



**Wadsworth Boulevard  
3<sup>rd</sup> Avenue to 13<sup>th</sup> Avenue  
Including US 6 / Wadsworth Interchange**

Purpose:	<b>Biological Field Review</b>		
Day:	<b>Tuesday</b>	Date:	<b>June 5, 2007</b>
Location:	<b>US 6 and Wadsworth Project Area</b>		

**Participants:**

Attendee	Representing		Attendee	Representing	
Sandy White	CH2M HILL	Y	Vanessa Henderson	CDOT EPB	Y
Mandy Whorton	CH2M HILL	Y	Jon Chesser	CDOT R6	Y
Katy Oakes	CH2M HILL	Y	Jeff Peterson	CDOT EPB	Y
			Kirk Webb	CDOT R6	N

On June 5, 2007, representatives of the CH2M HILL environmental staff met with Colorado Department of Transportation (CDOT) representatives at the project site to determine the scope of biological resource evaluations for the US 6 and Wadsworth interchange project. Because the project is located in a highly developed urban area, the field evaluation concentrated on two stream drainages that cross under Wadsworth Boulevard from the west to the east. The drainages are Lakewood Gulch and Dry Gulch, which cross Wadsworth at about 9<sup>th</sup> Avenue and 11<sup>th</sup> Avenue, respectively. Subjects of concern included potential habitat for federally listed threatened and endangered plant and wildlife species, potential habitat for migratory birds, and wetlands.

Lakewood Gulch is a deeply channelized stream with steep, 12- to 15-foot-high banks near the Wadsworth crossing. Chunks of asphalt and concrete have been placed in the drainage, possibly in an attempt to armor the streambanks. The stream crosses under Wadsworth Boulevard via a three-bay concrete box culvert with total dimensions approximately 8 feet high by 20 feet wide (see Figure 1). The stream was about 6 feet wide and several inches deep at the time of the site visit (see Figure 2). Vegetation along this section of Lakewood Gulch consists of an overstory of native trees (plains cottonwood, peachleaf willow, and box elder) and Chinese elm (a tree species that has escaped cultivation) and an understory comprising a large diversity of weedy grasses and forbs. Reed canary grass was the only native grass observed, and there were no native forbs. The presence of smooth brome and crested wheatgrass, grasses often used for reclamation, suggests that attempts may have been made to stabilize this disturbed area.



Figure 1 - Lakewood Gulch at Wadsworth Boulevard (west side)



Figure 2 - Lakewood Gulch at Wadsworth Boulevard (east side)

Dry Gulch is a smaller stream that crosses under Wadsworth Boulevard via an oval concrete culvert approximately 2 feet high by 3 feet wide (see Figure 3). A portion of the south streambank downstream from the culvert has been armored with cemented riprap (see Figure 4). The stream was about 3 feet wide and a few inches deep at the time of the site visit. Vegetation along this section of Dry Gulch consists of an overstory of native trees (plains cottonwood and peachleaf willow) and tree species that have escaped cultivation (Chinese elm and green ash) and an understory of smooth brome and weedy grasses and forbs. Reed canary grass was the only native grass observed, and there were no native forbs.





Figure 3 - Dry Gulch at Wadsworth Boulevard  
(east side)



Figure 4 - Dry Gulch at Wadsworth Boulevard  
(east side)

Attachment 1 lists the plant species documented along the two stream drainages.

The following urban wildlife species likely occur in project area.

House sparrow ( <i>Passer domesticus</i> )	Fox squirrel ( <i>Sciurus niger</i> )
Mourning dove ( <i>Zenaida macroura</i> )	Red fox ( <i>Vulpes vulpes</i> )
Black-billed magpie ( <i>Pica hudsonia</i> )	Raccoon ( <i>Procyon lotor</i> )
Common grackle ( <i>Quiscalus quiscula</i> )	House cat ( <i>Felis catus</i> )
American crow ( <i>Corvus brachyrhynchos</i> )	Mouse ( <i>Peromyscus</i> sp.)
American robin ( <i>Turdus migratorius</i> )	Skunk ( <i>Mephitis mephitis</i> )

The biological resources team reached the following conclusions regarding potential environmental issues at the US 6 and Wadsworth Interchange Project site.

Potential Habitat for Federally Listed Threatened and Endangered Plant and Wildlife Species

The following species appear on the U.S. Fish and Wildlife Service (USFWS) list of federally threatened and endangered for Jefferson County. No potential habitat for these species was identified in the project area. The project area occurs within the Denver metro block clearance area for Preble's meadow jumping mouse, within which the USFWS has determined that the species is not likely to exist. The project team concluded that federally listed threatened and endangered species may be dismissed from detailed analysis for this project.

Common Name	Scientific Name	Status	Potential Habitat in Project Area
Bald eagle	<i>Haliaeetus leucocephalus</i>	T	No
Canada lynx	<i>Lynx canadensis</i>	T	No
Colorado butterfly plant	<i>Gaura neomexicana</i> ssp. <i>coloradensis</i>	T	No
Interior least tern	<i>Sternula antillarum</i>	E	No
Mexican spotted owl	<i>Strix occidentalis</i>	T	No
Pallid sturgeon	<i>Scaphirhynchus albus</i>	E	No
Pawnee montane skipper	<i>Hesperia leonardus montana</i>	T	No
Piping plover	<i>Charadrius melodus</i>	T	No
Preble's meadow jumping mouse	<i>Zapus hudsonius preblei</i>	T	Block Clearance Area
Ute ladies'-tresses	<i>Spiranthes diluvialis</i>	T	No
Whooping crane	<i>Grus americana</i>	E	No

Potential Habitat for Migratory Birds

No bird nests were identified within the project area along the two gulches, and no swallow nests were observed in the culverts. Project construction activities would be carried out according to standard CDOT specifications for protection of birds under the Migratory Bird Treaty Act, which are provided as Attachment 2.

Wetlands

Lakewood Gulch has minimal wetland characteristics in the vicinity of the Wadsworth crossing. A small area west of Wadsworth Boulevard was observed to support reed canary grass, a common wetland plant, and is a potential wetland. Small grassy areas on low

benches along Dry Gulch east of Wadsworth may also represent potential wetland habitat. Pinyon Environmental, the project subcontractor for wetlands, will visit the sites independently to determine whether wetlands are present in the project area. If wetlands are identified, they would be delineated at a future stage in the environmental review.

#### Other

- The team will confirm whether there is year-round flow in the two streams. If not, fish may be dismissed from detailed analysis for this project.
- The team will assess the potential suitability of the project area as habitat for Colorado species of special concern using Colorado Department of Wildlife data for animal species and Colorado Natural Heritage Program data for plants at a future stage in the environmental review.
- An SB40 Wildlife Certification through the Colorado Division of Wildlife would be required if the proposed construction were to involve a new stream crossing or a permanent stream realignment or if the project would result in bank stabilization or stream encroachment greater than 500 feet of stream length.

**ATTACHMENT 1****US 6 and Wadsworth Interchange Project****Vegetation Documented along Lakewood Gulch and Dry Gulch Drainages - June 5, 2007**

Scientific Name	Common Name	Lakewood Gulch	Dry Gulch	Comments
<i>Acer negundo</i>	Box elder	X		native
<i>Chrysothamnus nauseosus</i>	Rabbitbrush		X	native
<i>Populus sargentii</i> ( <i>P. deltoides</i> )	Plains cottonwood	X	X	native
<i>Salix amygdaloides</i>	Peachleaf willow	X	X	native
<i>Salix</i> sp.	Willow	X		native
<i>Phalaris arundinacea</i>	Reed canary grass	X	X	native
<i>Fraxinus pennsylvanica</i>	Green ash		X	escaped cultivation
<i>Medicago sativa</i>	Alfalfa	X		escaped cultivation
<i>Robinia pseudoacacia</i>	Black locust		X	escaped cultivation
<i>Ulmus pumila</i>	Chinese elm	X	X	escaped cultivation
<i>Agropyron cristatum</i>	Crested wheatgrass	X		reclamation grass
<i>Agropyron</i> sp.	Wheatgrass		X	reclamation grass ??
<i>Bromus inermis</i>	Smooth brome	X	X	reclamation grass
<i>Dactylis glomerata</i>	Orchard grass	X		reclamation grass ??
<i>Aegilops cylindrica</i>	Goatgrass		X	weed
<i>Agoseris</i> sp.	False dandelion	X	X	weed
<i>Alyssum alyssoides</i>	Alyssum	X		weed
<i>Bromus tectorum</i>	Cheat grass	X	X	weed
<i>Chenopodium album</i>	Lamb's quarters	X	X	weed

Scientific Name	Common Name	Lakewood Gulch	Dry Gulch	Comments
<i>Cirsium arvense</i>	Canada thistle	X	X	weed
<i>Convolvulus arvensis</i>	Bindweed	X	X	weed
<i>Erodium cicutarium</i>	Storksbill	X		weed
<i>Hordeum jubatum</i>	Foxtail barley	X		weed
<i>Kochia iranica</i>	Burning bush	X	X	weed
<i>Lactuca serriola</i>	Prickly lettuce	X	X	weed
<i>Lepidium sp.</i>	Mustard			weed
<i>Onopordum acanthium</i>	Scotch thistle	X		weed
<i>Oxybaphus nyctagineus</i>	Four-o'-clock	X		weed
<i>Polygonum aviculare</i>	Knotweed	X		weed
<i>Rumex crispus</i>	Curly dock	X	X	weed
<i>Sisymbrium loeselii</i>	Tumblemustard	X	X	weed
<i>Taraxacum officinale</i>	Dandelion		X	weed
<i>Tragopogon dubius</i>	Oyster plant	X	X	weed
<i>Verbascum thapsus</i>	Mullein	X		weed



**ATTACHMENT 2****US 6 and Wadsworth Interchange Project  
Specifications for the Protection of Birds**REVISION OF SECTION 107  
PROTECTION OF THREATENED SPECIES

Section 107 for the Standard Specifications is hereby revised for this project as follows:

Subsection 107.12 shall include the following:

- (a) *Swallow nests.* Swallows are protected by the Migratory Bird Treaty Act, a federal statute. The Contractor shall not perform work on structures on which active swallow nests are found.

To conduct work on these structures, the Contractor shall take one of the two following options:

- (1) Complete all construction activities at concrete box culverts (CBCs) or under bridges prior to April 1 or after August 15; or
- (2) Prevent swallow nests from being constructed.

If Option (2) is chosen, the following shall occur:

- (1) CDOT Maintenance will be notified by the Contractor (with the Project Engineer's permission) to remove any existing swallow nests prior to April 1, 2005.
- (2) During the time that the swallows are trying to build or occupy their nests (between April 1 and July 31), the Contractor shall check the bridges and CBCs daily for any nesting activity. Between August 1 and August 15, the Contractor shall check bridges and CBCs for nesting activity every other day.
- (3) If the birds have started to build any nests, the nests shall be removed immediately, before a substantial portion of the nest is constructed.

The Contractor shall prevent the possibility that the construction activity could displace swallows after they have laid their eggs or before the young have fledged. Forcing swallows to build their nests at another, non-construction site is acceptable. Using netting to prevent swallows from building nests at a site is acceptable. If swallows are allowed to be established by the end of May, all work that impacts the nests shall be avoided until August 15. If the project continues into the following spring, this cycle shall be repeated.

- (b) *Ground-nesting birds.* Ground-nesting birds are protected by the Migratory Bird Treaty Act, a federal statute. Due to the potential for ground nesting birds' habitat, if work occurs between April 1 and August 15, the ground within the construction zone shall be mowed to 6" or less during that time in order to dissuade birds from nesting in the construction zone.

- (c) *Tree and shrub removal.* Due to the Migratory Bird Treaty Act, tree and shrub removal shall be completed before April 1st or after August 15th. If work must take place between these dates, a nesting bird survey shall be completed by a biologist within one week of tree/shrub clearing. If an active nest is found, the vegetation shall remain undisturbed and protected until young fledge. Protection shall consist of fence (plastic) placed a minimum of 50' distance from vegetation to be undisturbed. No work shall occur within fence line. If a raptor nest is spotted, consultation with the Region biologist will be required.