

**BIOLOGICAL RESOURCES
TECHNICAL MEMORANDUM**

FOR THE

**Federal Boulevard Improvements between
West 7th Avenue and West Howard Place
Environmental Assessment**

Prepared for

CITY AND COUNTY OF DENVER

COLORADO DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

Prepared by

PINYON ENVIRONMENTAL, INC.

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ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
CCD	City and County of Denver
CDOA	Colorado Department of Agriculture
CDOT	Colorado Department of Transportation
CNHP	Colorado Natural Heritage Program
CPW	Colorado Parks and Wildlife
CWA	Clean Water Act
CRS	Colorado Revised Statutes
DBH	Diameter at Breast Height
EA	Environmental Assessment
ESA	Endangered Species Act
FHU	Felsburg Holt & Ullevig
FHWA	Federal Highway Administration
GPS	Global Positioning System
IPAC	Information, Planning, and Conservation (System)
MBTA	Migratory Bird Treaty Act
NWP	Nationwide Permit
PBA	Programmatic Biological Assessment
PEL	Planning and Environmental Linkages
ROW	Right of Way
SB 40	Colorado Senate Bill 40
SPWRAP	South Platte Water Related Activities Program
LRT	Light Rail Transit
RTD	Regional Transportation District
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
WUS	Waters of the United States

INTRODUCTION

This Technical Memorandum has been prepared in support of the *Federal Boulevard Improvements Environmental Assessment (EA)*. The general project area extends from West 7th Avenue to West Howard Place along Federal Boulevard (“Project Area”, Figure 1). This Memorandum evaluates the effects of the Federal Boulevard Improvement Project (the Proposed Action) and the No-Action Alternative with respect to biological resources. The study area used in this assessment encompasses the actual limits of disturbance, including areas that would be impacted as a result of right-of-way acquisitions (“Study Area”).

Figure 1. EA Project Area



Federal and State Regulations or Policies

This Memorandum has been prepared to address potential project impacts to biological resources and protected species in accordance with the following Federal and State regulations or policies:

- The United States' *Endangered Species Act* (ESA) protects federally listed plant and animal species with the goal of ensuring their long-term survival. The ESA is administered by the United States Fish and Wildlife Service (USFWS).
- The Colorado's *Non-game, Endangered, and Threatened Species Conservation Act* provides some protection within the State for listed species and establishes the State's intent to protect endangered, threatened, or rare species. The Colorado Parks and Wildlife (CPW) is responsible for listing species.
- The United States' *Migratory Bird Treaty Act* (MBTA) and the *Bald and Golden Eagle Protection Act* regulate vegetation clearing, earth-moving, bridge demolition, and other construction activities that have the potential to disrupt nesting activity or destroy nests of bird species protected under the MBTA. The USFWS administers these requirements.
- In addition to regulations primarily designed to protect fish and wildlife species, regulations are in place to protect habitat from plant species determined to be "noxious." The Colorado Department of Agriculture (CDOA) Noxious Weed Act of 2003 (Colorado Revised Statutes [CRS] 35-5-101; CRS 35-5.5-101; Executive Order D-006-99), defines and prioritizes management objectives for State-designated noxious weeds.
- Section 404 of the United States' *Clean Water Act* (CWA) regulates Waters of the United States (WUS), including navigable waters, their tributaries, and related wetlands. Impacts to these features and associated wetlands require permitting through the United States Army Corps of Engineers (USACE). Both open waters and areas with an ordinary high-water mark may be defined as WUS. Wetlands that are abutting, or adjacent to, these areas are also under the jurisdiction of the USACE. Wetlands are "those 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" (USACE, 1987). Following recent Supreme Court rulings, the USACE typically does not take jurisdiction over wetlands or open waters that do not flow to navigable waters, unless these areas are considered to have a "significant nexus" to navigable waters. Only the USACE has the authority to make jurisdictional determinations. Impacts to WUS, including wetlands, would require a Section 404 permit from the USACE.
- *Colorado Senate Bill 40* (SB 40) requires that State agencies obtain certification from CPW when an agency plans construction in any stream, stream bank, or tributary. Any portions of the Project that could impact an SB 40 Jurisdictional

stream may require SB 40 certification, which would include mitigation measures designed to improve fish and wildlife habitat.

PEL STUDY SUMMARY

A Planning and Environmental Linkages (PEL) Study and a supporting *Biological Resources Technical Memorandum* were prepared for the project by Felsburg Holt & Ullevig in October and June 2009, respectively (FHU, 2009a; FHU, 2009b). The study area for the PEL Study was documented as a highly urbanized area, comprised primarily of commercial properties with a few residential properties. The study area contained little or no vegetated areas, with the exception of some small areas of irrigated and non-irrigated landscaped and maintained lawns associated with the commercial properties. Furthermore, the PEL Study noted that due to the limited natural vegetation in the area, any existing wildlife species within its study area were either adapted to the urban environment or were introduced species commonly associated with human development. Based upon the project description, location, and observations made within its study area, the PEL Study concluded the following:

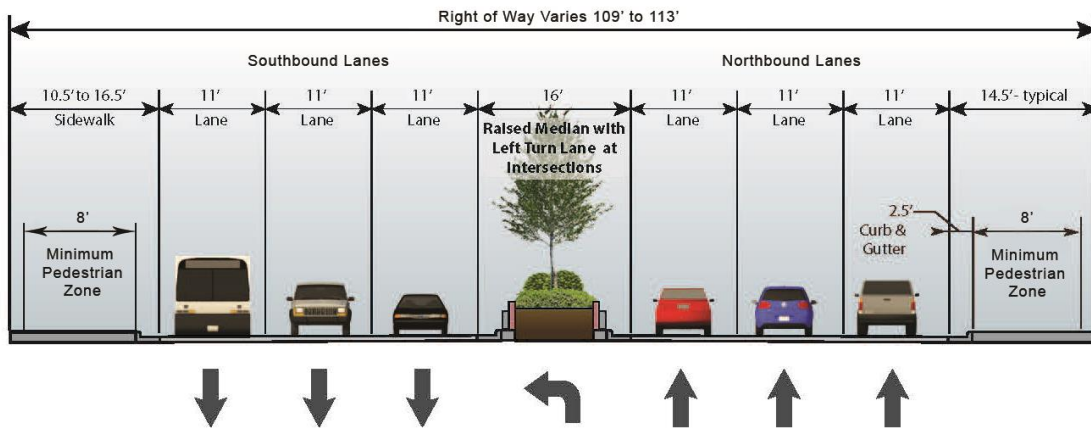
- The study area defined in the PEL Study did not contain suitable habitat for any of the Federally-listed threatened and endangered species, candidate species, or any State-listed species. Therefore, the proposed action identified in the PEL Study would not affect any of these species.
- No potential nesting trees and limited suitable nesting habitat were identified during the therefore, the proposed action identified in the PEL Study had a low potential to impact protected migratory birds and raptors.
- Two potential WUS were identified during the PEL Study, including the water and wetlands associated with Lakewood Gulch and Weir Gulch. Impacts associated with the proposed action identified in the PEL Study were noted due to the proposed construction of a water-quality pond and drainage improvements at Weir Gulch. It was noted that riparian vegetation in the vicinity Weir Gulch might also be minimally impacted.
- Weir Gulch is likely a SB 40 Jurisdictional resource; however, it was noted in the PEL Study that a formal certification would likely not be required.
- Three species of noxious weeds were identified during the PEL Study: field bindweed (*Convolvulus arvensis*), Russian olive (*Elaeagnus angustifolia*), and cheatgrass (*Bromus tectorum*). It was noted that the proposed action identified in the PEL Study had the potential to contribute to the spread of noxious weed species within its study area.

PROPOSED ACTION

The Proposed Action is to add a third northbound lane between West 7th Avenue and West 10th Avenue and a raised median throughout the Project Area to improve mobility and safety (Figure 2). North of West 10th Avenue, the width of the existing three northbound lanes would be brought up to standard (11 feet). The existing southbound lanes would also be brought up to standard width in areas where they are currently substandard.

Note that this Project Area differs from that of the PEL Study as the portion of Federal Boulevard to the south of West 7th Avenue, including the interchange with United States Highway 6 (US 6), is being addressed by the US 6 Bridges Design-Build project. However, the proposed improvements are consistent with the Proposed Action in the PEL Study.

Figure 2. Proposed Action



The widening of Federal Boulevard during the Proposed Action will meet American Association of State Highway and Transportation Officials (AASHTO) and CDOT standards. Access will be limited by controlling left-turns at non-signalized points. In the Proposed Action, the existing signalized crosswalks at the intersections of Federal Boulevard with West 8th Avenue and West 10th Avenue will be upgraded with new traffic and pedestrian signal indications and enhanced concrete crosswalks. Sidewalks on the west and east sides of the street will be brought up to Americans with Disabilities Act (ADA) standards; this will match the existing sections of Federal Boulevard to the north and south.

Access to bus service, which connects to local and regional destinations as well as the greater transit system, including the nearby West Line of RTD's LRT system, will be improved by upgrading the sidewalk to be consistent and compliant with ADA standards. Additionally, connectivity to the Weir Gulch Trail would be enhanced with better signage for the trail, reducing the curvature of the "T" intersection where the trail and sidewalk connect along West 8th Avenue, signage for the Trail, and a wider sidewalk along West 8th Avenue, all of which support the City and County of Denver's (CCD's) Bicycle Master Plan

(CCD, 2001) and Denver Moves (CCD, 2011). These improvements are anticipated to improve mobility, safety, and enhance multi-modal options within the Project Area.

In summary, the Proposed Action consists of the following elements:

- Federal Boulevard roadway alignment and improvements
 - Widening Federal Boulevard from the ROW boundary on the west side of Federal Boulevard toward the east between West 7th Avenue and approximately West 10th Avenue with an additional 11-foot northbound lane
 - Restriping and widening the three northbound lanes on Federal Boulevard between approximately West 10th Avenue to approximately West Howard Place to be 11 feet wide
 - Restriping and widening the three southbound lanes on Federal Boulevard between approximately West 7th Avenue and West 10th Avenue to be 11 feet wide
- Bicycle and pedestrian improvements
 - Improving the sidewalks on the east side of Federal Boulevard between West 7th Avenue and West 10th Avenue to meet ADA standards and better accommodate pedestrians
 - Standardizing inconsistent sidewalk widths on both the east and west sides of Federal Boulevard with an 8-foot pedestrian zone consisting of either a detached 5-foot sidewalk with a 3-foot buffer or an attached 8-foot sidewalk with ADA-compliant curb ramps and driveway cuts
 - Enhancing access to the Decatur-Federal LRT station through improved multi-modal connectivity by improving the sidewalks throughout the Project Area
 - Upgrading existing pedestrian signals and constructing enhanced concrete crosswalks at the signalized intersections of Federal Boulevard with West 8th Avenue and West 10th Avenue
 - Enhancing bicycle and pedestrian connectivity to the Weir Gulch Trail with better signage, wider sidewalks, and access ramps
 - Enhancing bicycle connectivity to Routes D-10 and D-12 by adding signage in the Project Area that meets CCD and CDOT standards

NO-ACTION ALTERNATIVE

The No-Action Alternative would leave Federal Boulevard as it currently is configured and would not provide any improvements beyond typical maintenance activities. The roadway would remain the same, with 3 southbound and 2 northbound lanes (each 9.5 to 11 feet in width) and a continuous two-way, center, left-turn median between West 7th Avenue and West 10th Avenue (Figure 3). The segment of Federal Boulevard from West 10th Avenue to West Howard Place has three southbound and three northbound

lanes, and a continuous two-way left-turn median over Lakewood Gulch (Figure 4). The existing sidewalks along the both sides of Federal Boulevard in the Project Area are either narrow or not well-defined, and the curb ramps at intersections do not meet current ADA or CDOT standards. As part of State Highway 88, normal maintenance of Federal Boulevard would continue to be performed by CDOT. This includes the current direct discharge of stormwater to the nearby gulches.

Figure 3. No-Action Alternative between West 7th Avenue and West 10th Avenue

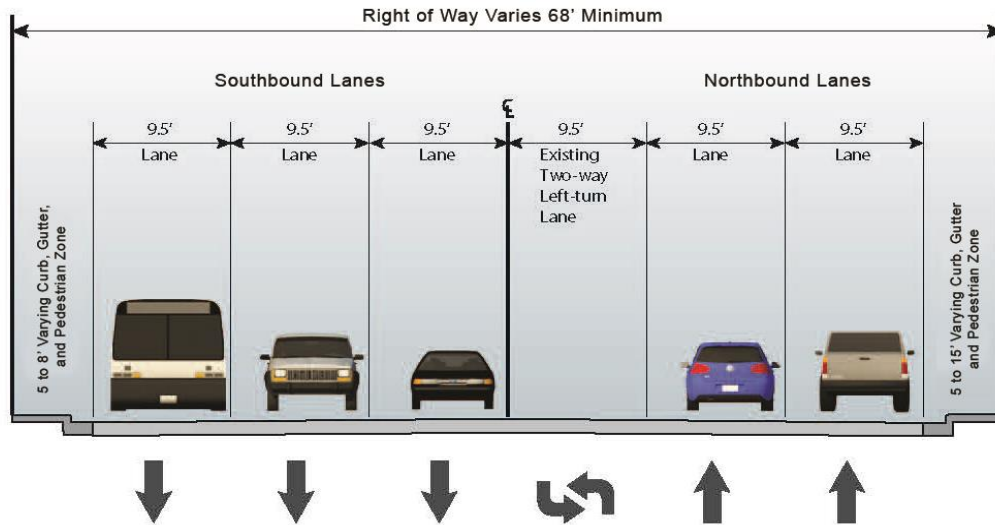
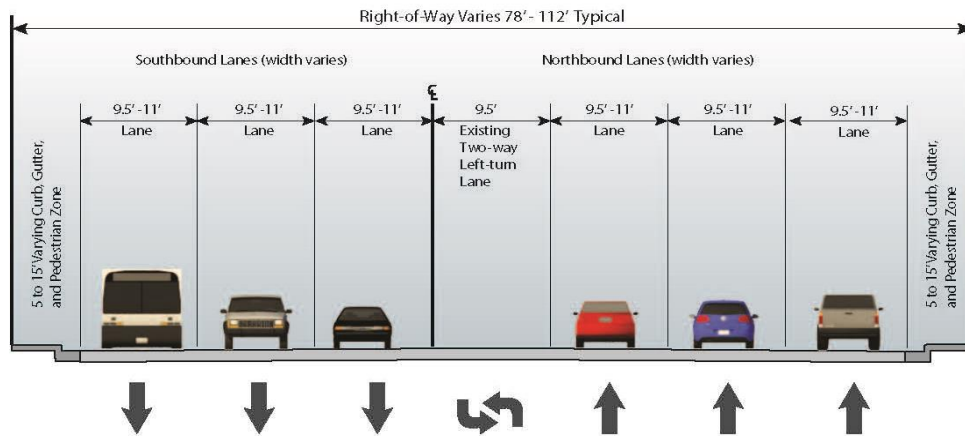


Figure 4. No-Action Alternative between West 10th Avenue and West Howard Place



METHODOLOGY

Pinyon Environmental, Inc.'s (Pinyon's), biologist conducted a site visit on January 2014 to assess if the general conditions of biological to collect pertinent biological information. Pinyon personnel documented the general site conditions by walking the entire Study Area and by taking notes and photographs (Appendix A). Pinyon personnel used a Trimble global positioning system (GPS) to document biological resources.

EXISTING CONDITIONS

General Site Conditions

The general conditions in the Study Area had not changed from those described by the PEL Study and its supporting *Biological Resources Technical Memorandum*. The majority of the urbanized corridor contains commercial and residential development with few vegetated areas. The vegetation present within the Study Area mainly consists of landscaped and horticultural trees and shrubs as well as maintained lawns. The vegetated areas adjacent to Weir Gulch in the southern portion of the Study Area and along Lakewood Gulch in the northern portion of the Study Area are maintained and consist of seeded grasses and few weedy forbs. Unmaintained vegetation along fence lines and adjacent to buildings in the Study Area consists mainly of weedy species including kochia (*Bassia scoparia*), cheatgrass (*Bromus tectorum*), goosefoot (*Chenopodium* sp.), prickly lettuce (*Lactuca serriola*), smooth brome (*Bromus inermis*), bottlebrush squirrel tail (*Elymus elymoides*), and Siberian elm (*Ulmus pumila*).

The entire Study Area is an urban environment that offers little habitat for wildlife. Weir and Lakewood Gulches might provide limited opportunities for foraging; however, these Gulches are also highly disturbed and provide little value to wildlife. During the site visit, the only wildlife species observed were several Canada Geese (*Branta canadensis*) and a Belted Kingfisher (*Megaceryle alcyon*) in close proximity to Weir Gulch, to the east of Federal Boulevard. In addition, Rock Pigeons (*Columba livia*) were observed throughout the Study Area. No prairie-dog (*Cynomys* sp.) activity was noted within or near the Study Area.

Special Status Species

Threatened or Endangered Species

The Study Area was also evaluated for potential habitat for Federally-listed threatened and endangered species, candidate species, or any State-listed species. Based upon a review of the USFWS's *Denver County Species Report* (USFWS, 2014a), the online USFWS Information, Planning and Conservation (IPaC) System (USFWS, 2014b), and the Colorado Natural Heritage Program (CNHP) Tracking List (CNHP, 2014), there are two State-listed and seven Federally-listed species with the potential to occur in, or be impacted by, projects in Denver County.

The two State-listed species that have the potential to occur in Denver County include the Burrowing Owl (*Athene cunicularia*) and the northern leopard frog (*Lithobates pipiens*). Based upon current conditions, suitable habitat for either species is not present within the Study Area.

The western prairie fringed orchid does not occur in Colorado, but it was listed along with four other species because they occur downstream of the Study Area, along the Platte

River, and each could be impacted by projects that would result in water depletions to its tributary, the South Platte River. These include the Interior Least Tern (*Sternula antillarum*), pallid sturgeon (*Scaphirhynchus albus*), Piping Plover (*Charadrius melodus*), Whooping Crane (*Grus americana*), and western prairie fringed orchid. The Federal Boulevard Improvements Project has elements that could cause a depletion to the South Platte River basin. In order to address the effects this depletion will have on Federally-listed species downstream that depend on the Platte River for their survival, CDOT, as a State agency, is participating in the South Platte Water Related Activities Program (SPWRAP). CDOT is cooperating with the Federal Highway Administration (FHWA), which provides a Federal nexus for the Project. In response to the need for formal consultation for the water used from the South Platte basin, FHWA has prepared a *Programmatic Biological Assessment* (PBA) that will estimate total water usage from 2012 until 2019. The PBA addresses the five species noted above. Although the Proposed Action is not expected to alter the flow of water to the South Platte River, some water usage may occur as a result of construction of the Project. Due to the potential water depletion, the Project is *likely to adversely affect* the five down-stream species. Participation in the SPWRAP will mitigate these impacts.

The Study Area falls within the block clearance zone for the Preble's meadow jumping mouse (*Zapus hudsonicus preblei*). The species requires a thick and continuous canopy of shrubs, which do not occur within or near the Study Area. Ute ladies'-tresses orchid (*Spiranthes diluvialis*) requires sub-irrigated soils, which do not occur within the Study Area. The banks at Weir Gulch are too steep to support this species. As a result, the Project would have *no effect* on these two species.

Migratory Birds Including Raptors

Raptor nests were not observed during the survey. Migratory bird nests were not observed in the Weir Gulch box culvert, on the bridge over Lakewood Gulch, or on any man-made structures or vegetation in the Study Area. Although unlikely, the large trees and open spaces outside but in the vicinity of the Study Area could be used for nesting by raptors and migratory birds. In addition, migratory birds could nest on buildings and man-made structures in the Study Area.

Wetlands and WUS

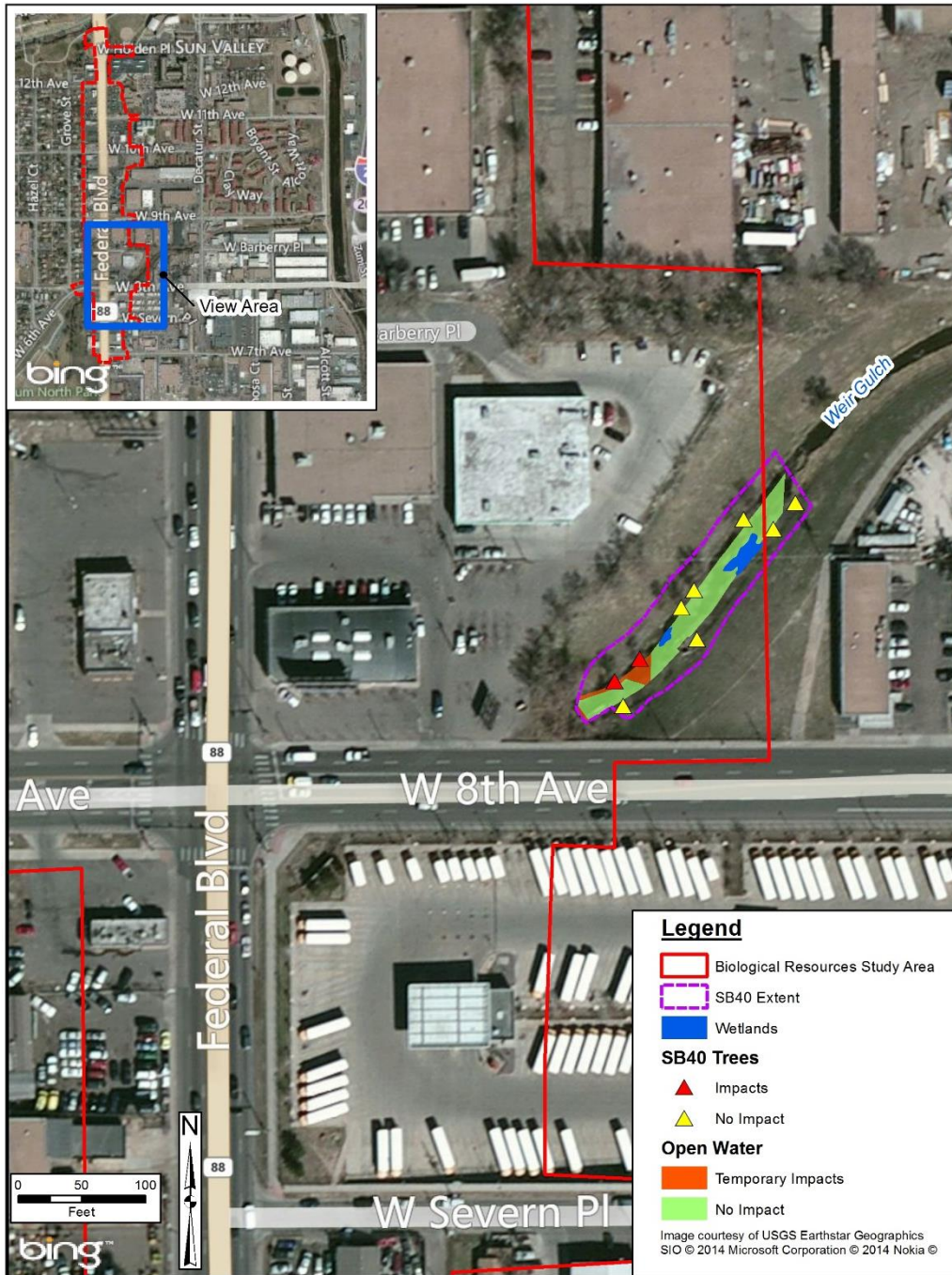
Weir Gulch is incised and channelized within the Study Area. This feature is likely to be a WUS under the jurisdiction of the USACE because it eventually flows to the South Platte River. The bottom portions of both banks are reinforced with riprap and little vegetation has grown in the riprapped portion of the banks. General vegetation along this section of Weir Gulch includes a narrow band of Siberian elm trees (*Ulmus pumila*) growing below the riprapped area; upland grasses and forbs were also noted growing above the riprapped areas. Upland grass species included field pennycress (*Thlapsi arvense*),

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cheatgrass, and redstem filaree (*Erodium cicutarium*). Shrubs were not observed along the stretch of Weir Gulch within the Study Area.

Two wetlands with similar characteristics were identified along Weir Gulch (Figure 5). One smaller wetland was located on the northwest bank of the Gulch, and the other larger wetland is located on the southeast bank of the Gulch. The wetland areas are dominated by quackgrass (*Elymus repens*), with some reed canarygrass (*Phalaris arundinaceae*) and dandelion (*Taraxacum officinale*) also present in the areas. Based upon the presence of hydrophytic vegetation, hydric soils, and wetland hydrology, the two small areas were determined to be wetlands.

Figure 5. Biological Resources in the Vicinity of Weir Gulch



Riparian Resources (SB 40)

SB 40 (33-5-101-107, CRS 1973 as amended) requires any agency of the State to obtain wildlife certification from CPW when an agency plans construction in “...any stream or its bank or tributaries....” Although SB 40 emphasizes the protection of fishing waters, it also acknowledges the need to protect and preserve all fish and wildlife resources associated

with streams in Colorado. The CDOT and CPW have a Memorandum of Agreement (CPW and CDOT, 2013) to clarify when SB 40 certification is required and to describe the procedures to be followed by CDOT in securing this certification.

Weir Gulch provides live water beneficial to fish and wildlife, and it supports wetlands just downstream from the Project. Therefore, Weir Gulch falls under the jurisdiction of SB 40 and Project-related impacts to SB 40 Jurisdictional streams must be assessed. Only two trees (with a total of four stems over two inches diameter) within the SB 40 Jurisdictional extent would be impacted by Project-related activities (Figure 5). Both trees are Siberian elm trees, which are not native to Colorado.

A total of 13 Application Criteria are used to evaluate the need for a Formal SB 40 Certification (CPW and CDOT, 2013). If a project meets one or more of these 13 Application Criteria, then a Formal SB 40 Application must be submitted to the CPW. The CPW then reviews the project and issues a Formal SB 40 Certification. For this Project, none of the 13 Application Criteria are met; therefore, a Formal SB 40 Certification will not be required. Notification of the use of a Programmatic SB 40 Certification will be submitted to the CPW prior to Project initiation.

Although the Project does not require a formal SB 40 Certification, it still falls under the jurisdiction of SB 40; therefore the Project will follow the general conditions specified in the SB 40 guidelines, including the following:

- Trees with a DBH (Diameter at Breast Height) over 2 inches that need to be removed will be replaced at a 1:1 ratio
- Trees, native or non-native, will be replaced with native species. In this case, the four stems of Siberian elm would be replaced with two Plains cottonwood (*Populus deltoids*) and two peach leaf willow (*Salix amygdaloides*) trees
- Tree replacement will occur on site
- Success criteria for the replacement trees must be met per CDOT Specification 214

Noxious Weeds

Three noxious weeds were identified in the Study Area: field bindweed, Russian olive, and cheatgrass.

One additional List C noxious weed was noted during the January 2014 site visit: redstem filaree (*Erodium cicutarium*). This species was noted growing on the hillside above Weir Gulch in the southern portion of the Study Area.

In order to reduce the spread of these noxious species, and to reduce the introduction of other noxious weed into the Study Area, standard best management practices would be followed during the Proposed Action (Table 2).

IMPACT ASSESSMENT

The Proposed Action has a potential to impact various biological resources within the Study Area, as summarized in Table 1.

Table 1. Biological Resources Impacts

Resource	Proposed Action	No-Action Alternative
Special Status Species	<p><u>Permanent Impacts:</u></p> <p>It is not anticipated that the Proposed Action would impact any federally listed threatened, endangered, or special-status species or any state-listed species. Approximately 2.88 acres of land will be disturbed, all of which is urbanized and developed and does not provide suitable habitat for threatened, endangered or special-status species.</p> <p>There is a low potential for the Project to impact any migratory birds or raptors that may use the Project Area for nesting or foraging during construction activities. Although no migratory bird or raptor nests were observed at the time of this study, they could be present by the time of construction and therefore impacted.</p> <p><u>Temporary Impacts:</u></p> <p>No temporary impacts to threatened, endangered or special-status species would occur if the Proposed Action is implemented.</p>	<p><u>Permanent Impacts:</u></p> <p>No permanent impacts to threatened, endangered, or special-status species would occur if the No-Action Alternative is implemented.</p> <p><u>Temporary Impacts:</u></p> <p>No temporary impacts to threatened endangered, or special-status species would occur if the No-Action Alternative is implemented.</p>
Fish and Wildlife	<p><u>Permanent Impacts:</u></p> <p>No permanent impacts to fish would occur if the Proposed Action is implemented.</p> <p><u>Temporary Impacts:</u></p> <p>No temporary impacts to fish would occur if the Proposed Action is implemented.</p>	<p><u>Permanent Impacts:</u></p> <p>No permanent impacts to fish would occur if the No-Action Alternative is implemented.</p> <p><u>Temporary Impacts:</u></p> <p>No temporary impacts to fish would occur if the No-Action Alternative is implemented.</p>
Wetlands and Other Waters of the US	<p><u>Permanent Impacts:</u></p> <p>No permanent impacts to wetlands or open waters would occur if the Proposed Action is implemented.</p> <p><u>Temporary Impacts:</u></p> <p>Impacts may occur due to the construction of a new stormwater outfall at Weir Gulch. It is anticipated that the outfall structure would temporarily impact approximately 436</p>	<p><u>Permanent Impacts:</u></p> <p>No permanent impacts to wetlands or open waters would occur if the No-Action Alternative is implemented.</p> <p><u>Temporary Impacts:</u></p>

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	square feet (0.01 acre) of open water in Weir Gulch; however, wetland areas would not be impacted.	No temporary impacts to wetlands or open waters would occur if the No Action Alternative is implemented.
Riparian Resources (SB 40)	<p>Permanent Impacts:</p> <p>Riparian vegetation along Weir Gulch would be impacted by the installation of a stormwater outfall. Two trees (with a total of four stems over two inches in diameter) within the SB 40 extent would be impacted by Project-related activities</p> <p>Temporary Impacts:</p> <p>There would be removal of riparian vegetation from construction-related activities (i.e., staging areas).</p>	<p>Permanent Impacts:</p> <p>No direct impacts to riparian vegetation would occur if the No-Action Alternative is implemented.</p> <p>Temporary Impacts:</p> <p>No temporary impacts to riparian vegetation would occur if the No-Action Alternative is implemented.</p>
Noxious Weeds	<p>Permanent Impacts:</p> <p>The disturbance of soils due to construction activities could contribute to the spread of noxious weed species or introduction of new weed species from outside sources.</p> <p>Temporary Impacts:</p> <p>There would be removal of vegetation from construction-related activities (i.e., staging areas).</p>	<p>Permanent Impacts:</p> <p>No permanent impacts to noxious weeds or vegetation would occur if the No-Action Alternative is implemented.</p> <p>Temporary Impacts:</p> <p>No temporary impacts to noxious weeds or vegetation would occur if the No- Action Alternative is implemented.</p>

MITIGATION MEASURES

The recommended control measures that would be implemented as part of the final design for the Proposed Action and its implementation are summarized in Table 2.

Table 2. Biological Resource Mitigation Measures

Resource	Proposed Action
Special Status Species	Pre-construction surveys for nesting birds will be completed prior to construction, if construction begins during between April 1 st and August 31 st , by a wildlife biologist with a minimum of three years of experience conducting migratory bird surveys. No construction activities will occur within 50 feet of an active nest and orange construction fencing will be installed around active nests to protect them until the nest

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Resource	Proposed Action
	<p>becomes inactive or the young fledge. The following conditions will apply to construction activities:</p> <ul style="list-style-type: none"> • If tree trimming, vegetation removal, or demolition activities occur between February 15 and August 31, then a pre-construction survey for nesting birds must be completed. Surveys for nesting birds are valid for five days. If work is not completed within this time, a new survey is required. • If construction-related activities occur between February 15 and August 31, a pre-construction survey for nesting raptors must be completed within a half-mile buffer of the project limits. If nesting raptors occur within the buffer area, then Colorado Parks and Wildlife (CPW) "Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors" guidelines should be followed. The CPW may reduce the buffer requirements based upon site conditions and type of work being done, but it must be consulted for approval prior to construction within the recommended buffer zone of an active nest. <p>CDOT Specification 240 includes additional details on the Migratory Bird Treaty Act (MBTA) compliance. Construction activities as a result of the Proposed Action will adhere to these specifications.</p>
Wetlands and Other Waters of the US	A request will be submitted to the USACE, documenting that the Project will be covered under Nationwide Permit Number 7; however, no mitigation is required for the new outfall at Weir Gulch.
Riparian Resources (Senate Bill 40)	<p>The Project will follow the general conditions in the SB 40 guidelines, including the following:</p> <ul style="list-style-type: none"> • Trees with a Diameter at Breast Height over 2 inches that need to be removed will be replaced at a 1:1 ratio. • Trees, native or non-native, will be replaced with native species. In this case, the four stems of Siberian elm will be replaced with two Plains cottonwood (<i>Populus deltoides</i>) and two peach leaf willow (<i>Salix amygdaloides</i>) trees. • Tree replacement will occur on site. • Success criteria for the replacement trees will meet CDOT Specification 214.
Noxious Weeds	<p>In order to reduce the spread of noxious-weed species, and to reduce the introduction of other noxious weed into the area, standard BMPs will be followed. Some general BMPs that will reduce the spread of noxious weeds include:</p> <ul style="list-style-type: none"> • Equipment entering and leaving the Project Area will be inspected as being free of mud and vegetation material capable of moving weed seed. Any vehicle found to be transporting mud and vegetation capable of moving weed seed shall be thoroughly cleaned before entering or leaving the Project Area. • Soil disturbance will be minimized to the greatest extent possible. • Disturbed soil will be re-seeded with a weed-free seed mix as soon as possible after completion of work. • To reduce the potential for introducing and spreading nuisance aquatic species, project equipment that was previously used in another water body will be disinfected as directed in the SB40 requirements prior to entering the Project Area.

REQUIRED PERMITS

The following permits and/or agency coordination are required as part of the Proposed Action:

- A request will be submitted to the USACE, documenting that the Proposed Action will be covered under NWP Number 7
- Notification of the use of a Programmatic SB 40 Certification will be submitted to the CPW

STAKEHOLDER COORDINATION

The CCD has continued to provide opportunities for public involvement between the PEL Study in 2009 and initiation of this EA. A public meeting was held in August 14, 2014 prior to the completion of this EA to solicit further comment on and discussion of the Project. A Spanish-speaking translator was present at the open house, and materials were presented in both English and Spanish; Korean translation was available upon request. Stakeholder coordination will continue to take place throughout the Project's development and construction.

REFERENCES

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Appendix A - Photographic Log

Biological Resources for the Federal Boulevard Improvements EA

Photo 1.
General view
of the Study
Area.
Photograph
taken from
between
West 10th
Avenue and
West 11th
Avenue, from
west side of
Federal
Boulevard.
Facing north.



Photo 2.
General view
of the Study
Area. Same
location as
previous
photograph.
Facing
northeast.



Photo 3.
General view
of the Study
Area. Same
location as
previous
photographs.
Facing east.



Photo 4.
General view
of the Study
Area. Same
location as
previous
photographs.
Facing
southeast.



Biological Resources for the Federal Boulevard Improvements EA

Photo 5.
General view
of Study Area.
Same location
as previous
photographs.
Facing south.



Photo 6.
General view
of Study Area.
Same location
as previous
photographs.
Facing west.



Biological Resources for the Federal Boulevard Improvements EA

Photo 7.
Weir Gulch
west of
Federal
Boulevard.
Area not
being
impacted by
Project.
Photograph
taken
adjacent to
West 8th
Avenue, west
of Federal
Boulevard
Facing east.
Weir Gulch in
right portion
of
photograph.



Photo 8.
Weir Gulch
west of
Federal
Boulevard.
Area not
being
impacted by
Project. Same
location as
previous
photograph.
Facing south.



Biological Resources for the Federal Boulevard Improvements EA

Photo 9.
Weir Gulch
east of
Federal
Boulevard. A
stormwater
outfall is
planned to
outflow into
Weir Gulch at
this location.
Photograph
taken
adjacent to
West 8th
Avenue, east
of Federal
Boulevard.
Facing west.



Photo 10.
Weir Gulch
east of
Federal
Boulevard.
Same location
as previous
photograph.
Facing north.
Weir Gulch in
right portion
of
photograph.



Biological Resources for the Federal Boulevard Improvements EA

Photo 11.
Weir Gulch
east of
Federal
Boulevard.
Same location
as previous
photographs.
Facing
northeast.
Weir Gulch, in
center of
photograph,
note the box
culvert, which
flows away
from the
camera
toward the
northeast.



Photo 12.
Weir Gulch
east of
Federal
Boulevard.
Same location
as previous
photographs.
Facing
northeast.
Weir Gulch in
left portion of
photograph.



Photo 13.
Weir Gulch
east of
Federal
Boulevard.
Photograph
taken
adjacent to
Gulch. Facing
southwest.



Photo 14.
Weir Gulch
east of
Federal
Boulevard.
Photograph
taken
adjacent to
Gulch. Facing
west.



Photo 15.
Weir Gulch
east of
Federal
Boulevard.
Photograph
taken
adjacent to
Gulch. Facing
north.

