

**Wetland Assessment and 404 Permitting Update
East Fork Jimmy Camp Creek Channel Design
Creekside at Lorson Filing No.1
U.S.A.C.E. Action No. SPA-2005-00757
Colorado Springs, Colorado**

Prepared for:
**Lorson Development
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Kiowa Project No. 18020

August 15, 2019

Introduction

The proposed East Fork Jimmy Camp Creek Channel Design Project is located on the East Fork of Jimmy Camp Creek in El Paso County Colorado, in Section 24 Township 15 South and Range 65 West of the 6th Principal Meridian (see Vicinity Map on Figure 1). GPS coordinates for the center of the project are approximately 38.732286° Lat. and -104.637418° Long.

Project impacts for the East Fork Jimmy Camp Creek on the Lorson Ranch were originally authorized by the Pueblo Regulatory Office of the U.S. Army Corps of Engineers on September 22, 2006 under USACE Action No. 2005-00757 with an expiration date of December 31, 2009. The permit authorized channel bank linings, grade control structures and two roadway crossings for three segments for the entire length of the East Fork Jimmy Camp Creek on the Lorson Ranch from the north boundary to the south boundary.

Attached Figure 2, Permit Modification Amendment No. 1 Map (Revised) shows locations of jurisdictional activities authorized under this permit. The central stream segment, designed as a reconfigured reach (Item#1 on Figure 2) was completed in about 2007 or 2008. Subsequently, a construction standstill in 2009 occurred with no further activity for a number of years. It appears that the permit was extended twice, first to September 2001 and then to September 2021.

In August 2017, Kiowa Engineering consulted with the USACE to update the existing permit per Modification Amendment No. 1. The purpose of this Modification Amendment was to address and clarify Special Conditions in the permit and summarize all future activities that were originally authorized in this permit.

Following Modification Amendment No. 1, Items 2 (Upper Reach Channel Improvements), 3 (Fontaine Boulevard Bridge) and 4 (Lorson Boulevard Bridge) have been completed to date.

Item 5, the reach of the East Fork Jimmy Camp Creek from the existing trapezoidal channel to the south property line still remains to be completed at this time. The Channel Design is nearing final design. Per Special Condition 2 of the Permit Modification, the lower stream preservation reach (Item #5 on Figure 2) is anticipated to be about 3,600 linear feet of three-to-one riprap bank linings in select locations with possibly two steel piling grade control structures. We anticipate the bottom width of the channel will be similar to the existing channel width. The design concept for this reach is to retain the stream alignment as much as possible, to avoid future channel incision and to lay back nearly vertical banks to three-to-one. The proposed invert will remain similar to the existing elevations.

The USACE will need a Wetland Delineation Update prior to authorization of the last remaining item authorized under the existing permit and the Final Design will be

reviewed by the agency. We expect that the Final Design will be compatible with agency requirements.

Wetland Assessment

The Lorson Ranch has been delineated twice during the permitting process. The original delineation by Savage and Savage in 2002 for the overall project delineated both the Mainstem Jimmy Camp Creek and the East Fork Jimmy Camp Creek. Subsequently, the Mainstem Jimmy Camp Creek was permitted and completed under Action No. 2002 00701. The East Fork Jimmy Camp Creek in the Lorson Ranch was again delineated in March 7, 2006 by AG Environmental Services, Inc. under Action No. 2005 00757. The existing delineations for this reach will be reviewed and verified for current conditions.

Preliminary field investigation in June of 2017 indicated that an Ordinary High Water Mark as indicated by a channel bank and bed configuration for this segment ranges from about 10- to 20-feet wide and will be used as the jurisdictional limit. Portions of the jurisdictional limits are unvegetated and other areas are vegetated.

Vegetation

The dominant upland vegetation community in the project area is short grass prairie dominated by smooth brome grass where disturbed and blue grama in undisturbed areas. A poorly developed riparian forest/shrubland is present along the waterway. Small pockets of wetland vegetation maybe present within the Ordinary High Water Mark. As the project site had been historically used for grazing to the extent it was overgrazed, large areas of weedy species are present.

Wetland plant species found were sandbar willow (*Salix exigua* OBL), soft stemmed bulrush (*Scirpus sp.* OBL), American three Square (*Schoenoplectus pungens* FACW), and cattails (*Typhus angustifolia* OBL). On the whole, wetland species were sparse and interspersed with communities of upland species.

Riparian forest/shrubland species present on the site are dominated by non-native Russian olive trees (*Eleagnus angustifolia* NI), FACU), snowberry (*Symphoricarpos occidentalis* FACU), wildrose (*Rosa woodsii* FACU) and elm (*Ulmus pumila* NI). In general, the riparian species present along the waterway were non-native undesirable native species that may shade the water but not promote water quality.

Upland herb species encountered include smooth broom (*Bromus inermis* NI), blue grama (*Bouteloua gracilis* NI), filaree (*Erodium cicutarium* NI), annual brome grass (*Bromus tectorum* FACU), mullein (*Verbascum thaspus* NI), and Canada thistle (*Cirsium arvense* FACU). Other weedy species present were blue mustard (*Chorispora tenuella* NI) and flixweed (*Descurainia sp.* NI).

Hydrology

The East Fork Jimmy Camp Creek is a 'blue-line' drainageway as depicted on the Fountain Quadrangle Map (1994) and appears to have an intermittent flow and as such is an assumed jurisdictional waterway. Channel slopes are nearly vertical and range from 3- to 10-feet of elevation.

The Fountain Mutual Irrigation Canal formerly traversed around the East Fork Jimmy Camp Creek channel and contributed to the historic hydrology. About 10 or more years ago, the irrigation canal was realigned causing adjacent wetlands to dry out.

Soils

The native soils within the project area per the Soil Survey of El Paso County are the Blendon sandy loam and the Ellicott loamy coarse sand. Neither of these soils are considered hydric indicators, although both could have pockets of hydric soil inclusions.

The Blendon sandy loam, 0-3% slopes, is a deep well drained soil with a depth of the water table anticipated to be greater than 6.5 feet, run-off is anticipated to be low, frequency of flooding and/or ponding is none. This upland soil was formed in alluvium and residuum and is derived from arkosic sedimentary rock.

The Ellicott loamy coarse sand, 0-5% slopes are somewhat excessively drained soils, with an expected depth to the water table to be greater than 6.5 feet. Runoff is anticipated to be very low, frequency of flooding is frequent, but ponding is none. This soil is formed on floodplains and terraces.

Potential Wetland Resources and Jurisdictional Waters of the U.S.

An update to two prior Wetland Delineations is in progress and will be submitted to the agency prior to review and concur. The jurisdictional areas with the channel will be delineated as Waters of the U.S. and adjacent wetlands will be quantified. It is expected that small pockets of wetlands will be found with the Waters of the U.S.

Consultation with the U.S. Army Corps of Engineers will need to take place when design plans are finalized. Efforts to avoid and minimize impacts to these jurisdictional areas are in progress. Where wetland impacts are unavoidable, mitigation may be required to offset impacts. Per agency guidelines, native plant species will be required for stream restoration.

References

El Paso County, Colorado, Comprehensive Hydric Soils List. U.S. Department of Agriculture, Soil Conservation Survey.

Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region, 2008, ERDC/EL TR-09-12.

Munsell Color Charts. Macbeth: a Division of Kollmorgen Corporation.

National Wetland Inventory, Fountain Quadrangle, 1975. U. S. Department of the Interior, U.S. Fish and Wildlife Service.

National Wetland Inventory Wetlands Mapper August, 2019. U. S. Department of the Interior, U.S. Fish and Wildlife Service.

Reed, P.B. 1996. National List of Plants That Occur in Wetlands: Colorado. U.S. Fish and Wildlife Service, Washington D.C. NERC-88/18.06.

Rocky Mountain Group engineers, August 2018. Geology and Soils Report Creekside at Lorson Ranch, Filing No. 1, El Paso County CO.

Custom Soils Report for Lower Lorson East Fork Jimmy Camp Creek, of El Paso County, Colorado. July 25, 2019. U.S. Department of Agriculture, Natural Resource Conservation Service.

Weber, W. A. 1996. Flora of Colorado: East Slope. University Press of Colorado, Boulder, Colorado.

U.S.G.S. 7.5-minute Fountain Quadrangle Map. El Paso County, Colorado. 1994. U. S. Department of the Interior.

Appendix

Photographs

Figure 1 Vicinity Map

Figure 2 Permit Modification Map - Revised



Photograph 1: Non-native Russian olive on the overbank near the channel thread.



Photograph 2: Typical weedy overbank.

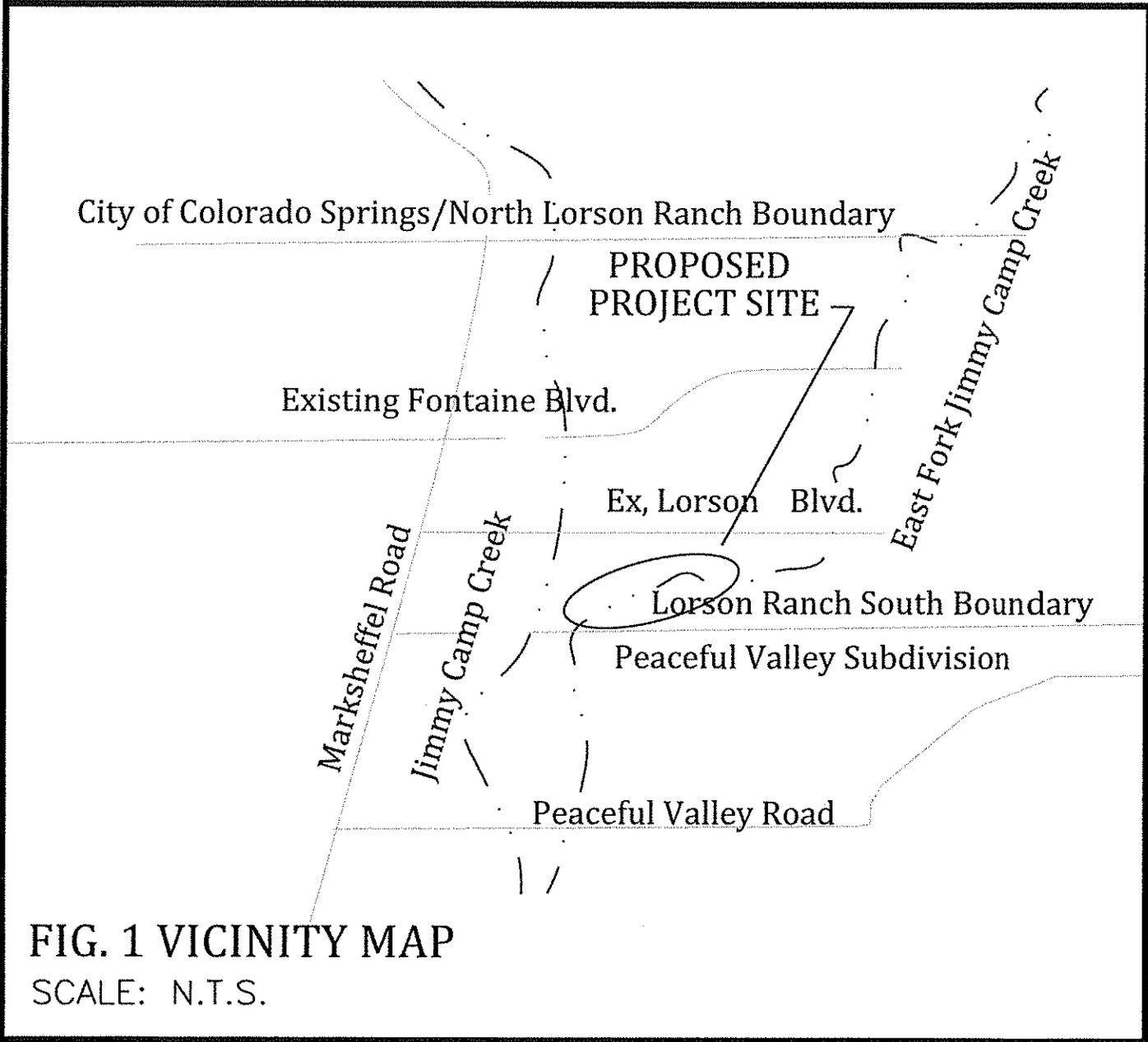
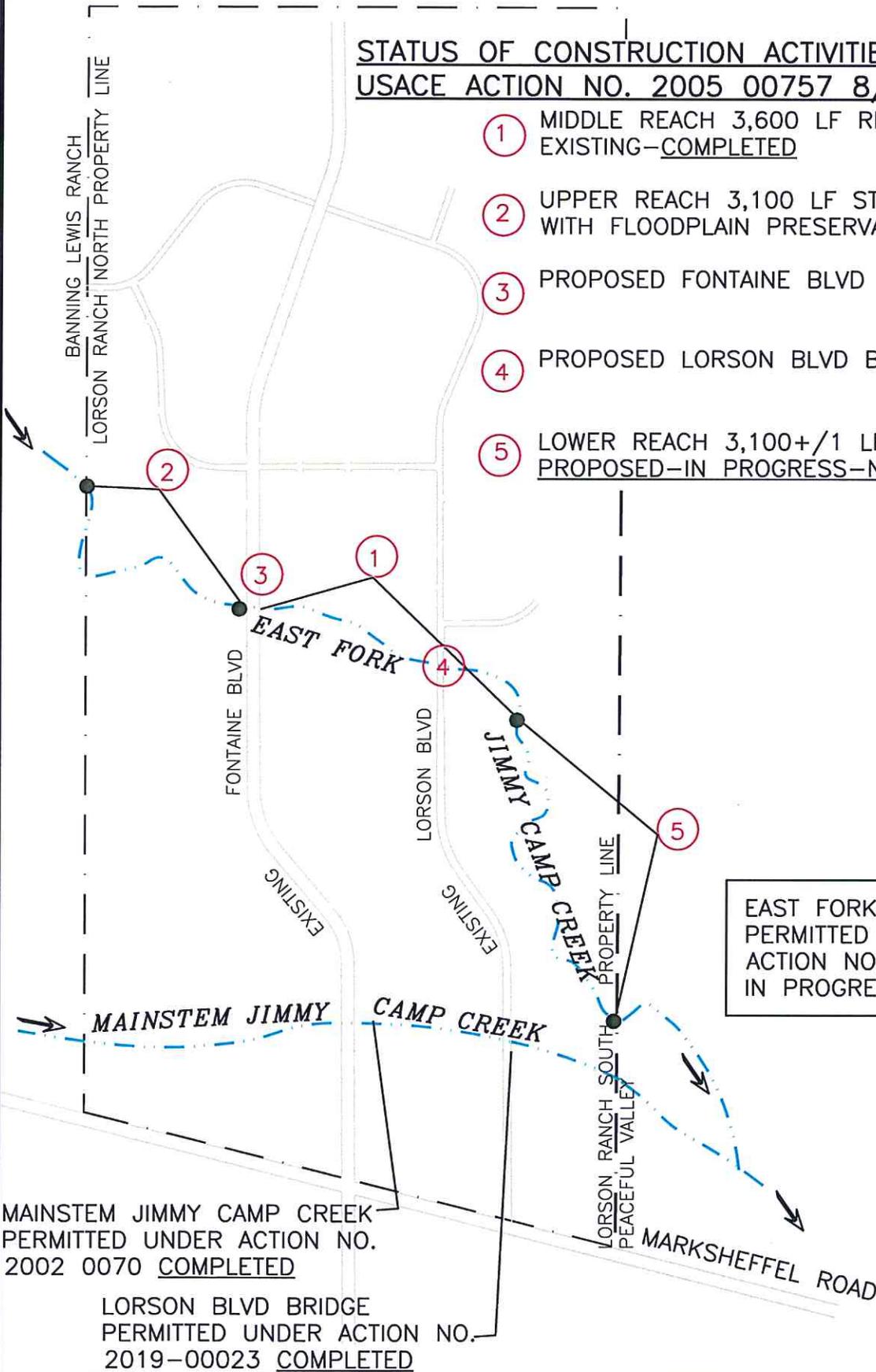


FIG. 1 VICINITY MAP

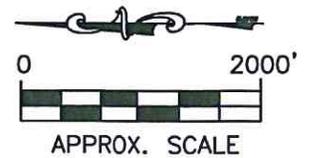
SCALE: N.T.S.

**STATUS OF CONSTRUCTION ACTIVITIES PERMITTED UNDER
USACE ACTION NO. 2005 00757 8/15/2019**

- ① MIDDLE REACH 3,600 LF RECONFIGURED CHANNEL EXISTING—COMPLETED
- ② UPPER REACH 3,100 LF STABILIZED CHANNEL WITH FLOODPLAIN PRESERVATION COMPLETED
- ③ PROPOSED FONTAINE BLVD BRIDGE COMPLETED
- ④ PROPOSED LORSON BLVD BRIDGE COMPLETED
- ⑤ LOWER REACH 3,100+/-1 LF STREAM PRESERVATION PROPOSED—IN PROGRESS—NOT COMPLETED



EAST FORK JIMMY CAMP CREEK
PERMITTED ENTIRELY UNDER
ACTION NO. 2005-00757
IN PROGRESS



MAINSTEM JIMMY CAMP CREEK
PERMITTED UNDER ACTION NO.
2002 0070 COMPLETED

LORSON BLVD BRIDGE
PERMITTED UNDER ACTION NO.
2019-00023 COMPLETED

**LORSON RANCH
PERMIT MODIFICATION AMENDMENT NO. 1 MAP**

DATE: 08/03/17 REV 8/8/2019
PROJECT NO. 18020

ACTION NO. 2005 00757
EL PASO COUNTY, COLORADO

FIGURE 2



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