles 1 - 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	40	60				
Below OHWM		50	50	<5		

Notes/Description:

Above OHWM - Saturated at 24"
Below OHWM - water at 20"

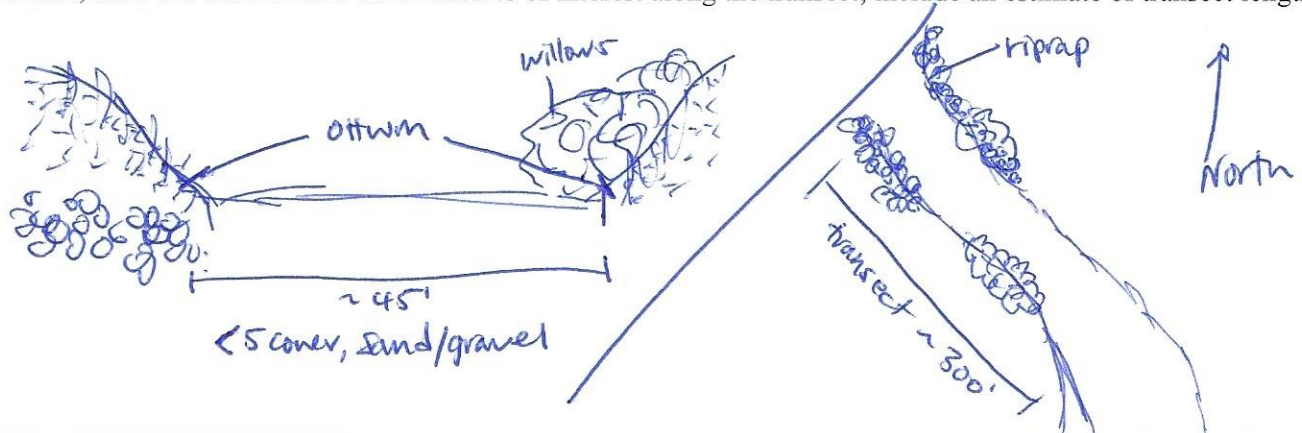
Vegetation: Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	10	0	80	5
Below OHWM	0	0	5	95

Notes/Description:

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation

Transect (cross-section) drawing: (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)



Break in Slope at OHWM: Sharp (> 60°) | Moderate (30–60°) | Gentle (< 30°) | None

Notes/Description:

Sediment Texture: Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 – 2mm	Gravel 2mm – 1cm	Cobbles 1 – 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	60	40				YES
Below OHWM		100				

Notes/Description:

Below OHWM - Water at 18"

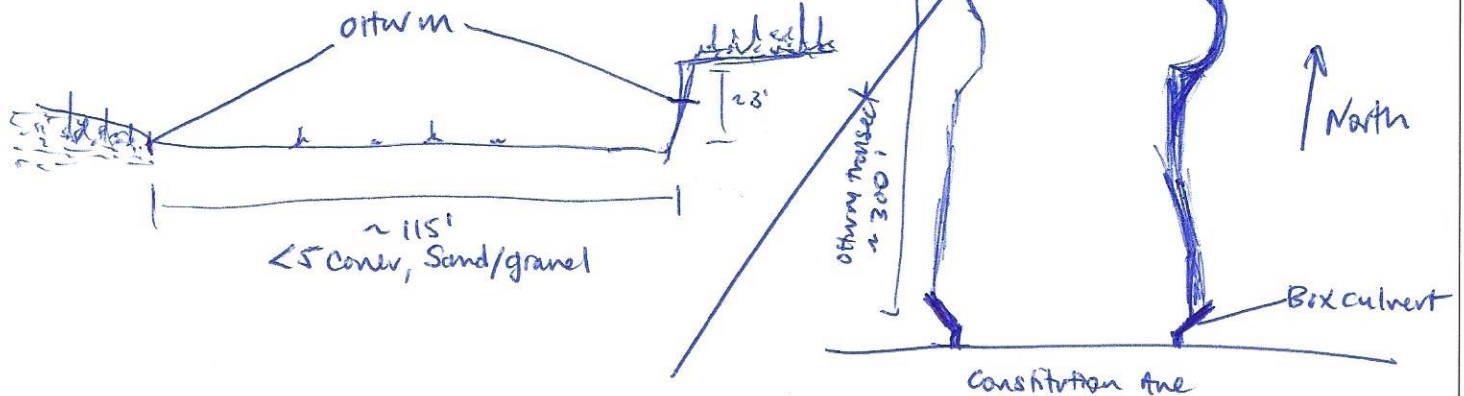
Vegetation: Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	20	20	55	5
Below OHWM		15		85

Notes/Description:

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation

Transect (cross-section) drawing: (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)



Break in Slope at OHWM: Sharp (> 60°) | Moderate (30–60°) | Gentle (< 30°) | None

Notes/Description: EAST

west

Sediment Texture: Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 – 2mm	Gravel 2mm – 1cm	Cobbles 1 – 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	50	50				
Below OHWM	25	90	5-10			

Notes/Description:

Above OHWM - No sat at 24"
Below OHWM - Sat at 20"

Vegetation: Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM			95	25
Below OHWM			25	95

Notes/Description:

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation

FIGURE 16



U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands



U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

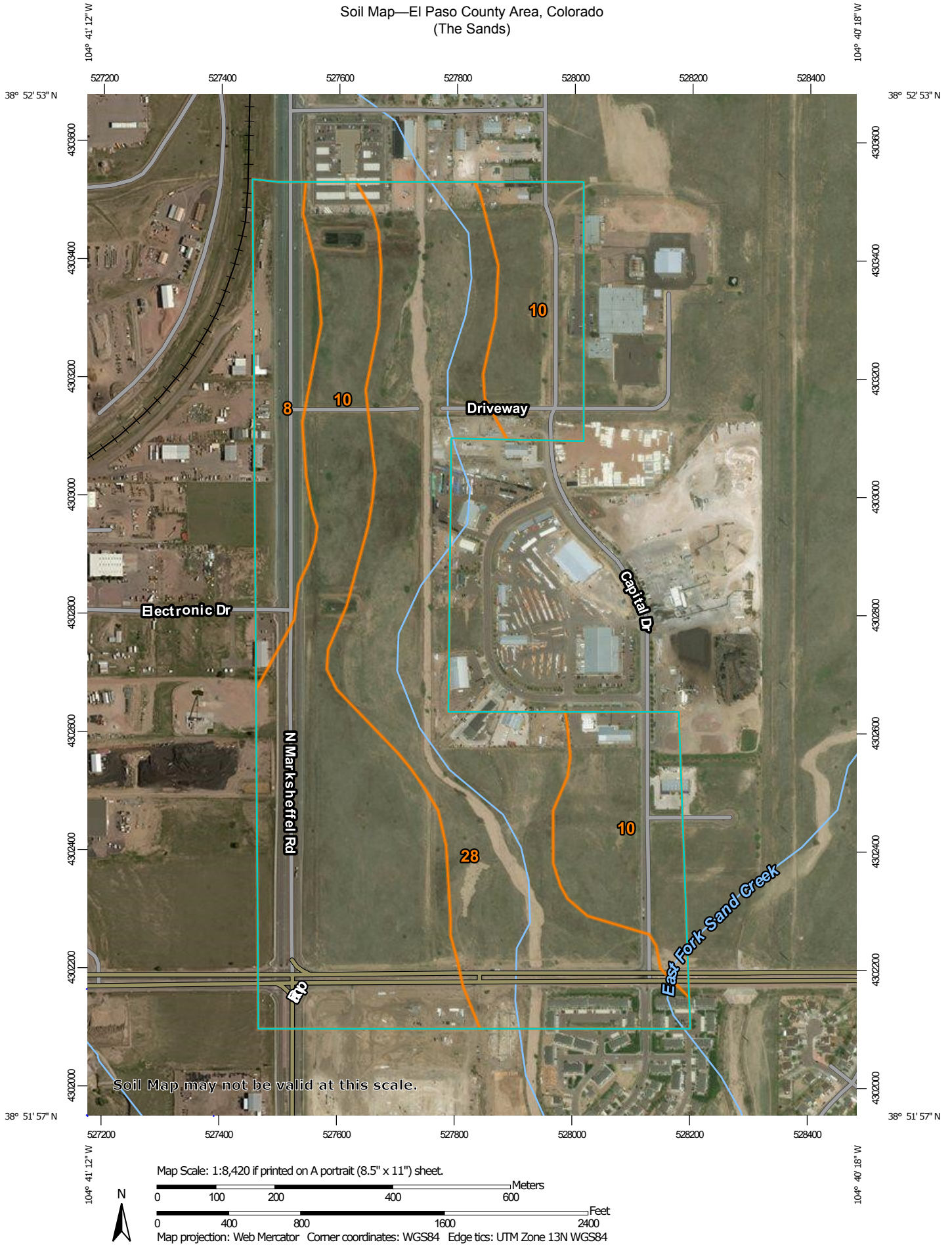
August 1, 2017

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

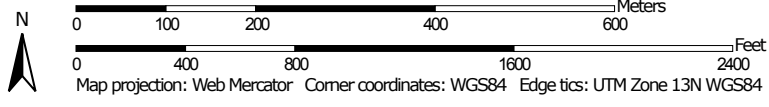
FIGURE 16

Soil Map—El Paso County Area, Colorado
(The Sands)



Soil Map may not be valid at this scale.

Map Scale: 1:8,420 if printed on A portrait (8.5" x 11") sheet.



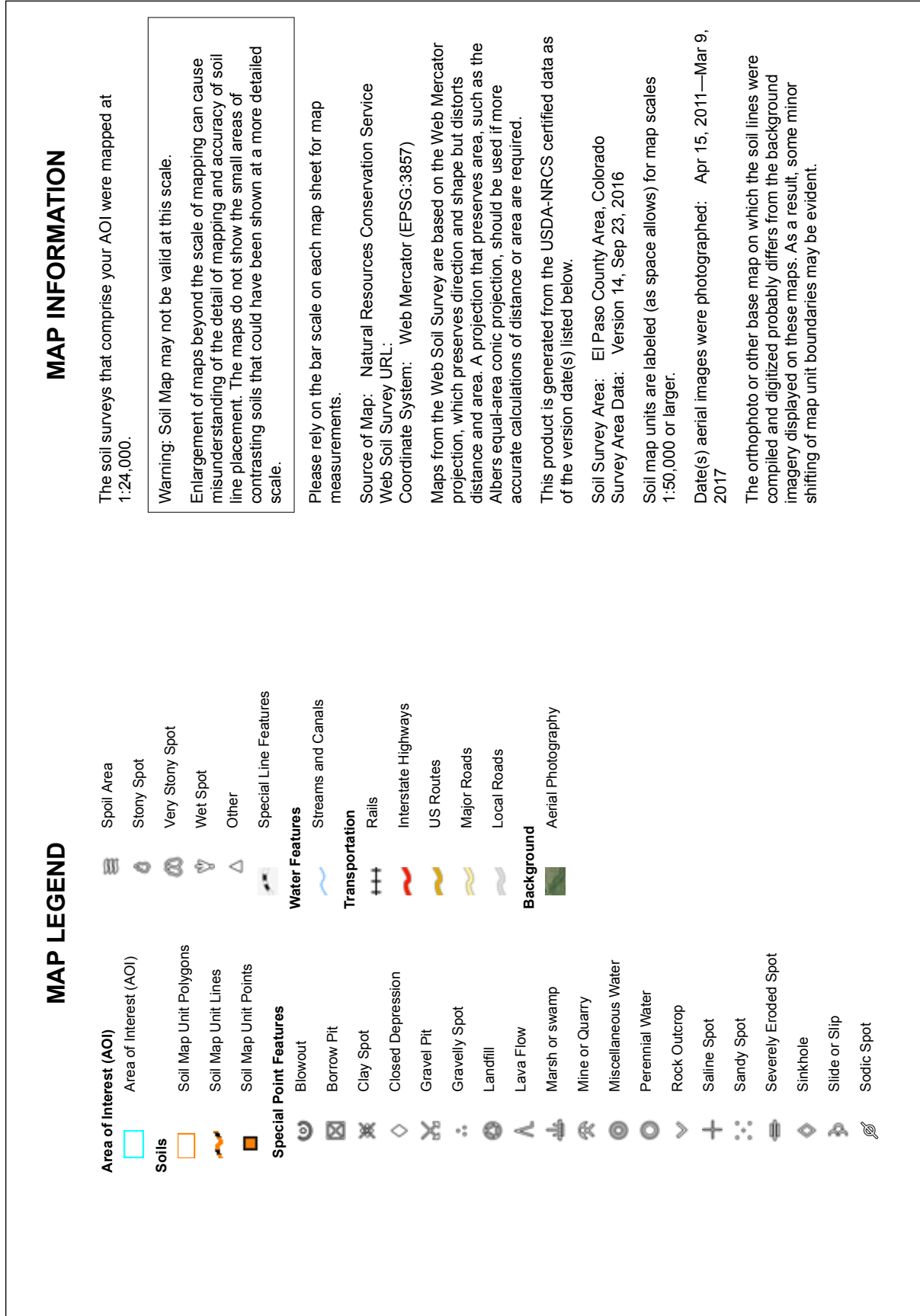


FIGURE 16

Map Unit Legend

El Paso County Area, Colorado (CO625)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
8	Blakeland loamy sand, 1 to 9 percent slopes	18.3	9.4%
10	Blendon sandy loam, 0 to 3 percent slopes	100.4	51.5%
28	Ellicott loamy coarse sand, 0 to 5 percent slopes	76.4	39.2%
Totals for Area of Interest		195.1	100.0%

WESTERN ENVIRONMENT AND ECOLOGY, INC

October 9th, 2017

Jeff Mark
The Landhuis Company
212 N. Wahsatch Avenue, Suite 301
Colorado Springs, CO 80903

Subject: The Sands - Sand Creek East Fork Sub-Tributary CLOMR - ESA Complinance/Threatened and Endangered Species Survey - Sand Creek East Fork, El Paso County, Colorado. Western Environment and Ecology, Inc. Project Number 757-001-01

Dear Mr. Mark,

At the request of Mr. Darin Moffett of MS Civil Consultants, Inc., Western Environment and Ecology, Inc (Western Environment) has prepared this "Threatened and Endangered Species Survey" to document compliance with Sections 9 and 10 of the Endangered Species Act (ESA) for FEMA Conditional Letters of Map Revision (CLOMRs). This survey was conducted to examine the above referenced property for the presence/absence and potential habitat of any federal or state threatened and endangered species, and to determine if the construction activities associated with the Sands Project will have any potential to cause adverse impacts that would result in a "take".

Species that are federally or state listed as threatened or endangered, including federally proposed and candidate species occurring or having historically occurred in El Paso County, were considered for this study. The county classification was determined by following the Colorado Field Office of the U.S. Fish and Wildlife Service's county checklist (USFWS, 2011) and the Colorado Division of Parks and Wildlife (CPW) State Wildlife Action Plan (CPW 2015). Western Environment also reviewed the Environmental Conservation Online System (ECOS) and the Information for Planning and Consultation (IPaC) databases on the USFWS website. The list was narrowed based on habitat requirements of the species relative to existing habitats on the project.

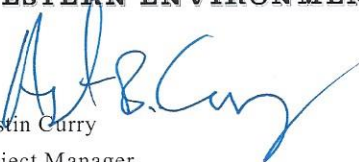
Habitat potentially suitable for Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*), listed as federally threatened and state threatened, was observed on the property. However, Sand Creek is not indicated to be within the Preble's critical habitat as defined by the USFWS final decision dated December 14, 2010, entitled, "Revised Critical Habitat for the Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*) in Colorado." Furthermore, the project is located within the USFWS Block Clearance Zone (attached) for portions of El Paso County where sufficient information has been collected to indicate Preble's is absent (TAILS 65412-2012-TA-0078). It is the opinion of Western Environment that The Sands CLOMR is not located within critical habitat for the Preble's Meadow Jumping Mouse.

No other significant or critical habitats of threatened or endangered species were indicated to occur on the property. Additionally, during the inspection of the subject property on August 17th, 2017, no wildlife was observed. It is the opinion of Western Environment that The Sands CLOMR project will have no potential for a "take", or cause adverse impacts to critical habitats of threatened or endangered species.

Should you have any questions or if we could be of further service, do not hesitate to contact me.

Sincerely,

WESTERN ENVIRONMENT AND ECOLOGY


Austin Curry
Project Manager

2217 WEST POWERS AVENUE * LITTLETON, COLORADO 80120
PHONE (303)730-3452 * FAX (303)730-3461
WWW.WESTERNENVIRONMENT.COM



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Colorado Field Office
P.O. Box 25486, DFC (65412)
Denver, Colorado 80225-0486

IN REPLY REFER TO:
ES/CO: T&E/PMJM/Block Clearance
TAILS 65412-2012-TA-0078

FEB 8 2012

Kirsta Scherff-Norris
Wildlife Biologist
Colorado Springs Utilities
P. O. Box 1103, Mail Code 940
Colorado Springs, Colorado 80947-0940

Dear Kirsta Scherff-Norris:

This responds to your letter of November 10, 2011 requesting a "Block Clearance Zone" covering portions of Monument, Cottonwood, and Sand Creeks in El Paso County, Colorado. The Service has reviewed your proposal under authority conferred to the U.S. Fish & Wildlife Service (Service) by the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 *et seq.*).

The Service concurs with your conclusion that the proposed exclusion area, as modified in your letter of November 11, 2011, meets the criteria for designation as a Block Clearance Zone for Preble's meadow jumping mouse (*Zapus hudsonius preblei*). Our concurrence is based on the information provided in the April 21, 2011 Report viz.:

- Between 1997 and 2008 there has been 31 negative presence/absence surveys south of Woodmen Road
- No PMJM have ever been documented south of Woodmen Road except for a single PMJM on Monument Creek and intensive monitoring following for eight years demonstrated that no PMJM were moving down Monument Creek or Cottonwood Creek
- All three major drainages that connect north of Woodmen Road to the south have already received Block Clearances indicating that they are not viable transit corridors and thus all habitat south of Woodmen Road has been isolated
- 234 habitat clearances have been approved within this area documenting the high level of disturbance and confirming that development has established many barriers to movement for PMJM south of Woodmen Road
- All significant drainages have all be evaluated along their entire length to ensure that no potentially occupied habitat has been missed

Therefore the mapped area is designated as a Block Clearance Zone.

In designating a block clearance zone, the Service eliminates the need for individuals or agencies to coordinate with the Service prior to conducting activities in habitats that otherwise would be deemed to have the potential to support Preble's. The establishment of this block clearance zone

is based on the likely absence of Preble's within the area, and it appears to be little likelihood that any of the area would be of importance in any future plan to recover the species. Should Preble's be discovered within the block clearance zone it would be subject to full protection under the Act and the Service would consider modification of the zone.

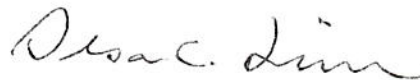
This block clearance includes the areas currently covered by the Monument, Cottonwood, and Sand Creek block exclusions. Therefore this exclusion eliminates the need for separate block exclusions. It has become clear that Preble's occupy many drainages north of Woodmen Road (runs East-West) but do not exist to the south. With 15 years of negative data and having thoroughly searched for potential habitat throughout the area south of Woodmen Road, there is sufficient evidence to support a block exclusion for all riparian areas within the CSU Service Area that are south of Woodmen Road, with some exceptions (see map). Further, the three major drainages that flow from north of Woodmen Road to south of Woodmen Road (Monument, Cottonwood, and Sand Creeks) have all received block clearance exclusions so it is consistent to clear this remaining area.

Effective the date of this letter, the block clearance zone will be effective for three years, or until a regional habitat conservation plan for the area is approved by the Service, whichever comes first. After three years the Service will review the clearance, any additional information, and may renew the clearance as deemed appropriate. Based on additional information, the clearance zone may be expanded or adjusted periodically. We will have maps of the block clearance zone available on our web site (<http://www.r6.fws.gov/preble>) and at our office. We will also have the supporting data and summaries of the trapping surveys available as part of the administrative record for this project.

The Service emphasizes that while wetlands and riparian habitats within the block clearance zone are not likely to support Preble's, they should be conserved and enhanced for other values including fish and wildlife habitat, flood control, and maintenance of water quality.

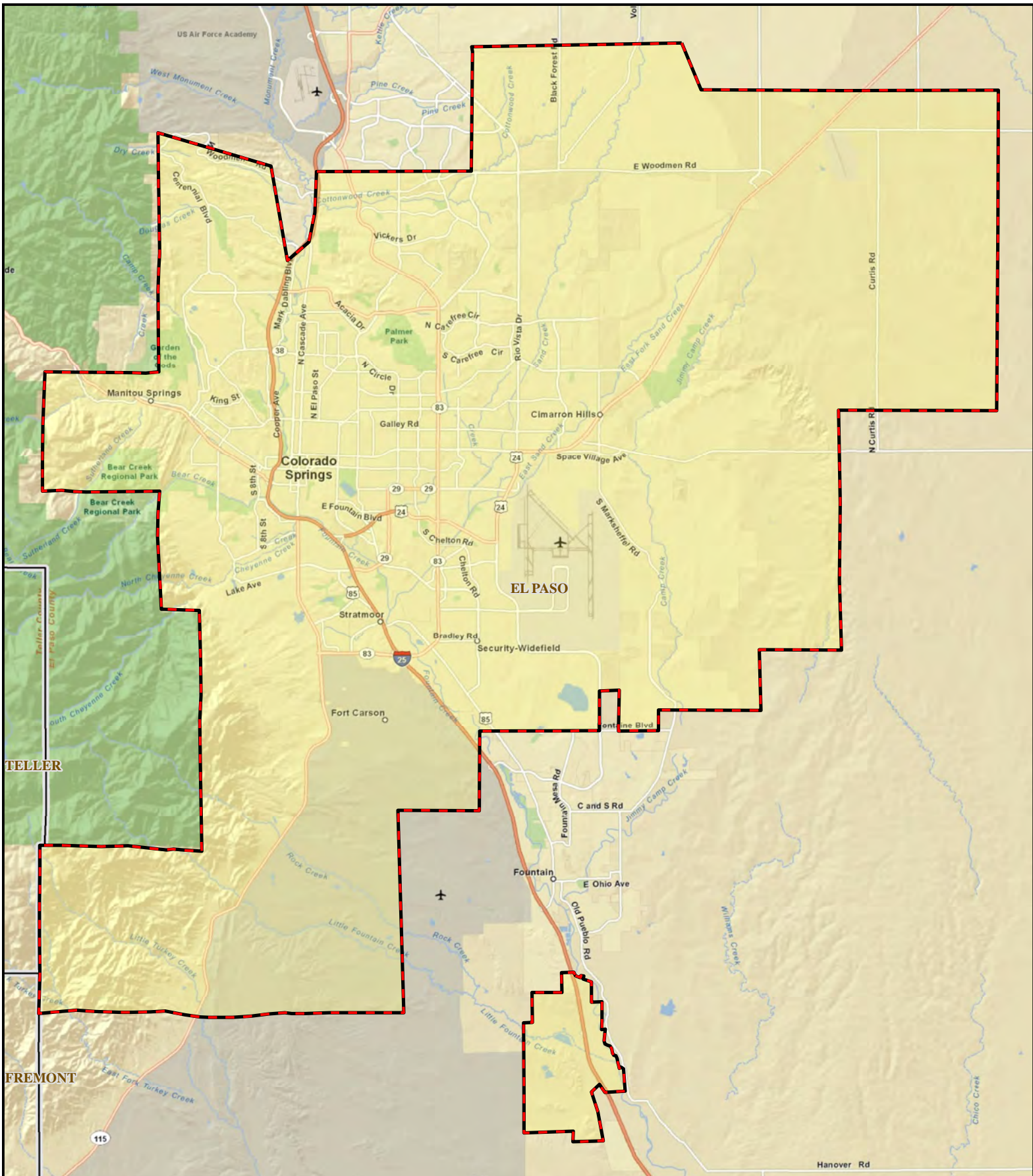
Please supply Craig Hansen with the appropriate SHAPE files to enable us to reproduce the block clearance map on the web site. Also you may contact Adam Misztal, of the Colorado Field Office for further assistance at (303) 236-4753 or at email: adam_misztal@fws.gov.

Sincerely,



Susan C. Linner
Colorado Field Supervisor



cc: Pete Plage
Alison Michael
Craig Hansen



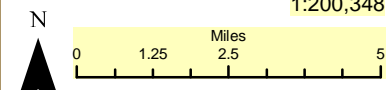
PREBLE'S MEADOW JUMPING MOUSE BLOCK CLEARANCE MAP: COLORADO SPRINGS



Please contact the U.S. Fish & Wildlife Service, Colorado Field Office, at (303) 236-4773 for assistance using this map. Visit <http://1.usa.gov/n5r48y> for more information on Preble's and the Block Clearance.

-  Block Clearance Area
-  County Boundaries

1:200,348



23 FEB 2012 | NAD83 UTM Z13N
 U.S. Fish and Wildlife Service Map, ESRI Services

FIGURE 16