

3.13 SENSITIVE SPECIES

Threatened and endangered (T&E) species are species that have been identified pursuant to the federal Endangered Species Act (ESA) of 1973, as amended (16 USC 1531-1543). A species listed as "endangered" is one that is in danger of extinction throughout all or a significant portion of its range. A species listed as "threatened" is one that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. In addition to being listed as threatened or endangered, a species can also be listed as a "species of concern." Species of concern are recognized by the U.S. Fish and Wildlife Service (USFWS) and the Colorado Division of Wildlife (CDOW) as species with declining populations or requiring conservation efforts to prevent decline but are not provided protection.

The ESA provides federal protection for species listed as threatened or endangered by the USFWS. The ESA prohibits any federally-funded or federally-authorized project from harming or killing a listed species or adversely affecting designated critical habitat for such species. A project could be considered a taking of a listed species if it modifies habitat, precludes or impedes development of habitat, would likely disturb feeding or breeding activities, or would harm or kill an individual of that species. Coordination between CDOT and the USFWS is necessary when a project may affect federally-listed species or designated critical habitat, even if the effects are expected to be beneficial.

Under Section 7 of the ESA, federal agencies such as FHWA are required to consult with the USFWS to ensure they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroying or adversely modifying designated critical habitat. (Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species.)

The State of Colorado also protects T&E species under Colorado Revised Statute, Title 33, Article 2. The Colorado Natural Heritage Program (CNHP) and CDOW maintain databases of state-listed T&E species and species of concern. On a statewide level, CDOW and CNHP track

species diversification and abundance (rarity), and the CNHP database provides species information on an advisory level.

Impacts to T&E species are closely linked to impacts to the habitat they require because they typically have low populations and are sensitive to disturbances such as the loss or fragmentation of habitat. As a result, it is necessary to determine a project's effects on habitat when evaluating potential impacts to T&E species.

3.13.1 Affected Environment

A T&E species assessment was conducted through consultation with federal (USFWS) and state (CDOW) resource agencies, a literature review (including search results from the CNHP location and status database), field surveys, and correspondence with local bird experts from CDOW and U.S. Army Corps of Engineers. Field surveys were completed in 2003 as a means of confirming the presence of individuals or suitable habitat for any of the listed species.

In a letter dated March 9, 2005, the USFWS provided a list of federally designated threatened or endangered species that may be located within or near the project area. The species identified consisted of the Bald Eagle (prior to their delisting in July 2007), greenback cutthroat trout, and Colorado butterfly plant (see **Appendix B**). The USFWS also responded that, while it has no known records verifying the presence of the Arkansas darter in the project area, suitable habitat exists along the Arkansas River and Fountain Creek. Presence of the Colorado butterfly plant could not be verified in the project area. As the area has been urbanized, a predominant lack of vegetation exists in areas outside of the Fountain Creek Park Land and Arkansas River Corridor. The urban habitats present in the project area are of low quality and inhabited predominantly by common urban wildlife species. Because no suitable habitat for the Colorado butterfly plant occurs in the project area, it is not discussed further in this DEIS. Likewise, no suitable habitat for the greenback cutthroat trout occurs in the project area, and this species is not discussed further.

In correspondence dated November 22, 2004, CDOW stated that it had no records indicating the presence of any state-listed species within the project area. Therefore, state-listed species were evaluated based on suitable

habitat requirements found in the project area. Species that have been known to occur or may potentially occur in the project area based on habitat requirements are listed in **Exhibit 3.13-1**.

EXHIBIT 3.13-1

Threatened and Endangered and Rare Species Known to Occur or Potentially Occurring in the Project Area

Species	Regulatory Status ¹	Rarity ²	Habitat	Occurrence Potential
Amphibians				
Plains Leopard Frog (<i>Rana blairi</i>)	SC	S3/G5	Wetlands and riparian areas adjacent to open water/open water.	Observed along the shore of Arkansas River in the project area.
Birds				
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	SC	G5, S1B, S3N	River floodplains, lakes, reservoirs, and prairie dog towns.	Possible winter visitor in the project area; however, use of the project area is incidental to more heavily used upstream areas.
Fish				
Arkansas Darter (<i>Etheostoma cragini</i>)	FC, ST	S2/G3G4	Spring-fed, pebble, or sand bottomed pools of small spring-fed streams and wetlands, open water.	Possible that some ephemeral habitat may be present in the form of overflow pools on Fountain Creek wetlands in the project area.

Sources: Andrews and Righter, 1992; Kingery, 1998; Colorado Rare Plant Technical Committee, 1999; Colorado Department of Wildlife (CDOW), 2003a; CDOW, 2003b; Colorado Natural Heritage Program (CNHP), 2001; Hammerson, 1999; Pantle, 2003; U.S. Fish and Wildlife Service, 2003.

¹FC = federal endangered species candidate; FE = federal endangered species; FT = federal threatened species; SC = state species of concern; SE = state endangered species; ST = state threatened species

²Colorado Natural Heritage Program Ranking Scheme:

S1/G1 = critically imperiled in the state/globally (five or fewer occurrences)

S2/G2 = imperiled in the state/globally (6 to 20 occurrences)

S3/G3 = vulnerable throughout the state/globally or found locally in a restricted range (21 to 100 occurrences)

S4/G4 = apparently secure in state/globally, though may be rare in parts of range, especially periphery

S5/G5 = demonstrably secure state/globally, though it may be quite rare in parts of its range

S#B = refers to breeding season rareness

S#N = refers to non-breeding season rareness

G = global ranking – imperilment of species over its entire range

3.13.1.1 Species Known to Occur

Plains Leopard Frog

The plains leopard frog occurs along creek and river channels (wetlands and riparian areas adjacent to open water) in southeastern Colorado (Hammerson, 1999). The plains leopard frog is not a state or federal protected (listed) T&E species, but it is listed by CNHP as a rare and

vulnerable species. This species is designated by CNHP as S3, meaning that between 21 and 100 occurrences occur in the state. Species population status within Colorado has not been accurately determined; however, water projects, cattle grazing, and predation/ competition with the bullfrog (*Rana catesbeiana*) are considered threats to this species.

3.13.1.2 Species Potentially Occurring

Bald Eagle

The USFWS developed the National Bald Eagle Management Guidelines to help avoid and minimize impacts on Bald Eagles after their delisting in July 2007. The guidelines are intended to advise landowners, land managers, and others who share public and private lands with Bald Eagles about when and under what circumstances the protective provisions of the Bald Eagle Protection Act may apply to their activities. Although the Bald Eagle has been delisted from federal status, it remains a state-listed species of concern and may occur incidentally in the project area as a winter migration visitor. This species is designated by CNHP as S1B/S3N, meaning there are 5 or fewer breeding pairs and 21 to 100 non-breeding occurrences known to exist in the state. Andrews and Righter (1992) show the Bald Eagle distributed throughout the Arkansas River corridor (open water, riparian, and wetland habitats) as a winter migrant from Pueblo County to eastern Colorado; however, communication with a local avian expert suggests only casual winter/migratory use of the Arkansas River in the project area by Bald Eagles (Truan, 2003). This was confirmed by a second regional avian expert who stated that the primary Bald Eagle concentration is upstream of the project area at Pueblo Reservoir (Pantle, 2003). Thus, the occurrence of this species in the project area would be ephemeral at best. Due to the minimal potential for occurrence in the project area, the Bald Eagle was not considered for further analysis in this DEIS.

Arkansas Darter

The Arkansas darter is a state-threatened species and a federal candidate for listing under the ESA. The CNHP designation is S2, meaning that there are between 6 and 20 occurrences of this species in the state. Potential habitat exists in the project area, although presence of the species has not been confirmed (CDOW, 2003b). This species is known to inhabit Fountain Creek (open water and wetland habitats) in El Paso County north of Pueblo, and CDOW believes that Arkansas darters may inhabit small overflow ponds in Fountain Creek wetlands in the project area when they are washed downstream from El Paso County during flood events.

Other Species

Other species potentially occurring in the project area are not discussed in this DEIS due to lack of suitable habitat or because they have not been observed in the project area. Pre-construction surveys will be conducted for all species, including prairie dogs and burrowing owls.

Further details on sensitive species in the project area may be found in the *Threatened and Endangered Species Assessment Technical Memorandum, New Pueblo Freeway* (CH2M HILL, 2005e).

3.13.2 Environmental Consequences

Impacts to T&E species could occur if the proposed project modifies habitat, precludes or impedes the development of habitat, has the likelihood of disturbing species' feeding or breeding activities, or results in the taking of an individual. This section describes impacts to the plains leopard frog and the Arkansas darter resulting from loss of habitat under the No Action Alternative, the Existing I-25 Alternative, and the Modified I-25 Alternative.

3.13.2.1 No Action Alternative

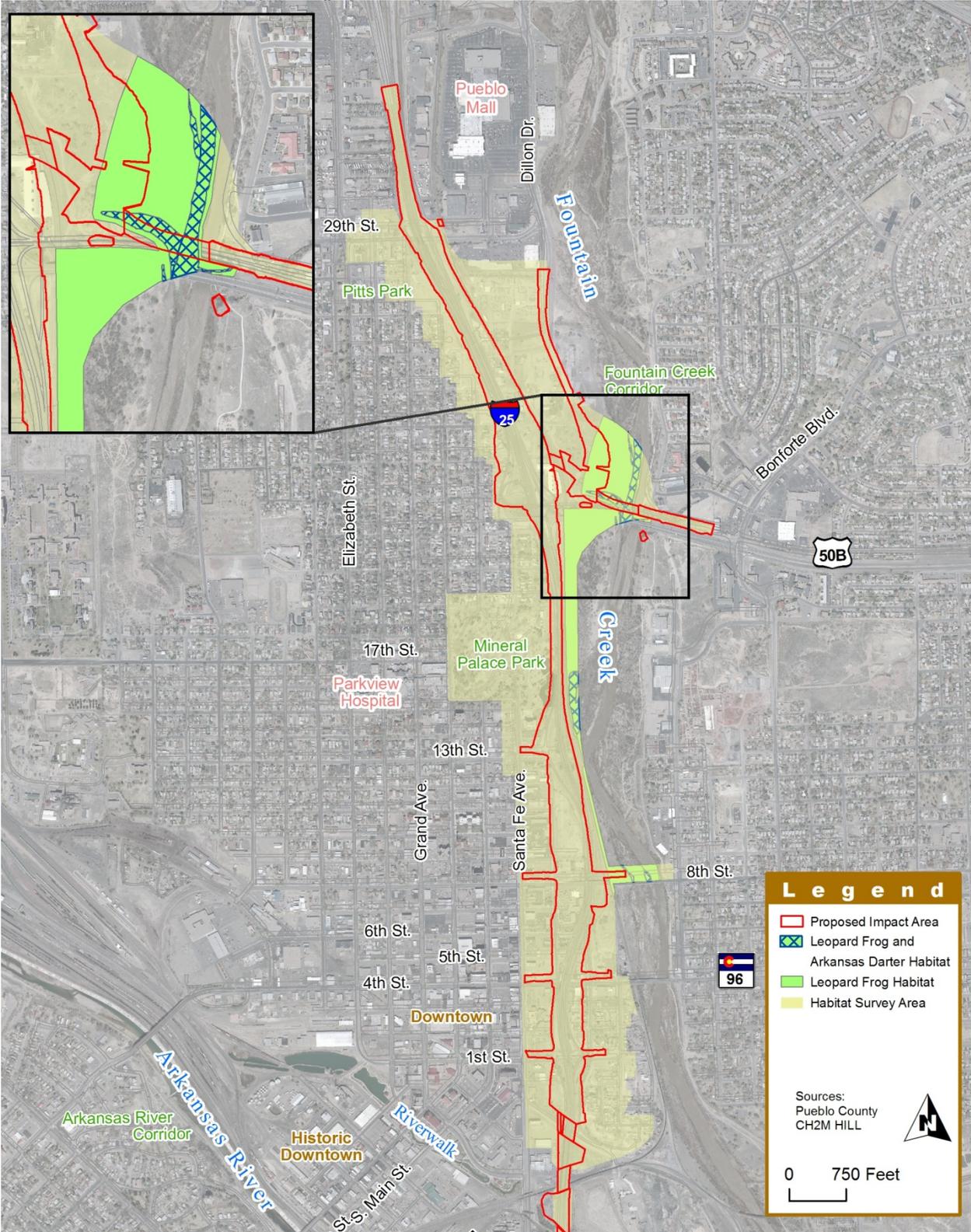
Under the No Action Alternative, the existing I-25 would remain and only routine maintenance would occur. No permanent or short-term impacts would occur to the habitats of the plains leopard frog or the Arkansas darter.

3.13.2.2 Build Alternatives

The loss of plains leopard frog and Arkansas darter habitat due to right-of-way (ROW) encroachment represents only a small portion of the total habitat available along the Arkansas River and Fountain Creek. The remaining open water, wetland, and riparian areas would remain intact and usable by both species. As a result, although both species would be affected due to the loss of habitat, the impacts are not likely to result in an adverse affect to either species.

Consultation under Section 7 of the ESA occurs during the National Environmental Policy Act (NEPA) process if listed species or their critical habitats would be affected by the proposed action. During preparation of the FEIS, a formal effects determination will be prepared. At this point in the NEPA process, it is likely that a "no effects" determination for listed species would be prepared. Formal Section 7 consultation with the USFWS would not be required if a "no effects" determination is prepared.

EXHIBIT 3.13-2
 Potential Habitat for the Plains Leopard Frog and the Arkansas Darter in the North Area



North Area

Under either Build Alternative, impacts to plains leopard frog and Arkansas darter habitat would occur in the wetland and riparian areas along the west side of Fountain Creek, as shown in **Exhibit 3.13-2**. A total of 0.13 acre of Arkansas darter habitat would be impacted by the conversion of wetlands to new ROW for the extension of Dillon Drive near US 50B. A total of 5.04 acres of plains leopard frog habitat would be permanently impacted due to construction activities. This includes 4.91 acres of riparian habitat that would be impacted by the extension of Dillon Drive to the south and 8th Street to the east, in addition to the 0.13 acre of wetlands mentioned above.

The loss of plains leopard frog and Arkansas darter habitat represents a small portion of the total habitat for these species located along this stretch of Fountain Creek through Pueblo. The remaining wetland and riparian areas along Fountain Creek throughout Pueblo would remain intact and usable by both species.

South Area

Both the Existing I-25 Alternative and the Modified I-25 Alternative would impact approximately 0.09 acre of plains leopard frog habitat in the South Area, as shown in **Exhibit 3.13-3**. The impacts would result from the placement of a box culvert in the wetland channel located southeast of the Pueblo Boulevard interchange. The impacted wetland represents only a small reduction in the overall wetland size, and the majority of the wetland would remain intact. The Bessemer Ditch does not provide suitable habitat because it is a concrete-lined channel that is subject to seasonal fluctuations in flow due to irrigation demands.

Central Area**Existing I-25 Alternative**

In the Central Area, the Existing I-25 Alternative would involve construction of a single new bridge to replace the two existing bridges for I-25 to cross the Arkansas River, as well as the widening of the existing Santa Fe Bridge. The new bridge piers would encroach on approximately 0.01 acre of open water habitat, as shown in **Exhibit 3.13-4**. This would be a "transverse encroachment," meaning that the encroachment is perpendicular to the flow of the stream. The new piers would be similar in size to the piers that currently support I-25. The impact is expected to be negligible because the new piers would not alter river surface flows or

restrict the movement of fish or frogs. The wetland located east of I-25 and south of the Arkansas River provides habitat for the plains leopard frog. Although only 0.07 acre of the wetland would be impacted due to construction activities, these areas would be fragmented and divided in half to accommodate the extension of Abriendo Avenue to the east of I-25 to connect Abriendo Avenue to Santa Fe Drive. It is anticipated that the remaining areas would continue to provide suitable habitat for the plains leopard frog.

Modified I-25 Alternative

In the Central Area, the Modified I-25 Alternative would impact a total of 0.08 acre of potential habitat for the Arkansas darter and 3.55 acres of potential habitat for the plains leopard frog, as shown in **Exhibit 3.13-5**. Specifically, a total of 0.08 acre of open water habitat for both species would be lost due to the placement of 18 new bridge piers in the Arkansas River streambed that would carry the new I-25 alignment and the two additional ramps. The existing piers that currently support I-25 will remain within the Arkansas River to carry the repurposed Santa Fe Avenue. The old Santa Fe/US 50B Bridge over the Arkansas River would be removed, which would remove one existing pier from the Arkansas River. Similar to the Existing I-25 Alternative, the additional bridge piers would not substantially alter river surface flows or restrict the passage of either species upstream or downstream, as modeled in the *Floodplain Technical Memorandum* (CH2M HILL, 2005f). On the south bank of the Arkansas River, an additional 2.54 acres of plains leopard frog habitat could be impacted due to the placement of the southern bridge abutment.

South of Abriendo Avenue, the new alignment of I-25 would remove almost an entire wetland, resulting in a loss of 0.93 acre of habitat for the plains leopard frog.

3.13.2.3 Indirect Effects

It is expected that either Build Alternative could result in temporary impacts to plains leopard frogs and their habitat, including mortality and injury, primarily from increased turbidity in the Arkansas River, increased siltation, and vibration from construction equipment. However, these impacts are considered minor compared to the areas and habitat available to the plains leopard frog in other locations. The primary impact of either Build Alternative on sensitive species is expected to be temporary in nature and associated with construction activities.

EXHIBIT 3.13-3
 Potential Habitat for the Plains Leopard Frog and the Arkansas Darter in the South Area

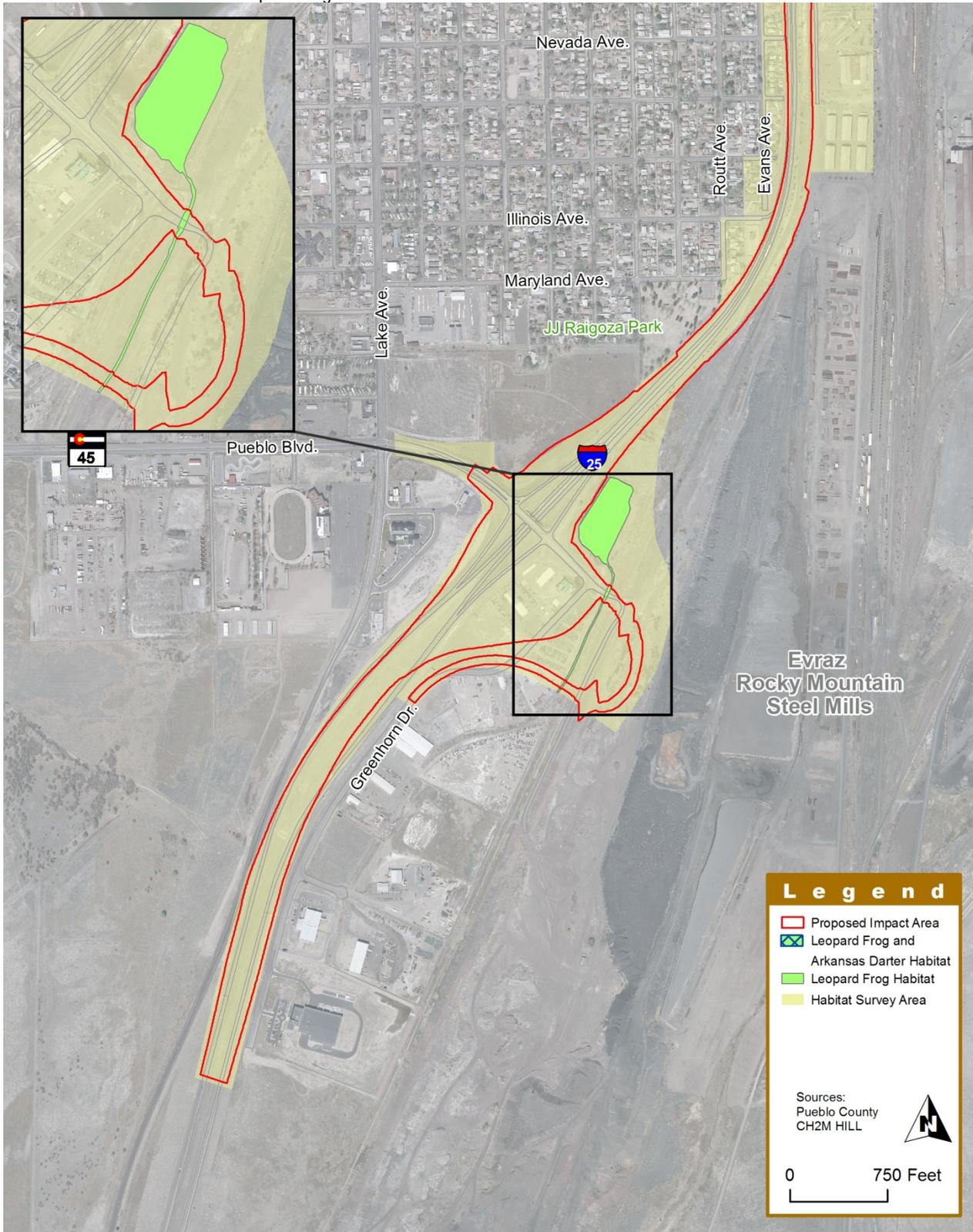


EXHIBIT 3.13-4

Potential Habitat for the Plains Leopard Frog and the Arkansas Darter in the Central Area under the Existing I-25 Alternative

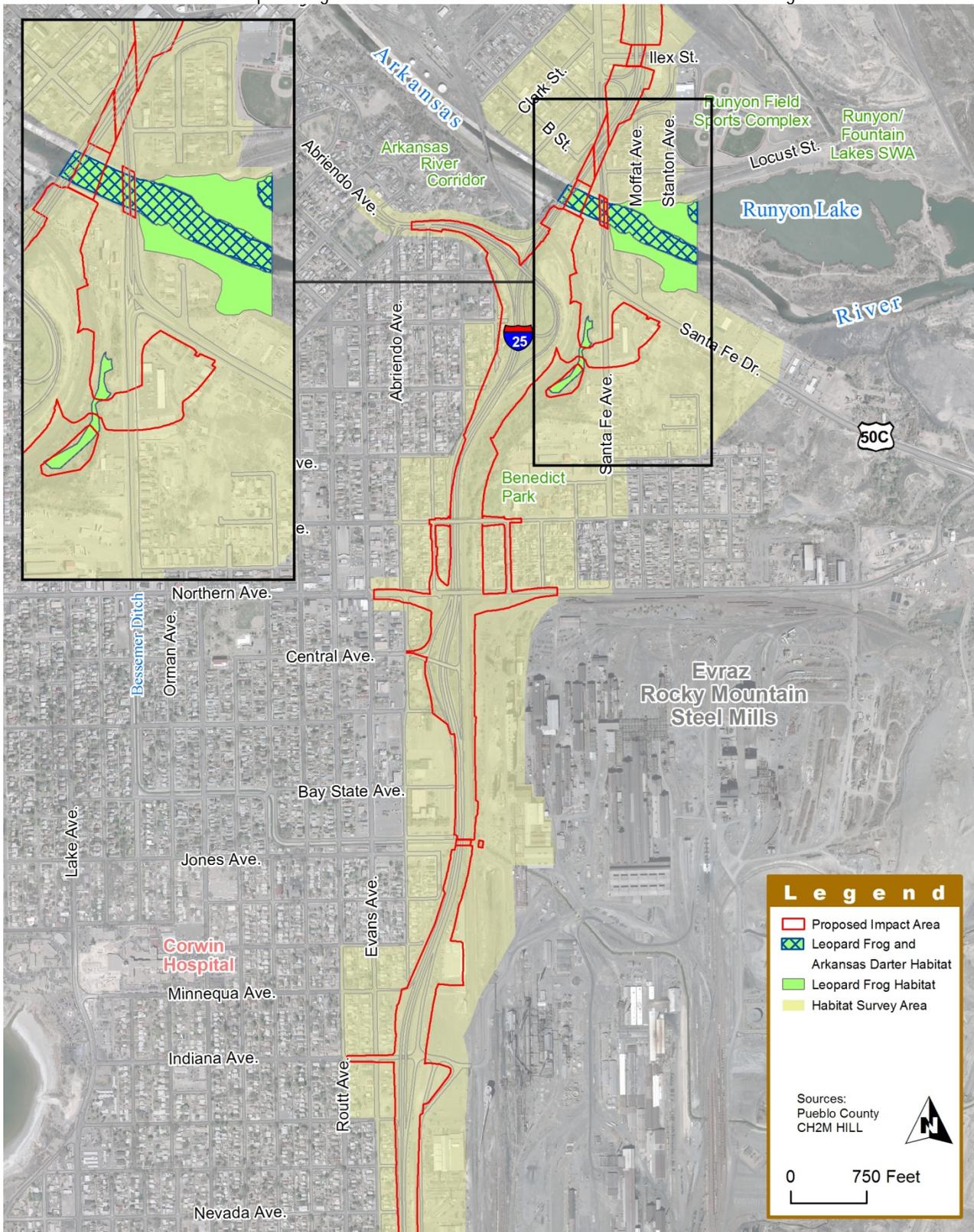
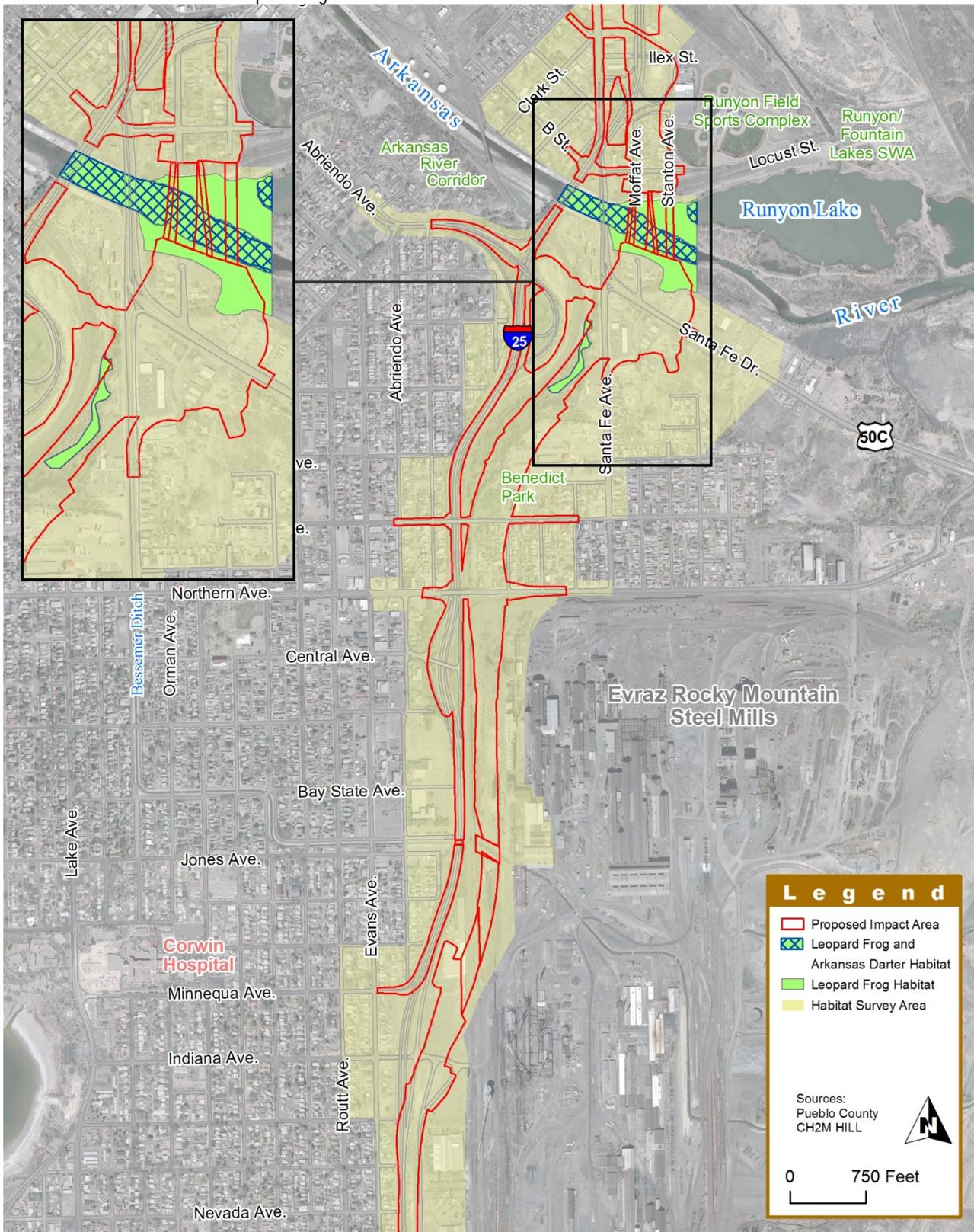


EXHIBIT 3.13-5
 Potential Habitat for the Plains Leopard Frog and the Arkansas Darter in the Central Area Under the Modified I-25 Alternative



In the context of the Arkansas River and Fountain Creek, any species displacement caused by the project would be very minor and is not expected to affect the long-term health or survival of the species.

Because the Modified I-25 Alternative would move I-25 to the east on a new alignment, the new bridge over the Arkansas River would result in greater impacts to Arkansas darter and plains leopard frog habitat when compared to the Existing I-25 Alternative.

3.13.3 Mitigation

Unless otherwise specified, the following mitigations apply to both the Existing I-25 Alternative and the Modified I-25 Alternative.

Mitigation will be required to offset impacts to Arkansas darter and plains leopard frog habitat within the project area. Although avoidance and minimization techniques were used to the extent possible during the design process to limit or reduce impacts to habitat, minor impacts are still expected to occur. Additional surveys will occur prior to final design and construction to identify additional opportunities to avoid and minimize impacts to sensitive species and habitat. Specific mitigation actions that CDOT will implement during final design are listed below.

- ❖ The mitigation measures to compensate for impacts on wetlands, wildlife, flowing water, and riparian habitats used by the plains leopard frog and Arkansas darter are

presented in sections **3.7 Wetlands**, **3.12 Fish and Wildlife**, **3.15 Water Quality**, and **3.18 Noxious Weeds**. These mitigation measures might benefit terrestrial and aquatic plant and wildlife species by improving and protecting potential habitat along the Arkansas River and Fountain Creek, as well as their respective floodplains. Implementing these mitigation measures might enlarge the size of contiguous blocks of wetland and riparian habitats, improve habitat connectivity, and enhance functions of the existing habitat. Such results would provide functional benefits for sensitive species.

- ❖ Habitat restoration or enhancement will be conducted to mitigate for impacts that could not be avoided, including impacts to the wetland and riparian areas along Fountain Creek and adjacent to the Arkansas River. Examples of habitat restoration and enhancement include planting of native species beneficial to wildlife and removal and management of noxious weeds.
- ❖ A SB 40 permit will be obtained by CDOT, as discussed in **Section 3.12 Fish and Wildlife**.
- ❖ Please refer to **Section 3.18 Noxious Weeds** for detailed information on weed control mitigation measures.
- ❖ Please refer to **Section 3.7 Wetlands** for detailed information on wetlands mitigation measures.