Draft Environmental Assessment

Colorado Parks and Wildlife

Fort Collins Service Center and Area Office Relocation

Fort Collins, CO

March 2024 - Revised September 2025

Prepared for the U.S. Fish and Wildlife Service

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1. INTRODUCTION

This Draft Environmental Assessment (EA) is being prepared by the Colorado Parks and Wildlife (CPW), Fort Collins Area Office to evaluate the effects associated with the construction of a new multipurpose facility in the CPW Bird Farm State Administration Area (Bird Farm SAA) (Proposed Action or project).

This EA complies with the National Environmental Policy Act (NEPA) regulations and policies. NEPA requires an examination of the effects of a proposed federal action on the natural and human environment. The project would take place on state lands managed by CPW and would be federally funded (in whole or part) using Wildlife Restoration Act (16 U.S.C 669 et. seq.) funds granted by the U.S. Fish and Wildlife Service (USFWS). Issuing a grant is a federal action, for purposes of NEPA, requiring analysis of the potential effects of the action on the human and natural environment.

2. PROPOSED ACTION

CPW is proposing to construct a new multipurpose facility (40,935 square feet) on approximately 27 acres at CPW's Bird Farm SAA located at the southeast corner of the intersection of Interstate 25 (I-25) and Mountain Vista Drive in Fort Collins, Larimer County, Colorado. The project also proposes construction of a joint outfall channel to convey stormwater from the developed CPW property at the Kelley and Johnson properties, which are south of the Bird Farm SAA. The Kelley property is east of Interstate 25 and south of Colorado Highway 50 in Fort Collins, Larimer County, Colorado. The Kelley property is proposed to be developed as a storage facility. The Johnson property is located east of the Kelley property and west of N County Road 5. Only 1.75 acres of this property would be included for the channel outfall.

The project area is in the native shortgrass prairie ecosystem on the east side of the Rocky Mountains. See Figure 1 for the site vicinity map. The Bird Farm SAA is currently owned in fee title by CPW and was purchased with wildlife funding. The Kelley and Johnson properties are privately owned. The proposed buildings, which would be approximately 69,885 square feet in size, would serve as administrative offices for local staff, storage buildings, maintenance buildings, and a visitor contact area (see Appendix B). The building site would also accommodate parking areas, stormwater detention ponds, an aquatics nuisance species boat wash station with accompanied filtration pond, a septic system and leach fields, recreational vehicle (RV) campsites, security gates and fencing, and utility rights-of-way for electricity, communications, and potable water.

In addition to the building construction, the Proposed Action would include access improvements to nearby roads, specifically along a portion of Mountain Vista Drive and the East Frontage Road of I-25. The Proposed Action design is described in more detail below in Section 6: Alternative B – Office Relocation to Bird Farm SAA section and illustrated on Figure 2. The new drainage and storage facility proposes a joint outfall channel to convey stormwater from the developed CPW property to the north and the Kelley property, where the facility would be constructed. The outfall is proposed to be on the southwestern portion of the Johnson property and be approximately 150 feet north of the Boxelder Creek and Larimer and Weld Canal intersection. Figure 3 shows the drainage facility site plan.

A proposed action may evolve during the NEPA process as the agency refines its proposal and gathers feedback from the public, tribes, and other agencies. Therefore, a final proposed action

may be different from the original. The Proposed Action will be finalized at the conclusion of the public comment period for the Draft EA and will be formally documented in the Final EA.

Figure 1. Vicinity Map.

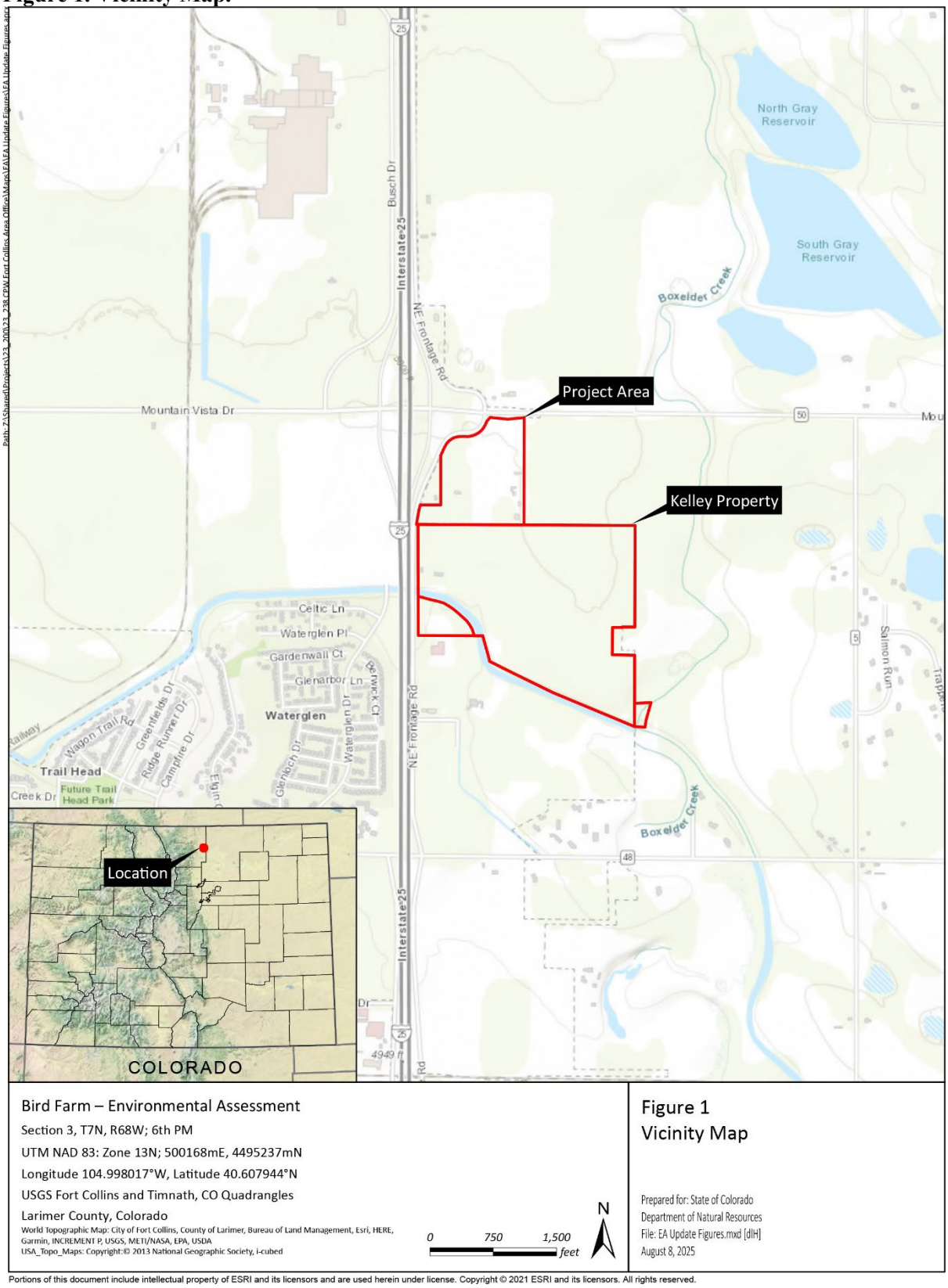

Figure 2. Proposed Site Plan at Bird Farm SAA.

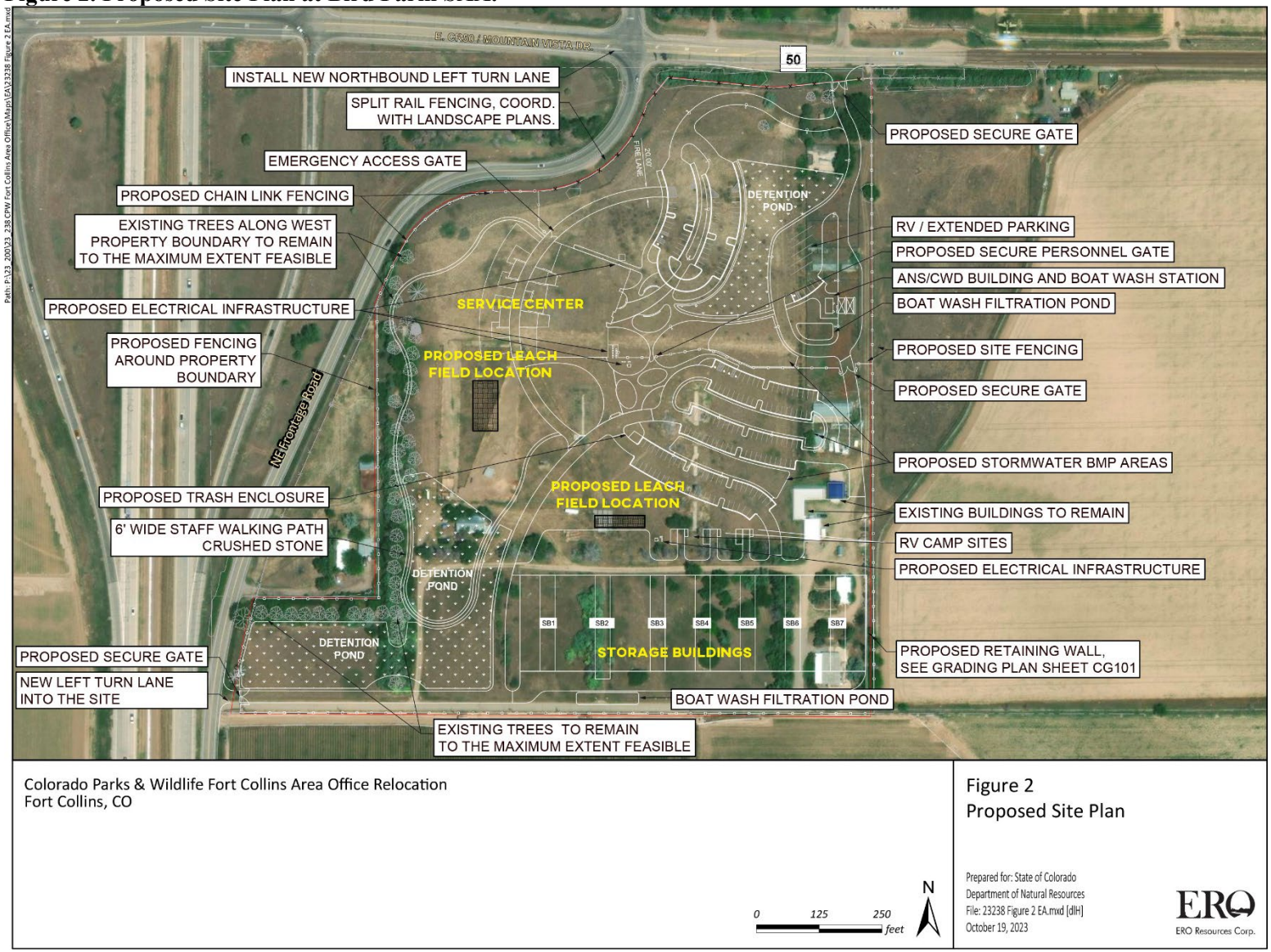

Figure 3. Proposed Site Plan on the Kelley Property.

3. BACKGROUND

The CPW Fort Collins Area Office currently runs its operations at the Fort Collins Service Center (FCSC) located at 317 West Prospect Road in Fort Collins, Colorado. The FCSC is situated on 4.18 acres and provides many functions for CPW, the public, and staff. Currently 15 structures on the site house various office and research functions and associated storage facilities.

The FCSC has experienced a significant increase in the demand and variety of the services it provides, which is due to many factors, including surrounding developments, regional growth, and the age of the existing structures. The existing FCSC no longer meets CPW's demand for the various services it provides.

In 2020, CPW contracted Farnsworth Group, Inc. (Farnsworth) to complete the *Fort Collins Service Center Relocation to Bird Farm SAA, Feasibility Study and Site Conceptual Design* (Feasibility Study; Farnsworth 2020) to assess the existing facilities and future needs. According to the Feasibility Study, the delivery of CPW's services has become more complex with the adoption of new technologies, additional wildlife management requirements, increased demand for research, and higher levels of public service and education. In addition to not meeting current demands for staffing, research, and visitors, the site is in the Spring Creek floodplain and is susceptible to increased flooding events as a result of changing climate and weather extremes.

CPW identified another property they own that currently houses the Bird Farm SAA to relocate all services and functions of the FCSC. The property is located at the southeast corner of the intersection of I-25 and Mountain Vista Drive: 1435 NE Frontage Rd., Fort Collins, Colorado 80524. The Bird Farm SAA is considerably larger, approximately 27 acres compared to the 4.18 acres of the existing site. The Bird Farm SAA currently consists of a pasture used for storing horses and eight buildings, which consist of an office, an unheated storage building, a block shed, an ammunition bunker, a shop, a pole shed, an old car garage, and a livestock barn. The elevation of the site is approximately 5,000 feet above sea level.

Two additional properties were later added to the project for the proposed drainage and storage facilities, the Kelley property located at 1312 NE Frontage Road, Fort Collins, Colorado 80524, and small portion of the Johnson property located at 1321 N County Road 5, Fort Collins, CO 80524. The Kelley property contains one building currently used as a storage facility. Two sheds are also located on the Kelley property. The Johnson property contains one building at its eastern edge.

4. PURPOSE AND NEED FOR THE ACTION

The purpose of the Proposed Action is to promote CPW's ability to secure and monitor public space separate from administrative tasks, improve collaboration spaces for staff, and provide ample space and opportunity to expand CPW's current services for the agency and the public. The delivery of these services has become more complex in recent years with the adoption of new technologies, additional wildlife management requirements, increased demand for research, and higher levels of public service and education.

The need for this project is to increase the capacity of CPW's current facilities to accommodate the future growth of the Fort Collins Area Office and increase the needs of visitors. The Proposed Action would create a multipurpose facility and visitor contact area that offers collaboration and coordinated management between CPW staff and the public. There will be over 60 staff assigned to this facility from the following sections: Northeast Region Area 4

Wildlife, Aquatics and Terrestrial, Terrestrial Programs, Avian and Mammals Research, Wildlife Health, Geographic Information Systems (GIS), Office of Information Technology (OIT), and Capital and Species Conservation.

The Proposed Action would also meet CPW's mission, which is to "perpetuate the wildlife resources of the state, to provide a quality state parks system, and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources" by providing ample space, conditions, and location to meet building maintenance and site security gaps currently experienced at the FCSC.

This EA is being prepared because CPW plans to use federal USFWS Wildlife Restoration funds to construct this project.

5. PUBLIC OUTREACH

CPW consulted with Larimer County as part of the county's Location and Extent permitting process. Larimer County held a public hearing for the project on October 19, 2022, which was advertised on the county's webpage (https://www.larimer.gov/bocc/commissioners-meetings#/uws/). The county determined that the project meets the intent of the applicable Engineering principles of the County Master Plan and, therefore, does not have any significant issues or outstanding comments on the project. The Larimer County correspondence is in Appendix A.

CPW sought public engagement and input on the proposal for 30 calendar days from March 19, 2024 to April 19, 2024 on the CPW website at: https://cpw.state.co.us/aboutus/Pages/News-Release-Details.aspx?NewsID=4067. A paper copy was also made available at 317 West Prospect Road in Fort Collins, Larimer County, Colorado. At the time of public outreach, the proposal only included information about the relocation to the Bird Farm SAA, and did not include the addition of the drainage facility at the Kelley and Johnson properties. Due to the minor nature of this addition, the proposal did not go through CPW's scoping process again once the drainage facility information was included.

Two comments regarding the proposal were received from private citizens during the scoping period. The two commenters expressed concerns about the location of the new facility and accessibility for walk-in traffic. One of the commenters also questioned whether the relocation would result in fee increases for the public. CPW has confirmed that there would not be an increase in fees for the public.

A copy of the EA is available for public review at: https://www.fws.gov/library/collections/office-conservation-investment-nepa-documents. The 30-day comment period will end on October 24, 2025.

6. ALTERNATIVES

Two alternatives were considered as part of the environmental assessment: Alternative A – No Action and Alternative B – Office Relocation to Bird Farm SAA and Kelley Property (Proposed Action and preferred alternative), which are described below. The Proposed Action has been developed over several years through internal discussions with CPW leadership, staff and other

key stakeholders, and the development of the Feasibility Study (Farnsworth 2020). Initially, CPW considered other properties they owned for the FCSC relocation; however, because the Bird Farm SAA property is underutilized and previously disturbed with low-quality wildlife habitat, this site was the only alternative carried forward for analysis.

6.1 Alternative A – No Action Alternative

Under the No Action Alternative, CPW would not construct a new multipurpose facility and drainage facility. CPW would continue to use and maintain the FCSC at its current location. The Bird Farm SAA would continue to be owned and operated by CPW as an overflow storage facility, and the Kelley property would remain a storage facility and vacant land. The ability to meet CPW's mission and provide services to the public would be increasingly difficult due to space restrictions and security concerns at the FCSC. Code compliance and building maintenance at the FCSC would likely be enforced and would require extensive monetary investment to bring it up to standard. The storage buildings at FCSC would continue to be at risk of flooding due to their location within the Spring Creek floodplain.

6.2 Alternative B – Office Relocation to Bird Farm SAA and Kelley Property (Proposed Action)

Under the Proposed Action, CPW would construct a new multipurpose building and visitor contact area on fee title land in the Bird Farm SAA at 1435 NE Frontage Road, Fort Collins, Colorado 80524 (see Appendix B). This alternative also includes the addition of a drainage facility south of the Bird Farm at 1312 NE Frontage Road, Fort Collins, Colorado 80524 and 1321 N County Road 5, Fort Collins, CO 80524. This project proposes the construction of a joint outfall channel to convey stormwater from the developed CPW property. The property would also be used as a storage facility.

6.2.1 Building Components

At the Bird Farm SAA, CPW would design and construct an approximately 28,950-square-foot service center, two maintenance buildings, five storage buildings, and an aquatics nuisance species chronic wasting disease check station, totaling 40,935 square feet. The new multipurpose complex would serve as the administrative offices for local staff, storage buildings, maintenance buildings, and a visitor contact area (see the proposed site plan, Figure 2). The facility would accommodate a combined staff of over 60 people that include the following section groups for the CPW Northeast Region: Northeast Region Area 4 Wildlife, Aquatics and Terrestrial, Terrestrial Programs, Avian and Mammals Research, Wildlife Health, GIS, OIT, and Capital and Species Conservation.

Table 1 summarizes the components of the new facilities and the footprint of each component.

Table 1. Proposed Action summary of components.

Interior Components	Purpose	Area (square feet)	Percent of Main Building Total
Common Areas	Customer service, conference rooms, restrooms, mechanical, electrical, shipping and receiving, break room	16,548	57.16
Area 4 (Wildlife)	Offices, customer service, lobby, storage, evidence	3,930	13.58
Aquatics Section	Offices, storage, conference room	431	1.49
Terrestrial Program	Offices, storage	1,554	5.37
NE Terrestrial	Offices	540	1.87
Avian Research	Offices, storage, lab	1,616	5.58
Mammals	Offices, library, storage	3,072	10.61
Trails	Office	108	0.37
Species/wildlife health	Offices	492	1.70
Geographic Information Systems (GIS)	Office, lab	388	1.34
Capital	Office	108	0.37
Office of Information Technology (OIT) – Technical Support	Office, workroom	162	0.56
Main Building Total		**28,950**	**100**
Exterior Storage Components	Storage	40,935	
Gross Buildings Total*		**69,885**	

*Site Plans prepared by D2C Architects (January 2023).

6.2.2 Exterior Components

The building site would also accommodate paved access, parking areas that can accommodate buses and trailers, an outdoor gathering area for staff, walking paths, stormwater detention ponds, an aquatics nuisance species boat wash station with accompanied filtration pond, ~~a~~septic system and leach fields, RV campsites, security gates and fencing, and utility rights-of-way for electricity, communications, and potable water.

In addition to the building construction, the Proposed Action would include improvements to nearby roads, specifically along a portion of Mountain Vista Drive and the East Frontage Road of I-25 (Figure 1).

The proposed building would feature a “mountain contemporary” architectural design with some rustic features that would blend into the landscape using natural colors. The overall design for the storage buildings is envisioned to be an enclosed pre-engineered metal building with sloped metal panel roofs.

6.2.3 Drainage Facility

The project proposes a drainage facility on the Kelley and Johnson properties located south of the Bird Farm SAA. The proposed facility would include a joint outfall channel to convey stormwater from the developed CPW property to the north and the Kelley property, where the facility would be constructed. The outfall channel would flow from an unnamed road at the north extent of the Kelley property and extend southward, turning southeast to parallel the Larimer and Weld Canal before discharging to Boxelder Creek on the Johnson property (Figure 3). The outfall is proposed to be approximately 150 feet north of the Boxelder Creek and Larimer and

Weld Canal intersection. The outfall channel at Boxelder Creek would be stabilized with riprap, erosion protection mat, and native vegetation to limit erosion potential.

6.2.4 Sustainability and Resiliency

The buildings would be constructed to meet Leadership in Energy and Environmental Design (LEED) standards for building sustainability under the U.S. Green Building Council rating system (USGBC 2023). To achieve LEED certification, a project earns points by adhering to prerequisites and credits that address carbon, energy, water, waste, transportation, materials, health, and indoor environmental quality. CPW's goals for LEED certification are at the Gold level (60 to 79 points earned).

In addition to the use of sustainable materials in construction, the facilities would be moved from the current location in the Spring Creek floodplain, providing greater resiliency for future flooding events. The Bird Farm SAA property was previously located in the floodplain of Boxelder Creek. However, the Boxelder Stormwater Authority constructed the East Side Detention Facility upstream of the property, removing this area from the floodplain. In February 2019, the property was officially recorded as out of the floodplain (Farnsworth 2020).

6.2.5 Construction

Construction is expected to begin in September 2025 and take approximately 18 to 24 months to complete. Staging of the construction equipment, construction materials, and contractor administration office would be located on the Bird Farm SAA property, the proposed construction site. Road and access plans are being developed in coordination with the Colorado Department of Transportation (CDOT). No detours are needed for construction; however, lane closures during offsite improvements for the Mountain Vista Road and East Frontage Road of I-25 may be required.

7. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section is organized by affected resource categories and, for each affected resource, discusses both (1) the existing environmental and socioeconomic baseline in the action area for each resource and (2) the effects and impacts of the Proposed Action and any alternatives on each resource. The effects and impacts of the Proposed Action considered here are changes to the human environment, whether adverse or beneficial that are reasonably foreseeable and have a reasonably close causal relationship to the Proposed Action or alternatives. This EA includes the written analyses of the environmental consequences on a resource only when the impacts on that resource could be more than negligible and therefore considered an "affected resource." Any resources that would not be more than negligibly impacted by the action have been dismissed from further analyses, and the rationale for dismissal is provided in Table 2.

Table 2. Resources identified and dismissed from further analysis and rationale for dismissal.

Resource Dismissed from Further Analysis	Rationale for Dismissal
Geology, Soils, and Landcover	The majority of the project area has been previously disturbed for the construction of existing buildings and roads, and the remainder of this area is characterized by nonnative grassland vegetation species. The Proposed Action would result in negligible impacts on geology, soils and landcover. Section 7.6 Prime and Unique Farmland analyzes potential impacts to prime and unique farmland soils under the Farmland Protection Policy Act (FPPA). Because there would be negligible impacts on geology, soils, and landcover, this topic was dismissed from further analysis.
Water Resources	The project area does not contain any water resources according to the U.S. Geological Survey (USGS) Fort Collins and Timnath topographic quadrangle maps or the USGS Hydrography Database as occurring in the project area (USGS 2018). Section 7.2.1 Aquatic Fauna and Habitat analyzes potential impacts on aquatic fauna and their habitat. Because there are no water resources present in the project area, this topic was dismissed from further analysis.
Noise	Existing noise sources in the project area include vehicular traffic on Interstate 25 to the west of the project area and intermittent local traffic on the Frontage Road and Mountain Vista Drive, east and north of the project area, respectively. Construction activities from the Proposed Action would cause intermittent noise including the use of construction equipment and construction traffic, resulting in short term noise impacts during the 18- to 24-month construction period. This noise would be limited to normal business hours and would not occur in the evenings or on the weekends; all applicable Fort Collins and Larimer County construction noise ordinances would be observed. After construction is completed, it is assumed that noise levels in the project area would return to preexisting levels with the exception of day-to-day CPW operations on the new site, which are anticipated to be minimal.

7.1 Air Quality and Climate

7.1.1 Affected Environment

The Clean Air Act (CAA), last amended in 1990, requires the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) for six pollutants, known as “criteria” pollutants. The criteria pollutants are carbon monoxide, ozone, nitrogen dioxide (NO_x), sulfur dioxide (SO_2), particulate matter (PM), and lead. Concentrations of criteria pollutants in a particular region that are higher than the EPA standards are considered non-attainment areas. For each non-attainment area, the state is required to provide a State Implementation Plan (SIP) to the EPA that will enforce, maintain, and implement measures to meet the NAAQS.

The project area is in the city of Fort Collins in Larimer County, which is in the Denver Metro/North Front Range region, a moderate non-attainment area for 8-Hour Ozone as determined by the EPA (EPA 2015). Ozone associated with the NAAQS is formed in the lower

atmosphere by photochemical reactions involving hydrocarbons, nitrogen-containing gases, and sunlight. Fossil fuel combustion is a primary source of hydrocarbons and nitrogen-containing gases that form ozone in the lower atmosphere (EPA 2023).

The U.S. Climate Explorer under the U.S. Climate Resilience Toolkit was consulted for projected future trends for Larimer County in temperatures, precipitation, and flooding into the 2050s (30 years). Historically, Larimer County averaged 14 dry spells per year and will likely see an increase of up to 9 dry spells per year due to an increase in average temperature and a decrease in precipitation since the 1990s (U.S. Federal Government 2023).

7.1.2 Environmental Consequences

Based on regional and local air quality conditions, a qualitative (rather than quantitative) analysis of air quality impacts is provided for the project. The impact analysis compares the impacts of the No Action Alternative and Proposed Action and identifies mitigation measures as needed.

Alternative A: No Action

Under the No Action Alternative, the CPW multipurpose facility would not be constructed at the Bird Farm SAA, the drainage facility would not be constructed at the Kelley and Johnson properties, and CPW would continue to use and maintain the FCSC at its current location. No changes to the project area would occur, and there would be no additional impacts on air quality or climate resources.

Alternative B: Proposed Action

The Proposed Action would generate short-term construction emissions during construction activities. Emissions of volatile organic compounds (VOC) and NOx would be generated because of construction equipment, material haul trucks, and construction worker vehicles. Construction activities are anticipated to last approximately 18 to 24 months, during which construction emissions would vary day by day based on the types of construction activities occurring. Although construction of the Proposed Action would generate air quality emissions that contribute to cumulative regional levels, based on the magnitude of the proposed construction activities, it is not anticipated that annual VOC or NOx construction emissions would exceed the applicable minimum thresholds. Therefore, the direct impact on regional air quality due to the construction period of the Proposed Action would be negligible.

Construction Best Management Practices (BMPs) would be implemented to control potential emissions of fugitive dust and reduce potential emissions from construction vehicles/equipment during construction. BMPs may include, but are not limited to, the following:

- Apply water and chemical stabilizers in active construction areas and on haul roads as necessary to suppress dust.
- Post speed limit signs and enforce speeds in active construction areas and on haul roads.
- Water, perform soil compaction, and revegetate disturbed areas, as needed and appropriate for site conditions.
- Cover haul trucks, as appropriate, to reduce dust.
- Require the construction contractor to limit the idling equipment time.

In accordance with EPA guidelines under the CAA, new development can be established when the source will not cause or exacerbate a violation of NAAQS. The Proposed Action is not expected to cause or exacerbate a violation of NAAQS or further cause a violation of the SIP.

Thirty-year projections from the U.S. Climate Explorer indicate that while certain climate parameters, such as annual average daily maximum temperatures, may experience increases, other factors such as flooding are not expected to significantly change in Larimer County (U.S. Federal Government 2023). Because the climate is predicted to remain relatively similar to current conditions over the next 30 years, amplification of emissions caused by climatic variables that would cause further violation of the SIP are not anticipated.

As a LEED Gold-certified building, the emissions caused by operations of the Proposed Action would remain similar to the existing conditions due to innovative building design and materials that provide energy savings, water efficiency, reduced carbon emissions, and improved indoor air quality. Regional air quality benefits of a LEED-certified building include 25 percent less energy consumed and 34 percent lower carbon dioxide emissions when compared to non-LEED certified buildings (U.S. Green Building Council 2023). Therefore, the direct and indirect effects of the Proposed Action on regional air quality align with the implementation and enforcement measures of the SIP and are not expected to negatively impact regional air quality or climate.

The direct and indirect effects are anticipated to be negligible on regional air quality, aligning with the conclusion that the Proposed Action would not impact the ozone SIP or further exacerbate non-attainment status.

7.2 Biological Environment

7.2.1 Aquatic Fauna and Habitat

Affected Environment

Boxelder Creek is shown on the USGS Fort Collins and Timnath topographic quadrangle maps and the USGS National Hydrography Dataset as occurring in the project area. Boxelder Creek is likely jurisdictional and, therefore, a Preconstruction Notification (PCN) would need to be submitted to the U.S. Army Corps of Engineers (Corps) regarding any impacts on the creek. Additionally, the Larimer and Weld Canal runs along the southern edge of the project area. No wetlands were found in the project area during the 2025 site visit (ERO 2025; Appendix C).

Environmental Consequences

Alternative A: No Action

Under the No Action Alternative, the CPW multipurpose facility would not be constructed at the Bird Farm SAA, the drainage facility would not be constructed at the Kelley and Johnson properties, and CPW would continue to use and maintain the FCSC at its current location. There would be no additional impacts on aquatic fauna and habitat from the No Action Alternative.

Alternative B: Proposed Action

Boxelder Creek occurs in the southeast corner of the project area and one data point was collected during the 2025 site visit in an area of hydrophytic vegetation that was observed along its eastern bank. However, no wetlands in the project area along the creek were observed (ERO 2025). ERO mapped a total of 0.03 acre of OHWNM associated with Boxelder Creek during the 2025 site visit. During an additional site visit at the Johnson property, wetlands were identified along

Boxelder Creek to the north of the data point collected during the initial site visit. No data points were taken at this new location, but based on aerial imagery and the presence of wetland vegetation, wetlands were assumed to be present. 0.06 acre of wetlands were mapped in this area along Boxelder Creek.

Because of its downstream hydrological connection to a known water of the U.S., Boxelder Creek would be considered a jurisdictional water of the U.S. The Proposed Action would permanently impact a total of 0.02 acre of ordinary high water mark and 0.06 acre of wetlands. A PCN has been submitted to the Corps for this impact (Appendix D).

The proposed detention ponds could be used by waterfowl or migratory shorebirds and the Proposed Action would have beneficial impacts on these species.

The project area is in proximity to the South Platte River. However, based on the types of activities likely to be implemented as part of the development of the project area, there would be no depletions and no impacts on aquatic fauna and habitat in the South Platte River. Additionally, erosion-control measures would be implemented to avoid sedimentation from reaching waterways (see Section 7.9 - Best Management Practices for additional measures).

7.2.2 Terrestrial Fauna and Habitat

Affected Environment

The project area exists in a native shortgrass prairie environment. No significant remnants of native plant communities exist in the project area today due to various types of disturbance over the past several years. Upland vegetation in the project area consists predominantly of nonnative grassland species such as smooth brome (*Bromus inermis*), crested wheatgrass (*Agropyron cristatum*), and kochia (*Kochia scoparia*). Mixed woodland areas also occur on the western and southeastern portions of the project area and consist of nonnative and native species such as netleaf hackberry (*Celtis reticulata*), Siberian elm (*Ulmus pumila*), and the native Rocky Mountain juniper (*Juniperus scopulorum*) interspersed with upland nonnative grassland vegetation.

Site visits of the project area were conducted by ERO on October 3, 2023 and February 27, 2025. A more detailed description of the habitat communities observed in the project area during the 2023 and 2025 site visits is provided in the Natural Resources Technical Memorandum (ERO 2023, 2025; Appendix C). Additionally, several noxious weed species were documented during the 2023 and 2025 site visits including musk thistle (*Carduus nutans*), Canada thistle (*Cirsium arvense*), leafy spurge (*Euphorbia esula*), Russian olive (*Elaeagnus angustifolia*), common mullein (*Verbascum thapsus*), field bindweed (*Convolvulus arvensis*), diffuse knapweed (*Centaurea diffusa*), and cheatgrass (*Bromus tectorum*) (ERO 2023, 2025).

The project area provides habitat for a variety of small mammals (cottontail rabbits [*Sylvilagus* sp.], deer mice [*Peromyscus maniculatus*], voles [*Microtus* sp.], and pocket gophers [*Geomyidae* sp.]) that use different habitat types in the project area for shelter, breeding, wintering, and foraging at various times of the year. Other animals such as coyote (*Canis latrans*), raccoon (*Procyon lotor*), red fox (*Vulpes vulpes*), grey fox (*Urocyon cinereoargenteus*), and striped skunk (*Mephitis mephitis*) may also occur in the project area (ERO 2023, 2025). Additionally, the project area is in the overall range of mountain lion (*Puma concolor*) and white-tailed deer (*Odocoileus virginianus*) (CPW 2021). However, none of these species were observed during the 2023 or 2025 site visits (ERO 2023, 2025; Appendix C). It is likely that mule deer forage and

migrate through the project area. The project area is unlikely to contain areas of concentration for nesting and migratory shorebirds and waterfowl due to the lack of water features. Additionally, the project area does not contain key nesting areas for grassland birds due to a lack of native vegetation and disturbances from development.

Environmental Consequences

Alternative A: No Action

Under the No Action Alternative, the CPW multipurpose facility would not be constructed at the Bird Farm SAA, the drainage facility would not be constructed at the Kelley and Johnson properties, and CPW would continue to use and maintain the FCSC at its current location. There would be no impacts on terrestrial fauna and habitat from the No Action Alternative.

Alternative B: Proposed Action

The Proposed Action would impact approximately 118 acres of terrestrial fauna and habitat. Construction of the new multipurpose facility would require the removal of vegetation, which would directly impact fauna that uses existing vegetation for habitat. However, most vegetation in the project area has been previously disturbed by the construction of existing buildings and roads and is dominated by non-native grassland or other invasive species. Noise during construction may also lead to behavioral avoidance of the project area by birds, small mammals, and other fauna. Existing trees in the mixed woodland area along the western portion of the project area would be retained to the maximum extent possible and continue to provide habitat for nesting birds and bats.

As with any human development, wildlife species sensitive to human disturbance are likely to decline in abundance or abandon the area during and following construction, while other wildlife species adapted to development, such as raccoons, red foxes, and great horned owls (*Bubo virginianus*), are likely to increase in abundance following construction. Impacts would be minimized in areas where existing vegetation would be replaced or retained. Native grass species, deciduous and evergreen shrubs, and ornamental trees would be established around the service center with landscape planters (Figure 2). The remaining portion of the site would be established with drought-tolerant, native, dry land grasses and deciduous and evergreen trees in the open areas (see Appendix B – Landscape Plans).

Overall, surrounding, and continuing development contributes to a decline in the number and diversity of wildlife species nearby and to a change in species composition to favor species that adapt better to human disturbance. The Proposed Action would result in minimal impacts on native vegetation and fauna during and following construction, with these impacts restricted to small patches of habitat. BMPs would be followed to minimize disturbance to terrestrial resources (see Section 7.9 - Best Management Practices).

7.2.3 Species and Habitats of Concern

Affected Environment

Threatened and Endangered Species

Federally threatened and endangered species are protected under the Endangered Species Act (ESA) of 1973, as amended (16 United States Code (U.S.C.) 1531 et seq.). Significant adverse effects on a federally listed species or its habitat require consultation with the USFWS under

Section 7 or 10 of the ESA. Several threatened and endangered species have the potential to occur within Larimer County (Table 3). A review of habitat requirements for each species and habitat characteristics in the project area indicates that there is potential habitat present for two candidate species: the tri-colored bat (*Perimyotis subflavus*) and monarch butterfly (*Danaus plexippus*).

Table 3. Federally threatened, endangered, and candidate species potentially found in Larimer County or potentially affected by projects in Larimer County from the Information for Planning and Consultation (IPaC) website.

Common Name	Scientific Name	Status-	Habitat	Habitat Present or Potential to Occur
Mammals				
Gray wolf	*Canis lupus*	E	Wolves can thrive in a wide range of habitats; highly adaptable as a species that occurs in temperate forests, mountains, and grasslands	No
Tricolored bat	*Perimyotis subflavus*	C	Caves, abandoned mines, and forested areas	Yes; see below
Preble's meadow jumping mouse	*Zapus hudsonius preblei*	T	Shrub riparian/wet meadows	No
Birds				
Eastern black rail	*Laterallus jamaicensis*	T	Shallow cattail wetlands and wet sedge meadows with dense cover in the Arkansas River drainage in southeastern Colorado and the Republican River in east-central Colorado	No
Piping plover*	*Charadrius melodus*	T	Sandy lakeshore beaches and river sandbars	No habitat and no depletions anticipated
Whooping crane*	*Grus americana*	E	Mudflats around reservoirs and in agricultural areas	No habitat and no depletions anticipated
Fish				
Greenback cutthroat trout	*Oncorhynchus clarki stomias*	T	Clear, swift-flowing mountain streams with cover such as overhanging banks and vegetation and mountain lakes	No
Pallid sturgeon**	*Scaphirhynchus albus*	E	Large, turbid, free-flowing rivers with a strong current and gravel or sandy substrate	No habitat and no depletions anticipated

Common Name	Scientific Name	Status-	Habitat	Habitat Present or Potential to Occur
Invertebrates				
Monarch butterfly	*Danaus plexippus plexippus*	PT	Dependent on milkweeds (*Asclepiadoideae*) as host plants and forage on blooming flowers; a summer resident	Yes; see below
Suckley's cuckoo bumble bee	*Bombus suckleyi*	PE	Various habitats including prairies, grasslands, meadows, and woodlands between 6,000 and 10,500 feet in elevation where host species are present	Presumed extirpated from Colorado
Western Regal Fritillary	*Argynnis idalia*	PT	Grasslands species dependent on violets (*Viola* spp.) for egg-laying and larval development. Also occupies riparian corridors where it can forage on nectar sources.	No
Plants				
Ute ladies'-tresses orchid	*Spiranthes diluvialis*	T	Moist to wet alluvial meadows, floodplains of perennial streams, and around springs and lakes below 7,800 feet in elevation	No
Western prairie fringed orchid*	*Platanthera praeclara*	T	Moist to wet prairies and meadows	No habitat and no depletions anticipated

T = Federally Threatened Species, E = Federally Endangered Species, C = Candidate for Federal Listing; PT = Proposed Threatened; PE = Proposed Endangered; *water depletions in the South Platte River may affect the species and/or critical habitat in downstream reaches in other counties or states.
Source: (USFWS 2023b).

Tri-Colored Bat

The tricolored bat is a candidate species and is proposed for listing as an endangered species (USFWS 2021). The tricolored bat occurs throughout much of North America, with parts of Colorado being along the western border of its range. Habitat varies from forested areas in the spring, summer, and fall to caves, mines, tunnels, and culverts during the winter. Tricolored bats have also been known to use human structures. Some small woodland areas exist in the project area, as well as some abandoned buildings that may be potential habitat for the species.

Monarch Butterfly

The monarch butterfly is proposed for listing as threatened. The monarch butterfly occurs throughout much of North America and is segregated into an eastern and western population. Monarch butterflies are dependent on milkweeds (primarily *Asclepias* spp.) as host plants for egg-laying and larval development (USFWS 2023a). The project area is not within a designated migration corridor or breeding or overwintering area for this species (MonarchWatch 2010), although some monarch butterflies migrate through Colorado in the summer. Several scattered milkweeds were observed in the project area during the 2023 site visits (ERO 2023). This species may occasionally travel through the project area but is not likely to lay eggs because the number of host plants is minimal.

Raptors and Migratory Birds

Migratory birds, as well as their eggs and nests, are protected under the Migratory Bird Treaty Act (MBTA). The MBTA does not contain any prohibition that applies to the destruction of a bird nest alone (without birds or eggs), provided that no possession occurs during the destruction. While the destruction of a nest by itself is not prohibited under the MBTA, nest destruction that results in the unpermitted take of migratory birds or their eggs is illegal and fully prosecutable under the MBTA (USFWS 2003). The regulatory definition of a take means to pursue, hunt, shoot, wound, kill, trap, capture, or collect; or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect (50 CFR 10.12).

Grasslands and mixed woodlands in the project area are potential nesting habitat for migratory birds. However, the project area does not contain areas of concentration for nesting and migratory shorebirds and waterfowl due to the lack of water features. The project area also lacks key nesting areas for grassland birds due to a lack of native vegetation and disturbances from development. No active or inactive migratory bird nests, including potential raptor nests, were observed in or near the project area during the 2023 or 2025 site visits (ERO 2023, 2025).

Environmental Consequences

Alternative A: No Action

Under the No Action Alternative, the CPW multipurpose facility would not be constructed at the Bird Farm SAA, the drainage facility would not be constructed at the Kelley and Johnson properties, and CPW would continue to use and maintain the FCSC at its current location. There would be no impacts on species and habitats of concern from the No Action Alternative.

Alternative B: Proposed Action

The Proposed Action would impact approximately 118 acres of potential habitat for threatened and endangered species, raptors, and migratory birds due to the removal of vegetation and noise from construction activities. However, existing habitat is limited to small areas of woodland vegetation and a few buildings that could be used by the tri-colored bat, and scattered milkweeds for foraging by the monarch butterfly. Therefore, the impact of habitat loss for the tri-colored bat and monarch butterfly would be low. Additionally, the site would be revegetated using drought-tolerant native grass species (see Appendix B – Landscape Plans). The newly created habitat would be of higher quality due to the removal of noxious weeds.

Raptors and migratory birds may avoid the project area during construction due to noise and increased human presence. Long-term impacts on raptor and migratory bird habitat from the Proposed Action would be limited to the removal of small patches of existing habitat. However, these areas are only marginally suitable for raptors and migratory birds due to the lack of connectivity with other suitable habitats, nonnative species, prior disturbance, and lack of water features. Additionally, planting of native vegetation as part of the Proposed Action may enhance suitable habitat for migratory birds and result in long-term beneficial impacts. To avoid the destruction of potential migratory bird nests, vegetation removal should be conducted outside of the April 1 through September 15 breeding season (see Section 7.9 - Best Management Practices for additional measures).

Overall, the Proposed Action would result in short-term impacts during construction but would not have long-term impacts on species and habitats of concern. The direct effects on species and

habitats of concern from the project would be negligible because of the low potential for occupancy. Some beneficial impacts would occur from the use of native species for revegetation and the removal of noxious weeds.

7.3 Cultural Resources

7.3.1 Affected Environment

The Proposed Action would require funding from the USFWS and, therefore, also requires compliance with Section 106 (54 U.S.C. § 306108) of the National Historic Preservation Act (NHPA; 54 U.S.C. § 300101 et seq.). Section 106 of the NHPA requires that the lead federal agency take into account potential effects on historic properties that may result from the proposed undertaking. Historic properties are those cultural resources listed in or eligible for listing in the National Register of Historic Places (NRHP).

Three cultural resource surveys were completed for the Proposed Action. The first survey was in the vicinity of the Bird Farm SAA. The second survey was in the vicinity of the Kelley property. The third survey was in the vicinity of the Johnson property.

The area of potential effects for the Bird Farm portion of the Proposed Action was defined by the USFWS as the 27-acre parcel. The cultural resource survey conducted to identify potential historic properties resulted in the documentation of one cultural resource: the State Game and Fish Experimental Nursery (5LR15314). 5LR15314 is a complex of buildings and features that reflect the operation of the State Game and Fish Experimental Nursery. The nursery was in operation from about 1962 to 1992. Site 5LR15314 is recommended not eligible for listing in the NRHP (Matsuda and Ortiz 2023). Although the facility is associated with national bird conservation efforts, it is not considered significant. Many of the buildings and features are abandoned and have deteriorated to the point where the facility no longer conveys association with the breeding program due to the loss of physical integrity. The USFWS conducted consultation with the Colorado State Historic Preservation Officer (SHPO) and other potential consulting parties for determination of NRHP eligibility: the project area is recommended “no historic properties affected.”

The area of potential effects for the Kelley portion of the Proposed Action was defined as a portion of the Kelley property, parcel 8703000005, where the drainage facility would be constructed, and where an outflow structure intersects Boxelder Creek (Larimer County Tax Assessor’s Office 2023) (98.3 acres). The cultural resource survey conducted to identify historic properties resulted in the documentation of four cultural resources: a segment of the Larimer and Weld Canal (5LR863.3), a segment of the Poudre to Richards Lake Transmission Line (5LR9457.1), a segment of the Cheyenne to Richards Lake Transmission Line (5LR9458.2), and the Einarsen Farm (5LR11396). 5LR863.3 is recommended supporting of the eligibility of the entire resource for listing in the NRHP.

The project does not propose any alterations to the Larimer and Weld Canal. The existing stormwater outfall into the Larimer and Weld Canal would be abandoned. 5LR9457.1 and 5LR9458.2 are recommended nonsupporting of the eligibility of the entire resource for listing in the NRHP, and 5LR11396 is recommended not eligible for listing in the NRHP. The USFWS conducted consultation with the SHPO and other potential consulting parties for determination of NRHP eligibility: the project is recommended “no historic properties affected.”

7.3.2 Environmental Consequences

Alternative A: No Action

Under the No Action Alternative, CPW would continue to use and maintain the Fort Collins Area Office at its current location. The drainage facility would not be constructed at the Kelley and Johnson properties and the Bird Farm SAA would continue to be owned and operated by CPW as an overflow storage facility. No effects would occur on historic properties from the No Action Alternative.

Alternative B: Proposed Action

Under the Proposed Action, CPW would construct a new multipurpose building and visitor contact area. Pending SHPO concurrence with the USFWS's not eligible recommendation for site 5LR15314, no effects would occur on historic properties under the Proposed Action.

7.4 Recreation

7.4.1 Affected Environment

Existing facilities located in the project area do not currently provide recreational opportunities for the public. Current recreational opportunities in the vicinity of the project area include fishing in the South Platte River (just south of the project area) and the South Gray Reservoir (about 0.6 mile northwest of the project area), and birdwatching or hunting at Cobb Lake in the Wellington State Wildlife Area (about 2.2 miles northeast of the project area).

7.4.2 Environmental Consequences

Alternative A: No Action

Under the No Action Alternative, the CPW multipurpose facility would not be constructed at the Bird Farm SAA, the drainage facility would not be constructed at the Kelley and Johnson properties, and CPW would continue to use and maintain the FCSC at its current location. No impacts on recreation would occur under the No Action Alternative.

Alternative B: Proposed Action

Under the Proposed Action, the new CPW multipurpose facility would provide wildlife-dependent educational and recreational opportunities for the public that do not currently exist at the Fort Collins Area Office, including Americans with Disabilities Act (ADA)-accessible buildings and facilities.

The Feasibility Study identified issues with public access to the current facilities, including restricted access to parking due to high traffic, limited parking space, and inadequate space for public outreach (Farnsworth 2020). The proximity to Mountain Vista Drive and I-25 would make the new multipurpose facility readily visible and accessible to members of the public seeking information about outdoor recreational and wildlife-dependent opportunities in the area. The new CPW multipurpose facility would also provide increased parking capacity. The proposed building configuration would allow for enhanced public outreach space within the facilities, including a customer service desk to facilitate education and sharing of information with the public and a meeting space for public use or programs. Overall, the Proposed Action would have beneficial impacts on recreation availability and ADA accessibility within and in the vicinity of the project area.

7.5 Socioeconomic Resources

7.5.1 Affected Environment

The population of Census tract 25.04, which encompasses the project area, is 2,501. The population of Larimer County is 359,066 (U.S. Census 2020a). Census Tract 25.04 has a slightly higher percentage of American Indian and Alaska Native residents (less than 5 percent than percentages in Larimer County; Table 4 and Table 5). Census tract 25.04 has a significantly higher percentage (17.05 percent) of Hispanic or Latino residents than Larimer County (Table 4; U.S. Census 2020b).

The unemployment rate in Census tract 25.04 (1.2 percent) is lower than the county's (4.0 percent) (U.S. Census 2020c) (Table 6). The poverty rate, as measured by the percent of residents living below the poverty level, was lower for Census tract 25.04 (5.3 percent) than in the county (11.6 percent) (U.S. Census 2021a). Median household income for Census tract 25.04 ($91,071) is greater than Larimer County ($88,403) (U.S. Census 2021b).

Table 4. U.S. Census racial characteristics in Census Tract 25.04 and Larimer County, Colorado (percent of population).

Location	Total Population	White (percent)	Black (percent)	American Indian and Alaska Native (percent)	Asian (percent)	Native Hawaiian and Other Pacific Islander (percent)	Some Other Race (percent)	Two or More Races (percent)
Census Tract 25.04, Larimer County, Colorado	2,501	69.93	0.72	1.32	0.88	-	12.32	14.83
Larimer County, Colorado	359,066	82.43	1.06	0.80	2.38	0.09	3.84	9.39

Source: U.S. Census Bureau 2020a.

Table 5. U.S. Census ethnicity characteristics in Census Tract 25.04 and Larimer County, Colorado (percent of population).

Location	Total Population	White, Not Hispanic or Latino (percent)	Hispanic or Latino (percent)
Census Tract 25.04, Larimer County, Colorado	2,501	69.93	30.39
Larimer County, Colorado	359,066	82.43	12.44

Source: U.S. Census 2020b.

Table 6. U.S. Census economic characteristics in Census Tract 25.04 and Larimer County, Colorado.

Location	Unemployment Rate*	Percent Below Poverty Level**	Median Household Income***
Census Tract 25.04, Larimer County, Colorado	1.2%	5.3%	$91,071
Larimer County, Colorado	4.00%	11.1%	$80,664

Source: *U.S. Census Bureau 2020c; **U.S. Census Bureau 2021a; ***U.S. Census Bureau 2021b.

7.5.2 Environmental Consequences

Alternative A: No Action

Under the No Action Alternative, the CPW multipurpose facility would not be constructed at the Bird Farm SAA, the drainage facility would not be constructed at the Kelley and Johnson properties property, and CPW would continue to use and maintain the FCSC at its current location. Therefore, no changes to existing socioeconomic characteristics would occur.

Alternative B: Proposed Action

Construction-related impacts would include noise, dust, and the presence of construction vehicles. Although impacts from construction would be adverse, they would be temporary and minimized by maintaining access and use of BMPs to reduce noise and dust (see Section 7.9).

Construction of the Proposed Action could result in direct and indirect short-term beneficial impacts on the local economy. These short-term effects would occur during construction and would be mostly limited to a slight increase in the construction workforce and beneficial impacts from associated spending in the immediate community. Construction would provide approximately 20 to 30 construction personnel temporary employment for approximately 18 to 24 months (contingent on weather and other site constraints). No long-term population and housing effects are anticipated under the Proposed Action.

It is anticipated that workers would spend a portion of their income in the immediate communities on meals, resulting in an incremental beneficial effect on local businesses during construction. These impacts would be short-term and end after construction is completed.

The Proposed Action would result in temporary impacts on the overall community from increased dust, dirt, noise, traffic, and access disruptions during the construction process. These impacts would be short-term and would be mitigated with BMPs for construction (see Section 7.9).

7.6 Prime and Unique Farmland

7.6.1 Affected Environment

The FPPA is intended to minimize the impacts federal actions have on the unnecessary and irreversible conversion of farmland to nonagricultural use. It assures that to the extent possible, federal actions are compatible with state and local governments, private programs, and policies to protect farmland. For purposes of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland and can be forestland, pastureland, or cropland.

According to the Natural Resources Conservation Service (NRCS), approximately 5 percent of the project area is classified as farmland of statewide importance and the remainder (95 percent) is classified as prime farmland if irrigated, as defined in 7 CFR 658 (Figure 4; Table 7).

Table 7. Mapped soil units and NRCS farmland soil ratings in the project area.

Soil Map Unit Symbol	Soil Map Unit Name	Soil Order	Drainage Class	NRCS Farmland Rating	Acreage in Project Area (percent of project area)
54	Kim loam, 3 to 5 percent slopes	Entisols	Well drained	Farmland of statewide importance	1.59 acres (1.21%)
53	Kim loam, 1 to 3 percent slopes	Entisols	Well drained	Prime farmland if irrigated	2.68 acres (2.04%)
53	Kim loam, 1 to 3 percent slopes	Entisols	Well drained	Prime farmland if irrigated	0.39 acre (0.30%)
54	Kim loam, 3 to 5 percent slopes	Entisols	Well drained	Farmland of statewide importance	10.88 acres (8.28%)
74	Nunn clay loam, 1 to 3 percent slopes	Mollisols	Well drained	Prime farmland if irrigated	10.11 acres (7.70%)
95	Satanta loam, 1 to 3 percent slopes	Mollisols	Well drained	Prime farmland if irrigated	1.27 acres (0.97%)
54	Kim loam, 3 to 5 percent slopes	Entisols	Well drained	Farmland of statewide importance	5.19 acres (3.95%)
63	Longmont clay, 0 to 3 percent slopes	Inceptisols	Poorly drained	Prime farmland if irrigated and reclaimed of excess salts and sodium	4.42 acres (3.37%)
94	Satanta loam, 0 to 1 percent slopes	Mollisols	Well drained	Prime farmland if irrigated	19.13 acres (14.57%)
53	Kim loam, 1 to 3 percent slopes	Entisols	Well drained	Prime farmland if irrigated	25.38 acres (19.33%)
105	Table Mountain loam, 0 to 1 percent slopes	Mollisols	Well drained	Prime farmland if irrigated	0.48 acre (0.37%)
73	Nunn clay loam, 0 to 1 percent slopes	Mollisols	Well drained	Prime farmland if irrigated	29.56 acres (22.51%)
59	Laporte-Rock outcrop complex, 3 to 30 percent slopes	Mollisols	N/A	Not prime farmland	1.25 acres (0.95%)
73	Nunn clay loam, 0 to 1 percent slopes	Mollisols	Well drained	Prime farmland if irrigated	1.65 acres (1.26%)
7	Ascalon sandy loam, 0 to 3 percent slopes	Mollisols	Well drained	Prime farmland if irrigated	12.33 acres (9.39%)
95	Satanta loam, 1 to 3 percent slopes	Mollisols	Well drained	Prime farmland if irrigated	5.01 acres (3.81%)

7.6.2 Environmental Consequences

Alternative A: No Action

Under the No Action Alternative, the CPW multipurpose facility would not be constructed at the Bird Farm SAA, the drainage facility would not be constructed at the Kelley and Johnson properties, and CPW would continue to use and maintain the FCSC at its current location. Therefore, no impacts on prime farmland and unique farmland, as defined in 7 CFR 658, would occur.

Alternative B: Proposed Action

The Proposed Action would disturb approximately 112 acres of land mapped as prime farmland soil, including prime farmland if irrigated, according to NRCS (Table 7). However, the project area has not historically been used for agricultural purposes. The majority of the project area is mapped as prime farmland if irrigated (108 acres) and has been previously disturbed for the construction of existing buildings and roads. The remainder of this area is characterized by non-native grassland vegetation species. The area mapped as prime farmland soil of statewide importance (18 acres) is currently occupied by buildings, a paved road, and trees (Figure 4). Additionally, the project area is surrounded by heavily trafficked roads (I-25 and County Road 50) to the north and west. Therefore, the Proposed Action would have only long-term negligible to minimal impacts on the prime and unique farmland soils in the project area.

Figure 4. Prime and Unique Farmland

7.7 Visual Resources

7.7.1 Affected Environment

The project area is located at the southeast corner of the intersection of I-25 and Mountain Vista Drive in Fort Collins, Colorado, which is characterized by expansive and generally unobstructed valley views and rolling hill topography. Viewsheds of the Horsetooth Mountain Open Space and the Rocky Mountains are visible to the west of the project area, and to the south of the project area, Longs Peak is visible. The area is rural and agrarian in nature, with few developments that are widely dispersed. Clusters of trees line streams and roads adjacent to the project area.

Larimer County has proposed a strategy for safeguarding ridgelines against development. A collaborative effort involving five counties, including Larimer County, led to the Mountain Backdrop Study. The study aimed to conceptually identify crucial preservation elements in the foothills landscape. Consequently, the Larimer County Comprehensive Plan (2019) pinpointed Land Conservation Priority Areas; these lands align with the preservation goals outlined in the study. The Larimer County Open Lands Master Plan dated June 2015 (Larimer County 2015) cataloged sites or structures of local significance. This includes landmarks, areas designated by the Colorado Natural Areas Program, and various historic or cultural resources. In the pursuit of comprehensive planning, future county initiatives involve the further identification and establishment of protection guidelines for distinctive geological features, ridgelines, and panoramic views.

Additionally, the project area of the Proposed Action is directly adjacent to and south of the City of Fort Collins Industrial and Employment zoned district. The design criteria for these districts, according to the Fort Collins Land Use Code (Fort Collins 1997), is to provide a variety of business types and sizes allowing for a range of job opportunities for this area, community, and region by establishing a major business center in northeast Fort Collins.

7.7.2 Environmental Consequences

Alternative A: No Action

Under the No Action Alternative, the CPW multipurpose facility would not be constructed at the Bird Farm SAA, the drainage facility would not be constructed at the Kelley and Johnson properties, and CPW would continue to use and maintain the FCSC at its current location. There would be no changes to visual resources in the project area, and therefore, there would be no impacts on visual resources.

Alternative B: Proposed Action

Construction and operation of the Proposed Action would change the visual resources in the project area in comparison to existing development of the project area. A slight reduction in the viewshed of the plains and Rocky Mountains to the west is anticipated due to the size of the Proposed Action at the Bird Farm SAA (69,885 square feet in size) as opposed to the undeveloped Bird Farm SAA that currently has a much smaller footprint (approximately 15,650 feet). In addition, the area would be more developed with several buildings, driveways, parking areas, sidewalks, walking paths, and landscaping. The multipurpose facility would be designed to ensure an appropriate transition and buffer is established between residential uses and the business center, which uses neutral building colors. The overall design style for the majority of

the site, based on recommendations in the Feasibility Study, is proposed to be "mountain contemporary" with some rustic features in a modern approach to blend in and complement the surrounding environment (Farnsworth 2020).

During the construction phase, visual impacts are anticipated due to the removal of vegetation cover and the temporary loss of vegetation caused by the installation of the new buildings between I-25 and Mountain Vista Drive. The trees in the mixed woodland areas would be preserved during construction, to the extent possible.

Short-term effects resulting from construction activities associated with the Proposed Action would also include increased construction traffic, transportation of materials on local roads, and the presence of construction equipment and materials in the project area.

Because the Proposed Action would be constructed in an existing Larimer County development, no Open Lands or Critical Preservation Candidate Lands are designated by Larimer County in the proposed disturbance areas. The Proposed Action shall adhere to the adjacent and directly south city of Fort Collins zoning district standards and, therefore, is not anticipated to negatively impact visual resources.

7.8 Reasonably Foreseeable Impacts

This EA describes the impacts, or environmental consequences, of the No Action Alternative and Proposed Action, and the potential impact of the reasonably foreseeable future trends and planned actions combined with the Proposed Action that could cumulatively impact specific resources evaluated in this EA. Reasonably foreseeable impacts can result from individually minor but collectively significant actions taking place over a period of time.

The proposed project area is located on the eastern edge of the rapidly growing city of Fort Collins. As the population grows, so does the need for residential and commercial development and road maintenance and improvement, and the demand for recreational opportunities. Several development projects are under review by the city of Fort Collins in the vicinity of the project area. These projects include the construction of two industrial buildings west of I-25 and just south of East Vine Drive, the construction of two industrial buildings west of I-25 and just south of East Vine Drive, and the construction of a convenience store and fuels sale project just south of Highway 14. Additionally, oil and gas wells continue to be operated in the Fort Collins field approximately 3 miles northwest of the project area. Ongoing residential and commercial development, including the Proposed Action, require road maintenance and improvement, which may have beneficial effects on socioeconomics through construction jobs and recreation resources through improved access, and adverse effects on biological resources and air quality.

When combined with past, present, and reasonably foreseeable future actions, the Proposed Action would have short-term negligible adverse effects on air quality and species and habitats of concern, short-term minor adverse effects on terrestrial fauna habitats, and long-term minor adverse effects on prime and unique farmland. Short-term beneficial effects on socioeconomic resources would occur from the Proposed Action, as well as long-term beneficial effects on recreation resources. No impacts would occur on aquatic fauna and habitat, cultural resources, or visual resources. The Proposed Action would have no significant adverse effects on any resource.

7.9 Best Management Practices

BMPs would be developed and implemented in accordance with Larimer County's Stormwater Sediment and Erosion Control requirements along with the Colorado Department of Public Health and Environments Stormwater Construction Discharge Permit requirements. BMPs would be implemented to avoid or minimize impacts on project area resources, as follows:

- Vegetation removal remedial actions would include installing erosion-control structures; reseeding, conserving, and replacing topsoil or replanting the area; and controlling nonnative plant species.
- Erosion-control measures would contribute to avoiding sedimentation into waterways.
- Introduction of nonnative/noxious plant species would be minimized by:
    - Washing equipment prior to construction to prevent the introduction of invasive species seeds from earthmoving or hauling.
    - Minimizing soil disturbance.
- To avoid destruction of potential migratory bird nests, vegetation removal should be conducted outside of the April 1 through September 15 breeding season. Nest surveys would be conducted at least one week prior to construction.
- Project personnel would be prohibited from feeding or approaching wildlife.
- The following measures would be taken to limit noise and disturbance from vehicles and equipment used on the project:
    - Ensuring all motor vehicles and equipment have mufflers conforming to original manufacturer specifications that are in good working order and are in constant operation to prevent excessive or unusual noise, fumes, or smoke.
    - Limiting the use of air horns in the project area to emergencies only.

8. SUMMARY OF ANALYSIS

The purpose of this EA is to briefly provide sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

8.1 Alternative A: No Action

As described above under the No Action Alternative, CPW would not construct a new multipurpose facility and would continue to use and maintain the FCSC at its current location. The Kelley property would remain as is and the drainage facility would not be constructed. Therefore, there would be no changes or impacts to air quality and climate, the biological environment, cultural resources, recreation, socioeconomic resources, prime and unique farmland, and visual resources.

The Bird Farm SAA would continue to be owned and operated by CPW as an overflow storage facility. The ability to meet CPW's mission and provide services to the public would be increasingly difficult due to space restrictions and security concerns at the FCSC.

8.2 Alternative B: Office Relocation to Bird Farm SAA and Kelley Property (Proposed Action)

As described above, Alternative B would have temporary adverse impacts on air quality and socioeconomics, and negligible to minimal and long-term impacts on terrestrial fauna and habitat

and prime and unique farmland soils. The Proposed Action would have beneficial impacts on recreation availability and ADA accessibility. No effects on cultural resources are anticipated.

The Proposed Action would meet the need for the Project by increasing the capacity of CPW's current facilities to accommodate the future growth of the Fort Collins Area Office and increase the needs of visitors. The Proposed Action would promote CPW's ability to secure and monitor public space separate from administrative tasks, improve collaboration spaces for staff, and provide ample space and opportunity to expand CPW's current services for the agency and the public.

9. LIST OF SOURCES, AGENCIES, AND PERSONS CONSULTED

Preparation of this EA is being coordinated with appropriate tribal, congressional, federal, state, and local interests, as well as other interested parties. The following federal and state agencies were contacted during project development:

- U.S. Department of the Interior
- USFWS
- SHPO

As part of NHPA, letters were sent to 17 tribes who have historical and cultural connection to this area. Letters were sent December 13, 2024, and no concerns were raised by any of the contacted tribes.

Details of public outreach are presented in Section 5.

Correspondence from the public and Larimer County is included in Appendix A.

10. LIST OF PREPARERS

Name	Role / Title	Organization
Paul Barker	Project Manager NE Region	Colorado Parks and Wildlife
Megan Sims	Federal Aid Coordinator	Colorado Parks and Wildlife
Jason Surface	NE Region Area 4 Manager	Colorado Parks and Wildlife
Amanda Horvath	Office of Conservation Investment	U.S. Fish and Wildlife Service
Shannon Ford	Senior Environmental Planner	ERO Resources Corporation
Nicole Den Herder	NEPA Specialist/Principal	ERO Resources Corporation
Jon Hedlund	Senior Archaeologist	ERO Resources Corporation
Lili Perreault	Senior Environmental Planner	ERO Resources Corporation
Autumn Panlilio	Environmental Planner	ERO Resources Corporation
Marie Matsuda	Cultural Resources Specialist	ERO Resources Corporation
David Hesker	GIS Specialist	ERO Resources Corporation
Kay Wall	Technical Editor	ERO Resources Corporation
Emily Ortiz	Architectural Historian	ERO Resources Corporation
Megan Paliwoda	Environmental Planner	ERO Resources Corporation

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APPENDICES

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Appendix A. Public Outreach.

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LARIMER COUNTY | ENGINEERING DEPARTMENT

P.O. Box 1190, Fort Collins, Colorado 80522-1190, 970.498.5700, Larimer.org

MEMORANDUM

TO: Doug May, Larimer County Planning Department

FROM: Steven Rothwell, Larimer County Engineering Department

DATE: October 11, 2022

SUBJECT: Colorado Parks and Wildlife - Location and Extent (L&E), File #22-ZONE3352

Project Description/Background:

This is a Location and Extent (L&E) review to allow for a new regional office for the Colorado Parks and Wildlife Division. The subject site is situated southeast of the interchange of Mountain Vista (ECR50) and I-25.

Comments:

The Larimer County Engineering Department would recommend that this proposal be required to go through the Site Plan review process. As part of site plan process, County Engineering would review the application per the criteria found in the Larimer County Land Use Code, County Rural Area Road Standards, and Storm-Water Design Standards.

Based on the criteria found in these manuals, we would typically have comments at the site plan stage that discuss transportation and drainage issues to ensure that that there is adequate drainage, access, and parking for the site. Any proposed appeals to the standards can be requested at the Site Plan stage where the appeals can be reviewed by staff and approved by the Board of County Commissioners.

1. The proposal appears to meet the intent of the applicable Engineering principles of the County Master Plan relating to stormwater management, floodplain hazards, and water quality.
2. Staff expects that all necessary measures are taken to control water quality, erosion and sedimentation during all phases of construction and that all disturbed areas are repaired to a condition that is equal to or better than the existing condition.
3. The construction of, or grading for, of any new facilities shall not impact or hinder the existing drainage patterns in the area. It should be noted that the proposed project falls within the Boxelder Drainage Basin. We expect that any improvements comply with the Boxelder Drainage Master Plan.

LARIMER COUNTY

4. A State Stormwater Permit will be required if more than one acre of land is disturbed. Staff assumes that all other applicable Federal, State and County permits will be obtained and adhered to as part of the design, construction, and post- construction phases of the project.

Fees:

1. Typically, Transportation Capital Expansion Fees are required at the time of building permit issuance in accordance with transportation capital expansion fee regulations then in effect.
2. This proposal lies within a Drainage Basin for which this office typically applies drainage fees for new impervious areas created as part of new development.

Staff Recommendation:

The proposal appears to meet the intent of the applicable Engineering principles of the County Master Plan and therefore we do not have any significant issues or outstanding comments that need to be addressed at this time. Staff expects that a Site Plan application be submitted following Planning Commission approval of the L&E.

Please feel free to contact me at (970) 498-5715 or e-mail me at srothwell@larimer.org if you have any questions. Thank you.

cc: paul.barker@state.co.us
file

LARIMER COUNTY | COMMUNITY DEVELOPMENT

Planning Services, 200 West Oak Street, Suite 3100, PO Box 1190, Fort Collins, Colorado 80522-1190, 970.498.7683, Larimer.org/Planning

10/04/2022

Paul Barker
3745 E Prospect Rd
Fort Collins, CO 80525

Dear Applicant:

Your application for Colorado Parks & Wildlife Location & Extent (22-ZONE3352) has been scheduled for a public hearing on **Wednesday, October 19, 2022 at 6:00 PM**. before the Larimer County Planning Commission. This hearing will be held via video conference and in the Hearing Room-1st Floor at the Larimer County Courthouse Offices, 200 West Oak Street, Fort Collins Colorado.

It is important that you or your representative attend this hearing. Should you have a scheduling conflict with this hearing date please contact the planner listed below as soon as possible.

Douglas May, Planner II

☎ 970-498-7712

maydw@co.larimer.co.us

Respectfully,
Larimer County Planning Services

PC: 22-ZONE3352
Kent Bruxvoort
Paul Barker
Scott Roush

LARIMER COUNTY | COMMUNITY DEVELOPMENT

Planning Services, 200 West Oak Street, Suite 3100, PO Box 1190, Fort Collins, Colorado 80522-1190, 970.498.7683, Larimer.org/Planning

10/28/2022

Paul Barker
3816 Crescent Dr
Fort Collins, CO 80526

Dear Applicant:

Your application for Colorado Parks & Wildlife Location & Extent (22-ZONE3352) was heard before the Larimer County Planning Commission on Wednesday, October 19, 2022. At the hearing, the Planning Commission approved your application. A copy of the official record of the Larimer County Planning Commission action can be found at www.larimer.org/bocc/commissioners-meetings/internet-broadcasts-commissioners-meetings#/uws/.

Please feel free to contact the planner listed below if you have any questions regarding your application.

Douglas May, Planner II
☎ 970-498-7712
maydw@co.larimer.co.us

Respectfully,
Larimer County Planning Services

PC: 22-ZONE3352
Kent Bruxvoort
Paul Barker
Scott Roush

March 19, 2024

Colorado Parks and Wildlife seeking public feedback on Fort Collins office relocation

FORT COLLINS, Colo. - Colorado Parks and Wildlife is asking for public feedback on the planned relocation of the Fort Collins administrative office to a new site with expanded access and updated buildings. The public will have 30 days to review the environmental assessment and provide comments on the new state administrative area. Feedback can be submitted in-person at the current Fort Collins office or online by emailing dnr_cpw_ftcsc_csrs@state.co.us.

The 30-day comment window period will be March 20 through April 19. Comments will be incorporated into the final environmental assessment and forwarded to the U.S. Fish and Wildlife Service for review and approval.

The current administrative office, located at 317 W Prospect Rd, Fort Collins, CO 80526, is more than 60 years old and has reached staffing capacity. City development around the office has made it difficult for visitors to access the site when pulling trailers with boats, ATVs, campers and more. Current storage space is also limited due to agency growth and the need for more research projects.

The new location is an existing CPW-owned property, currently housing storage spaces, at 1424 NE Frontage Rd, Fort Collins, CO 80524. Construction is anticipated to begin this fall, with the goal of opening to the public by spring 2027. The new campus will have better public access as it is conveniently located off of I-25 and will have wider frontage roads for trailers and boats. The project will also include building an aquatic nuisance species decontamination station and a chronic wasting disease check station.

Appendix B. Landscape Plans.

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LANDSCAPE LEGEND:

- ORGANIC WOOD MULCH TYPE: 100% SHREDDED CEDAR
- NATIVE SEED TYPE A RE: SCHEDULE
- NATIVE SEED TYPE B RE: SCHEDULE
- IRRIGATED SOD (3 TYPE BLUEGRASS HYBRID BLEND W/ 20% TEXAS BLUEGRASS)

GENERAL LANDSCAPE NOTES:

1. ALL LANDSCAPING AND PLANTS TO BE LOCATED NOT TO INTERFERE WITH EXISTING OR PROPOSED UTILITIES CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES,
   LINES AND STRUCTURES PRIOR TO EXCAVATION OR TRENCHING. DAMAGE TO THESE UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER OR LANDSCAPE ARCHITECT.
2. ALL PLANT MATERIALS SHALL BE IN ACCORDANCE WITH AAN (AMERICAN ASSOCIATION OF NURSERYMEN) SPECIFICATIONS FOR NUMBER ONE GRADE.
3. PLANT QUANTITIES SHOWN FOR INFORMATION PURPOSES ONLY, CONTRACTOR TO VERIFY ALL QUANTITIES.
4. ALL TREE AND SHRUB LOCATIONS SHALL BE STAKED BY CONTRACTOR AND APPROVED BY LANDSCAPE ARCHITECT.
5. PLANT SUBSTITUTIONS WILL NOT BE PERMITTED WITHOUT APPROVAL FROM LANDSCAPE ARCHITECT.
6. PLANTS SHALL BE INSTALLED IMMEDIATELY UPON DELIVERY TO SITE, IF THIS IS NOT POSSIBLE, PLANTS SHALL BE HEELED IN AND WATERED TO PREVENT DEHYDRATION.
7. SOIL AMENDMENT:
   SOD AREAS - 4 C.Y. PER 1,000 S.F. OF COMPOST TILLED INTO 4" OF EXISTING SOIL. APPLY DIAMONIUM PHOSPHATE (18-46-0) AT ONE HUNDRED (100) POUNDS NITROGEN PER ACRE.
   SHRUB AND PLANTING BEDS - 4" OF COMPOST TILLED INTO 6" OF EXISTING SOIL.

   ACCEPTABLE PRODUCT: CLASS I COMPOST. COMPOSTED MATERIAL SHALL CONSIST OF AGED ORGANIC MATTER, FREE OF WEED OR OTHER NOXIOUS PLANT SEEDS, LUMPS, STONES, OR OTHER
   FOREIGN CONTAMINANTS HARMFUL TO PLANT LIFE, AND HAVING THE FOLLOWING CHARACTERISTICS BASED ON A NUTRIENT TEST PERFORMED NO LONGER THAN 3 MONTHS PRIOR TO ITS
   INCORPORATION INTO THE PROJECT:
   A. ORGANIC MATTER: 25% MINIMUM.
   B. SALT CONTENT: 5.0 MMHOS/CM MAXIMUM
   C. PH: 7.5 MAXIMUM.
   D. CARBON TO NITROGEN RATIO OF 10:1 TO 20:1
8. ALL DAMAGED OR DEAD PLANT MATERIAL TO BE REPLACED. CONTRACTOR TO PROVIDE WATER THROUGHOUT CONSTRUCTION PERIOD.

NATIVE SEED LEGEND:

NATIVE SEED MIX TYPE A
(Drill or broadcast rate: PER MANUFACTURER SPECIFICATIONS)
SUPPLIER: PAWNEE BUTTES SEED, INC.
PRODUCT: PSBI NATIVE PRAIRIE MIX

NATIVE SEED MIX TYPE B
(Drill or broadcast rate: PER MANUFACTURER SPECIFICATIONS)
SUPPLIER: PAWNEE BUTTES SEED, INC.
PRODUCT: PSBI NATIVE PRAIRIE WILDFLOWER MIX

NATIVE SEED MIX TYPE C
(Drill or broadcast rate: PER MANUFACTURER SPECIFICATIONS)
SUPPLIER: PAWNEE BUTTES SEED, INC.
PRODUCT: PSBI NATIVE LAWN SEED MIX

LANDSCAPE SCHEDULE

QTY	SYMBOL	BOTANIC NAME	COMMON NAME	SIZE	HT	WT
DECIDUOUS TREES						
37		ACER NEGUNDO 'SENSATION'	SENSATION MAPLE	1.5" CAL./B&B	30-35'	20-25'
45		GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER'	SHADEMASTER HONEYLOCUST	1.5" CAL./B&B	40-50'	35-45'
25		CATALPA SPECIOSA	NORTHERN CATALPA	2" CAL./B&B	50-60'	30-40'
9		POPULUS ANGUSTIFOLIA	NARROWLEAF COTTONWOOD	1.5" CAL./B&B	50'	20-30'
20		QUERCUS GAMEBLII	GAMBEL OAK	1.5" CAL./B&B	15-20'	10-12'
30		QUERCUS MUEHLENBERGII	CHINKAPIN OAK	1.5" CAL./B&B	40-50'	40-50'
20		TILIA AMERICANA 'AMERICAN SENTRY'	AMERICAN SENTRY LINDEN	1.5" CAL./B&B	40-45'	25-30'
31		ULMUS JAPONICA X PUMILA 'NEW HORIZON'	NEW HORIZON ELM	1.5" CAL./B&B	30-40'	25'
26		ULMUS 'MORTON GLOSSY'	MORTON TRIUMPH ELM	1.5" CAL./B&B	50'-60'	35'-40'
ORNAMENTAL TREES						
14		AMELANCHIER CANADENSIS	SHADBLOW SERVICEBRRY (MULTI-STEM FORM)	1.5" CAL.	15-20'	15-20'
11		MALUS X 'SPRING SNOW'	SPRING SNOW CRABAPPLE	1.5" CAL.	20-25'	20'
17		QUERCUS 'CRIMSCHMIDT'	CRIMSON SPIRE OAK	1.5"CAL.	25-30'	10-15'
EVERGREEN TREES						
15		PICEA PUNGENS 'BACHERI'	BACHERI SPRUCE	6' HT.	18-20'	8-10'
4		PICEA PUNGENS 'FAT ALBERT'	FAT ALBERT SPRUCE	6' HT.	25-30'	20'
5		PINUS FLEXILIS 'VANDERWOLF'S PYRAMID'	VANDERWOLF'S LIMBER PINE	6' HT.	20-25'	10-15'
17		PINUS NIGRA	AUSTRIAN PINE	6' HT.	50-60'	20-40'
19		JUNIPERUS SCOPULORUM 'MOONGLOW'	MOONGLOW JUNIPER	6' HT.	15-20'	10'

QTY	SYMBOL	BOTANIC NAME	COMMON NAME	SIZE	HT	WT
DECIDUOUS SHRUBS						
75		AMORPHA CANESCENS	LEADPLANT	5 GAL.	3'	2'
44		POTENTILLA FRUTICOSA 'PINK BEAUTY'	PINK BEAUTY POTENTILLA	5 GAL.	2-3'	2-3'
43		CEROCARPUS INTRICATUS	LITTLE LEAF MOUNTAIN MAHOGANY	5 GAL.	6'	6'
57		PRUNUS BESSEYI	WESTERN SANDCHERRY	5 GAL.	5'	5-6'
256		PRUNUS BESSEYI 'PAWNEE BUTTES'	PAWNEE BUTTES WESTERN SAND CHERRY	5 GAL.	1-2'	5-6'
62		RHUS TRILOBATA	THREE-LEAF SUMAC	5 GAL.	2-6'	6'
EVERGREEN SHRUBS						
55		PINUS MUGO 'SLOWMOUND'	SLOWMOUND MUGO PINE	5 GAL.	18-24"	18-24"
27		PICEA PUNGENS 'GLOBOSA'	DWARF GLOBE SPRUCE	5 GAL.	3-5'	3-6'

QTY	SYMBOL	BOTANIC NAME	COMMON NAME	SIZE	HEIGHT	SPREAD
ORNAMENTAL GRASSES (SYMBOL ENLARGED FOR CLARITY)						
4		ANDROPOGON GERARDII	BIG BLUESTEM	1 GAL.	4-7'	2-4'
503		BOUTELOUA GRACILIS 'BLOND AMBITION'	BLOND AMBITION BLUE GRAMA	1 GAL.	20-24"	20-24"
28		CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	1 GAL.	4-5'	1-2'
14		CALAMAGROSTIS BRACHYTRICHA	KOREAN FEATHER REED GRASS	1 GAL.	3-4'	3'
21		DESCHAMPSIA CAESPITOSA	TUFTED HAIRGRASS	1 GAL.	18-24"	2-3'
143		MUHLENBERGIA REVERCHONII	UNDAUNTED MUHLY GRASS	1 GAL.	15-18"	18-24"
177		PANICUM VIRGATUM	SWITCHGRASS	1 GAL.	3'	3'
259		SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	1 GAL.	2-3'	2'
291		SPOROBOLUS HETEROLEPIS	PRAIRIE DROP SEED	1 GAL.	1.5-2'	18-24"

D2C ARCHITECTS
russell + mills
D2C ARCHITECTS, INC
DENVER, COLORADO

MARK	DESCRIPTION	DATE	APPR

DESIGN BY: RUSSELL + MILLS STUDIOS	ISSUE DATE: 07.11.2022
D2C PROJECT NUMBER 202113	CONSULTANTS PROJECT #
DRAWN BY: MT	CKD BY: JB
	SOLICITATION NO.:
SBMT BY: Approver	PLOT DATE: 02/01/2024
	CONTRACT NO.:
PLOT SCALE:	FILE NUMBER:
SIZE: 22" x 34"	FILE NAME:

Progress Construction Documents

NOT FOR CONSTRUCTION

Colorado Parks and Wildlife
Fort Collins Relocation
1626 NE Frontage Rd, Fort Collins, CO 80524

LANDSCAPE NOTES AND LEGEND

SHEET IDENTIFICATION
STE LP001

STE X-##1-

LANDSCAPE LEGEND:

- ORGANIC WOOD MULCH
  TYPE: 100% SHREDDED CEDAR
- NATIVE SEED TYPE A
  RE: SCHEDULE
- NATIVE SEED TYPE B
  RE: SCHEDULE
- IRRIGATED SOD
  (3 TYPE BLUEGRASS HYBRID BLEND W/ 20% TEXAS BLUEGRASS)

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   INCORPORATION INTO THE PROJECT:
   A. ORGANIC MATTER: 25% MINIMUM.
   B. SALT CONTENT: 5.0 MMHOS/CM MAXIMUM
   C. PH: 7.5 MAXIMUM.
   D. CARBON TO NITROGEN RATIO OF 10:1 TO 20:1
8. ALL DAMAGED OR DEAD PLANT MATERIAL TO BE REPLACED. CONTRACTOR TO PROVIDE WATER THROUGHOUT CONSTRUCTION PERIOD.

80' 0' 40' 80' 160' NORTH

D2C ARCHITECTS

russell + mills

MARK	DESCRIPTION	DATE	APPR.

DESIGN BY: RUSSELL + MILLS STUDIOS
D2C PROJECT NUMBER: 202113
DRAWN BY: MT
CKD BY: JB
SBMT BY: Approver
PLOT DATE: 02/01/2024
PLOT SCALE:
SIZE: 22" x 34"
ISSUE DATE: 07.11.2022
CONSULTANTS PROJECT #
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:
FILE NAME:

Progress Construction Documents

NOT FOR CONSTRUCTION

Colorado Parks and Wildlife
Fort Collins Relocation
1626 NE Frontage Rd, Fort Collins, CO 80524

OVERALL LANDSCAPE PLAN

SHEET IDENTIFICATION
STE LP100

STE X-##1-

1 2 3 4 5

D

C

B

A

LANDSCAPE LEGEND:

- ORGANIC WOOD MULCH
  TYPE: 100% SHREDDED CEDAR
- NATIVE SEED TYPE A
  RE: SCHEDULE
- NATIVE SEED TYPE B
  RE: SCHEDULE
- IRRIGATED SOD
  (3 TYPE BLUEGRASS HYBRID
  BLEND W/ 20% TEXAS BLUEGRASS)

30' 0' 15' 30' 60' NORTH

D2C ARCHITECTS

russell + mills

MARK	DESCRIPTION	DATE	APPR

DESIGN BY: RUSSELL + MILLS STUDIOS		ISSUE DATE: 07.11.2022	
D2C PROJECT NUMBER 202113		CONSULTANTS PROJECT #	
DRAWN BY: MT	CKD BY: JB	SOLICITATION NO.:	
SBMT BY: Approver	PLOT DATE: 02/01/2024	CONTRACT NO.:	
PLOT SCALE:		FILE NUMBER:	
SIZE: 22" x 34"	FILE NAME:		

Progress Construction Documents

NOT FOR CONSTRUCTION

Colorado Parks and Wildlife

Fort Collins Relocation

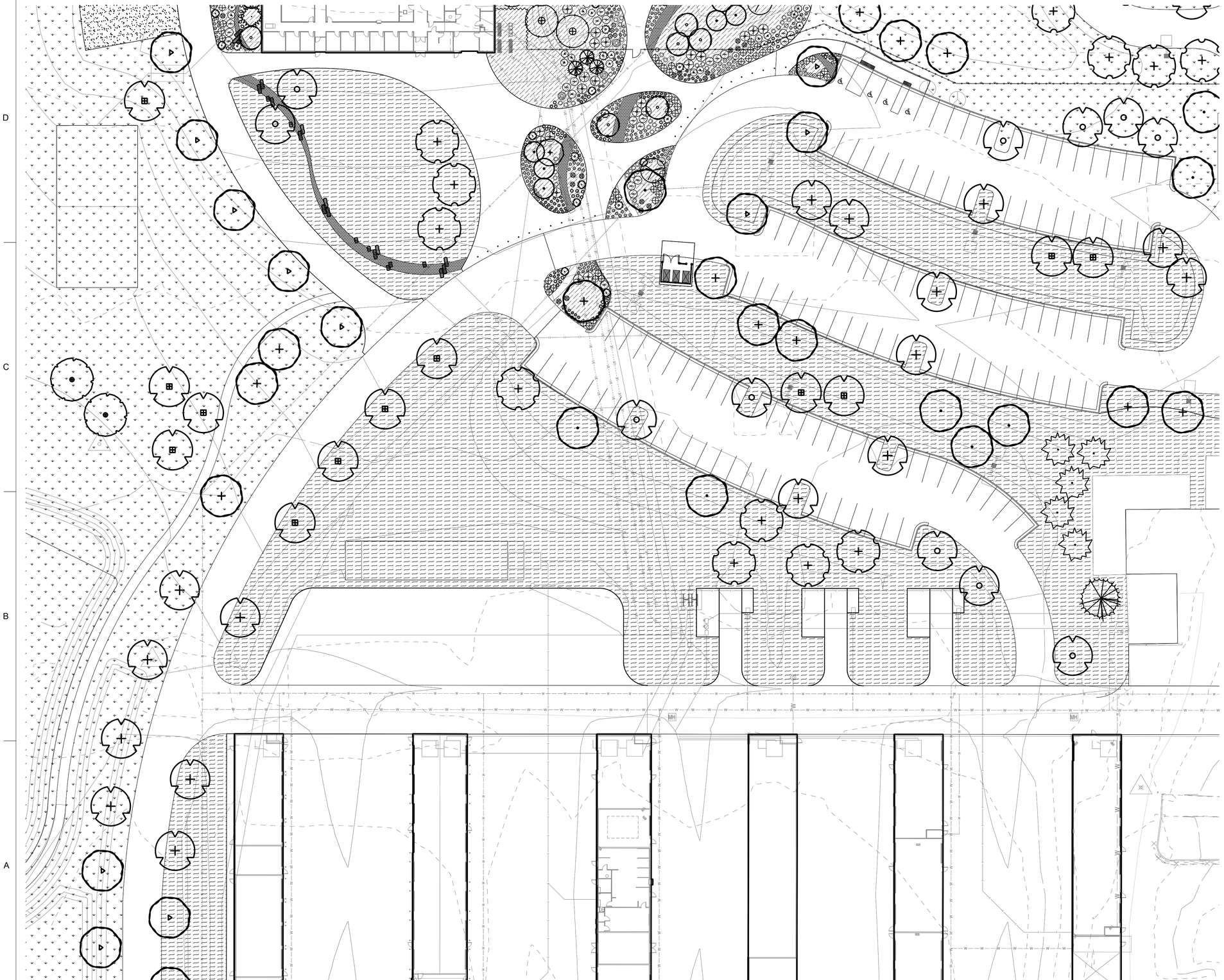
1626 NE Frontage Rd, Fort Collins, CO 80524

LANDSCAPE PLAN

SHEET IDENTIFICATION

STE LP101

STE X.##1-



D2C ARCHITECTS

russell+mills

MARK	DESCRIPTION	DATE	APPR

DESIGN BY: RUSSELL + MILLS STUDIOS	ISSUE DATE: 07.11.2022		
D2C PROJECT NUMBER 202113	CONSULTANTS PROJECT #		
DRAWN BY: MT	CKD BY: JB	SOLICITATION NO.:	
SBMT BY: Approver	PLOT DATE: 02/01/2024	CONTRACT NO.:	
PLOT SCALE:		FILE NUMBER:	
SIZE: 22" x 34"	FILE NAME:		

Progress Construction Documents

NOT FOR CONSTRUCTION

Colorado Parks and Wildlife

Fort Collins Relocation

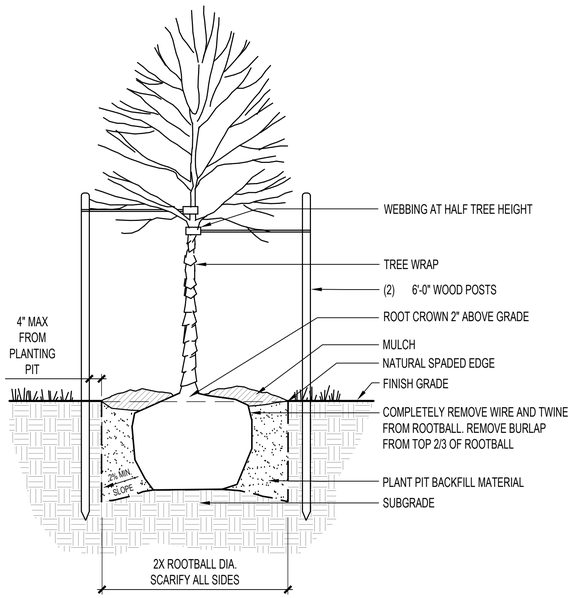
1626 NE Frontage Rd, Fort Collins, CO 80524

LANDSCAPE PLAN

SHEET IDENTIFICATION

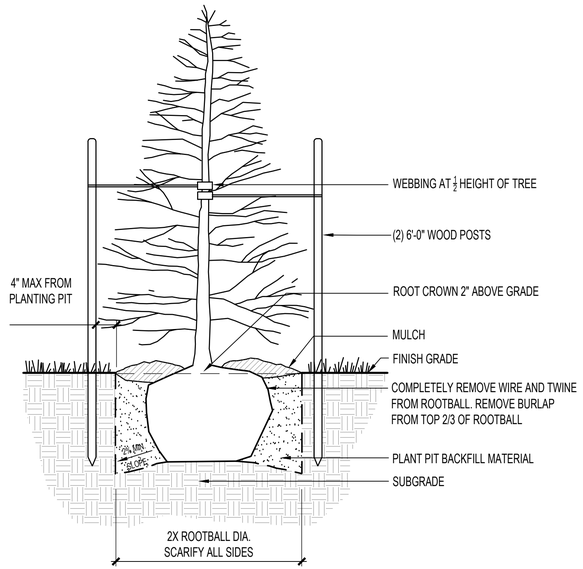
STE LP102

STE X-##1-



A DECIDUOUS TREE PLANTING

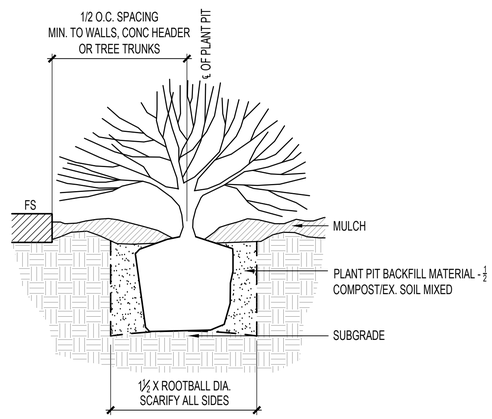
SCALE: NTS



B EVERGREEN TREE PLANTING

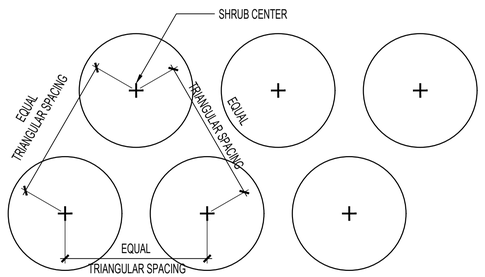
SCALE: NTS

DT-PLNT-TREE-EVER



C SHURB PLANTING

SCALE: NTS



D SHRUB SPACING

SCALE: NTS

DT-PLNT-SHRB-SPAC

STE X-##1-

D2C ARCHITECTS

russell + mills

MARK	DESCRIPTION	DATE	APPR

DESIGN BY: RUSSELL + MILLS STUDIOS		ISSUE DATE: 07.11.2022	
D2C PROJECT NUMBER 22d113	CKD BY: JB	CONSULTANTS PROJECT #	SOLICITATION NO.:
DRAWN BY: MT	PLOT DATE: 02/01/2024		CONTRACT NO.:
SBMT BY: Approver			FILE NUMBER:
PLOT SCALE:			
SIZE: 22" x 34"	FILE NAME:		

Progress Construction Documents

NOT FOR CONSTRUCTION

Colorado Parks and Wildlife

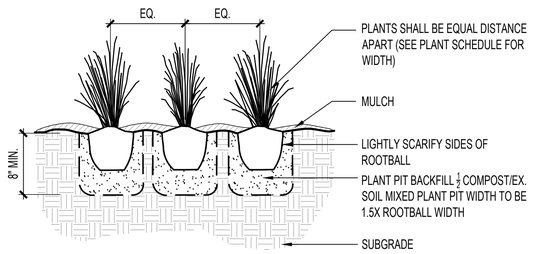
Fort Collins Relocation

1626 NE Frontage Rd, Fort Collins, CO 80524

LANDSCAPE DETAILS

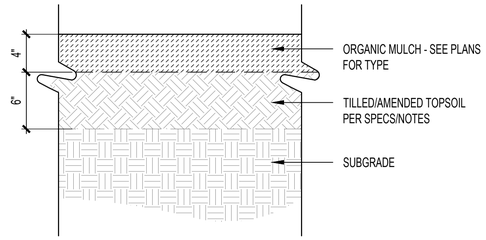
SHEET IDENTIFICATION

STE LP501



A PERENNIAL/ORNAMENTAL GRASS PLANTING

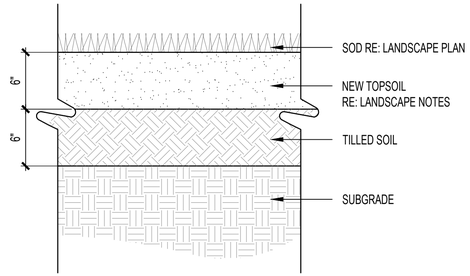
SCALE: NTS DT-PLNT-PERN-ORNA



NOTE:
DO NOT INSTALL LANDSCAPE FABRIC UNDER MULCH

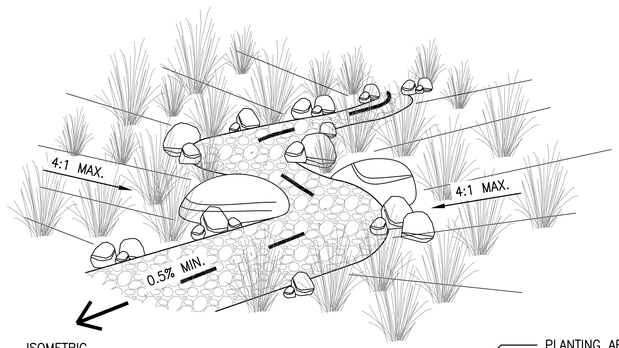
B ORGANIC MULCH

SCALE: 1 1/2" = 1'-0"

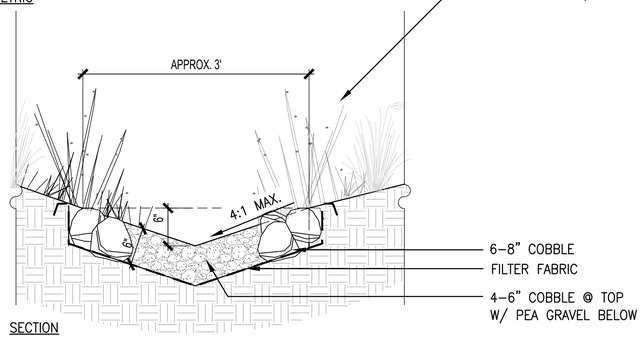


C SOD PLANTING

SCALE: 1 1/2" = 1'-0"



ISOMETRIC



SECTION

NOTE:
1. BIOSWALE TO BE VARIED IN WIDTH, WITH A RANGE OF APPROX. 2'-5' WIDE.

D DRYSTREM BED

SCALE: NTS

D2C ARCHITECTS
russell + mills

D2C ARCHITECTS, INC
DENVER, COLORADO

MARK	DESCRIPTION	DATE	APPR

DESIGN BY: RUSSELL + MILLS STUDIOS
D2C PROJECT NUMBER 20211 3
DRAWN BY: MT
CKD BY: JB
SBMT BY: Approver
PLOT SCALE:
ISSUE DATE: 07.11.2022
CONSULTANTS PROJECT #
SOLICITATION NO.:
CONTRACT NO.:
PLOT DATE: 02/01/2024
FILE NUMBER:
SIZE: 22" x 34"
FILE NAME:

Progress Construction Documents

NOT FOR CONSTRUCTION

Colorado Parks and Wildlife
Fort Collins Relocation
1626 NE Frontage Rd, Fort Collins, CO 80524

LANDSCAPE DETAILS

SHEET IDENTIFICATION
STE LP502

STE X-##1-

Appendix C. Natural Resources Technical Memorandum.

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ERO

Consultants in Natural Resources and the Environment

Natural Resources Technical Memorandum
Colorado Parks and Wildlife Fort Collins Area Office
Kelley Property
East of Interstate 25 and South of Colorado Highway 50
Fort Collins, Colorado

Prepared for—

Colorado Parks and Wildlife
317 West Prospect Road
Fort Collins, Colorado 80526

Prepared by—

ERO Resources Corporation
1626 Cole Boulevard, Suite 100
Lakewood, Colorado 80401
(303) 830-1188
ERO Project #23-238

September 9, 2025

Contents

Tables

Figures

Appendices

Executive Summary

Colorado Parks and Wildlife (CPW) retained ERO Resources Corporation (ERO) to provide a natural resources technical memorandum for the Kelley property east of Interstate 25 and south of Colorado Highway 50 (project) in Fort Collins, Larimer County, Colorado (project area). ERO assessed the project area for potential wetlands and other waters of the U.S., threatened and endangered species habitat, and general wildlife use. Below is a summary of the resources found in the project area and recommendations or future actions necessary based on the current site conditions and federal, state, and local regulations.

The natural resources and associated regulations described in this report are valid as of the date of this report and may be relied upon for the specific use for which it was prepared by ERO under contract to CPW. Because of their dynamic natures, site conditions and regulations should be reconfirmed by a qualified consultant before relying on this report for a use other than that for which ERO was contracted.

Vegetation and Noxious Weeds – Vegetation communities in the project area consist of mixed woodlands, nonnative grasslands, and agricultural fields. These areas do not contain significant remnants of native plant species. List B and List C noxious weed species were observed in the project area during the 2025 site visits.

Wetlands and Other Waters of the U.S. – Boxelder Creek is shown on the U.S. Geological Survey (USGS) Fort Collins and Timnath, CO topographic quadrangle maps and the USGS National Hydrography Dataset as occurring in the project area. Boxelder Creek is likely jurisdictional and, therefore, a preconstruction notification should be submitted to the U.S. Army Corps of Engineers regarding any impacts on the creek. Wetlands were also observed along Boxelder Creek during the July 2025 site visit. Additionally, the Larimer and Weld Canal runs along the southern edge of the project area..

Threatened and Endangered Species – The project area does not contain habitat for any federally listed threatened or endangered species. A viable population of Preble's meadow jumping mouse is unlikely to exist in the project area because the project area lacks riparian shrub habitat, and woody vegetation in project area is fragmented and has been disturbed by human activity. The project area is not conducive to the establishment of Ute ladies'-tresses orchid (ULTO) because the project area lacks the open wet meadows that ULTO typically requires, and the remainder of the project area consists of almost entirely of disturbed uplands dominated by upland nonnative species.

Migratory Birds – Migratory birds, including raptors, and any active nests are protected under the Migratory Bird Treaty Act. ERO observed no potential songbird nests and two potential raptor nests in the project area during the 2025 site visits. The raptor nests could be impacted by the project if there would be human encroachment activities or a physical object or structure is proposed within a CPW-recommended buffer of an active nest permanently or for a significant amount of time (CPW 2020).

The best way to avoid impacting migratory birds is to conduct ground-clearing activities and construction activities during the non-nesting season. The Eastern Colorado Field Office of the U.S. Fish and Wildlife Service (Service 2022) and Colorado Department of Transportation (CDOT 2011) have identified the primary nesting season for migratory birds in eastern Colorado as occurring from April 1 to August 31. However, some birds (e.g., eagles, owls and red-tailed hawks), can nest as early as February or March. Because of variability in the breeding seasons of various bird species, additional nest surveys

during the nesting season may also be warranted. ERO recommends a nest survey be conducted within one week prior to construction to determine if any active nests are present in or near the project area so they can be avoided. If active nests are found, any work that would destroy the nests should not be conducted until the birds have vacated the nests. If possible, ground-clearing activities should occur outside of the migratory bird breeding season, generally April 1 through August 31.

Other Wildlife – The project area occurs in mule deer, white-tailed deer, and mountain lion overall range, as well as white-tailed deer and bald eagle winter ranges. No High Priority Habitat (HPH) exists in the project area. No prairie dog colonies, fox dens, or coyote dens were observed in the project area during the 2025 site visits. No other sensitive species occur in the project area that would be significantly adversely affected by the proposed project. Overall, surrounding and continuing development contributes to a decline in the number and diversity of wildlife species nearby and to a change in species composition.

Views – The project area is bounded by Colorado Highway 50 to the north, privately owned land to the east and south, and Interstate 25 to the west. Portions of the Front Range are visible in the northern and northwestern portions of the project area.

Natural Resources Technical Memorandum
Colorado Parks and Wildlife Fort Collins Area Office – Kelley Property
East of Interstate 25 and South of Colorado Highway 50
Fort Collins, Colorado

September 9, 2025

Introduction

Colorado Parks and Wildlife (CPW) retained ERO Resources Corporation (ERO) to provide a natural resources technical memorandum for the Kelley property east of Interstate 25 and south of Colorado Highway 50 (project) in Fort Collins, Larimer County, Colorado (project area; Figure 1). On February 27, 2025, Jared Dubiel, a biologist with ERO, assessed the project area for natural resources. ERO conducted an additional site visit on July 11, 2025 and reviewed aerial imagery in conjunction with the July 2025 site visit (Google, Inc. 2025; 2025 site visits). Additionally, an assessment of the Bird Farm property immediately north of the Kelley property was completed in 2023 (2023 site visit). See Appendix D for the Natural Resources Assessment of the Bird Farm property. During these assessments, activities included a review of potential wetlands and other waters of the U.S. (WOTUS), identification of suitable habitat for federally threatened and endangered species, and identification of other natural resources, including natural habitats and features as described in the Fort Collins Land Use Code, Article 3, Division 3.4. In addition to the information gathered during the 2023 and 2025 site visits, natural resource information was obtained from existing databases and sources such as aerial photography, the U.S. Fish and Wildlife Service (Service) Information for Planning and Consultation (IPAC) tool, the U.S. Geological Survey (USGS) National Hydrography Dataset (NHD), the National Wetland Inventory (NWI), CPW map databases, City of Fort Collins Natural Features Mapping, the Colorado Natural Heritage Program (CNHP), and other sources (Service 2025a; USGS 2025; Service 2025b; CPW 2021; 2025; City of Fort Collins 2018; CNHP 2025). This report provides information on existing site conditions and resources, as well as current regulatory guidelines related to those resources. ERO assumes the landowner is responsible for obtaining all federal, state, and local permits for construction of the project.

The natural resources and associated regulations described in this report are valid as of the date of this report and may be relied upon for the specific use for which it was prepared by ERO under contract to CPW. Because of their dynamic natures, site conditions and regulations should be reconfirmed by a qualified consultant before relying on this report for a use other than that for which ERO was contracted.

Project Area Location

The project area is in Section 3, Township 7 North, Range 68 West of the 6th Principal Meridian in Larimer County, Colorado (Figure 1). The UTM coordinates for the approximate center of the project

area are 500168mE, 4495237mN, Zone 13 North. The longitude/latitude of the project area is 104.995645°W/40.603877°N. The elevation of the project area is approximately 4,990 feet above sea level. Photo points of the project area are shown on Figure 2, and the photo log is in Appendix A.

Project Area Description

The U.S. Department of Agriculture (USDA) has mapped the project area within the Central High Plains, Southern Land Resource Area, which is mainly characterized by an elevated, smooth to slightly irregular plain consisting of sediments deposited by rivers that drained from the Rocky Mountains (USDA, NRCS 2006). The climate of the area is typical of midcontinental semiarid temperate zones, but the strong rain shadow effect of the Southern Rocky Mountains makes the area drier with average annual precipitation from 12 to 18 inches, increasing from west to east (USDA, NRCS 2006). The topography of the project area is a flat plain (Photo 1 and Photo 2).

The project area is bounded by Colorado Highway 50 and the CPW Bird Farm property to the north, privately owned land to the east and south, and Interstate 25 to the west (Figure 2). The project area largely consists of a former agricultural site (Figure 2). Several abandoned buildings are also located in the project area, including former residential buildings and border fencing (Photo 1).

Vegetation

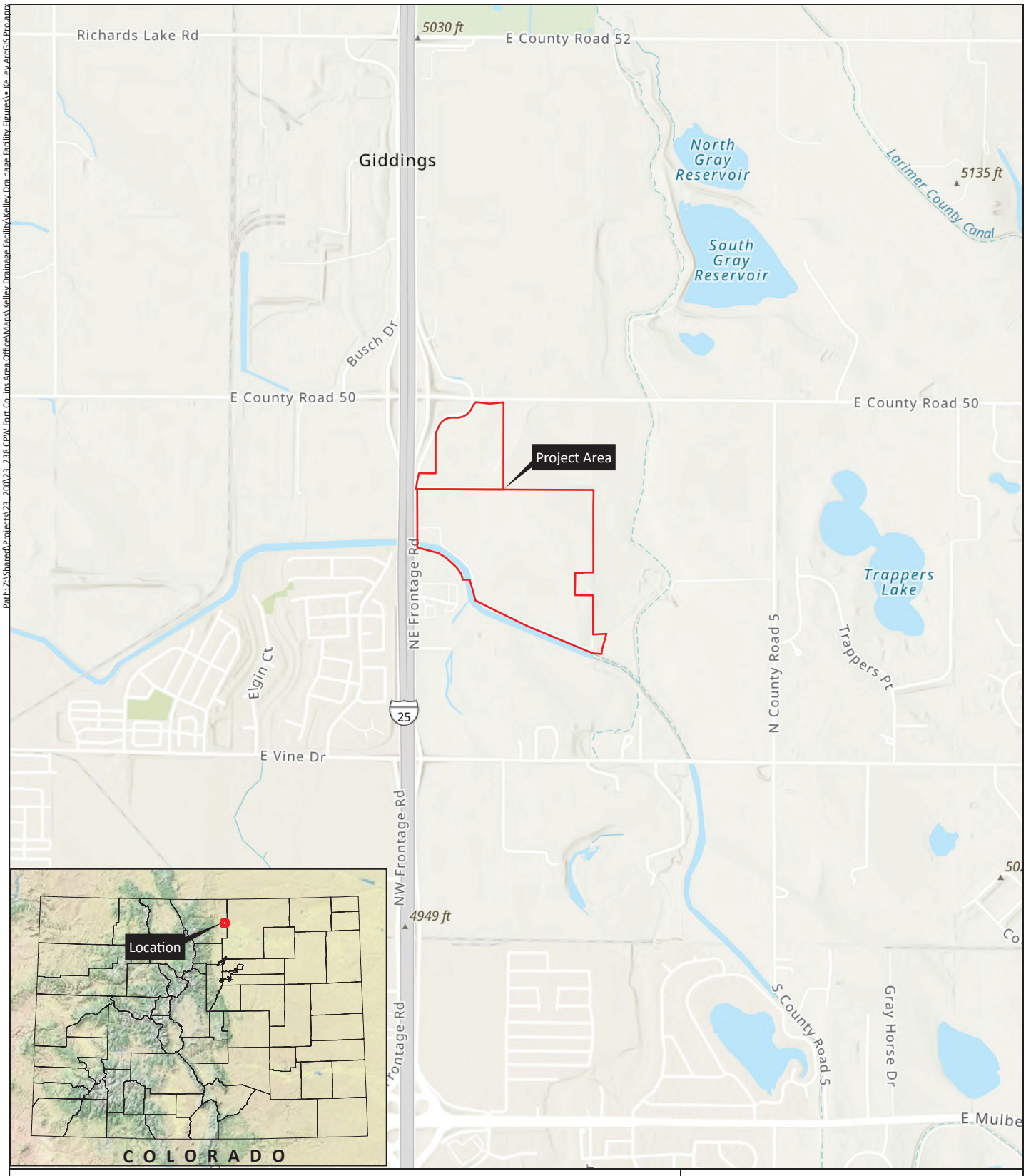
No significant remnants of native plant communities exist in the project area (Appendix B). More detailed descriptions of the habitat communities observed in the project area during the 2025 site visits are provided below.

Agricultural

The majority of the project area consists of former or current agricultural land. These agricultural fields are not mapped on the City of Fort Collins Natural Habitats and Features Map (City of Fort Collins 2018). Dominant species in the agricultural areas consisted of alfalfa (*Medicago sativa*) and kochia (*Bassia scoparia*). Other species observed in the agricultural areas include western wheatgrass (*Pascopyrum smithii*), flixweed (*Descurainia sophia*), Russian thistle (*Salsola tragus*), diffuse knapweed (*Centaurea diffusa*), field bindweed (*Convolvulus arvensis*), and common mullein (*Verbascum thapsus*).

Mixed Woodland

Mixed woodland areas occur on the western portion of the project area (Figure 2; Photo 1). These woodlands are mapped on the City of Fort Collins Natural Habitats and Features Map (Fort Collins 2018) as nonnative uplands plains forest. However, observations during the 2025 site visits confirmed the presence of some native species, suggesting a mixed woodland habitat interspersed with upland agricultural areas. Dominant species in the mixed woodland areas include ponderosa pine (*Pinus ponderosa*), blue spruce (*Picea pungens*), and honey locust (*Gleditsia triacanthos*).



Path: Z:\Shared\Projects\23_200\23_238 CPW Fort Collins Area Office\Maps\Kelley Drainage Facility\Kelley Drainage Facility Figures\• Kelley ArcGIS Pro.aprx

Kelley Drainage Facility

Section 3, T7N, R68W; 6th PM

UTM NAD 83: Zone 13N; 500368mE, 4494785mN

Longitude 104.995645°W, Latitude 40.603877°N

USGS Fort Collins and Timnath, CO Quadrangles

Larimer County, Colorado

0 1,000 2,000 feet

N

Figure 1
Vicinity Map

Prepared for: State of Colorado
File: • Kelley ArcGIS Pro.mxd [dlH]
July 29, 2025

ERO Resources Corp.

Kelley Drainage Facility

- Kelley Property Boundary
- Project Area
- Proposed Project Footprint
- CPW Facility Boundary
- CPW Detention Pond
- Wetland
- Ordinary High Water Mark
- Culvert
- Raptor Nest
- Data Point
- 1/3-Mile Raptor Nest Buffer
- Agricultural
- Developed
- Larimer and Weld Canal
- Mixed Woodland
- Photo Point

0 350 700 feet

N

Figure 2
Existing Conditions

Prepared for: State of Colorado
File: • Kelley ArcGIS Pro.mxd [dlH]
July 29, 2025

ERO Resources Corp.

Noxious Weeds

Several species of noxious weeds were observed throughout the project area during the 2025 site visits. Noxious weeds are designated by the Colorado Department of Agriculture (CDA) and are categorized by their level of impact (CDA 2022). List B noxious weed species are species that have state noxious weed management plans designed to stop the continued spread of these species. List B species observed in the project area during the 2025 site visits included diffuse knapweed. List C noxious weed species are species that have state noxious weed management plans designed to provide additional education, research, and biological control resources to jurisdictions that choose to require management of List C species. List C species observed in the project area during the 2025 site visits included common mullein and field bindweed (Appendix B).

Wetlands and Other Waters of the U.S.

Background

Clean Water Act (CWA)

The CWA protects the chemical, physical, and biological quality of WOTUS. The U.S. Army Corps of Engineers (Corps) Regulatory Program administers and enforces Section 404 of the CWA. Under Section 404, a Corps permit is required for the discharge of dredged or fill material into wetlands and other WOTUS (streams, ponds, and other waterbodies). Since the regulatory program was initiated, the definition of WOTUS has changed frequently due to United States Supreme Court (Supreme Court) decisions and new rules proposed by presidential administrations. On August 29, 2023, the U.S. Environmental Protection Agency and Corps announced a final rule amending the 2023 definition of "waters of the U.S." to conform with the Supreme Court ruling under Sackett v. Environmental Protection Agency, No. 21-454. The amended rule reduces the jurisdiction of the CWA over wetlands adjacent to bodies of water that do not have a continuous surface connection to other known WOTUS, as well as streams that do not have continuous flowing or relatively permanent water. The amended rule removes the "significant nexus" standard that was created under Rapanos v. United States, removes interstate wetlands from the definition of WOTUS, and revises the definition of "adjacent" to mean "having a continuous surface connection." Potential rulings and guidance in the future could change the results of this report regarding the jurisdictional status of waters and wetlands in the project area. While ERO may provide its opinion on the likely jurisdictional status of wetlands and waters, the Corps will make the final determination of jurisdiction based on the current rulings.

State Dredge and Fill Program

On May 6, 2025, the Colorado Legislature passed House Bill (HB) 24-1379, which creates a dredge and fill permit program for the State of Colorado. The program will apply to all state waters, including wetlands, that are not protected under the federal CWA Section 404. If a CWA Section 404 Permit is obtained from the Corps, or the project has a valid approved jurisdictional determination from the Corps that was issued prior to May 25, 2023, then authorization from the state would not be required. The program will require authorization from Colorado Department of Public Health and Environment

(CDPHE) for the placement of dredged or fill material into state waters where the wetlands or open water have been determined to not be WOTUS. CDPHE has until December 31, 2025 to go through rulemaking, which will create general and individual permits similar to CWA Section 404 Permits.

Until the program is in place, CDPHE has issued Clean Water Policy 17, which allows for enforcement discretion for activities in state waters that would have previously required a CWA Section 404 Permit. If a project would impact state waters that are no longer considered WOTUS and require a CWA Section 404 Permit, Clean Water Policy 17 applies. The policy allows for enforcement discretion if permanent impacts on state waters would be less than 0.10 acre on wetlands or 0.03 acre on streambeds and notification is submitted to CDPHE. If impacts would exceed those thresholds, HB 24-1379 states CDPHE may issue temporary authorizations for the activities if it would result in net increases in the function and services of state waters (only to stream impacts), or the applicant shows proof of purchase of mitigation bank credits that meet or exceed the compensatory mitigation requirements that would have been applicable under federal Nationwide Permits or state Regional General Permits.

Methods

During the 2025 site visits, ERO surveyed the project area for potential isolated wetlands, jurisdictional wetlands, and other waters of the U.S. Prior to the 2025 site visits, ERO reviewed USGS Fort Collins and Timnath, Colorado topographic quadrangle maps, NHD maps, NWI maps, and aerial photography to identify mapped streams and areas of open water that could indicate wetlands or waters of the U.S. (USGS 1962; 2025; Service 2025b; Google, Inc. 2025).

ERO conducted the wetland delineation following the methods for routine on-site wetland determinations in areas of less than 5 acres as described in the 1987 Corps of Engineers Wetlands Delineation Manual, and used methods in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0), to record data on vegetation, soils, and hydrology on routine determination forms (Appendix C) (Environmental Laboratory 1987; Corps 2010). The Corps defines wetlands as “areas that are inundated or saturated by surface or ground water 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. Wetlands generally include swamps, marshes, bogs, and similar areas” (33 Code of Federal Regulations (CFR) 328.2(c)). Wetland boundaries were determined by a visible change in vegetation community, soils, topographic changes, and other visible distinctions between wetlands and uplands.

The wetland indicator status of plant species was identified using the *National Wetland Plant List*, taxonomy was determined using *Flora of Colorado* and nomenclature was determined using the *PLANTS Database* (Corps 2020; Ackerfield 2022; USDA, Natural Resources Conservation Service 2025). If present, hydric soils were identified using field observation for hydric soil indicators accepted by the Corps. Soil data were not always collected if hydrophytic vegetation and hydrology was present and did not appear altered (Environmental Laboratory 1987; Corps 2010). In addition, soil data were not collected in conditions where there was a clear lack of indicators of hydrophytic vegetation and wetland

hydrology. Where soil data were collected, a Munsell soil color chart was used to determine soil color (*Munsell Soil-Color Charts: With Genuine Munsell Color Chips*, n.d.).

Intermittent, ephemeral, and perennial drainages with characteristics of a defined streambed, streambank, ordinary high water mark (OHWM), and other erosional features also were identified. The OHWM identifies the lateral jurisdictional limits of nonwetland waters of the U.S. Federal jurisdiction over nonwetland waters of the U.S. extends to the OHWM, defined in 33 CFR 328.3 as "the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." The Corps defines "stream bed" as "the substrate of the stream channel between the OHWMs. The substrate may be bedrock or inorganic particles that range in size from clay to boulders."

The boundaries of identified wetlands and other characteristics of potential waters of the U.S. were mapped using an R1 global Positioning System (GPS) unit. GPS data were incorporated using ESRI® ArcGIS Desktop software. Additionally, where appropriate, wetlands were drawn on georectified aerials and then digitized.

Wetland Classification

Delineated wetlands were classified according to the Service's Cowardin classification system combined with a hydrogeomorphic (HGM) approach (Cowardin et al. 1979; Brinson 1993). The HGM approach assesses the chemical, physical, and biological functions of wetlands based on its geomorphic setting, water source, and hydrodynamics. HGM classes found in Colorado are mineral soil flats, organic soil flats, riverine, lacustrine fringe, slope, and depressional. The Cowardin classification uses a hierarchical structure of systems, subsystems, and classes to classify both wetlands and deepwater habitats. Wetlands with persistent or nonpersistent vegetation are classified in the Cowardin system as palustrine, which typically includes wetlands referred to as marshes, fens, wet meadows, and sloughs. The palustrine system also includes small, shallow, permanent, or intermittent water bodies such as ponds. Palustrine wetlands may be situated shoreward of lakes and river channels, on river floodplains, in isolated catchments, or on slopes (Cowardin et al. 1979). Under the palustrine system, wetlands are classified as emergent (erect, rooted, herbaceous, and usually perennial hydrophytes that remain standing until at least the next growing season); scrub-shrub (woody vegetation less than 20 feet tall); or forested (woody vegetation 20 feet or taller). In wetlands where more than one wetland type occurs, the wetland type of the largest area is used. For example, an area that is predominantly palustrine emergent (PEM) wetlands but also contains a small amount of palustrine scrub-shrub (PSS) wetlands would be categorized as PEM wetlands. Because of the limited occurrence of the smaller sized wetland types within the larger wetland polygons, these areas were not separated out within the delineated polygons.

The Cowardin riverine system includes wetlands and deepwater habitats contained within a channel, with the exception of wetlands dominated by trees, shrubs, and emergent vegetation. The riverine

system usually contains flowing water and is bounded on the landward side by uplands, channel banks, or other wetlands. Within the riverine system, wetlands are divided into tidal, lower perennial (low gradient and slow water), upper perennial (high gradient and fast water), and intermittent subsystems. Within these subsystems, riverine wetlands are further classified as unconsolidated bottom, aquatic bed, streambed, rocky shore, unconsolidated shore, and emergent wetland (nonpersistent).

Jurisdictional Assessment

To assist the Corps in making a preliminary jurisdictional determination, ERO reviewed the proximity and potential surface water connection of wetlands to known jurisdictional waters of the U.S. using aerial photo interpretation, landowner information, and information from the wetland survey. Using the amended rule (described in detail in Introduction), wetlands that do not have a contiguous surface connection to a jurisdictional traditionally navigable water or tributary are no longer jurisdictional, as well as ephemeral streams that do not have relatively permanent water. Wetlands that have a contiguous surface water connection and waters that have relatively permanent water and a contiguous surface connection to the South Platte River, a known jurisdictional water, are likely jurisdictional.

Description of Wetlands and Other Waters

ERO surveyed the project area for wetlands and other waters as described below. Data were collected from one location in the project area to document the characteristics of uplands and wetlands, and the transition areas between them. Each data point (DP) was given a label that corresponds to a location shown on Figure 3 and routine wetland determination forms in Appendix C. The following sections contain information on potential surface water connections of wetlands and other waters within the project area (Figure 3).

Streams and Open Water

The project area is within HUC 10-10190000709. Boxelder Creek is shown as a perennial stream on the USGS Timnath and Fort Collins, Colorado topographic quadrangle maps (Figure 1; USGS 2025). In the project area, Boxelder Creek consists of a 3- to 5-foot-wide channel that flows underneath the Larimer and Weld Canal through a pipeline (Photo 3 and Photo 4). Boxelder Creek flows into the Cache la Poudre River approximately 5.5 river miles south of the project area boundary. No other areas of open water were observed in the project area during the 2025 site visits.

Wetlands

During the February 2025 site visit, one DP was collected (DP1) in an area of hydrophytic vegetation that was observed along the eastern bank of Boxelder Creek (Photo 3; Figure 3). No wetlands were found at this location. A summary of the findings at DP1 are below. During the additional July 2025 site visit, wetlands were identified along Boxelder Creek to the north of DP1. No DP was taken at this location; however, based on aerial imagery and the presence of wetland vegetation, wetlands were assumed to be present.

Kelley Drainage Facility

- Project Area
- Proposed Project Footprint
- Wetland (0.06 ac)
- Ordinary High Water Mark (0.03 ac)
- Raptor Nest
- Data Point
- Photo Point

0 37.5 75 feet

N

Figure 3
Wetlands and Waters

Prepared for: State of Colorado
File: • Kelley ArcGIS Pro.mxd [dlH]
July 29, 2025

ERO Resources Corp.

Vegetation

Dominant vegetation at DP1 consisted of reed canarygrass (*Phalaris arundinacea* - Facultative Wetland). Other vegetation observed along Boxelder Creek included smooth brome (*Bromus inermis* - Upland), Russian thistle (Facultative Upland), diffuse knapweed (Upland), common mullein (Upland), and kochia (Upland). At DP1, the vegetation met the rapid test for hydrophytic vegetation.

Soils

Field observations revealed that soils primarily consisted of sandy clay loam within 12 inches of the soil surface. At DP1, the soils contained a matrix color of 10YR 4/3 with no redox features observed. No hydric soil indicators were observed at DP1. See Appendix B for additional details on soils at DP1.

Hydrology

No primary hydrologic indicators were observed at DP1. Secondary hydrologic indicators at DP1 included passing the FAC-neutral test and the geomorphic position.

Recommendations

Boxelder Creek occurs in the southeast corner of the project area and supports fringe wetlands along both its eastern and western banks. Because of its downstream hydrological connection to a known WOTUS, ERO believes Boxelder Creek would be considered a WOTUS.

Due to proposed actions within the project area, a CWA Section 404 Nationwide Permit (NWP) should be obtained from the Corps for the placement of dredged or fill material below the OHWM of Boxelder Creek or in its associated wetlands. If permanent impacts on federally jurisdictional wetlands and below the OHWM are under 0.5 acre, then the project may be authorized under an NWP, which is a general permit with a streamlined permitting process. NWPs typically take 45 days for review by the Corps, assuming no consultation with the Service or State Historic Preservation Office is required. If impacts would exceed 0.5 acre, then an Individual Permit would likely be required. Individual Permits require an alternative analysis to determine if the proposed activity is the least environmentally damaging practicable alternative. Mitigation may also be required if permanent impacts to wetlands exceed 0.10 acre or 0.03 acre of streambed.

Threatened, Endangered, and Candidate Species

ERO assessed the project area for habitat for threatened, endangered, and candidate species under the Endangered Species Act (ESA). Federally threatened and endangered species are protected under the ESA of 1973, as amended (16 United States Code (U.S.C.) 1531 et seq.). Significant adverse effects on a federally listed species or its habitat require consultation with the Service under Section 7 or 10 of the ESA. The Service lists several threatened and endangered species with habitat in Larimer County, or that would be potentially affected by projects in Larimer County (Table 1).

Table 1. Federally threatened, endangered, and candidate species potentially found in Larimer County or potentially affected by projects in Larimer County.

Common Name	Scientific Name	Status*	Habitat	Habitat Present or Potential to be Affected by Project?
Mammals				
Preble's meadow jumping mouse	*Zapus hudsonius preblei*	T	Shrub riparian/wet meadows	No
Birds				
Eastern black rail	*Laterallus jamaicensis*	T	Shallow cattail wetlands and wet sedge meadows with dense cover in the Arkansas River drainage in southeastern Colorado and the Republican River in east-central Colorado	No
Piping plover**	*Charadrius melodus*	T	Sandy lakeshore beaches and river sandbars	No habitat and no depletions anticipated
Whooping crane**	*Grus americana*	E	Mudflats around reservoirs and in agricultural areas	No habitat and no depletions anticipated
Fish				
Pallid sturgeon**	*Scaphirhynchus albus*	E	Large, turbid, free-flowing rivers with a strong current and gravel or sandy substrate	No habitat and no depletions anticipated
Invertebrates				
Monarch butterfly	*Danaus plexippus*	PT	Dependent on milkweeds (*Asclepiadoideae*) as host plants and forage on blooming flowers; a summer resident	No
Suckley's cuckoo bumble bee	*Bombus suckleyi*	PE	Various habitats including prairies, grasslands, meadows, and woodlands between 6,000 and 10,500 feet in elevation where host species are present	Presumed extirpated from Colorado
Plants				
Ute ladies'-tresses orchid	*Spiranthes diluvialis*	T	Moist to wet alluvial meadows, floodplains of perennial streams, and around springs and lakes below 7,800 feet in elevation	No
Western prairie fringed orchid**	*Platanthera praeclara*	T	Moist to wet prairies and meadows	No habitat and no depletions anticipated

*T = Federally Threatened Species, E = Federally Endangered Species, PT = Proposed Threatened Species, PE = Proposed Endangered Species.
**Water depletions in the South Platte River may affect the species or critical habitat in downstream reaches in other counties or states.
Source: (Service 2025a).

The proposed project would not impact Preble's meadow jumping mouse because of a lack of habitat in the form of dense shrub riparian areas. The proposed project would not impact the eastern black rail because of the lack of wetland habitat in the project area. The piping plover, whooping crane, pallid sturgeon, and western prairie fringed orchid are species that are affected by depletions to the Platte

River system. Based on ERO's knowledge of the types of activities likely to be implemented as part of the development of the project area, there would be no depletions to the South Platte River. If the project includes activities that deplete water in the South Platte River, such as diverting water from a stream or developing new water supplies, these species could be affected by the project and consultation with the Service may be required. The proposed project would not impact the monarch butterfly because of a lack of milkweed host plants in the project area. The proposed project would not directly affect Suckley's cuckoo bumble bee because the species was last observed in Colorado in 2014 and, therefore, is considered extirpated from Colorado (Salamack 2025; Service 2024). No impacts on Ute ladies'-tresses orchid (ULTO) is predicted because the project area does not contain the regularly flooded mesic areas that ULTO requires, and the project area does not fall within the Service's guidelines for ULTO surveys (Service 1992).

Species and Habitats of Concern

Raptors and Migratory Birds

Migratory birds, as well as their eggs and nests, are protected under the Migratory Bird Treaty Act (MBTA). The MBTA does not contain any prohibition that applies to the destruction of a bird nest alone (without birds or eggs), provided that no possession occurs during the destruction. While destruction of a nest by itself is not prohibited under the MBTA, nest destruction that results in the unpermitted take of migratory birds or their eggs is illegal and fully prosecutable under the MBTA (Service 2003). The regulatory definition of a take means to pursue, hunt, shoot, wound, kill, trap, capture, or collect; or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect (50 CFR 10.12).

Under the MBTA, the Service may issue nest depredation permits, which allow a permittee to remove an active nest. The Service, however, issues few permits and only under specific circumstances, usually related to damage to agricultural crops/livestock, private property, and protection of human health and safety. Obtaining a nest depredation permit is unlikely and involves a process that takes, at a minimum, 8 to 12 weeks. The best way to avoid a violation of the MBTA is to remove vegetation outside of the active breeding season, which typically falls between March and August, depending on the species. MBTA enforcement actions are typically the result of a concerned member of the community reporting a violation.

CPW maintains a leadership role with respect to raptor management in Colorado; however, the primary authority for the regulation of take and the ultimate jurisdiction for most of these species rests with Service under the MBTA and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c).

Potential Habitat and Effects

ERO surveyed the project area and reviewed the CPW database for nests during the 2025 site visits. A wide variety of bird species use different habitat types in the project area for shelter, breeding, wintering, and foraging at various times during the year. Agricultural grasslands and mixed woodlands in the project area are potential nesting habitat for migratory birds. However, it is ERO's opinion that the

project area does not contain areas of concentration for nesting and migratory shorebirds and waterfowl due to the minimal amount of water features and the project area does not contain migratory songbird concentration areas or key nesting areas for grassland birds due to a lack of native vegetation and disturbances due to development (Appendix B).

ERO observed no migratory bird nests in or near the project area and observed two likely raptor nests near the project area during the 2025 site visits. These raptor nests were also identified on the CPW raptor database (CPW 2025b) as a red-tailed hawk nest and a Swainson's hawk nest. In addition, ERO observed an American robin (*Turdus migratorius*), a mourning dove (*Zenaida macroura*), a horned lark (*Eremophila alpestris*), a black-capped chickadee (*Poecile atricapillus*), a European starling (*Sturnus vulgaris*), and a red-tailed hawk (*Buteo jamaicensis*) in or near the project area during the 2025 site visits.

Recommendations

Raptors

Two raptor nests were observed near the project area during the 2025 site visits: one to the northeast and one immediately southeast of Boxelder Creek (Figure 2). A red-tailed hawk was observed landing in the tree where the northeast nest is located. No raptor or other bird activity was observed near the nest southeast of Boxelder Creek.

CPW recommends a 0.33-mile buffer from active red-tailed hawk nests from February 15 through July 15 for human encroachment activities or installation of a permanent or long-standing physical object or structure (CPW 2020). The buffer zone for the red-tailed hawk nest located approximately 0.15-mile northeast of the project area overlaps only the far northeast corner of the project area (Figure 2). Activities that would directly impact an active nest, or that would encroach close enough to cause adult birds to abandon the nest during the breeding season, should be restricted. Construction activities that would occur within the recommended CPW buffer zone should commence outside of the February 15 to September 15 breeding season. Consultation with CPW or the Service may be required if construction is proposed within the buffer zone of an active raptor nest outside the recommended seasonal restriction timeframe. CPW recommends consultation with local CPW staff early in the planning phase of project proposals to assess and develop site-specific recommendations based on preexisting conditions (e.g., existing development, topography, vegetation, and line-of-sight to nest).

Migratory Birds

Although no migratory bird nests were observed during the 2025 site visits, ground-nesting birds and arboreal nests are difficult to detect and may be present in the agricultural grasslands and trees in the project area. To avoid destruction of potential migratory bird nests, vegetation removal should be conducted outside of the April 1 through September 15 breeding season.

Both the Eastern Colorado Field Office of the Service (Service 2009) and the Colorado Department of Transportation (CDOT 2011) have identified the primary nesting season for migratory birds in eastern Colorado as occurring from April 1 through August 31 (Service 2022). However, a few species, such as

bald eagles, great horned owls, and red-tailed hawks can nest as early as December (eagles) or late February (owls and red-tailed hawks). Because of variability in the breeding seasons, ERO recommends that a nest survey be conducted within one week prior to construction to determine if any active nests are present in the project area so that they can be avoided. Additional nest surveys during the nesting season may also be warranted to identify active nesting species that may present additional development timing restrictions (e.g., eagles or red-tailed hawks).

If active nests are identified in or near the project area, activities that would directly affect the nests should be restricted. Habitat-disturbing activities (e.g., tree removal, grading, scraping, and grubbing) should be conducted during the nonbreeding season to avoid disturbing active nests, or to avoid a "take" of the migratory bird nests in the project area. Nests can be removed during the September 1 through March 31 nonbreeding season to preclude future nesting and avoid violations of the MBTA. There is no process for removing nests during the nonbreeding season; however, nests may not be collected under MBTA regulations. If the construction schedule does not allow vegetation removal outside of the breeding season, a nest survey should be conducted immediately prior to vegetation removal to determine if the nests are active and by which species. If active nests are found, any work that would destroy the nests or cause the birds to abandon young in the nest could not be conducted until the birds have vacated the nests.

High Priority Habitat and Big Game

In 2021, CPW released a High Priority Habitat (HPH) table that identifies species and habitats, as well as recommendations to avoid and minimize impacts on wildlife from land use development (CPW 2021). ERO reviewed data from CPW map databases and determined that no HPH areas overlap the project area (Natural Diversity Information Source 2023). Although no HPH occurs in the project area, ERO assessed the project area for habitat for species and habitats listed in the HPH table during the 2023 and 2025 site visits. Because mule deer likely frequent the project area, this species is discussed in more detail below.

Mule Deer

Species Background

Mule deer are found in all ecosystems in Colorado from grasslands to alpine tundra. Spring and summer ranges are typically mosaics of meadows, aspen woodlands, alpine tundra-subalpine forest edges, or montane forest edges (Fitzgerald 1994). Seasonally, deer are relatively sedentary, although most will spend the summer at higher elevations and migrate to lower elevations in the winter. Mule deer diets vary seasonally but generally consist of browse from trees and shrubs, forbs, and grasses.

Potential Habitat and Effects

The majority of the project area is within mule deer overall range (NDIS 2020). No mule deer HPH areas, including migration corridors, severe winter range, or winter concentration areas, are located in the

project area (CPW 2021; Appendix B). Although no mule deer were observed during the 2025 site visits, it is likely that mule deer forage and migrate through the project area.

Recommendations

Because no HPH for mule deer occurs in the project area, no action is necessary.

Other Wildlife and Special Features

The project area provides habitat for a variety of small mammals such as cottontail rabbits (*Sylvilagus* sp.), deer mice (*Peromyscus maniculatus*), voles (*Microtus* sp.), and pocket gophers (*Geomyidae* sp.) No prairie dogs were observed in or near the project area during the 2025 site visits (Appendix B).

Carnivores such as coyote (*Canis latrans*), raccoon (*Procyon lotor*), red fox *(Vulpes vulpes*), grey fox *(Urocyon cinereoargenteus*), and striped skunk (*Mephitis mephitis*) may occur in the project area. These species are typically observed in open grasslands and mixed woodlands. However, no dens were discovered during the 2025 site visits (Appendix B). Additionally, the project area is in the overall range of mountain lion (*Puma concolor*) and white-tailed deer (*Odocoileus virginianus*), as well as white-tailed deer and bald eagle (*Haliaeetus leucocephalus*) winter ranges (NDIS 2023). None of these species were observed during the 2025 site visits.

As with any human development, wildlife species sensitive to human disturbance are likely to decline in abundance or abandon the area, while other wildlife species adapted to development are likely to increase in abundance. Species likely to increase include red fox, raccoon, and great horned owl (*Bubo virginianus*). Overall, surrounding and continuing development contributes to a decline in the number and diversity of wildlife species nearby and to a change in species composition to favor species that adapt better to human disturbance.

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Appendix A Photo Log

Photo 1 - Structures and mixed woodland in the western portion of the project area. View is to the northwest.

Photo 2 - Ditch road, agricultural area, and Larimer and Weld Canal. View is to the southeast.

Photo 3 - Boxelder Creek and DP1. View is to the northwest.

Photo 4 - Road separating Boxelder Creek and Larimer and Weld Canal. View is to the southeast.

Photo 5 - Boxelder Creek. View is to the southeast.

Appendix B Natural Habitat and Features Table

Table B-1. Natural habitat and features potentially occurring on or near the project area.

Special Feature	Present (Y/N)	Comment
Noxious weeds	Y	Diffuse knapweed (List B); common mullein and field bindweed (List C).
Jurisdictional and nonjurisdictional wetlands	Y	Likely jurisdictional wetlands occur along Boxelder Creek.
Significant remnants of native plant communities	N	
Potential habitats and known locations of rare, threatened, or endangered plant species	N	
Potential habitats and known locations of rare, threatened, or endangered species of wildlife	N	
Raptor habitat features, including nest sites, communal roost sites, and key concentration areas	Y	Two raptor nests were observed near the project area.
Concentration areas for nesting and migratory shorebirds and waterfowl	N	
Migratory songbird concentration areas	N	
Key nesting areas for grassland birds	N	
Fox and coyote dens	N	
Mule deer winter concentration areas	N	
Prairie dog colonies 1 acre or greater in size	N	

Appendix C Delineation Data Form

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: 23-238 CPW Office Kelley Property City/County: Ft. Collins/Larimer Sampling Date: Feb 27, 202

Applicant/Owner: CPW State: CO Sampling Point: DP1

Investigator(s): JJD Section, Township, Range: S3, T7N, R68W

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): concave Slope (%): 100

Subregion (LRR): G Lat: 40.599870 Long: -104.991153 Datum: NAD83

Soil Map Unit Name: Table Mountain Loam, 0 to 1 percent slopes NWI classification: R5UBH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes [x] No [ ] (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes [x] No [ ]

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes [x]	No [ ]	**Is the Sampled Area within a Wetland?** Yes [ ] No [x]
Hydric Soil Present?	Yes [ ]	No [x]	
Wetland Hydrology Present?	Yes [x]	No [ ]	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5')			
1. Phalaris arundinacea	75	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 25

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- [x] 1 - Rapid Test for Hydrophytic Vegetation
- [ ] 2 - Dominance Test is >50%
- [ ] 3 - Prevalence Index is ≤3.0[1]
- [ ] 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes [x] No [ ]

Remarks:

SOIL

Sampling Point: DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/3	100					Sandy Cla	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR F**)
- ☐ 1 cm Muck (A9) (**LRR F, G, H**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (**LRR I, J**)
- ☐ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ☐ Dark Surface (S7) (**LRR G**)
- ☐ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Frozen/Rock

Depth (inches): 10

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Restrictive layer due to rock and frozen soil. No indicators met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☒ FAC-Neutral Test (D5)
- ☐ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):

Water Table Present? Yes ☐ No ☒ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches):

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix D 2023 Bird Farm Property Natural Resources Assessment

ERO

Consultants in Natural Resources and the Environment

Natural Resources Technical Memorandum
Colorado Parks and Wildlife Fort Collins Area Office
East of Interstate 25 and South of Colorado Highway 50
Fort Collins, Colorado

Prepared for—

Colorado Parks and Wildlife
317 West Prospect Road
Fort Collins, Colorado 80526

Prepared by—

ERO Resources Corporation
1626 Cole Boulevard, Suite 100
Lakewood, Colorado 80401
(303) 830-1188
ERO Project #23-238

October 30, 2023

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Executive Summary

Colorado Parks and Wildlife (CPW) retained ERO Resources Corporation (ERO) to provide a natural resources technical memorandum for the Bird Farm property east of Interstate 25 and south of Colorado Highway 50 in Fort Collins, Larimer County, Colorado (project area). ERO assessed the project area for potential wetlands and other waters of the U.S., threatened and endangered species habitat, and general wildlife use. Below is a summary of the resources found in the project area and recommendations or future actions necessary based on the current site conditions and federal, state, and local regulations.

The natural resources and associated regulations described in this report are valid as of the date of this report and may be relied upon for the specific use for which it was prepared by ERO under contract to CPW. Because of their dynamic natures, site conditions and regulations should be reconfirmed by a qualified consultant before relying on this report for a use other than that for which ERO was contracted.

Vegetation and Noxious Weeds – Vegetation communities in the project area consist of mixed woodlands and nonnative grasslands. These areas do not contain significant remnants of native plant species. List B and List C noxious weed species were observed in the project area during the 2023 site visit.

Wetlands and Other Waters of the U.S. – No wetlands or waters are shown on the U.S. Geological Survey (USGS) Fort Collins and Timnath topographic quadrangle maps or the USGS hydrography database as occurring in the project area. Additionally, no wetlands or waters were found in the project area during the 2023 site visit; therefore, no action is necessary.

Threatened and Endangered Species – The project area does not contain habitat for any federally listed threatened or endangered species. A viable population of Preble's meadow jumping mouse is unlikely to exist in the project area because the project area lacks riparian shrub habitat, and woody vegetation in project area is fragmented and has been disturbed by human activity. The project area is not conducive to the establishment of Ute ladies'-tresses orchid because no wetlands occur in the project area and the project area consists of disturbed uplands dominated by upland nonnative species. Potential habitat exists for monarch butterflies and tricolored bats in the project area; however, both species are currently candidate species under the Endangered Species Act and, therefore, no action is necessary.

Migratory Birds – No bird nests were observed during the 2023 site visit. While trees, shrubs, and upland grasslands in the project area provide potential nesting habitat, ERO did not identify raptor habitat features, concentration areas for nesting and migratory shorebirds and waterfowl, migratory songbird concentration areas, or key nesting areas for grassland birds. The Eastern Colorado Field Office of the U.S. Fish and Wildlife Service (Service 2022) and Colorado Department of Transportation (Colorado Department of Transportation 2011) have identified the primary nesting season for migratory birds in eastern Colorado as occurring from April 1 to August 31. However, some birds, such as the red-tailed hawk and great horned owl, can nest as early as February or March. Because of variability in the breeding seasons of various bird species, ***ERO recommends a nest survey be conducted within one week prior to construction*** to determine if any active nests are present in the project area so they can be avoided. If active nests are found, any work that would destroy the nests should not be conducted until the birds have vacated the nests.

Other Wildlife – The project area occurs in mule deer, white-tailed deer, and mountain lion overall range. No High Priority Habitat (HPH) exists in the project area. No prairie dog colonies, fox dens, or coyote dens were observed in the project area during the 2023 site visit. No other sensitive species occur in the project area that would be significantly adversely affected by the proposed project. Overall, surrounding, and continuing development contributes to a decline in the number and diversity of wildlife species nearby and to a change in species composition.

Views – The project area is bounded by Colorado Highway 50 to the north, privately owned land to the east and south, and Interstate 25 to the west. Portions of the Front Range are visible in the northern and northwestern portions of the project area.

Natural Resources Technical Memorandum
Colorado Parks and Wildlife Fort Collins Area Office
East of Interstate 25 and South of Colorado Highway 50
Fort Collins, Colorado

October 30, 2023

Introduction

Colorado Parks and Wildlife (CPW) retained ERO Resources Corporation (ERO) to provide a natural resources technical memorandum for the CPW Fort Collins Bird Farm property east of Interstate 25 and south of Colorado Highway 50 in Fort Collins, Larimer County, Colorado (project area; Figure 1). On October 3, 2023, Erin Cubley and Jared Dubiel, biologists with ERO, assessed the project area for natural resources (2023 site visit). During this assessment, activities included a review of potential wetlands and other waters of the U.S. (WOTUS), identification of suitable habitat for federally threatened and endangered species, and identification of other natural resources, including natural habitats and features as described in the Fort Collins Land Use Code, Article 3, Division 3.4. In addition to the information gathered during the 2023 site visit, natural resource information was obtained from existing databases and sources such as aerial photography, the U.S. Fish and Wildlife Service (Service) Information for Planning and Consultation (IPAC) tool, CPW map databases, City of Fort Collins Natural Features Mapping, the Colorado Natural Heritage Program, and other sources (Service 2023b; Fort Collins 2018; CNHP 2023; CPW 2021a). This report provides information on existing site conditions and resources, as well as current regulatory guidelines related to those resources. ERO assumes the landowner is responsible for obtaining all federal, state, and local permits for construction of the project.

The natural resources and associated regulations described in this report are valid as of the date of this report and may be relied upon for the specific use for which it was prepared by ERO under contract to CPW. Because of their dynamic natures, site conditions and regulations should be reconfirmed by a qualified consultant before relying on this report for a use other than that for which ERO was contracted.

Project Area Location

The project area is in Section 3, Township 7 North, Range 68 West of the 6th Principal Meridian in Larimer County, Colorado (Figure 1). The UTM coordinates for the approximate center of the project area are 500168mE, 4495237mN, Zone 13 North. The longitude/latitude of the project area is 104.99801°W/40.607944°N. The elevation of the project area is approximately 5,000 feet above sea level. Photo points of the project area are shown on Figure 2, and the photo log is in Appendix A.

Bird Farm – Environmental Assessment

Section 3, T7N, R68W; 6th PM

UTM NAD 83: Zone 13N; 500168mE, 4495237mN

Longitude 104.998017°W, Latitude 40.607944°N

USGS Fort Collins and Timnath, CO Quadrangles

Larimer County, Colorado

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Copyright:© 2013 National Geographic Society, i-cubed

0 750 1,500 feet

N

Figure 1
Vicinity Map

Prepared for: —State of Colorado Department of Natural Resources

File: 23238 Figure 1.mxd [dlH]

September 29, 2023

ERO Resources Corp.

Bird Farm – Environmental Assessment

- Project Area
- Mixed Woodland
- Grassland
- Russian Olive Stand
- Disturbed/Developed
- Photo Point

0 100 200 feet

N

Figure 2
Habitat Areas

Prepared for: —State of Colorado
Department of Natural Resources
File: 23238 Figure 2.mxd [dlH]
October 23, 2023

ERO Resources Corp.

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community 6/26/2020

Path: P:\23_200\23_238 CPW Fort Collins Area Office\Maps\23238 Figure 2.mxd

Project Area Description

The U.S. Department of Agriculture (USDA) has mapped the project area within the Central High Plains, Southern Land Resource Area, which is mainly characterized by an elevated, smooth to slightly irregular plain consisting of sediments deposited by rivers that drained from the Rocky Mountains (USDA, NRCS 2006). The climate of the area is typical of midcontinental semiarid temperate zones, but the strong rain shadow effect of the Southern Rocky Mountains makes the area drier with average annual precipitation from 12 to 18 inches, increasing from west to east (USDA, NRCS 2006). The topography of the project area is a flat plain (Photos 1 and 2).

The project area is bounded by Colorado Highway 50 to the north, privately owned land to the east and south, and Interstate 25 to the west (Figure 2). The project area was a former bird farm and research site for CPW (Figure 2). Many abandoned buildings are located in the project area, including storage and agricultural buildings, chicken coops, and border fencing (Photos 1 and 3).

Vegetation

No significant remnants of native plant communities exist in the project area (Appendix B). A more detailed description of the habitat communities observed in the project area during the 2023 site visit is provided below.

Mixed Woodland

Mixed woodland areas occur on the western and southeastern portions of the project area. A significant number of dead stem areas were also found in the project area (Figure 2; Photos 3 through 5). These woodlands are mapped on the City of Fort Collins Natural Habitats and Features Map (Fort Collins 2018) as nonnative uplands plains forest. However, observations during the 2023 site visit confirmed the presence of some native species, suggesting a mixed woodland habitat interspersed with upland nonnative grassland. Dominant species in the mixed woodland areas include netleaf hackberry (*Celtis reticulata*), Siberian elm (*Ulmus pumila*), and the native Rocky Mountain juniper (*Juniperus scopulorum*). Other species in the mixed woodland areas include plains cottonwood (*Populus deltoides*), ornamental juniper (*Juniperus* sp.), pinyon juniper (*Pinus edulis*), ponderosa pine (*Pinus ponderosa*), blue spruce (*Picea pungens*), honey locust (*Gleditsia triacanthos*), paradise apple (*Malus pumila*), green ash (*Fraxinus pennsylvanica*), black elderberry (*Sambucus nigra*), staghorn sumac (*Rhus typhina*), rubber rabbitbrush (*Ericameria nauseosa*), snowberry (*Symphoricarpos albus*), and Virginia creeper (*Parthenocissus quinquefolia*).

Grassland

Grasslands are the most prominent habitat in the project area, covering most of the northern portion as well as sections along the access road on the southern edge of the project area (Figure 2; Photo 2). Dominant species in the disturbed grassland areas consist of predominantly nonnative species such as smooth brome (*Bromus inermis*), crested wheatgrass (*Agropyron cristatum*), and kochia (*Kochia scoparia*). Some nondominant native species were also observed, including sand dropseed (*Sporabolous*

cryptandrus), hairy false goldenaster (*Heterotheca villosa*), fetid marigold (*Dyssodia papposa*), rubber rabbitbrush, prairie sagewort (*Artemisia frigida*), green needlegrass (*Nassella viridula*), common sunflower (*Helianthus annuus*), and showy milkweed (*Asclepias speciosa*). Other nonnative species found in these areas include sweetclover (*Melilotus officinalis*), white clover (*Trifolium repens*), curly dock (*Rumex crispus*), common sowthistle (*Sonchus oleraceus*), rush wheatgrass (*Thinopyrum ponticum*), horehound (*Marrubium vulgare*), and festuca (*Festuca* sp.). Several shrub species were observed scattered throughout the grassland, including native threeleaf sumac (*Rhus trilobata*), rose (*Rosa* sp.), and the nonnative common lilac (*Syringa vulgaris*). Many of these areas have been recently mowed and appear to have been previously disturbed as evidenced by the dominance of nonnative species.

Noxious Weeds

Several species of noxious weeds were observed throughout the project area during the 2023 site visit (Photo 4). Noxious weeds are designated by the Colorado Department of Agriculture (CDA) and are categorized by their level of impact (CDA 2022). List B noxious weed species are species that have state noxious weed management plans designed to stop the continued spread of these species. List B species observed in the project area during the 2023 site visit included musk thistle (*Carduus nutans*), Canada thistle (*Cirsium arvense*), and leafy spurge (*Euphorbia esula*). Several large stands of Russian olive (*Elaeagnus angustifolia*), another List B tree species, were also observed (Figure 2; Photo 6). List C noxious weed species are species that have state noxious weed management plans designed to provide additional education, research, and biological control resources to jurisdictions that choose to require management of List C species. List C species observed in the project area during the 2023 site visit included common mullein (*Verbascum thapsus*), field bindweed (*Convolvulus arvensis*), and cheatgrass (*Bromus tectorum*). Several individual Siberian elms, a List C tree species, were also observed (Appendix B).

Wetlands and Other Waters of the U.S.

Project Area Conditions and Regulations

During the 2023 site visit, ERO surveyed the project area for wetlands, streambeds, and open waters; however, a jurisdictional wetland delineation following U.S. Army Corps of Engineers (Corps) guidelines was not conducted during this assessment. Prior to the 2023 site visit, ERO reviewed U.S. Geological Survey (USGS) quadrangle topographic maps and aerial photography to identify mapped streams and areas of open water that could indicate wetlands or WOTUS. ERO also reviewed the proximity and potential surface water connection of wetlands to known jurisdictional WOTUS using aerial photo interpretation, landowner information, and information from the 2023 site visit.

Recommendations

No wetlands or waters are shown on the USGS Fort Collins and Timnath topographic quadrangle maps or the USGS hydrography database as occurring in the project area (USGS 2018). Additionally, no wetlands or waters were found in the project area during the 2023 site visit; therefore, no action is necessary (USGS 2023; Appendix B).

Threatened, Endangered, and Candidate Species

ERO assessed the project area for habitat for threatened, endangered, and candidate species under the Endangered Species Act (ESA). Federally threatened and endangered species are protected under the ESA of 1973, as amended (16 United States Code (U.S.C.) 1531 et seq.). Significant adverse effects on a federally listed species or its habitat require consultation with the Service under Section 7 or 10 of the ESA. The Service lists several threatened and endangered species with habitat in Larimer County, or that would be potentially affected by projects in Larimer County (Table 1).

Table 1. Federally threatened, endangered, and candidate species potentially found in Larimer County or potentially affected by projects in Larimer County.

Common Name	Scientific Name	Status*	Habitat	Habitat Present or Potential to be Affected by Project?
Mammals				
Gray wolf	*Canis lupus*	E	Wolves can thrive in a wide range of habitats; highly adaptable as a species that occurs in temperate forests, mountains, and grasslands	No
Tricolored bat	*Perimyotis subflavus*	C	Caves, abandoned mines, and forested areas	Yes; see below
Preble's meadow jumping mouse	*Zapus hudsonius preblei*	T	Shrub riparian/wet meadows	No
Birds				
Eastern black rail	*Laterallus jamaicensis*	T	Shallow cattail wetlands and wet sedge meadows with dense cover in the Arkansas River drainage in southeastern Colorado and the Republican River in east-central Colorado	No
Piping plover**	*Charadrius melodus*	T	Sandy lakeshore beaches and river sandbars	No habitat and no depletions anticipated
Whooping crane**	*Grus americana*	E	Mudflats around reservoirs and in agricultural areas	No habitat and no depletions anticipated
Fish				
Greenback cutthroat trout	*Oncorhynchus clarki stomias*	T	Clear, swift-flowing mountain streams with cover such as overhanging banks and vegetation and mountain lakes	No
Pallid sturgeon**	*Scaphirhynchus albus*	E	Large, turbid, free-flowing rivers with a strong current and gravel or sandy substrate	No habitat and no depletions anticipated

Common Name	Scientific Name	Status*	Habitat	Habitat Present or Potential to be Affected by Project?
Invertebrates				
Monarch butterfly	*Danaus plexippus plexippus*	C	Dependent on milkweeds (*Asclepiadoideae*) as host plants and forage on blooming flowers; a summer resident	Yes; see below
Plants				
Ute ladies'-tresses orchid	*Spiranthes diluvialis*	T	Moist to wet alluvial meadows, floodplains of perennial streams, and around springs and lakes below 7,800 feet in elevation	No
Western prairie fringed orchid**	*Platanthera praeclara*	T	Moist to wet prairies and meadows	No habitat and no depletions anticipated

*T = Federally Threatened Species, E = Federally Endangered Species, C = Candidate for Federal Listing,
**Water depletions in the South Platte River may affect the species and/or critical habitat in downstream reaches in other counties or states.
Source: (Service 2023a).

The gray wolf is known to be extirpated from the region and therefore the project would not result in any appreciable take. The proposed project would not impact Preble's meadow jumping mouse because of a lack of a water source and dense shrub riparian areas. No impacts on Ute ladies'-tresses orchid is predicted because the project area does not contain a perennial tributary to the South Platte River and the project area does not fall within the Service's guidelines for ULTO surveys (Service 1992). Additionally, no jurisdictional wetlands regulated by the Corps or nonjurisdictional wetlands protected by the Fort Collins Land Use Code occur in the project area, and any proposed impacts would be on disturbed uplands. The proposed project would not impact the eastern black rail because of the lack of wetland habitat in the project area. The proposed project would not impact the greenback cutthroat trout because of the lack of mountain lake or stream habitat. The piping plover, whooping crane, pallid sturgeon, and western prairie fringed orchid are species that are affected by depletions to the Platte River system. Based on ERO's knowledge of the types of activities likely to be implemented as part of the development of the project area, there would be no depletions to the South Platte River. If the project includes activities that deplete water in the South Platte River, such as diverting water from a stream or developing new water supplies, these species could be affected by the project and consultation with the Service may be required.

Potential habitat for two candidate species, the tricolored bat and monarch butterfly, occurs in the project area and, as such, a more detailed discussion can be found below (Appendix B).

Tricolored bat

Species Background

The tricolored bat is a candidate species and is proposed for listing as an endangered species (Service 2021). There are generally no regulatory requirements for candidate species; however, agencies are

encouraged to take advantage of any opportunity they may have to conserve the species' habitat. The tricolored bat occurs throughout much of North America, with parts of Colorado being along the western border of its range. Habitat varies from forested areas in the spring, summer, and fall to caves, mines, tunnels, and culverts during the winter. Tricolored bats have also been known to use human structures. The primary threat to tricolored bats is white-nose syndrome (Service 2017).

Potential Habitat and Effects

Some small woodland areas exist in the project area, as well as some abandoned buildings that may be potential habitat for tricolored bats. However, the Service has concluded that the current impact of habitat loss for tricolored bats is low (Service 2021).

Recommendations

As a candidate species, tricolored bats are not currently under federal regulation. Should the tricolored bat's status be elevated to that of a threatened or endangered species, future consultation with the Service may be required.

Monarch Butterfly

Species Background

The monarch butterfly is a candidate species and is not yet listed or proposed for listing. There are generally no regulatory requirements for candidate species; however, agencies are encouraged to take advantage of any opportunity they may have to conserve the species' habitat. The monarch butterfly occurs throughout much of North America and is segregated into an eastern and western population. The monarch is the only butterfly known to make a two-way migration as birds do. Monarch butterflies are dependent on milkweeds (primarily *Asclepias* spp.) as a host plant for egg laying and larval development (U.S. Fish and Wildlife Service 2023c).

Potential Habitat and Effects

The project area is not within a designated migration corridor or breeding or overwintering area for this species (MonarchWatch 2010), although some monarch butterflies migrate through Colorado in the summer. Several scattered milkweeds were observed in the project area during the 2023 site visit. This species may occasionally travel through the project area but is not likely to lay eggs because the number of host plants are minimal.

Recommendations

As a candidate species, monarch butterflies are not currently under federal regulation. Should the monarch's status be elevated to that of a threatened or endangered species, future consultation with the Service may be required.

Species and Habitats of Concern

Raptors and Migratory Birds

Migratory birds, as well as their eggs and nests, are protected under the Migratory Bird Treaty Act (MBTA). The MBTA does not contain any prohibition that applies to the destruction of a bird nest alone (without birds or eggs), provided that no possession occurs during the destruction. While destruction of a nest by itself is not prohibited under the MBTA, nest destruction that results in the unpermitted take of migratory birds or their eggs is illegal and fully prosecutable under the MBTA (Service 2003). The regulatory definition of a take means to pursue, hunt, shoot, wound, kill, trap, capture, or collect; or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect (50 Code of Federal Regulations 10.12).

Under the MBTA, the Service may issue nest depredation permits, which allow a permittee to remove an active nest. The Service, however, issues few permits and only under specific circumstances, usually related to damage to agricultural crops/livestock, private property, and protection of human health and safety. Obtaining a nest depredation permit is unlikely and involves a process that takes, at a minimum, 8 to 12 weeks. The best way to avoid a violation of the MBTA is to remove vegetation outside of the active breeding season, which typically falls between March and August, depending on the species. MBTA enforcement actions are typically the result of a concerned member of the community reporting a violation.

CPW maintains a leadership role with respect to raptor management in Colorado; however, the primary authority for the regulation of take and the ultimate jurisdiction for most of these species rests with Service under the MBTA and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c).

Potential Habitat and Effects

ERO surveyed the project area and reviewed the CPW database for nests during the 2023 site visit. A wide variety of bird species use different habitat types in the project area for shelter, breeding, wintering, and foraging at various times during the year. Grasslands and mixed woodlands in the project area are potential nesting habitat for migratory birds. However, it is ERO's opinion that the project area does not contain areas of concentration for nesting and migratory shorebirds and waterfowl due to the lack of water features and the project area does not contain migratory songbird concentration areas or key nesting areas for grassland birds due to a lack of native vegetation and disturbances due to development (Appendix B). ERO did not observe any active or inactive migratory bird nests, including potential raptor nests, in or near the project area during the 2023 site visit. However, during the 2023 site visit, ERO observed an American robin (*Turdus migratorius*), a mourning dove (*Zenaida macroura*), common grackles (*Quiscalus quiscula*), a red-winged blackbird (*Agelaius phoeniceus*), a blue jay (*Cyanocitta cristata*), a red-tailed hawk (*Buteo jamaicensis*), and a bald eagle (*Haliaeetus leucocephalus*) hunting over the project area.

Recommendations

Although no nests were observed during the 2023 site visit, ground-nesting bird and arboreal nests are difficult to detect and may be present in the grasslands and trees in the project area. To avoid destruction of potential migratory bird nests, vegetation removal should be conducted outside of the April 1 through September 15 breeding season.

Both the Eastern Colorado Field Office of the Service (U.S. Fish and Wildlife Service 2009) and the Colorado Department of Transportation (Colorado Department of Transportation 2011) have identified the primary nesting season for migratory birds in eastern Colorado as occurring from April 1 through August 31 (Service 2022). However, a few species such as bald eagles, great horned owls, and red-tailed hawks can nest as early as December (eagles) or late February (owls and red-tailed hawks). Because of variability in the breeding seasons, ERO recommends that a nest survey be conducted within one week prior to construction to determine if any active nests are present in the project area so that they can be avoided. Additional nest surveys during the nesting season may also be warranted to identify active nesting species that may present additional development timing restrictions (e.g., eagles or red-tailed hawks).

If active nests are identified in or near the project area, activities that would directly affect the nests should be restricted. Habitat-disturbing activities (e.g., tree removal, grading, scraping, and grubbing) should be conducted during the nonbreeding season to avoid disturbing active nests, or to avoid a "take" of the migratory bird nests in the project area. Nests can be removed during the September 1 through March 31 nonbreeding season to preclude future nesting and avoid violations of the MBTA. There is no process for removing nests during the nonbreeding season; however, nests may not be collected under MBTA regulations. If the construction schedule does not allow vegetation removal outside of the breeding season, a nest survey should be conducted immediately prior to vegetation removal to determine if the nests are active and by which species. If active nests are found, any work that would destroy the nests or cause the birds to abandon young in the nest could not be conducted until the birds have vacated the nests.

High Priority Habitat and Big Game

In 2021, CPW released a High Priority Habitat (HPH) table that identifies species and habitats, as well as recommendations to avoid and minimize impacts on wildlife from land use development (CPW 2021). ERO reviewed data from CPW map databases and determined that no HPH areas overlap the project area (NDIS 2021). Although no HPH occurs in the project area, ERO assessed the project area for habitat for species and habitats listed in the HPH table during the 2023 site visit. Because mule deer likely frequent the project area, this species is discussed in more detail below.

Mule Deer

Species Background

Mule deer are found in all ecosystems in Colorado from grasslands to alpine tundra. Spring and summer ranges are typically mosaics of meadows, aspen woodlands, alpine tundra-subalpine forest edges, or montane forest edges (Fitzgerald 1994). Seasonally, deer are relatively sedentary, although most will spend the summer at higher elevations and migrate to lower elevations in the winter. Mule deer diets vary seasonally but generally consist of browse from trees and shrubs, forbs, and grasses.

Potential Habitat and Effects

The majority of the project area is within mule deer overall range (NDIS 2020). No mule deer HPH areas, including migration corridors, severe winter range, or winter concentration areas, are located in the project area (CPW 2021; Appendix B). Although no mule deer were observed during the 2023 site visit, it is likely that mule deer forage and migrate through the project area.

Recommendations

Because no HPH for mule deer occurs in the project area, no action is necessary.

Other Wildlife and Special Features

The project area provides habitat for a variety of small mammals such as cottontail rabbits (*Sylvilagus* sp.), deer mice (*Peromyscus maniculatus*), voles (*Microtus* sp.), and pocket gophers (*Geomyidae* sp.) No prairie dogs were observed in or near the project area during the 2023 site visit (Appendix B).

Carnivores such as coyote (*Canis latrans*), raccoon (*Procyon lotor*), red fox *(Vulpes vulpes*), grey fox *(Urocyon cinereoargenteus*), and striped skunk (*Mephitis mephitis*) may occur in the project area. These species are typically observed in open grasslands and mixed woodlands. However, no dens were discovered during the 2023 site visit (Appendix B). Additionally, the project area is in the overall range of mountain lion (*Puma concolor*) and white-tailed deer (*Odocoileus virginianus*) (NDIS 2021). None of these species were observed during the 2023 site visit.

As with any human development, wildlife species sensitive to human disturbance are likely to decline in abundance or abandon the area, while other wildlife species adapted to development are likely to increase in abundance. Species likely to increase include red fox, raccoon, and great horned owl (*Bubo virginianus*). Overall, surrounding and continuing development contributes to a decline in the number and diversity of wildlife species nearby and to a change in species composition to favor species that adapt better to human disturbance.

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Appendix A Photo Log

Photo Log
CPW Fort Collins Area Office
October 3, 2023

Photo 1 - View of project area, disturbed grassland and developed areas in the foreground, mixed woodland in the background. View is northwest.

Photo 2 - Disturbed grassland area. View is northwest.

Photo 3 - Dead stems along fence line, with abandoned structures in the background. View is south.

Photo 4 - Grassy area with Canada thistle visible in the foreground, dead stems in the background. View is south.

Photo 5 - Mixed woodland area. View is east.

Photo 6 - Russian olive stand to the right. View is south.

Appendix B Natural Habitat and Features Table

Table B-1. Natural habitat and features potentially occurring on or near the project area.

Special Feature	Present (Y/N)	Comment
Noxious weeds	Y	Musk thistle, Canada thistle, leafy spurge, and Russian olive (List B); and common mullein, field bindweed, cheatgrass, and Siberian elm (List C).
Jurisdictional and nonjurisdictional wetlands	N	
Significant remnants of native plant communities	N	
Potential habitats and known locations of rare, threatened, or endangered plant species	N	
Potential habitats and known locations of rare, threatened, or endangered species of wildlife	Y	Potential for tricolored bat and monarch butterfly habitat. Both are currently candidate species under the ESA and are not listed under any federal, state, or local regulations.
Raptor habitat features, including nest sites, communal roost sites, and key concentration areas	N	
Concentration areas for nesting and migratory shorebirds and waterfowl	N	
Migratory songbird concentration areas	N	
Key nesting areas for grassland birds	N	
Fox and coyote dens	N	
Mule deer winter concentration areas	N	
Prairie dog colonies 1 acre or greater in size	N	

Appendix D. Preconstruction Notification for Colorado Parks and Wildlife Fort Collins Area Office – Kelley Property.

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ERO

Consultants in Natural Resources and the Environment

Preconstruction Notification
Colorado Parks and Wildlife Fort Collins Area Office – Kelley Drainage Facility
Larimer County, Colorado

Prepared for—

Colorado Parks and Wildlife
317 West Prospect Road
Fort Collins, Colorado 80526

Prepared by—

ERO Resources Corporation
1626 Cole Boulevard, Suite 100
Lakewood, Colorado 80401
303-830-1188
ERO Project #23-238

August 11, 2025

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Preconstruction Notification
Colorado Parks and Wildlife Fort Collins Area Office – Kelley Drainage Facility
Larimer County, Colorado

August 11, 2025

Introduction

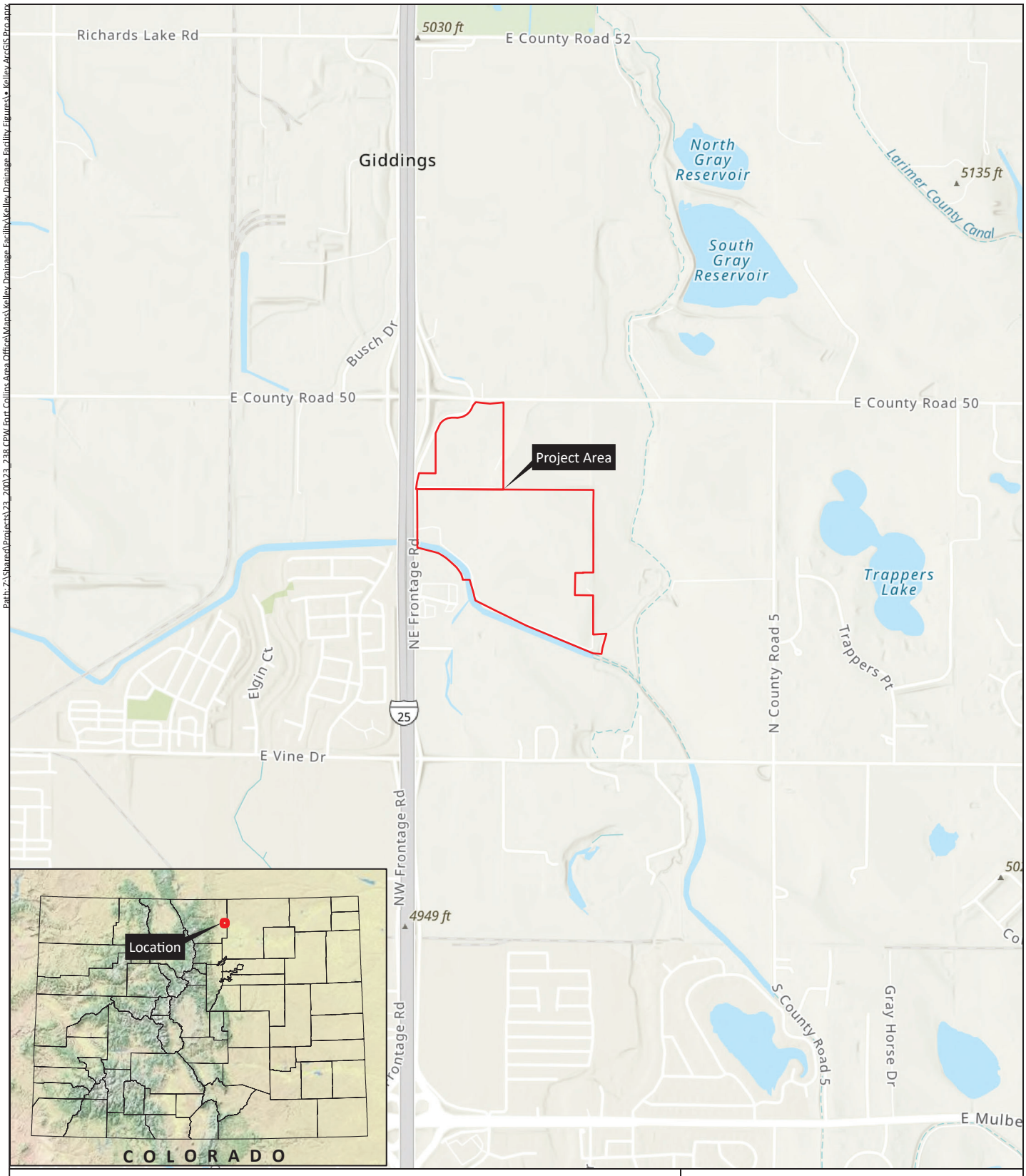
Colorado Parks and Wildlife (CPW) is proposing to construct the Fort Collins Area Office – Kelley Drainage Facility (project) in Larimer County, Colorado (project area; Figure 1). This Preconstruction Notification (PCN) discusses proposed impacts on potential waters of the U.S. (WOTUS) found in the project area (Figure 1 through Figure 3). The proposed project would include a joint outfall channel to convey stormwater from a stormwater basin north of Mountain Vista Drive, from the developed CPW property to the north, and from the Kelley Property itself, which is proposed for development as a storage operation. CPW retained ERO Resources Corporation (ERO) to assist in requesting authorization for the project under one or more Nationwide Permits (NWPs), specifically NWP 7 for Outfall Structures, or other appropriate NWP.

Project Area Location

The project area is in Section 3, Township 7 South, Range 68 West of the 6th Principal Meridian in Larimer County, Colorado (Figure 1). The UTM coordinates for the approximate center of the project area are 500368mE, 4494785mN, Zone 13 North. The longitude/latitude of the project area is 104.995645°W/40.603877°N. The elevation of the project area ranges from 4,980 to 4,990 feet above sea level. Photo points of the project area are shown on Figure 2, and the photo log is included as Appendix A.

Project Area Description

The project area is bounded by Colorado Highway 50 and the CPW Bird Farm property to the north, privately owned land to the east and south, and Interstate 25 to the west (Figure 2). The project area largely consists of a former agricultural site (Figure 2). Several buildings are also located in the project area, including former residential buildings and border fencing (Photo 1).



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Kelley Drainage Facility

Section 3, T7N, R68W; 6th PM

UTM NAD 83: Zone 13N; 500368mE, 4494785mN

Longitude 104.995645°W, Latitude 40.603877°N

USGS Fort Collins and Timnath, CO Quadrangles

Larimer County, Colorado

0 1,000 2,000 feet

N

Figure 1
Vicinity Map

Prepared for: State of Colorado
File: • Kelley ArcGIS Pro.mxd [dlH]
July 29, 2025

ERO Resources Corp.

Kelley Drainage Facility

- Kelley Property Boundary
- Project Area
- Proposed Project Footprint
- CPW Facility Boundary
- CPW Detention Pond
- Wetland
- Ordinary High Water Mark
- Culvert
- Raptor Nest
- Data Point
- 1/3-Mile Raptor Nest Buffer
- Agricultural
- Developed
- Larimer and Weld Canal
- Mixed Woodland
- Photo Point

0 350 700 feet

N

Figure 2
Existing Conditions

Prepared for: State of Colorado
File: • Kelley ArcGIS Pro.mxd [dlH]
July 29, 2025

ERO Resources Corp.

Kelley Drainage Facility

- Project Area
- Proposed Project Footprint
- Wetland (0.06 ac)
- Ordinary High Water Mark (0.03 ac)
- Raptor Nest
- Data Point
- Photo Point

0 37.5 75 feet

N

Figure 3
Wetlands and Waters

Prepared for: State of Colorado
File: • Kelley ArcGIS Pro.mxd [dlH]
July 29, 2025

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Land Use and Vegetation

The overall project area consists mainly of former or current agricultural fields and residential buildings (Figure 2). Dominant species in the project area include alfalfa (*Medicago sativa*), kochia (*Bassia scoparia*), and smooth brome (*Bromus inermis*). Other less prevalent species in the uplands in the project area include western wheatgrass (*Pascopyrum smithii*), flixweed (*Descurainia sophia*), Russian thistle (*Salsola tragus*), diffuse knapweed (*Centaurea diffusa*), field bindweed (*Convolvulus arvensis*), and common mullein (*Verbascum thapsus*) (Photo 1 through Photo 4). Several species listed by the state of Colorado as noxious weeds occur along the project area including diffuse knapweed, field bindweed, and common mullein.

Wetlands were identified along Boxelder Creek. Boxelder Creek flows through the southeast corner of the project area, and the area immediately surrounding the creek is dominated by reed canarygrass (*Phalaris arundinacea*), Russian thistle, and smooth brome, with sparse diffuse knapweed, common mullein, and kochia (Figure 3; Photo 3 and Photo 4). The wetlands and open water features identified in the project area are described in detail in the *Wetlands and Other Waters of the U.S.* section below.

Soil Classification

Soil types in the project area have been identified by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) (USDA, NRCS 2025b). Several soil types are mapped in the project area and include:

- Ascalon sandy loam, 0 to 3 percent slopes
- Kim loam, 1 to 3 percent slopes
- Kim loam, 3 to 5 percent slopes
- Nunn clay loam, 0 to 1 percent slopes
- Nunn clay loam, 1 to 3 percent slopes
- Satanta loam, 1 to 3 percent slopes
- Table Mountain loam, 0 to 1 percent slopes

Ascalon sandy loam, 0 to 3 percent slopes are found on interfluves and are considered nonhydric. Kim loam, 1 to 3 percent slopes and 3 to 5 percent slopes are found on alluvial fans and are considered nonhydric. Nunn clay loam, 0 to 1 percent slopes and 1 to 3 percent slopes are found on terraces and are considered nonhydric. Satanta loam, 1 to 3 percent slopes are found on paleoterraces and is considered nonhydric. Table Mountain loam, 0 to 1 percent slopes are found on stream terraces and floodplains and are considered nonhydric. The soil association is listed in Table 1 in the *Wetlands and Other Waters of the U.S.* section below.

Wetlands and Other Waters of the U.S.

Background

The Clean Water Act (CWA) protects the chemical, physical, and biological quality of WOTUS. The U.S. Army Corps of Engineers (Corps) Regulatory Program administers and enforces Section 404 of the CWA. Under Section 404, a Corps permit is required for the discharge of dredged or fill material into wetlands and other WOTUS (streams, ponds, and other waterbodies). Since the regulatory program was initiated, the definition of WOTUS has changed frequently due to United States Supreme Court (Supreme Court) decisions and new rules proposed by presidential administrations. On August 29, 2023, the U.S. Environmental Protection Agency and Corps announced a final rule amending the 2023 definition of "waters of the U.S." to conform with the Supreme Court ruling under *Sackett v. Environmental Protection Agency*, No. 21-454. The amended rule reduces the jurisdiction of the CWA over wetlands adjacent to bodies of water that do not have a continuous surface connection to other known WOTUS, as well as streams that do not have continuous flowing or relatively permanent water. The amended rule removes the "significant nexus" standard that was created under *Rapanos v. United States*, removes interstate wetlands from the definition of WOTUS, and revises the definition of "adjacent" to mean "having a continuous surface connection." Wetlands that do not have a contiguous surface connection to a jurisdictional traditionally navigable water or tributary are no longer jurisdictional, as well as ephemeral streams that do not have relatively permanent water. Potential rulings and guidance in the future could change the results of this report regarding the jurisdictional status of waters and wetlands in the project area. While ERO may provide its opinion on the likely jurisdictional status of wetlands and waters, the Corps will make the final determination of jurisdiction based on the current rulings.

Methods

On February 27, 2025, Jared Dubiel with ERO assessed the project area for potential isolated wetlands, jurisdictional wetlands, and other WOTUS (2025 site visit). Before the 2025 site visit, ERO reviewed U.S. Geological Survey (USGS) topographic quadrangle map and aerial photography to identify mapped streams and areas of open water that could indicate wetlands or WOTUS (USGS 2024; Google, Inc. 2025). ERO conducted an additional site visit on July 11, 2025 and reviewed aerial imagery in conjunction with the July 2025 site visit (Google, Inc. 2025).

ERO conducted the wetland delineation following the methods for routine on-site wetland determinations in areas of less than 5 acres as described in the 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and used methods in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0) (U.S. Army Corps of Engineers 2010) to record data on vegetation, soils, and hydrology on routine determination forms (Appendix B). The Corps defines wetlands as "areas that are inundated or saturated by surface or ground water 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. Wetlands

generally include swamps, marshes, bogs, and similar areas" (33 Code of Federal Regulations [CFR] 328.2(c)). Wetland boundaries were determined by a visible change in vegetation community, soils, topographic changes, and other visible distinctions between wetlands and uplands.

The wetland indicator status of plant species was identified using the National Wetland Plant List (U.S. Army Corps of Engineers 2020), taxonomy was determined using Flora of Colorado (Ackerfield 2022), and nomenclature was determined using the PLANTS Database (U.S. Department of Agriculture, Natural Resources Conservation Service 2025a). Soil data were not always collected if hydrophytic vegetation and hydrology were present and did not appear altered (Environmental Laboratory 1987). In addition, soil data were not collected in conditions where there was a clear lack of hydrology and hydrophytic vegetation indicators. Where soil data were collected, a Munsell soil color chart was used to determine soil color.

Intermittent, ephemeral, and perennial drainages with characteristics of a defined streambed, streambank, ordinary high water mark (OHWM), and other erosional features also were identified. The OHWM identifies the lateral jurisdictional limits of nonwetland WOTUS. Federal jurisdiction over nonwetland WOTUS extends to the OHWM, defined in 33 CFR 328.3 as "the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." The Corps defines stream bed as "the substrate of the stream channel between the OHWMs. The substrate may be bedrock or inorganic particles that range in size from clay to boulders."

The boundaries of identified wetlands and other characteristics of potential WOTUS were mapped using an R1 global Positioning System (GPS) unit. GPS data were incorporated using ESRI® ArcGIS Desktop software. Additionally, where appropriate, wetlands were drawn on georectified aerials and then digitized.

ERO also reviewed the proximity and potential surface water connection of wetlands to known jurisdictional WOTUS using aerial photo interpretation, landowner information, and information from the wetland survey. Potential WOTUS, including adjacent wetlands, identified in the project area are shown on Figure 3. Data were collected from various locations in the project area to document the characteristics of uplands and wetlands and the transition areas between them. Each data point (DP) was given a label that corresponds to a location shown on Figure 3 and routine wetland determination forms (Appendix B). The following sections contain information on potential surface water connections of wetlands and other waters in the project area.

Wetland Classification

Delineated wetlands were classified according to the U.S. Fish and Wildlife Service's (Service) Cowardin classification system (Cowardin et al. 1979) combined with a hydrogeomorphic (HGM) approach (Brinson 1993). The HGM approach assesses the chemical, physical, and biological functions of wetlands

based on its geomorphic setting, water source, and hydrodynamics. HGM classes found in Colorado are mineral soil flats, organic soil flats, riverine, lacustrine fringe, slope, and depressional. The Cowardin classification uses a hierarchical structure of systems, subsystems, and classes to classify both wetlands and deepwater habitats. Wetlands with persistent or nonpersistent vegetation are classified in the Cowardin system as palustrine, which typically includes wetlands referred to as marshes, fens, wet meadows, and sloughs. The palustrine system also includes small, shallow, permanent, or intermittent waterbodies such as ponds. Palustrine wetlands may be situated shoreward of lakes and river channels, on river floodplains, in isolated catchments, or on slopes (Cowardin et al. 1979). Under the palustrine system, wetlands are classified as emergent (erect, rooted, herbaceous, and usually perennial hydrophytes that remain standing until at least the next growing season); scrub-shrub (woody vegetation less than 20 feet tall); or forested (woody vegetation 20 feet or taller). In wetlands where more than one wetland type occurs, the wetland type of the largest area is used. For example, an area that is predominantly palustrine emergent (PEM) wetlands but also contains a small amount of palustrine scrub-shrub (PSS) wetlands would be categorized as PEM wetlands. Because of the limited occurrence of the smaller sized wetland types within the larger wetland polygons, these areas were not separated out within the delineated polygons.

The Cowardin riverine system includes wetlands and deepwater habitats contained within a channel, with the exception of wetlands dominated by trees, shrubs, and emergent vegetation. The riverine system usually contains flowing water and is bounded on the landward side by uplands, channel banks, or other wetlands. Within the riverine system, wetlands are divided into the tidal, lower perennial (low gradient and slow water); upper perennial (high gradient and fast water); and intermittent subsystems. Within these subsystems, riverine wetlands are further classified as unconsolidated bottom, aquatic bed, streambed, rocky shore, unconsolidated shore, and emergent wetland (nonpersistent). During the wetland delineation, ERO classified the wetlands as PEM and PSS, but did not classify open waters or streams.

Results

Streams and Open Waters

Under existing regulations, waters tributary to navigable waters are considered WOTUS and are subject to the Corps' jurisdiction. The USGS Fort Collins and Timnath, Colorado topographic quadrangle maps and the National Hydrography Dataset show Boxelder Creek in the southeast corner of the project area (USGS 2025). During the 2025 site visit, Boxelder Creek was found in the project area as described in more detail below. During the 2025 site visit, ERO mapped a total of 0.03 acre of OHWM associated with Boxelder Creek (Table 1; Figure 3).

Wetlands

During the 2025 site visit, one DP was collected (DP1) in an area of hydrophytic vegetation that was observed along the eastern bank of Boxelder Creek (Photo 3; Figure 3). No wetlands were found at this location. A summary of the findings at DP1 are below. During the additional July 2025 site visit, wetlands were identified along Boxelder Creek to the north of DP1. No DP was taken at this location; however,

based on aerial imagery and the presence of wetland vegetation, wetlands were assumed to be present. ERO mapped 0.06 acre of wetlands in this area along Boxelder Creek during the July 2025 site visit.

Vegetation

Dominant vegetation at DP1 consisted of reed canarygrass (Facultative wetland). Other vegetation observed along Boxelder Creek included smooth brome (Upland), Russian thistle (Facultative Upland), diffuse knapweed (Upland), common mullein (Upland), and kochia (Upland). At DP1, the vegetation met the rapid test for hydrophytic vegetation.

Soils

Field observations revealed that soils primarily consisted of sandy clay loam within 12 inches of the soil surface. At DP1, the soils contained a matrix color of 10YR 4/3 with no redox features observed. No hydric soil indicators were observed at DP1. See Appendix B for additional details on soils at DP1.

Hydrology

Hydrology indicators were observed at DP1. No primary hydrologic indicators were observed. Secondary hydrologic indicators included passing the FAC-neutral test and the geomorphic position.

Table 1. Wetlands and open water in the project area.

Water/Wetland ID	Longitude	Latitude	Feature Size (acre)	Cowardin Classification	HGM
Boxelder Creek	104.991185°W	40.599957°N	0.03	Riverine, unconsolidated bottom	Riverine
W1	104.991147°W	40.600204°N	0.06	PEM	Riverine

Endangered Species Act Compliance

During the 2025 site visit, ERO assessed the project area for potential habitat for threatened, endangered, proposed, and candidate (T&E) species listed under the Endangered Species Act (ESA) of 1973, as amended (16 United States Code 1531 et seq.). Adverse effects on a federally listed species or its habitat require consultation with the Service under Section 7 or 10 of the ESA. The Service's Information for Planning and Consultation (IPaC) resource list for the project area identifies several T&E species with potential habitat in the project area or with potential to be affected by the project (Table 2) (Service 2025). Because the project area falls within survey guidelines for Preble's meadow jumping mouse (*Zapus hudsonius preblei* or Preble's) and Ute ladies'-tresses orchid (*Spiranthes diluvialis* or ULTO), ERO assessed the project area for suitable habitat for these species.

Table 2. Federally listed T&E species potentially found in the project area or potentially affected by the project.

Common Name	Scientific Name	Status*	Habitat	Suitable Habitat Present or Potential to be Affected by Project
Mammals				
Preble's meadow jumping mouse (Preble's)	*Zapus hudsonius preblei*	T	Riparian and wet meadow areas with dense shrub, grass, and forb cover	No
Birds				
Eastern black rail	*Laterallus jamaicensis*	T	Shallow cattail wetlands and wet sedge meadows with dense cover in the Arkansas River drainage in southeastern Colorado and the Republican River in east-central Colorado	No
Piping plover**	*Charadrius melodus*	T	Sandy lakeshore beaches and river sandbars	No habitat and no depletions anticipated
Whooping crane**	*Grus americana*	E	Mudflats around reservoirs and in agricultural areas	No habitat and no depletions anticipated
Fish				
Pallid sturgeon**	*Scaphirhynchus albus*	E	Large, turbid, free-flowing rivers with a strong current and gravel or sandy substrate	No habitat and no depletions anticipated
Invertebrates				
Monarch butterfly	*Danaus plexippus*	PT	Dependent on milkweeds (*Asclepiadoideae*) as host plants and forage on blooming flowers; a summer resident	No habitat
Suckley's cuckoo bumble bee	*Bombus suckleyi*	PE	Various habitats including prairies, grasslands, meadows, and woodlands between 6,000 and 10,500 feet in elevation where host species are present	Presumed extirpated from Colorado
Plants				
Ute ladies'-tresses orchid (ULTO)	*Spiranthes diluvialis*	T	Moist to wet alluvial meadows, floodplains of perennial streams, and around springs and lakes below 7,800 feet in elevation	No habitat
Western prairie fringed orchid**	*Platanthera praeclara*	T	Moist to wet tallgrass prairies and meadows	No habitat and no depletions anticipated

*T = Federally Threatened Species; E = Federally Endangered Species; PT = Proposed Federally Threatened Species; PE = Proposed Federally Endangered Species.
**Water depletions in the South Platte River may affect the species or critical habitat in downstream reaches in other counties or states.
Source: (Service 2025).

The proposed project would not impact Preble's because of a lack of habitat in the form of dense shrub riparian areas. The proposed project would not impact the eastern black rail because of the lack of wetland habitat in the project area. The proposed project would not impact the monarch butterfly because of a lack of milkweed host plants in the project area. The proposed project would not directly affect Suckley's cuckoo bumble bee because the species was last observed in Colorado in 2014 and, therefore, is considered extirpated from Colorado (Salamack 2025; Service 2024). No impacts on ULTO is predicted because the project area does not contain the regularly flooded mesic areas that ULTO requires, and the project area does not fall within the Service's guidelines for ULTO surveys (Service 1992).

The piping plover, whooping crane, pallid sturgeon, and western prairie fringed orchid are species that are affected by depletions to the Platte River system. Based on ERO's knowledge of the types of activities likely to be implemented as part of the development of the project area, there would be no depletions to the South Platte River. If the project includes activities that deplete water in the South Platte River, such as diverting water from a stream or developing new water supplies, these species could be affected by the project and consultation with the Service may be required.

Historic Properties

To assist with the Corps' consultation obligations under Section 106 of the National Historic Preservation Act (NHPA), ERO conducted a Class III survey of the project area. The project area is contained within an area of potential effects (APE) that includes the entire parcel and was defined to comply with Section 106 of the NHPA for a federal nexus resulting from the use of Service funding for parts of the project. The APE is defined as a portion of the Kelley Property, parcel 8703000005, where the drainage facility would be constructed, and where an outflow structure intersects Boxelder Creek (98.3 acres).

ERO redocumented four sites: a segment of the Larimer and Weld Canal (5LR863.3), a segment of the Poudre to Richards Lake Transmission Line (5LR9457.1), a segment of the Cheyenne to Richards Lake Transmission Line (5LR9458.2), and the Einarsen Farm (5LR11396). 5LR863.3 is recommended supporting of the eligibility of the entire resource for listing in the National Register of Historic Places (NRHP). The project does not propose any alterations to the ditch. The existing stormwater outfall into the ditch would be abandoned and, therefore, ERO recommends no further work. 5LR9457.1 and 5LR9458.2 are recommended nonsupporting of the eligibility of the entire resource for listing in the NRHP, and 5LR11396 is recommended not eligible for listing in the NRHP.

ERO recommends a determination of *no historic properties affected* pursuant to 36 CFR 800.4(d)(1) of the NHPA and General Condition 20. Refer to Appendix C for the full cultural resource report.

Activity to be Authorized

CPW intends to participate in the design, construction, and operation of a joint outfall channel to convey stormwater from its property, with the 100-year discharge as the design storm. The channel would convey runoff from a stormwater basin north of Mountain Vista Drive, from the developed CPW property, and from the adjoining Kelley Property to the south. The Kelley Property to the south is proposed for development as a storage operation. The outfall channel would flow southward and then east, parallel to the Larimer and Weld Canal, before discharging to Boxelder Creek approximately 200 feet north of the point at which Boxelder Creek and the Larimer and Weld Canal intersect. Basin hydrology will be evaluated and channel hydraulics designed such that base flood elevation increases in Boxelder Creek will meet a no-rise criterion. The invert of the outfall channel, where it will enter Boxelder Creek, will be established at an elevation above the OHWM of the creek. The area where the outfall channel will discharge into Boxelder Creek will be stabilized with riprap, erosion protection

matting, or native vegetation to limit erosion potential at this location. See the Project Plan Sheets in Appendix D for more detail.

Overall, the proposed project activities would permanently impact a total of 0.02 acre of OHWM and 0.06 acre of wetlands (Table 3; Figure 4).

Table 3. Summary of impacts on OHWM locations.

Feature	Latitude	Longitude	Permanent Impacts (acre)	Temporary Impacts (acre)
Streams and Open Water Areas				
OHWM 1 (Boxelder Creek)	40.599956°N	104.991185°W	0.02	0
Total Impacts on Streams and Open Water Areas (acre)			***0.02***	***0***
Wetlands				
Total Impacts on Wetlands (acre)			***0.06***	***0***
Total Impacts (acre)			***0.08***	***0***

Avoidance and Minimization of Impacts and Best Management Practices

The project has been designed to minimize impacts on the ditches, wetlands, and riparian areas as much as possible. This includes limiting grading and construction disturbance to the minimum necessary along the project area. In addition to avoiding and minimizing direct impacts, Best Management Practices (BMPs) would be implemented during construction to minimize indirect impacts on the ditches, wetlands, and riparian and upland areas. Standard BMPs that would be implemented during construction include, but are not limited to, the following:

- Installing temporary fencing to deter access to portions of the project area not being disturbed during construction.
- Placing staging areas in previously disturbed upland areas.
- Installing sediment- and erosion-control devices, such as silt fence, to minimize surface runoff in disturbed areas.
- Placing vehicle tracking control devices at the site entrance.
- Installing concrete washout areas in uplands away from the wetland and ditches.

Mitigation

CPW does not propose specific compensatory mitigation because the project would result in no more than minimal adverse effects on the aquatic environment. All temporarily disturbed areas in the project area would be returned to preconstruction contours, planted with native seed mixes appropriate for the site conditions, and mulched directly after completion of construction.

Kelley Drainage Facility

- Project Area
- Proposed Project Footprint
- Permanent Impacts On Wetland (0.06 ac)
- Permanent Impacts On Ordinary High Water Mark (0.02 ac)
- Wetland (0.06 ac)
- Ordinary High Water Mark (0.03 ac)
- Raptor Nest
- Data Point
- Photo Point

0 37.5 75 feet

N

Figure 4
Proposed Impacts

Prepared for: State of Colorado
File: • Kelley ArcGIS Pro.mxd [dlH]
July 29, 2025

ERO Resources Corp.

Compliance with Nationwide and Regional Permit Conditions

ERO believes the project may be constructed under NWP 7 for Outfall Structures or other appropriate NWP. As proposed, the project would be constructed to comply with all general and regional conditions associated with current NWPs. Of particular relevance, no habitat for T&E species occurs in the project area (General Condition 18 and the ESA); and ERO recommends a determination of *no historic properties affected* pursuant to 36 CFR 800.4(d)(1) of the NHPA and General Condition 20.

Contact Information

Consulting Agent

Jared Dubiel
ERO Resources Corporation
1626 Cole Boulevard, Suite 100
Lakewood, CO 80401
303-830-1188

Project Proponent

Paul Barker
Colorado Parks and Wildlife
3745 East Prospect Road
Fort Collins, CO 80525
970-214-7510

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Appendix A Photo Log

Photo 1 - Structures and mixed woodland in the western portion of the project area. View is to the northwest.

Photo 2 - Ditch road, agricultural area, and Larimer and Weld Canal. View is to the southeast.

Photo 3 - Boxelder Creek and DP1. View is to the northwest.

Photo 4 - Road separating Boxelder Creek and Larimer and Weld Canal. View is to the southeast.

Photo 5 - Boxelder Creek. View is to the southeast.

Appendix B Wetland Delineation Data Form

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: 23-238 CPW Office Kelley Property City/County: Ft. Collins/Larimer Sampling Date: Feb 27, 202

Applicant/Owner: CPW State: CO Sampling Point: DP1

Investigator(s): JJD Section, Township, Range: S3, T7N, R68W

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): concave Slope (%): 100

Subregion (LRR): G Lat: 40.599870 Long: -104.991153 Datum: NAD83

Soil Map Unit Name: Table Mountain Loam, 0 to 1 percent slopes NWI classification: R5UBH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes [x] No [ ] (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes [x] No [ ]

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes [x]	No [ ]	**Is the Sampled Area within a Wetland?** Yes [ ] No [x]
Hydric Soil Present?	Yes [ ]	No [x]	
Wetland Hydrology Present?	Yes [x]	No [ ]	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5')			
1. Phalaris arundinacea	75	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 25

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- [x] 1 - Rapid Test for Hydrophytic Vegetation
- [ ] 2 - Dominance Test is >50%
- [ ] 3 - Prevalence Index is ≤3.0[1]
- [ ] 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes [x] No [ ]

Remarks:

SOIL

Sampling Point: DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-12	10YR 4/3	100					Sandy Cla	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR F**)
- ☐ 1 cm Muck (A9) (**LRR F, G, H**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (**LRR I, J**)
- ☐ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ☐ Dark Surface (S7) (**LRR G**)
- ☐ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Frozen/Rock

Depth (inches): 10

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Restrictive layer due to rock and frozen soil. No indicators met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☒ FAC-Neutral Test (D5)
- ☐ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):

Water Table Present? Yes ☐ No ☒ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches):

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix C Cultural Resource Report

ERO

Consultants in Natural Resources and the Environment

Cultural Resource Survey
Colorado Parks and Wildlife Kelley Property Drainage Facility
Larimer County, Colorado

Prepared for—

Colorado Parks and Wildlife
317 West Prospect Road
Fort Collins, Colorado 80526

Prepared by—

ERO Resources Corporation
1626 Cole Boulevard, Suite 100
Lakewood, Colorado 80401
(303) 830-1188

Written by—

Marie Matsuda
Emily Ortiz
Madeline Westrom-Simons

Prepared under the supervision of—

Jonathan Hedlund, Principal Investigator

State Permit No. 85654
SHPO Report ID LR.PW.R3
ERO Project No. 23-238

July 2, 2025

For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)

Colorado Historical Society - Office of Archaeology and Historic Preservation

Colorado Cultural Resource Survey

Cultural Resource Survey Management Information Form

I. PROJECT SIZE

Total federal acres in project		Total federal acres surveyed	
Total state acres in project		Total state acres surveyed	
Total private acres in project	95.83	Total private acres surveyed	95.83
Total other acres in project		Total other acres surveyed	

II. PROJECT LOCATION

County: Larimer

USGS Quad Map:

PrincipalMeridian: 6th

Township	7N	Range	68W	Section	3	NW 1/4 of	SE	1/4
Township	7N	Range	68W	Section	3	SW 1/4 of	NE	1/4
Township	7N	Range	68W	Section	3	SW 1/4 of	NW	1/4
Township	7N	Range	68W	Section	3	NW 1/4 of	L1	1/4
Township	7N	Range	68W	Section	3	NW 1/4 of	L1	1/4
Township	7N	Range	68W	Section	3	NW 1/4 of	L2	1/4
Township	7N	Range	68W	Section	3	NW 1/4 of	L2	1/4

III. SITES

Smithsonian Number	Resource Type				Eligibility						Management Recommendations						
	Prehistoric	Historic	Paleontological	Unknown	Eligible	Not Eligible	Need Data	Supporting Linear Segment	Non-supporting Linear Segment	Contributes to a District	No Further Work	Preserve / Avoid	Monitor	Test	Excavate	Archival Research	Other
5LR863.3		X			X			X			X						
5LR9457.1		X				X			X		X						
5LR9458.2		X				X			X		X						
5LR11396		X				X					X						

Abstract

ERO Resources Corporation (ERO) conducted a cultural resource survey for the Colorado Parks and Wildlife (CPW) Kelley Property Drainage Facility (project). Because the project would be funded in part by a grant from the U.S. Fish and Wildlife Service and require a Nationwide Permit 7 for Outfall Structures, the proposed undertaking requires an environmental assessment in compliance with the National Environmental Policy Act and compliance with Section 106 (54 United States Code [U.S.C.] § 306108) of the National Historic Preservation Act (NHPA; 54 U.S.C. § 300101 et seq.).

The project is in the initial design phase and proposes the construction of a joint outfall channel to convey stormwater from the developed CPW property to the north and the Kelley Property. The area of potential effects (APE) is defined as a portion of the Kelley Property, parcel 8703000005, where the drainage facility would be constructed, and where an outflow structure intersects with Boxelder Creek (95.83 acres).

ERO completed a Class III cultural resource survey of the APE and redocumented four sites: a segment of the Larimer and Weld Canal (5LR863.3), a segment of the Poudre to Richards Lake Transmission Line (5LR9457.1), a segment of the Cheyenne to Richards Lake Transmission Line (5LR9458.2), and the Einarsen Farm (5LR11396). 5LR863.3 is recommended supporting of the eligibility of the entire resource for listing in the National Register of Historic Places (NRHP). The project does not propose any alterations to the ditch. The existing stormwater outfall into the ditch would be abandoned and therefore, ERO recommends no further work. 5LR9457.1 and 5LR9458.2 are recommended nonsupporting of the eligibility of the entire resource for listing in the NRHP, and 5LR11396 is recommended not eligible for listing in the NRHP.

ERO recommends a determination of *no historic properties affected* pursuant to 36 Code of Federal Regulations 800.4(d)(1) of the NHPA.

Contents

Figures

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Appendices

Cultural Resource Survey
Colorado Parks and Wildlife Kelley Property Drainage Facility
Larimer County, Colorado

March 28, 2025

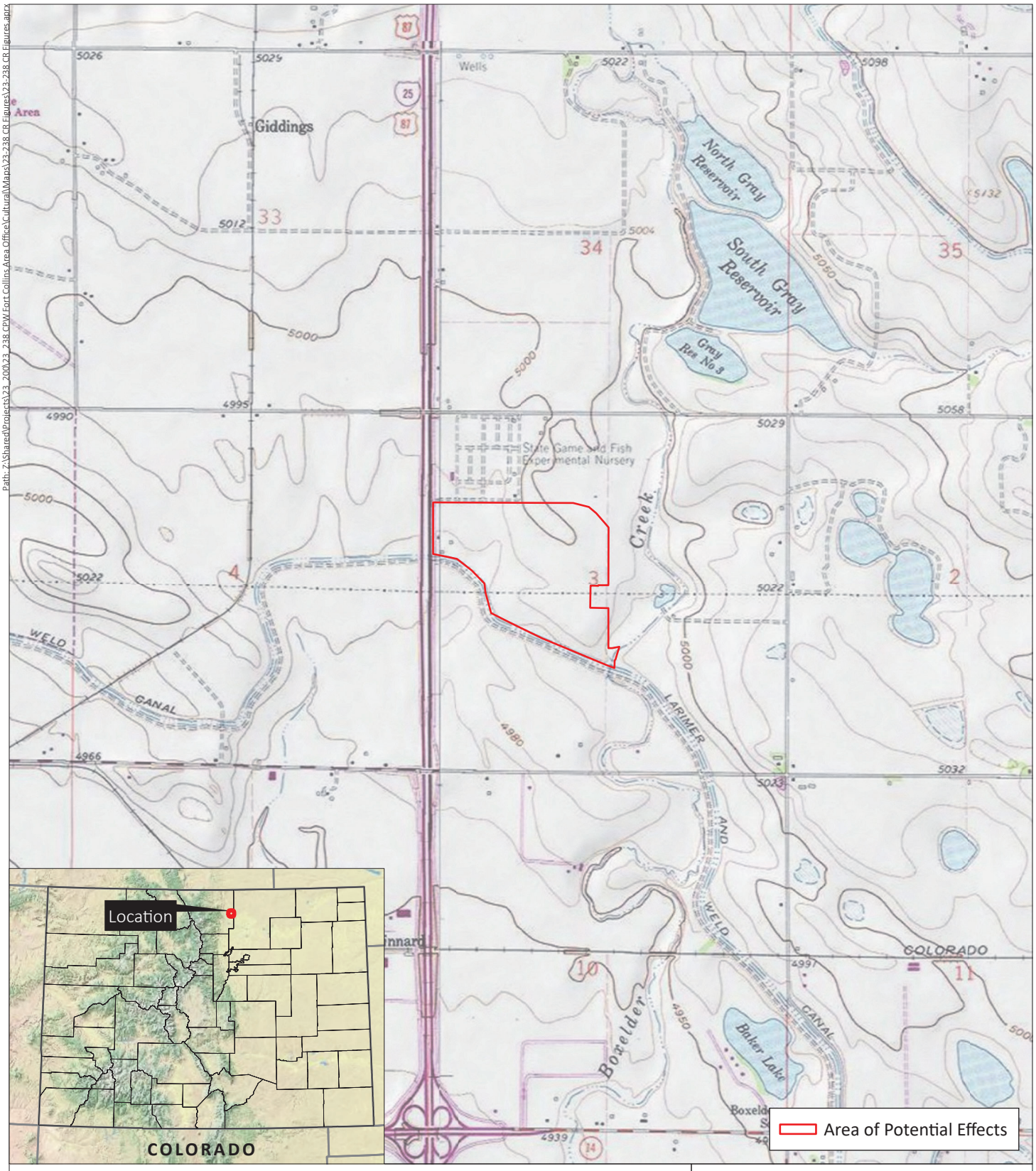
Project Description

ERO Resources Corporation (ERO) conducted a cultural resource survey for the Colorado Parks and Wildlife (CPW) Kelley Property Drainage Facility (project) (Figure 1). Because the project would be funded in part by a grant from the U.S. Fish and Wildlife Service (USFWS) and require a Nationwide Permit (NWP) 7 for Outfall Structures, the proposed undertaking requires an environmental assessment in compliance with the National Environmental Policy Act and compliance with Section 106 (54 United States Code [U.S.C.] § 306108) of the National Historic Preservation Act (NHPA; 54 U.S.C. § 300101 et seq.).

The project is in the initial design phase and proposes the construction of a joint outfall channel to convey stormwater from the developed CPW property to the north and the Kelley Property, where the drainage facility would be constructed. The outfall channel would flow from an unnamed road at the north extent of parcel 8703000005 and extend southward, turning southeast to parallel the Larimer and Weld Canal before discharging to Boxelder Creek (Figure 2). The outfall is proposed approximately 250 feet (ft) north of the Boxelder Creek and Larimer and Weld Canal intersection. The outfall channel at Boxelder Creek would be stabilized with riprap, erosion protection mat, and native vegetation to limit erosion potential. Additionally, the Kelley Property is proposed to be developed as a storage facility. The permit area for the NWP 7 is contained within an area of potential effects (APE) that includes a portion of the parcel. This was defined to comply with Section 106 of the NHPA for a federal nexus resulting from the use of USFWS funding for parts of the project.

The area of potential effects (APE) is defined as a portion of the Kelley Property, parcel 8703000005, where the drainage facility would be constructed, and where an outflow structure intersects with Boxelder Creek (Larimer County Tax Assessor's Office 2023) (95.83 acres). The APE includes areas of grading and staging and construction of the channel, pipeline, and any associated outflow structures. Land in the APE is owned by Freedom Storage, LLC. The APE is shown on the Timnath, Colorado 7.5-minute U.S. Geological Survey (USGS) quadrangle. The legal location is Section 3, Township 7 North, Range 68 West of the Sixth Principal Meridian in Larimer County, Colorado.

ERO archaeologists Marie Matsuda and Michelle Dinkel conducted a Class III cultural resource survey of the APE on March 18, 2025.



Cultural Resource Survey
Colorado Parks and Wildlife Kelley Property Drainage Facility
Larimer County, Colorado

Section 3, T7N, R68W; 6th PM
USGS Fort Collins, CO Quadrangle (1:24,000; 1985)
USGS Timnath, CO Quadrangle (1:24,000; 1973)
Larimer County, Colorado

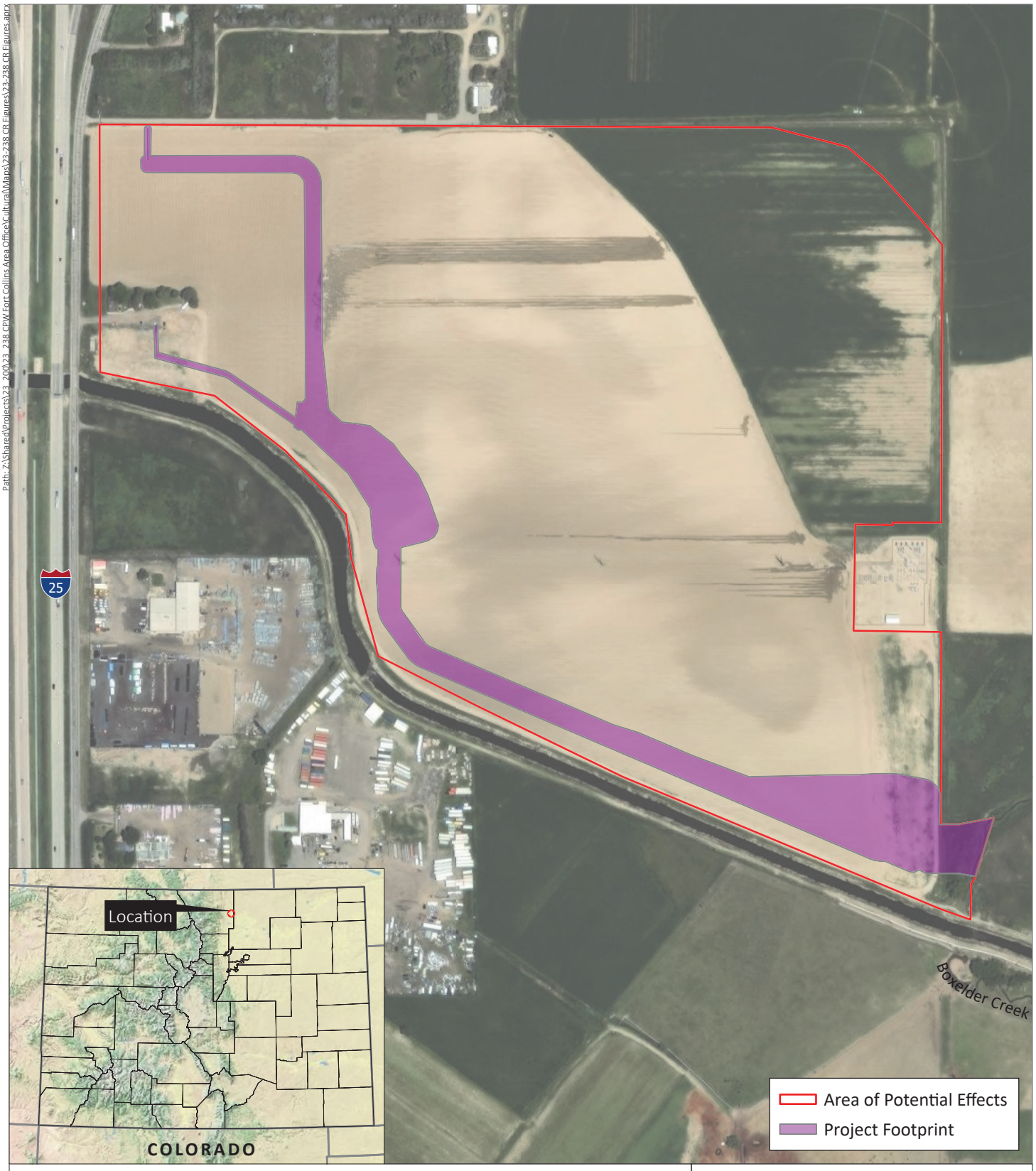
N

0 1,000 2,000 Feet
1:24,000

Figure 1
Project Location

Prepared for:
Colorado Parks and Wildlife
File: 23-238 CR Figures.aprx (ME)
July 2, 2025

ERO Resources Corp.



Cultural Resource Survey
Colorado Parks and Wildlife Kelley Property Drainage Facility
Larimer County, Colorado

Section 3, T7N, R68W; 6th PM
USGS Fort Collins, CO Quadrangle (1:24,000; 1985)
USGS Timnath, CO Quadrangle (1:24,000; 1973)
Larimer County, Colorado

N

0 250 500 Feet
1:5,000

Figure 2
Project Location

Prepared for:
Colorado Parks and Wildlife
File: 23-238 CR Figures.aprx (ME)
July 2, 2025

ERO Resources Corp.

Natural Environment

The APE is in the Great Plains physiographic province in the South Central Semi-Arid Prairies (Chapman et al. 2006). The APE is west of Boxelder Creek and surrounded by various lakes and reservoirs including North Gray Reservoir, South Gray Reservoir, and Gray Reservoir No. 3 to the northeast. The area is characterized by flat to rolling plains (Figure 3). The elevation of the APE is 4,978 ft (1,517 meters [m]) above sea level (asl). The ground visibility ranges from 0 to 75 percent. The surface geology consists of Broadway alluvium from the Pinedale Glaciation, which dates to the Pleistocene (Colton 1978).

Figure 3. Overview of the APE, view to the southwest.

Based on the Web Soil Survey data compiled by the Natural Resources Conservation Service (Natural Resources Conservation Service 2025), soils in the APE consist of (in order of dominance) Nunn clay loam, Kim loam, Ascalon sandy loam, Satanta loam, and Longmont clay. The soil series represented in the APE are in Table 1.

Table 1. Soil series encountered in the APE.

Soil Series	Slope Range	Description
Nunn clay loam	0–1%	Nunn clay loam consists of a well-drained clay loam and loam. Soils are formed on terraces and treads from Pleistocene-aged alluvium and eolian deposits.
Nunn clay loam	1–3%	Nunn clay loam consists of a well-drained clay loam and loam. Soils are formed on terraces and treads from Pleistocene-aged alluvium and eolian deposits.
Kim loam	1–3%	Kim loam consists of a well-drained loam and clay loam. Soils are formed on fans and base slopes from mixed alluvium.
Kim loam	3–5%	Kim loam consists of a well-drained loam and clay loam. Soils are formed on fans and base slopes from mixed alluvium.
Ascalon sandy loam	0–3%	Ascalon sandy loam consists of a well-drained sandy loam to sandy clay loam. Soils are formed on interfluves and summits from wine-reworked alluvium and calcareous sandy eolian deposits.
Satanta loam	0–1%	Satanta loam consists of a well-drained loam and clay loam. Soils are formed on alluvial fans, backslopes, and head slopes from alluvium.
Satanta loam	1–3%	Satanta loam consists of a well-drained loam and clay loam. Soils are formed on paleoterraces, backslopes, and head slopes from alluvium.
Longmont clay	0–3%	Longmont clay consists of poorly drained clay. Soils are formed on flood plains, valleys, and base slopes from clayey alluvium derived from shale.

The vegetation community present in the APE is classified as Flat to Rolling Plains and consists of shortgrass prairie grass species including blue grama, buffalograss, fringed sage, Junegrass, wheatgrass, fixweed, Russian thistle, diffuse knapweed, field bindweed, common mullein, and kochia (Chapman et al. 2006). Fauna includes coyotes, mountain lions, raccoons, cottontails, jackrabbits, foxes, bats, bobcats, rodents, and various bird species.

Cultural Overview

The temporal framework for northeastern Colorado is divided into five major stages: Paleoindian (ca. 11500 to 7800 B.P., 11400 to 6650 B.C.), Archaic (ca. 7800 to 1850 B.P., ca. 6650 B.C. to A.D. 150), Late Prehistoric (1850 to 400 B.P., A.D. 150 to 1540), Protohistoric (400 to 100 B.P., A.D. 1540 to 1860), and Historic (A.D. 1860 to 1945). No detailed Native American cultural overview is provided in this report as no associated cultural materials were encountered or documented in the survey area. An intensive Native American cultural overview for this region can be found in *Colorado Prehistory: A Context for the Platte River Basin* (Gilmore et al. 1999).

Historic Settlement of Northeast Colorado (A.D. 1860 to 1930)

The earliest settlements in the eastern plains of Colorado were established by Hispanic settlers. Until the end of the Mexican-American War and the transfer of control of large areas of the West to the United States in 1848, most American contact with the area was in the form of exploratory and military parties. Following this, a second period of agricultural settlement was initiated by the discovery of gold in Colorado in 1858 (Church et al. 2007). Large numbers of individuals left the economically depressed Mississippi Valley to travel to Colorado in the hopes of wealth. While many failed and returned to the east coast, a number stayed to occupy mining communities or establish agricultural or commercial venues in the Colorado plains to supply miners and travelers. The U.S. government began to encourage western expansion and settlement after the Civil War by establishing a series of acts. The Homestead

Act of 1862 encouraged the settlement of the Colorado plains for agricultural purposes by ensuring that settlers could obtain cheap land.

Early homesteaders were drawn to the fertile South Platte River Valley and, by 1871, set up homes and ranches in present-day Sterling and around the Pawnee Buttes. Throughout the 1870s, ranchers grazed large herds of cattle and sheep on the prairie. In 1871, Congress defined the boundaries of the Colorado Territory, and state boosters and railroad companies initiated legal land surveys of the region. After the USGS published the original survey plats of northeastern Colorado, settlers were able to file legal claims and patents for land (General Land Office 1873). In 1876, Colorado obtained statehood, further solidifying settlement, and by 1890 waves of settlers had claimed much of the land Congress had set aside for settlement under the Homestead Act. The sustainability of these settlement efforts was increased by the establishment of irrigation systems and improved transportation across the plains (Church et al. 2007; Mehls 1984).

The semiarid climate of Colorado made the development of irrigation necessary for the settlement of the area. Irrigation ditches and canals across the state divert water from rivers and streams and carry it to agricultural areas and reservoirs. The era of historical agricultural irrigation in Colorado began in the south-central part of the state in the San Luis Valley with the construction of the San Luis People's Ditch in 1852. Irrigation development continued in the late 1850s and 1860s (Colorado Irrigation Centennial Committee 1952). Typically, the first ditches constructed in an area, known as pioneer ditches, were used to irrigate low-lying areas in the floodplains and bottomlands by drawing water off of existing sources such as creeks, rivers, and streams. These early irrigation systems required little engineering or technology (King 1984). The best land in the immediate vicinity of rivers was claimed early on, so later settlers of lands further from the river sought a way to carry water through ditch systems for a greater distance (Colorado Irrigation Centennial Committee 1952). In 1861, at the first session of the Colorado Territorial Legislature, an act was passed that allowed a landowner who was not adjacent to a stream to construct a ditch through land lying between his land and the stream to gain access to irrigation water (City of Boulder 2009). By the early 1860s, settlers were constructing much larger and longer ditch irrigation systems that required more sophisticated engineering and construction techniques. Some of these new systems expanded or replaced the early pioneer ditches and some were entirely new enterprises. These more complicated ditches ran at the minimum grade possible to keep water flowing and allowed carriage of water along ridge lines and into neighboring water basins to maximize the amount of land that could be irrigated by the ditch. Whereas some of the early pioneer ditches were constructed by individuals and some by several irrigators who banded together to form a mutual ditch company, larger ditches were almost always constructed by mutual ditch companies (Holleran 2005).

Mutual ditch companies are unique legal entities in Colorado that allow ditches to be used by multiple individuals who are shareholders in the ditch company that operates the facility on their behalf. A share in a mutual ditch company represents an actual pro rata ownership interest in all of the water rights, ditches, facilities, and other assets of the company. The shareholders are, in essence, the company (Hobbs 1997).

In 1872, the Colorado Territorial Supreme Court recognized that irrigators had a natural right to carry water across intervening land owned by others to irrigate their land. Therefore, the owners of an irrigation ditch had an almost irrefutable right to construct and continually access, operate, and maintain their ditch along its entire length (Hobbs 1997).

The development of new irrigation ditches in Colorado began to be viewed as an investment opportunity in the late nineteenth and early twentieth centuries with speculators often enticing investors from the eastern United States with promises of quick wealth. Many of these investment schemes were associated with land developments that promised irrigated acreage to unwary buyers. Large sums of money were spent constructing irrigation systems to reach more remote areas of land in the hopes of creating a profit by selling water rights or, in many cases, just a contractual right to use water from water rights owned by another (Holleran 2005). Colorado water laws are based on the appropriation doctrine, which protects the water rights of earlier users from diminishment by later users. Therefore, many of these later ditch investment companies were less successful than originally planned due to the limited quantity of water available to them (Holleran 2005). While many of the investment-style water companies tried to incorporate older systems or buy out senior water rights, investors soon realized that the maintenance costs of the irrigation ditches would prevent water companies from making a profit (Holleran 2005).

Many of the irrigation systems developed by investment water companies were taken over by their users in the form of mutual ditch companies or irrigation districts. Irrigation districts were developed as a method to help diffuse the cost of developing a ditch system. The districts could be organized by a majority of the landowners within their boundaries with acquisitions and construction paid through bonds paid off by assessments on all irrigated lands in the district. Irrigation districts were soon developed in some regions of Colorado as a means to acquire earlier failed irrigation companies and develop reservoirs and new canals to support existing systems. Irrigation districts had the advantage of using a taxation system based on the amount of water used by a landowner to help diffuse the cost of building and maintaining an irrigation system (Holleran 2005).

As the demand on water resources in Colorado increased, it became necessary for the state to implement laws overseeing water rights and monitoring the amount of water diverted by each ditch system (Mehls and Mehls 2006). In 1889, state law mandated the installation of headgates to control and measure water flow. Most early attempts at water measurement tended to be unreliable, as these methods were based on the calibration of laterals and headgates. Accurate flow measurements required the development of a measurement structure separate from the control gate. The need for accurate measurements led to the development of several devices, including the *Cipoletti weir*, a measured opening across the flow of the ditch, and the *Parshall flume*, which is precalibrated to give a true flow measurement at a range of volumes (Holleran 2005).

The technology available for the construction of irrigation ditch systems has also improved, and many historic ditches have undergone modifications and improvements that help conserve water and monitor flow allotments. One significant change in ditch construction is the increased use of concrete, which

began in the late nineteenth and early twentieth centuries when the cost decreased. Concrete can be seen in ditch features, such as headgates and weirs, but also as a channel liner in sections of a canal particularly susceptible to erosion or seepage. Another improvement can be seen in the development of patent iron or steel headgates in the 1890s. These iron and steel headgates replaced wooden gates, which had short life spans. Manufactured gates are usually set in concrete headwalls, although some earlier constructions were stone (Holleran 2005).

The first phase of settlement and agricultural development peaked in 1891. However, a drought and depression plagued many dryland farmers, and populations started to decline in the early 1890s. Despite the depression, the irrigated acreage of the Colorado Front Range tripled by the turn of the century, and the number of people employed in agriculture doubled (Fraser and Strand 1997). Agricultural scientists developed "drought-resistant" grains and crops and new types of mechanical equipment and approaches to cultivation and irrigation, such as deep plowing, packing the subsoil, and drilling wells (Grant 2011). Northeastern Colorado farmers had been growing sugar beets as a staple in the arid environment since the 1870s. As domestic demand for sugar surged in 1900, farmers organized local companies and co-ops to build processing plants. Plants located outside Brush and Sterling serviced so many farmers and such high yields that the railroads expanded to meet demand (Fraser and Strand 1997:75). Ultimately, wheat—particularly winter wheat—remained the primary crop for most Colorado farmers into the twentieth century (Fraser and Strand 1997).

Excitement over the potential profits from sugar beet refineries created a boom in northern Colorado. By 1905, independent factories opened in Longmont, Windsor, Eaton, Fort Collins, and Greeley, which the Great Western Sugar Company soon acquired. This consolidation made the Great Western Sugar Company the largest employer in the region. The industry was so prosperous that the company struggled to find enough farm workers to keep their factories supplied with sugar beets. While the factories ran on advanced technology, growing beets was a primitive and labor-intensive process. The Great Western Sugar Company encouraged Germans from Russia to immigrate to northern Colorado and work their fields. During the 1920s and 1930s, the company also recruited Mexican and Mexican American workers, also known as *betabeleros*, to work for them. The population of northern Front Range cities grew as these two ethnic groups established tight-knit neighborhoods near the sugar beet factories (Campbell 2021; McWilliams 2020).

A variety of circumstances led to regional economic decline after World War I. The population in the region decreased after World War I as soldiers learned new trades and sought other opportunities for careers beyond dryland farming. Those who stayed were again plagued by drought—a reality that increased during the Dust Bowl years in the 1930s. Freight rates started to be too expensive for smaller farmers and ranchers. Many faced the necessary choice of either selling the land and completely moving out of the area or buying and consolidating land into larger properties in hopes of making a profit. Despite the economic and environmental hardships of the Great Depression, the Great Western Sugar Company continued to expand, becoming one of the largest producers of beet sugar in the world. The company relied on prisoners of war from Germany and Italy to work in their beet fields during World War II. After the war ended, the Front Range experienced a population increase. Suddenly, the demand

for new suburban housing began competing with sugar beet farmland on the edges of cities. By the 1960s, the failure of the Great Western Sugar Company to embrace new innovations, such as truck transportation, began curbing profits, and the Great Western Sugar Company closed its factories in Fort Lupton, Brush, and Fort Collins (Campbell 2021).

Methods

Historic Property Identification

This cultural resource survey provides compliance under Section 106 of the NHPA and its implementing regulations under 36 Code of Federal Regulations (CFR) Part 800 by undertaking a "reasonable and good faith effort" to identify historic properties (defined as listed in or eligible for listing in the National Register of Historic Places [NRHP]) in the defined APE. Identification and documentation standards conform to federal land managing agency requirements and, secondly, to guidelines provided by the State Historic Preservation Officer (SHPO). In doing so, the standards imposed by the Secretary of the Interior for the *Identification, Documentation, and Evaluation of Historic Properties* are also met. All personnel supervising survey and documentation are listed on applicable federal and state permits and meet or exceed the *Secretary of the Interior's Professional Qualification Standards* (36 CFR 61).

Historic properties may consist of buildings, structures, objects, or sites and can include districts, cultural landscapes, and traditional cultural properties. The National Park Service has established a minimum age criterion of 50 years for historic property evaluation and to be listed in the NRHP (but see criteria consideration (g) for an exception to the age guideline) (U.S. Department of the Interior, National Park Service 1997); in some instances, a federal agency will establish the age criterion for a potential historic property at 45 years to account for the duration of the undertaking.

Cultural resources not identified in the Office of Archaeology and Historic Preservation (OAHP) file search and historical records were identified during pedestrian survey. This project used standard pedestrian survey transects spaced 15 m apart to identify unknown cultural resources in the APE. The APE is defined by the lead federal agency and means "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist" (36 CFR 800.16).

Cultural Resource Documentation

ERO documents cultural resources according to a standardized approach to ensure consistency and accuracy. Sites are digitally photographed from multiple perspectives to provide setting, and all significant tools, diagnostic artifacts, and features are photographed to scale. The site datum is also photographed if physically established and directed by the land managing agency. Site maps are produced using a submeter-capable Trimble DA2 Global Positioning System unit. Elements of the site map include all cultural features, diagnostic and point provenience artifacts (designated as field specimens), artifact concentrations, major vegetation breaks and topography, modern features and disturbances, and the site datum (whether physically established or for location reference).

All required forms are completed digitally in the field using a tablet. Archaeological resources and newly defined segments of linear resources, such as ditches and railroads, are documented using a Management Data Form (OAHP1400) and appropriate component form (precontact archaeology, historical archaeology, or linear). When feasible, newly defined linear resource segments are at least 0.25 mile long per OAHP recommendations (Horn and Norton 2021:22); however, state and federal agency guidance regarding linears takes precedence, and, therefore, the extent of linear resources may vary based on the lead federal agency (Horn and Norton 2021:1). Newly identified historical buildings and structures are documented on an Architectural Inventory Form (OAHP1403). Previously recorded cultural resources identified during the OAHP file search are revisited and reevaluated on OAHP form 1405. If the resource has not been reevaluated within the last 10 years, the eligibility has changed, or substantial changes have occurred to the resource since the previous evaluation, ERO rerecords and reevaluates the resource by completing new state documentation forms. Location maps (Appendix A) and OAHP resource documentation forms (Appendix B) are provided to the land managing agency only and reside permanently with the agency and OAHP.

Archaeological Sites

The NRHP defines an archaeological site as "the place or places where the remnants of a past culture survive in a physical context that allows for the interpretation of these remains" (Little et al. 2000). Archaeological sites must retain sufficient context and integrity to convey purposeful and patterned human activity. Isolated finds (IFs) represent evidence of past human activity that is either not patterned (as in the inadvertent loss or discard of one or more artifacts), too limited to qualify as a site, or indicative of conscious discard of material culture manufactured or used for its primary purpose elsewhere. Professional judgment is generally used to distinguish between purposeful activity and isolated occurrences of artifacts, which are often attributable to "background noise." For purposes of this project, an archaeological site is defined as an artifact scatter of more than 10 artifacts in a 10-m-diameter area or one or more site features with or without artifacts.

Historic Period Sites

Historic period sites include homesteads, ranching, or agricultural complexes; mining complexes; sites built under federal work programs; timber harvesting; and industry, among other site types. Age is established for potential historic sites by referencing General Land Office (GLO) patents, county assessor records, state water division records, historical maps, and 15-minute USGS maps. Historical dumps and artifact scatters without features are evaluated on a case-by-case basis. A single artifact class in a dump, such as sanitary cans, is recorded as an isolated occurrence; conversely, dumps that exhibit diverse artifact classes and date prior to World War II may be documented as archaeological sites because of their information potential.

Linear structures, such as water conveyance systems, transmission lines, trails, and roads, are documented as sites. An isolated fence is generally not recorded as a resource unless it demarcates a boundary significant to the history of the area and can be physically linked with a purposeful activity; an isolated fence may also be documented as a feature (F) of a larger resource. Depending on their cultural

context, single or small clusters of mining prospect pits with no associated artifacts are documented as IFs due to their general ubiquity and limited information potential.

File and Literature Review

ERO conducted a file and literature review for the project with the OAHP on August 26, 2024 (File Search No. 26466). ERO included a 1-mile buffer on the APE to include considerations for visual effects. Adverse effects on the viewshed of a historic property would result in diminishing integrity from the obstruction of views that are pertinent to the significance of the property. Viewshed results are discussed below. A total of 18 previous surveys are within 1 mile of the APE, and 4 of the surveys overlap the APE (Table 2). There are 22 previously documented cultural resources within 1 mile of the APE, and 5 of the resources overlap the APE (Table 3).

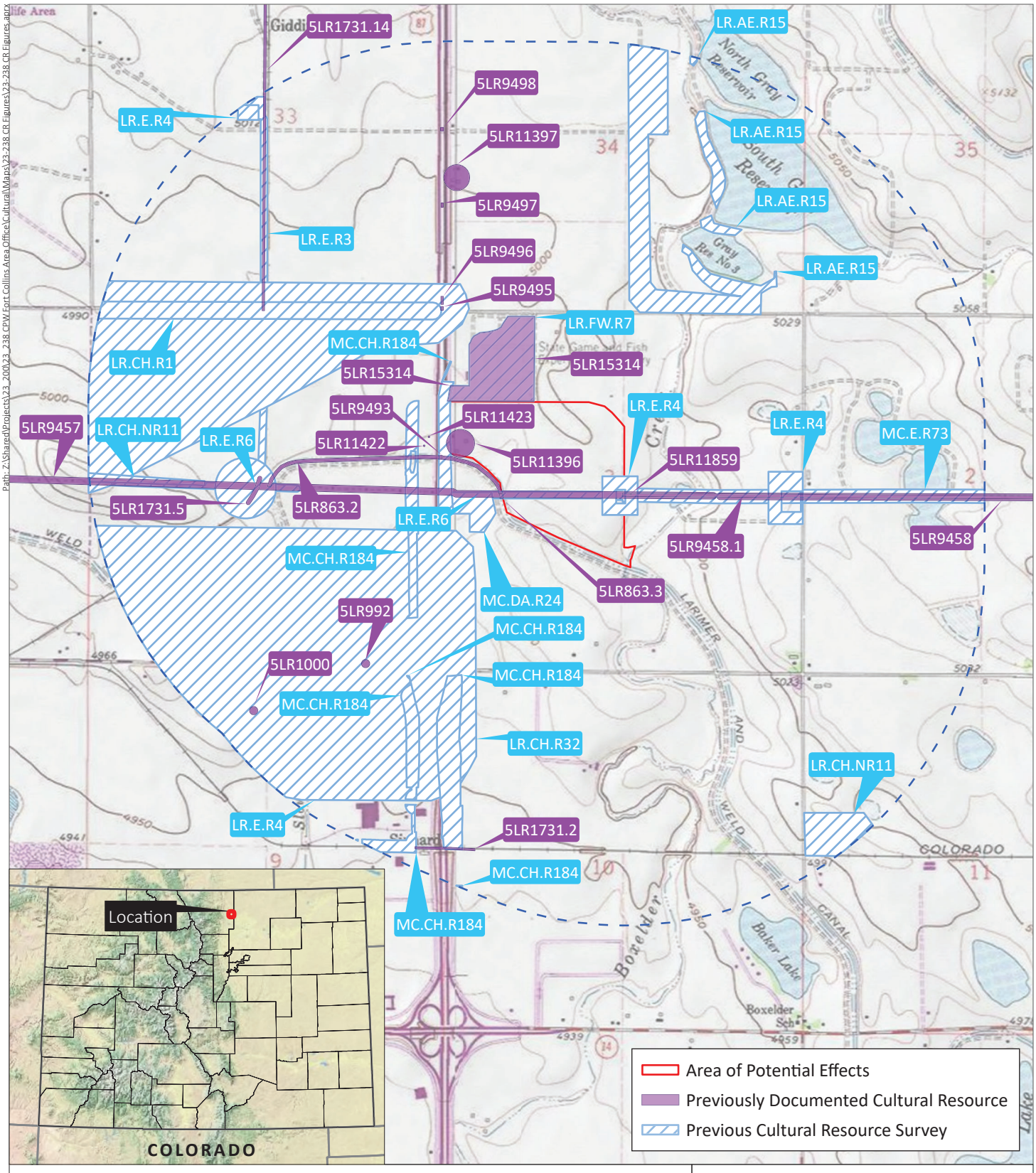
Table 2. Previous cultural inventories within 1 mile of the APE.

State Project No.	Report Title (Date)	Institution
LR.AE.R15	*Class III Cultural Resource Survey of the Proposed East Side Detention Facility, Larimer County, Colorado* (2018)	U.S. Army Corps of Engineers
LR.CH.NR11	*Archaeological Survey of Three Pits for the Prospect Interchange Larimer County, Colorado* (2004)	Colorado Department of Highways (CDH)
LR.CH.R1	*Archaeological Clearance of the County Road 59 Corridor of the Fort Collins Expressway (PROJECT FC 287-3-(22), Larimer County, Colorado* (2004)	CDH
LR.CH.R32	*Cultural Resource Report for Historical Resources Project FC 287-3(22) Fort Collins Expressway-East, Larimer County, Colorado* (2004)	CDH
LR.CH.R42	*Archaeological Survey of the North of Vine to South of Vine Route, Vine Drive Corridor of the Fort Collins Expressway (FC 287—3 [22]), Larimer County, Colorado* (1984)	CDH
LR.E.R3	*Platte River Power Authority Timberline Substation and Richards Lake Substation to Rawhide Generation Plant Segments of the Western Area Power Administration Flatiron-Poudre Transmission Line Class III Cultural Resource Inventory, Larimer County, Colorado* (2002)	Greystone Environmental Services, Inc.
LR.E.R4	*Class III Cultural Resource Inventory of Four Western Area Power Administration Fiber Optics Project Areas in Larimer County, Colorado* (2004)	Associated Cultural Resource Expert
LR.E.R6	*A Class III Cultural Resource Inventory of the Proposed Western Area Power Administration Laporte Tap to Dixon Creek and Richard Lake Tap to Timnath Substation 115/230KV Transmission Line Upgrade, Larimer County, Colorado* (2005)	Centennial Archaeology
LR.E.R11	*A Class III Cultural Resource Inventory of the Tri State Richard Lake to Waverly Transmission Line, Larimer County, Colorado* (2011)	Federal Energy Regulatory Commission
LR.FW.R7	*Cultural Resource Survey Colorado Parks and Wildlife Fort Collins Area Office Relocation, Larimer County, Colorado* (2023)	ERO
LR.LG.R13	*Agriculture in the Fort Collins Urban Growth Area, 1862-1994 (CLG Project 08-93-80042.7), Larimer County, Colorado* (1995)	Cultural Resource Historians
MC.CH.NR1	*Highway Dept. CR Neg Repts Jan to Dec 84* (1984)	CDH
MC.CH.NR78	*Paleontological Technical Report: Interstate 25 North Corridor Environmental Impact Statement, Adams, Boulder, Larimer, and Weld Counties, Colorado* (2007)	Rocky Mountain Paleontology
MC.CH.R96	*A Cultural Resource Survey of Interstates 25, 70, 225, and 270, U.S. Highways 34 and 160, and State Highways 13 and 470, for the Proposed Adesta Communications Fiber Optic System, Colorado (C SW00-102)* (2000)	Centennial Archaeology

State Project No.	Report Title (Date)	Institution
MC.CH.R184	*A Class III Archaeological Inventory of Corridor Alternatives and Miscellaneous Facilities Associated with the North I-25 Front Range Corridor Environmental Impact Statement, Adams, Boulder, Broomfield, Larimer, and Weld Counties* (2010)	Centennial Archaeology
MC.DA.R24	*A Class III Intensive Level Pedestrian Cultural Resource Inventory of 35 United States Army Reserve Properties in Colorado, Montana, North Dakota, South Dakota, and Utah for the 96th Regional Readiness Command* (2009)	SWCA Environmental Consultants, Inc.
MC.E.R73	*A Class III Inventory of the Proposed Timnath to Black Hollow Transmission Line Rebuild in Larimer and Weld Counties, Colorado* (2010)	Centennial Archaeology.
MC.FC.NR6	*Paleontological Review and Survey of Selected Sections Along the I-25 Right of Way for Adesta/CDOT I-25 Fiber Optic Project from Pueblo, Colorado to the Wyoming State Line, Pueblo, El Paso, Douglas, Adams, Larimer, and Weld Counties, Colorado* (2000)	Paleontological Investigations, Inc.

Because the proposed project will be an open channel and will be below grade, and it would not be visible from any cultural resources in the viewshed analysis area and APE except the Einarsen Farm (5LR11396). The outfall channel would intersect the Einarsen Farm at the western and southern boundary of the site (Figure 4). The existing Interstate 25 (I-25) corridor, which was constructed in the 1960s, has already impacted the viewshed of the Einarsen Farm, the Larimer and Weld Canal (5LR863), Poudre to Richards Lake Transmission Line (5LR9457), Cheyenne to Richards Lake Transmission Line (5LR9458), and the Colorado and Southern Railway (5LR1731) (Colorado Department of Transportation 2024).

Figure 4. Overview of proposed outfall channel from 5LR11396.



Cultural Resource Survey
Colorado Parks and Wildlife Kelley Property Drainage Facility
Larimer County, Colorado

Section 3, T7N, R68W; 6th PM
USGS Fort Collins, CO Quadrangle (1:24,000; 1985)
USGS Timnath, CO Quadrangle (1:24,000; 1973)
Larimer County, Colorado

N

0 1,000 2,000 Feet
1:24,000

Figure 5
Previous Cultural Resource Surveys and Documented Cultural Resources Within 1-mile of the APE

Prepared for:
Colorado Parks and Wildlife
File: 23-238 CR Figures.aprx (ME)
July 2, 2025

ERO Resources Corp.

Table 3. Previously recorded cultural resources within 1 mile of the APE.

Smithsonian Site No.	Associated Report Nos.	Resource Type	NRHP Eligibility Status (Date)	Status in APE
5LR.863.2	MC.CH.R159 LR.E.R6 LR.E.R4	Larimer and Weld Canal segment	Officially eligible (2007)	Inside of APE
5LR.863.3	LR.E.R6	Larimer and Weld Canal segment	Officially eligible (2004)	Inside of APE
5LR.992	LR.CH.R32	Transmission line	Field not eligible (1983)	Outside of APE
5LR2160	MC.CH.R96	Boxelder Ditch	Officially not eligible (1999)	Outside of APE
5LR9457	MC.E.R41	Poudre to Richards Lake Transmission Line	Field not eligible (1998)	Inside of APE
5LR9458	MC.E.R41	Cheyene to Richard Lake Transmission Line	Officially not eligible (2008)	Outside of APE
5LR9458.1	MC.E.R73	Cheyene to Richard Lake Transmission Line segment	Officially not eligible (2008)	Inside of APE
5LR9493	MC.CH.R100	Bridge, B-16-EA	Officially not eligible (2002)	Outside of APE
5LR9495	MC.CH.R100	Culvert, B-16-FA	Officially not eligible (2002)	Outside of APE
5LR9496	MC.CH.R100	Culvert, B-16-FB	Officially not eligible (2002)	Outside of APE
5LR9497	MC.CH.R100	Culvert, B-16-FC	Officially not eligible (2002)	Outside of APE
5LR9498	MC.CH.R100	Culvert, B-16-FD	Officially not eligible (2002)	Outside of APE
5LR1000	LR.CH.R42	Open camp	Field needs data (1984)	Outside of APE
5LR11396	MC.CH.R159	Einarsen Farm	Officially eligible (2016)	Inside of APE
5LR11397	MC.CH.R159	K and M Company shed	Officially not eligible (2007)	Outside of APE
5LR11422	MC.CH.R184	Native American IF	Field not eligible (2006)	Outside of APE
5LR11423	MC.CH.R184	Native American IF	Field not eligible (2006)	Outside of APE
5LR11859	MC.E.R73	Transmission line	No assessment given on form	Outside of APE
5LR1731.5	LR.E.R6 LR.E.R4	Colorado and Southern Railway segment	Officially eligible (2003)	Outside of APE
5LR1731.2	MC.CH.R159 MC.CH.R96	Colorado Central Railroad segment	Officially eligible (2007)	Outside of APE
5LR1731.14	LR.E.R11	Colorado and Southern Railway segment	Field supports eligibility of entire linear resource (2010)	Outside of APE
5LR15314	LR.FW.R7	State Game and Fish Experimental Nursery	Field not eligible (2023)	Outside of APE

In addition to the OAHP file search, ERO conducted a review of historical maps, Larimer County Assessor records, Colorado Division of Water Resources records, GLO records, and aerial images to assess the potential for unknown historical resources, such as roads, ditches, and buildings, in the APE (Colorado's Decision Support Systems 2025; General Land Office 2025; Google, Inc. 2025; Larimer County 2025; Nationwide Environmental Title Research 2025). ERO reviewed maps dating between 1865 and 1982 (DM ID: 174225 and 174227) (U.S. Geological Survey 1962, 1970, 1973, 1982) and aerial images from 1956 to 2023 (Google, Inc. 2025; Nationwide Environmental Title Research 2025). Aerial images indicate that a small structure was present south of the Larimer and Weld Canal from 1956 until 1984. The structure was razed in 1999. No other potential cultural resources were identified in the APE (U.S. Geological Survey 1962).

Survey Results

ERO redocumented the Einarsen Farm (5LR11396) and segments of three linear resources, including the Larimer and Weld Canal (5LR863.3), Poudre to Richards Lake Transmission Line (5LR9457.1), and the Cheyenne to Richards Lake Transmission Line (5LR9458.2), in the APE (Table 4).

Table 4. Redocumented sites.

Smithsonian Site No.	Resource Type/Name	NRHP Eligibility Recommendation
5LR863.3	Larimer and Weld Canal segment	Supporting
5LR9457.1	Poudre to Richards Lake Transmission Line segment	Nonsupporting
5LR9458.2	Cheyenne to Richards Lake Transmission Line segment	Nonsupporting
5LR11396	Einarsen Farm	Not eligible

ERO also observed various disturbances in the APE including grading, installation of transmission towers and poles, and construction of fencing. The location of the proposed outlet is disturbed by the channeling of Boxelder Creek, fence posts, and transmission poles. Aerial images indicate that the creek was channelized between 1978 and 1984 (Nationwide Environmental Title Research 2025). Various concrete and asphalt debris are in the channel banks and there are large berms in the immediate vicinity (Figure 6). Additionally, west of the creek, the area is extensively graded, and a large 20 ft berm is present.

Figure 6. Overview of berm with concrete and asphalt riprap along Boxelder Creek, view to the east.

Resource Descriptions

5LR863.3: Larimer and Weld Canal segment

Description: From its headgate on the Cache la Poudre, west of Shields Street, the Larimer and Weld Canal meanders through north Fort Collins and crosses the Weld County border at South Colorado Boulevard. After crossing into Weld County, the canal continues southeast then east and terminates 1 mile north of Long Lake for a total of 44 miles. Segment 5LR863.3 traverses flat agricultural land west of I-25 and terminates at its intersection with Boxelder Creek. Vegetation is smooth brome, Russian thistle, diffuse knapweed, common mullein, and low-lying grasses. Sediments are a brown sandy clay loam. The elevation is 4,987 ft (1,520 m) asl.

The Larimer and Weld Canal was first documented in 1980 and was determined eligible for listing in the NRHP that same year (Colorado Office of Archaeology and Historic Preservation 2025; Sicardi 1980). In Larimer County and Weld County, 10 segments (5LR863.1 through 5LR863.10) and 19 segments (5WL844.1 through 5WL844.19) have been documented, respectively.

ERO redocumented 5LR863.3 as a 0.82-mile-long segment west of I-25 and east of Boxelder Creek between East County Road (CR) 50 and East Vine Drive (Figure 7). 5LR863.3 was first documented as a 100-ft segment in 2004 by Centennial Archaeology and was recommended eligible for listing in the NRHP (Colorado Office of Archaeology and Historic Preservation 2025). ERO extended the segment to 0.82 miles, beginning at I-25 and ending at Boxelder Creek. The canal is 40 to 65 ft wide and approximately 15 ft deep. The berms of the canal are lined with concrete riprap. However, some concrete fragments were likely part of nearby demolished structures because they are portions of a stair and decorative columns. The segment also has three modern metal culverts along the south-facing berms.

Figure 7. 5LR863.3 overview; F5 wooden posts in foreground.

The segment consists of seven features: submerged wood posts (F1 and F5), headgates (F2 through F4), and remains of a weir (F6 and F7). F1 is four 10-inch-diameter wood posts that are partially submerged in water. Because of its small size and proximity to the headgates, F1 likely represents the remnants of a pedestrian or maintenance bridge. Three of the posts are parallel to the alignment of the canal, and one post is placed in the center of the canal. F2, F3, and F4 are headgates along the east facing berm. The features are evenly spaced, approximately 70 ft apart. The center headgate (F3) is aligned with an abandoned lateral ditch that is visible on the earliest aerial images from 1956 (Nationwide Environmental Title Research 2025).

F5 is a series of wood posts along a 1,000-ft segment of the canal 65 ft west of Boxelder Creek. The posts are partially submerged, similar to that of F1, and span the entire width of the canal. The posts lead to two separate barriers that were likely portions of a weir. The posts are approximately 3 ft apart, and a 2-inch diameter rebar is placed in the center of some posts. Aerial imagery indicates that F5 may be the remnants of a wood bridge (Nationwide Environmental Title Research 2025). A maintenance road is south of the canal; however, aerials from 1956 indicate that an additional maintenance road (likely used by the Einarsen Farm [5LR11396]) was north of the canal. The northern dirt road ends abruptly near F5, suggesting that cars may have crossed over at this point, to the south side of the canal. Photographs from circa 1910 indicate that bridges supported by wood piers were common features along the Larimer and Weld Canal (Figure 8). F6 is an embedded linear feature that spans the width of the canal. It is completely submerged under water and abuts the easternmost wooden posts of F5. Whether F6 is wood, or concrete is unclear; however, the visible portion of F6 is less than 2 inches wide and has

characteristics similar to lumber. F7 is a partially submerged weir and is a 2-ft-wide concrete barrier spanning the entire width of the canal. The concrete is in poor condition. Boxelder Creek is piped directly below F6 and F7.

Figure 8. Circa 1910 photograph of the headgate of the Larimer and Weld Canal at the Cache la Poudre River (Unknown Photographer 1900).

The water rights for the Larimer and Weld Canal were initially appropriated in June 1861 and were formally adjudicated in April 1882 (Colorado Decision Support Systems 2024). The canal was designed by Benjamin Harris Eaton. Eaton constructed several significant irrigation ditches, canals, and reservoirs throughout the state. He was a Justice of the Peace (1866 to 1875), Weld County Commissioner (1866 to 1872), and, ultimately, served as the tenth Governor of Colorado (1885 to 1887) (Colorado State Archives 2024). Eaton originally funded the construction of the canal with his own money until he was able to convince the Denver Pacific Railway and, later, the Colorado Mortgage and Investment Company to fund the remainder of canal. Between 1878 and 1879, the Larimer and Weld Irrigation Company was formed (Colorado State Archives 2024; Trask 2003). Newspaper articles indicate that water began to flow into the canal in April of 1879 (The Rocky Mountain News 1879). The canal was constructed upstream along the Cache la Poudre from the other already established ditches, including the Greeley No. 2 Canal and Greeley No. 3 Canal, causing major water rights battles (Trask 2003). Concomitant with water demands rising across the state, the construction of the Larimer and Weld Canal highlighted the lack of water regulation and inadequacy in the territorial law of 1861 and propelled further legislation to protect river water and divide the state into regulated water districts.

When the Larimer and Weld Canal was officially opened in 1878, the canal extended approximately 20 miles, and an additional 34 miles were already planned. According to the *Rocky Mountain News*, the canal reached more than 40,000 acres of land, roughly 50 percent of which was public domain. The remaining 50 percent was owned by the Denver Pacific Railroad. Funding for the canal was provided by the London Mortgage Company, who rented and sold water privileges to local agricultural operations (The Rocky Mountain News 1879). Within a year, the canal irrigated "more than 190,000 acres of choice lands" in the Fort Collins area (The Rocky Mountain News 1880). The canal was enlarged in 1919, designed by engineer V.J. Mc Anelly (Larimer County and State Engineer 1922) (Figure 9).

The Larimer and Weld Canal has been known by several names including the Larimer and Weld Canal, Larimer and Weld Ditch, and the Eaton Canal. The Water District plat of 1888 has the canal named as the "Larimer and Weld Canal"; however, in 1900, the canal is mapped as the "Larimer and Weld Ditch," and, by 1909, the ditch is once again named the "Larimer Weld Canal" (Board of Water Commissioners 1888; Clason 1900; Clason Map Co. 1909). Historic aerials and maps indicate that the channel is largely unchanged; however, some portions have been altered due to residential developments and road construction. Segment 5LR863.3 has also largely remained unchanged. Plan maps from 1919 have the canal mapped in its current alignment; however, the map shows the canal slightly shifted to the west, but, given that Boxelder Creek has not been realigned, this is a likely a mapping error (Larimer County and State Engineer 1922).

Figure 9. An enlarged view of the 1919 plans for 5LR863.3 (left) and the image of the 2024 aerial of 5LR863.3 (right) (Google, Inc. 2025; Larimer County and State Engineer 1922).

NRHP Eligibility: ERO did not evaluate the full extent of the Larimer and Weld Canal (5LR863/5WL844); however, the entire Larimer and Weld Canal is officially eligible for listing in the NRHP under Criteria A and C in 1980 (Luce 1980). ERO agrees that the canal is eligible for listing in the NRHP under Criteria A and C and, based on additional research, recommends the resource also qualifies for listing under Criterion B. The Larimer and Weld Canal is associated with early agricultural and commercial production in Larimer County and was crucial in the development of Colorado water rights during the Early Settlement/Pioneer Agriculture period (1859–1896) as well as the post–World War I revitalization period (1919–1929) (Criterion A). Mr. Eaton, a significant person in local and state history, built the canal and was integral to the growth and development of the region during the late nineteenth century

(Criterion B). ERO's evaluation of this segment demonstrates that the canal is a good example of a late nineteenth- and early twentieth-century earthen gravity-fed canal construction in Weld County (Criterion C). Further investigation of the canal is unlikely to yield additional information important to the history of the area (Criterion D).

ERO recommends segment 5LR863.3 as supporting of the eligibility of the entire resource for listing in the NRHP. The segment maintains integrity of location, setting, materials, design, association, and feeling. Since the early twentieth-century modifications, the segment has retained its original alignment and a consistent, standardized design despite the addition of a few modern culverts. Along this segment, the local setting remains predominantly agrarian. Earthen materials used to construct the canal are still present. Aspects of materials have been impacted as the wood bridges and weirs have been removed; however, some of the headgates remain. The canal maintains the aspect of feeling and association because it still conveys water to active agricultural fields. The aspect of workmanship is not present.

Management Recommendation: The project does not propose any alterations to the canal. The existing stormwater outfall into the canal would be abandoned. ERO therefore recommends no further work.

5LR9457.1: Poudre to Richards Lake Transmission Line segment

Description: The Poudre to Richards Lake Transmission Line stretches from the Poudre Substation northeast of the intersection of Redwood Street and Conifer Street over Boxelder Creek, crosses I-25, and ends 230 ft east of Boxelder Creek. Segment 5LR9457.1 traverses flat agricultural land west of I-25 and terminates at an unnamed substation west of Boxelder Creek. Vegetation is smooth brome, Russian thistle, diffuse knapweed, common mullein, and low-lying grasses. Sediments are a tan to brown sandy loam. The elevation is 4,986 ft (1,520 m) asl.

5LR9457 was first documented in 1998 by the Western Area Power Administration and was recommended not eligible for listing in the NRHP (Schweigert 1998a). ERO documented a 0.5-mile-long segment of 5LR9457.1 stretching from I-25 to the substation just west of Boxelder Creek. The segment consists of four steel transmission towers (Figure 10).

The segment was part of a larger Flatiron – Fort Collins – Cheyenne Tap Transmission Line, Colorado-Big Thompson Project that consisted of a total of 33.1 miles of 115 kilovolt (kV) transmission line. 5LR9457.1 was completed in 1939 (Schweigert 1998a). 5LR9457.1 is first mapped in 1962 (U.S. Geological Survey 1962). The original documentation indicates that the towers were wood H structures (Schweigert 1998a). Aerial imagery confirm the presence of the H structures prior to 2005 but the towers were replaced with steel between 2005 and 2006 when the substation was expanded (Nationwide Environmental Title Research 2025).

Figure 10. 5LR9457.1 overview.

NRHP Eligibility: ERO did not evaluate the full extent of the Poudre to Richards Lake Transmission Line (5LR9457); however, previous documentation has recommended the entire line not eligible for listing in the NRHP under any criteria (Schweigert 1998a). ERO agrees that the transmission line is not eligible for listing in the NRHP. The construction of this transmission line was not a crucial power point supply for the Colorado-Big Thompson Project and does not represent a significant period or event in the history of utility transmission in Larimer County (Criterion A). The transmission line is not associated with any person important to history (Criterion B). The towers and substation do not embody a distinctive architectural type, period, or method of construction (Criterion C). The transmission line does not have the potential to yield any additional significant information to the history of Larimer County (Criterion D) (Schweigert 1998a).

ERO recommends segment 5LR9457.1 nonsupporting of the eligibility of the entire resource for listing in the NRHP. All the towers have been replaced, and the substation was expanded between 2005 and 2006, further altering the original characteristics of the segment.

Management Recommendation: No further work.

5LR9458.2: Cheyenne to Richards Lake Transmission Line segment

Description: The Cheyenne to Richards Lake Transmission Line stretches from a substation just east of Boxelder Creek; passes through a substation west of North CR 5; is suspended over North CR 5, Coho Run, and North CR 3; and terminates at North CR 1. Segment 5LR9458.2 traverses flat agricultural land

west of an unnamed substation west of Boxelder Creek and terminates at North CR 5. The line is suspended over Boxelder Creek. Vegetation is smooth brome, Russian thistle, diffuse knapweed, common mullein, and low-lying grasses. Sediments are a tan to brown sandy loam. The elevation is 4,986 to 5,020 ft (1,520 to 1,530 m) asl.

5LR9458 was first documented in 1998 by the Western Area Power Administration and was determined not eligible in 2008 (Colorado Office of Archaeology and Historic Preservation 2025; Schweigert 1998a). One segment (5LR9458.1) was documented in 2007 and was recommended nonsupporting of the eligibility of the overall transmission line for listing in the NRHP. ERO documented segment 5LR9458.2 as a 0.5-mile segment of the transmission line stretching from a substation west of Boxelder Creek to North CR 5. The segment consists of four steel transmission towers and the Cobb Lake substation (Figure 11).

The segment was part of a larger Black Hollow Tap – Cobb Lake Tap – Timnath Richards Lake Tap Transmission Line, Colorado-Big Thompson Project that consisted of a total of 33.1 miles of 115 kV transmission line. 5LR9458.2 was constructed between 1951 and 1952 and is part of the 1.8-mile segment that has increased capacity (Schweigert 1998b). 5LR9458 is first mapped in 1962 (U.S. Geological Survey 1962). Aerial imagery indicate that a much smaller Cobb Lake substation was initially constructed in 1971. In 1984, the substation was expanded to its current size (Nationwide Environmental Title Research 2025). The transmission towers were originally wood H structures but were replaced with steel between 2005 and 2006 to support a 230 kV transmission line (Nationwide Environmental Title Research 2025; Schweigert 1998b).

Figure 11. 5LR9458.2 overview; substation in the foreground.

NRHP Eligibility: ERO did not evaluate the full extent of the Cheyenne to Richards Lake Transmission Line (5LR9458); however, the resources was determined not eligible for listing in the NRHP under any criteria (Colorado Office of Archaeology and Historic Preservation 2025; Schweigert 1998b). ERO agrees that the transmission line is not eligible for listing in the NRHP. The construction of this transmission line was not a crucial power point supply for the Colorado-Big Thompson Project and does not represent a significant period or event in the history of utility transmission in Larimer County (Criterion A). The transmission line is not associated with any person important to history (Criterion B). The towers and substation do not embody a distinctive architectural type, period, or method of construction (Criterion C). The transmission line does not have the potential to yield any additional significant information to the history of Larimer County (Criterion D) (Schweigert 1998a).

ERO recommends segment 5LR9458.2 nonsupporting of the eligibility of the entire resource. All the towers were replaced between 2005 and 2006, and the substation was expanded in 1984. These changes increased the transmission capacity to 230 kV, altering the original characteristics of the segment as it was originally designed.

Management Recommendation: ERO recommends no further work.

5LR11396: Einarsen Farm

Description: The Einarsen Farm consists of five buildings and six features southeast of I-25 and CR 50. Most of the site consist of agricultural fields that are still cultivated. Boxelder Creek is 0.55 mile east of

Einarsen Farm. Vegetation is sparse and is limited to a stand of ponderosa pine, blue spruce, ash, juniper, honey locust, and various low-lying grasses. Sediments are a tan silt loam. The elevation is 4,987 ft (1,520 m) asl. Most of the area south and east of the standing buildings has been graded and is currently being used as a staging area for large construction equipment and supplies.

Einarsen Farm was first documented in 2006 and was determined eligible in 2007 under Criterion A, as an example of a 1950s farm in Northern Colorado (Colorado Office of Archaeology and Historic Preservation 2025; Cronenberger and Keeley 2006). This documentation recorded a main residence and six outbuildings including a batten wood barn, hay shed, grain silo, garage, and two sheds (Cronenberger and Keeley 2006). In 2016, the farm was revisited documenting the removal of a silo and further deterioration of the buildings since 2006 (Office of Archaeology and Historic Preservation 2016).

ERO documented the Einarsen Farm consisting of six standing buildings and six features (Table 5). All of the buildings are historical (Buildings 1 through 5 and Building 11). Building 1 was constructed in 1890 and was the main residence on the property (Figure 12) (Larimer County 2025). Building 1 is a rectangular building with a concrete block foundation with no architectural style. The bottom 13 inches of the foundation are painted green. The original portion of the house consists of white stucco while the addition (on the south elevation) is constructed of 2- by 4-inch white clapboard. The roof is hipped with maroon asphalt shingles, and the addition has a shed roof. Two red brick chimneys are at the northern and southern ends of the house. The façade is the south elevation, and the primary door is off-center toward the west. This door is wood and has a wood covering over where a glass window likely used to be. All window frames on the house are wood unless otherwise stated. The south elevation has three separate 3-panel sliding windows. Each window has four lights. Immediately to the west of the main entrance, the house number “1312” in small silver metal numbers is nailed horizontally onto the clapboard. At the far western end of the south elevation, a white metal mailbox is mounted to the building, and a larger iron “1312” is mounted vertically above the mailbox. The south elevation has one Ogee gutter with a downspout at the southwest corner.

The west elevation has one 3-panel sliding window with four lights at the far south end of the addition. A “UHAUL RENTALS” sign is mounted below the three-panel window and is adjacent to a metal steam vent. Four sash windows with a swept head are on the main part of the building. The exterior windows have screens held by small wooden tabs at each corner. A door is centered to the original portion of the building and has two concrete steps leading to the doorway. The exterior door is a metal storm door with two glass panels. This entrance was the original main entrance to building, as is seen in a 1950 photograph of the property (Figure 12). Electrical wires and conduits enter the building at the southwest corner. The western extent of the north elevation has one sash window with a swept head. The east elevation has three sash windows with swept heads and one 3-panel sliding window at the far southern extent. Modern additions including an air conditioning unit and a dish satellite at the southeastern elevation.

Table 5. 5LR11396 buildings and their construction dates.

Building/Feature No.	Description	Construction Date (Reference)	Current Condition
1	Main residence	1890 (Larimer County 2025)	In-Use
2	Storm shelter	1900 to 1956 (Larimer County 2025; Nationwide Environmental Title Research 2025)	Unknown
3	Garage	Pre-1950 (O. A. 1950)	In-Use
4	Outbuilding	Between 1956 and 1969 (Nationwide Environmental Title Research 2025)	In-Use
5	Outbuilding	Between 1956 and 1969 (Nationwide Environmental Title Research 2025)	In-Use
6	Well	Unknown	Abandoned
7	Pipe	Unknown	Abandoned
8	Lateral ditch	Unknown to 1956 (Nationwide Environmental Title Research 2025).	Abandoned
9	Portner Well 1-0490	1940 (Office of the State Engineer 1959)	In-Use
10	Portner Well 2-0491/RF68	1965 (Office of the State Engineer 1959)	In-Use
11	Portner Well 3-0492	1948 (Office of the State Engineer 1959)	In-Use
12	Lateral ditch	Unknown	Abandoned

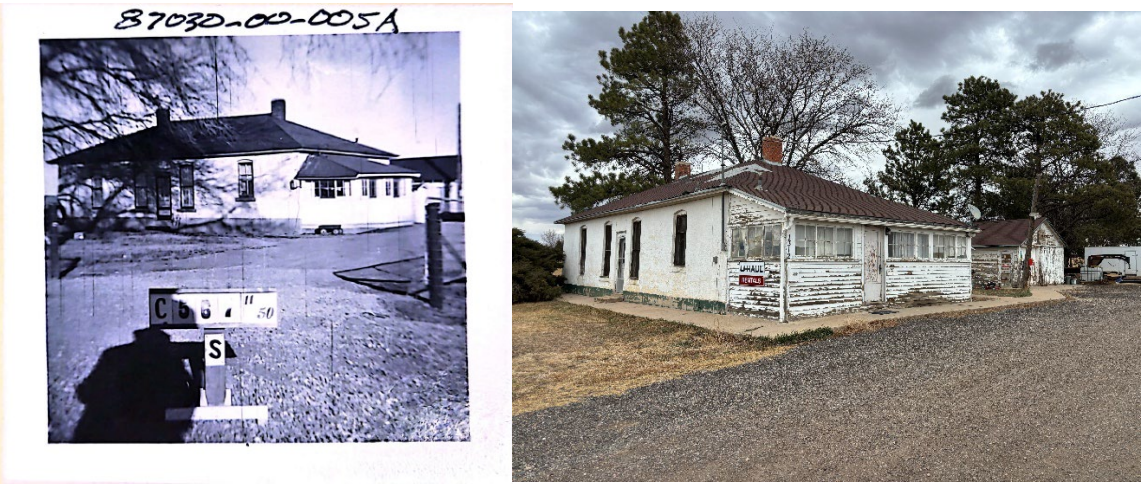


Figure 12. Image of Building 1 from the 1950 property records (left) and in 2025 (right); Building 3 is in the background (O. A. 1950).

Building 2 is directly east of Building 1 and consists of a small shed-like structure connected to a concrete gabled roof with a small ventilation feature at the northern extent. The building is constructed of a combination of horizontal wood siding, concrete, and 2- by 4-inch lumber. The gable roof is lined with maroon asphalt shingles, and the rafters are exposed with wire mesh covering the spacing between the roof and the east and west walls. The entrance to Building 2 is at the south elevation and consists of a simple wooden door comprised of vertical planks. A sidewalk leads to the entrance. Electrical conduits enter near the eaves at the south elevation. The north side of this building is partially underground with a gabled concrete pad and wood gabled vent. Although the exact function or time of construction is unknown, the building likely served as a storm shelter and was constructed approximately the same time as the house. The earliest aerials indicate that the building was present in 1956 (Nationwide Environmental Title Research 2025).

Building 3 is a garage. The exact date of construction is unknown, but, based on real estate records, the building was present in 1950 (O. A. 1950). Aerial images from 1956 also indicate that the garage was present by this time. Building 3 is rectangular with a concrete block foundation and horizontal wood siding. The roof is front gabled and covered in maroon asphalt shingles with exposed rafter ends. The main entrance is at the south elevation. A vertical wood siding barn-style sliding garage door is on the south elevation. A UHAUL customer return sign is on the door on the west side of the south elevation. A basketball hoop is in the gable. Electrical conduits enter the building on the southwest corner. A concrete sidewalk leads to the garage door and side door at the west elevation. The west elevation has a door on the south end. This door is wood with five panels. The door has a "HOUSE FOR SALE" sign with an arrow pointing south. A sliding wood window is at the northern extent. This window has 12 lights. A small portion of a green Ogee gutter remains above the door. The north elevation has no fenestration. The east elevation has one wood sliding window with 12 lights. A "NO TRESPASSSING" sign is on the north end of the window. Various modern construction debris and trash are scattered around the garage.

A concrete sidewalk wraps around the west elevation of Building 1 and south elevation of Building 1 through Building 3 and abruptly ends northeast of Building 3 where a building once stood until it was razed in 1978 (Nationwide Environmental Title Research 2025). Various trailers are staged in this area, and no foundation or structural debris remains.

Building 4 and Building 5 are outbuildings at the eastern extent of the property, southeast of Building 1 through Building 3, separated by a wooden fence. Both Building 4 and Building 5 were constructed between 1956 and 1969. The main entrances of both buildings are at the east elevation.

Building 4 is square with no foundation. The wall material is horizontal 2- by 4-inch wooden planks covered with wooden shakes. The roof is a hipped roof with wood shingles, though the primary ridge of the roof is lined with galvanized metal, and the east elevation ridges are lined with metal ribbed ridge cap. A single wood door frame is on the east elevation, though the door is no longer present. A boarded up window is on the south elevation. The west elevation has a double wood window with casement - style wood shutters. Due to the shutters being closed, the type of window is unknown. The north elevation of the building has no fenestration.

Building 5 is a rectangular building with no foundation. The wall material is horizontal wood siding. The building has a shed roof with exposed rafter ends and wood shingles. Two entrances are on the east elevation. These entrances are wood doors that match the siding. No fenestration is on the south elevation. Two windows with awning style shutters are on the west elevation. Due to the shutters being closed, the type of window is unknown. A "TRUCKS & TRAILERS FOR RENT" UHAUL banner it is on the west elevation. The north elevation has no fenestration. Various modern building and farming equipment are scattered around the buildings.

Building 11 is a pumphouse over a well that was constructed in 1948 at the far northern extent of the property (Figure 13). Water was appropriated to the well in 1940 and adjudicated in 1972 (Colorado

Decision Support Systems 2025a). Registration documents indicate that Roy A. Portner constructed three wells (Building 11, F9, and F10) from 1940 to 1965 and irrigated agricultural fields in Section 3, Township 7 North, Range 68 West, where the Einarsen Farm is located (Colorado Decision Support Systems 2025a, 2025b). Building 11 is a rectangular building with a concrete block foundation. The side-gable roof is constructed of 2- by 4-inch wooden planks covered with wooden shakes, some of which retain green paint. The ridge of the roof is lined with metal, and the rafters are exposed. The building is constructed of horizontal wood siding with off-white paint; however, most of the paint is no longer intact. The façade faces south, and a wood-framed door opening is in the center of the building. The door itself has been removed. A modern electrical box mounted onto a lumber frame is nailed to the building east of the door frame. The west elevation has one wood cottage window. The north elevation has one wood 2-panel window with a single shutter that is hinged at the base of the window. The east elevation has no fenestration but has a 5-inch-diameter polyvinyl chloride (PVC) pipe extending from the bottom half of the building to a yellow motor with the label “Eric Kelly.” The motor is to the east of the building along with an abandoned concrete lateral ditch. Whether the ditch and the pump are related is unclear.

Figure 13. Overview of Building 11.

The other features of the site consist of wells (F6 through F10), lateral ditch infrastructure (F8 and F12), and a pipe (F28). F6 is a rectangular-shaped concrete well cover that measures 62 inches long by 48.5 inches wide by 38 inches high. F6 is constructed of cinder blocks mortared over by concrete, some of which is eroded. F6 has a 3-inch-thick concrete lid obscuring the interior of the feature. A 6.5-inch by 7-inch bar-clip draft horse shoe dating to the late 1800s or early 1900s was placed on top of the lid

(Sparkes 2013) (Figure 14). A juniper tree is growing at the northwest corner of F6. A 12-inch Fresno valve is approximately 5 ft southeast of F6. Outside of the APE, a concrete-lined lateral ditch is 3 ft north of F6. F6 is not documented as a structure in the Colorado Decision Support System records.

Figure 14. Bar-clip draft horse shoe.

F7 is a 12-inch-diameter cast iron pipe embedded in the soil. F8 is the remains of a concrete lateral ditch. The remaining portion of F8 is an L shape and measures 8 ft at its longest axis and 4 ft at its shortest. The channel is 2 ft wide, and the tallest walls are 2 ft high. The channel is filled with sediment, and a 12-inch Fresno Valve is at the northeast corner in the center of the channel. Historic aerial images indicate that F8 was present by 1956 (Nationwide Environmental Title Research 2025).

F9 is the Portner Well 1-0490 that was constructed by Ray A. Portner in 1940 (Colorado Decision Support Systems 2025a). The well consists of a white PVC pipe extending from a wood plank floor supported by iron I-beams. The plank flooring sits on bricks and a concrete base. The well is electrically powered. F10 is the Portner Well 2-0491, which was similarly constructed by Portner in 1965 (Colorado Decision Support Systems 2025b). F10 consists of the same piping and wood plank floor as F8 but is surrounded by a rectangular cinder block foundation. Only a few pieces of lumber remain of the flooring. Below the lumber, a 4-ft-diameter galvanized steel pipe surrounding a 12-inch cast iron pipe with a lid meets the PVC piping above ground. Electrical conduits also enter the cast iron pipe from the top. Plastic tubing and remains of PVC piping are scattered around the immediate vicinity of F10. Historic aerial images indicate that both F9 and F10 were likely inside of a small structure, similar to what remains at Building 11. F9 and F10 were present by 1956 (Nationwide Environmental Title Research 2025). Both wells have

been maintained, and various components of the piping and overall structure have been replaced with modern materials.

F12 is the remains of a concrete lateral ditch. One 5-ft segment of a wall remains engraved with the initials “E.H.D” and an illegible year (Figure 15). The initial likely represents the name Einarsen, Harold Davis who owned the farm in the late 1950s.

Figure 15. Engraved lateral ditch segment that reads “E.H.D.”

The original surveys of the area indicate that the property was undeveloped from 1865 to 1872 (DM ID: 174225 and 174227) (General Land Office 2025). As with many agricultural properties in northern Colorado, landownership of the parcel changed numerous times over the course of its history. Historical newspapers indicate that Hiram H. Allison lived and cultivated the land where the farm is located in 1877 and, in 1890, filed for a Sale-Cash Entry patent and formally purchased the land (Accession No. COCOAA 041591) (Fort Collins Courier 1887; General Land Office 2025). Building 1 was constructed at this time; however, no archival documents tie the site to Allison. By 1910, the land was owned separately by W.M. Snively (north half) and S.D. Spencer (south half) (Clason Map Co. 1910). In 1915, the land is mapped as being owned by Thos. [Thomas] Hale (Gelder 1915).

It is unclear when Hale sold the property, but real estate records indicate that the property was owned by Roy A. Portner in 1950, who also constructed the wells at the northern extent of the site (O. A. 1950). Photographs from this time show that the main entrance to the house was at the west elevation and that Building 2 and Building 3 were also present at this time. The 1950 documents also indicate that the

main building roof had wood shingles, indicating the current asphalt shingles were a replacement of the wood sometime after 1950. Additionally, five other farm buildings are noted on the property including a steel grain bin (O. A. 1950).

Sometime in the late 1950s, the farm transferred hands to Harold Davis Einarsen, who moved from New Mexico to the Fort Collins and Timnath area to farm. Einarsen was the general manager of American Fertilizer and Chemical Company and 4-H Agent in the Agricultural Field for Colorado State University Extension Service (Find a Grave 2020; The Fence Post 2018). Although not on this property, Einarsen also farmed on the historic Jessup Farm near downtown Fort Collins. In 1988, annexation and zoning documents indicate that the property was jointly owned by Buckeye Farms Inc. and Harold D. Einarsen. Buckeye Farms was owned and operated by Sam Matsuda, who was one of the top 10 sugar beet growers in the Fort Collins area from the 1950s through 1970s (Rocky Mountain Jiho 1971; Unknown Photographer 1956).

The farm was likely primarily a sugar beet farm until the sugar beet crash of the late 1960s. By 1979, Einarsen Farm auctioned off a large portion of their farming equipment and aerials indicate that by 1983 the southern portion of the property was fenced off and many of the dirt access roads across the agricultural fields were no longer in use (Nationwide Environmental Title Research 2025; The Banner 1979). Between 1956 and 1969, during the time Einarsen owned the land, historic aerials indicate that at least nine buildings were on the property (Nationwide Environmental Title Research 2025). By 1999, the grain silo and a large building north of the barn were razed; and by 2020, the barn was razed, fencing was removed, and a large area south of the main residence was graded. At the time of the survey, the graded area was used for staging construction vehicles and materials.

NRHP Eligibility: The Einarsen Farm was determined eligible in 2007 under Criterion A, as an example of a 1950s farm in Northern Colorado (Colorado Office of Archaeology and Historic Preservation 2025; Cronenberger and Keeley 2006). However, ERO disagrees and recommends the Einarsen Farm (5LR11396) not eligible for listing in the NRHP under any criteria due to a lack of integrity. Although the main residence was built in 1890, the site does not convey aspects of a late 1800s farm. The Einarsen Farm largely represents an agricultural residence and property from the 1940s to the 1970s when it was owned and operated by Roy Portner and Harold Einarsen. Beginning in the 1980s until 2020, four of the nine buildings were razed, including the grain silo and barn, and an area south of the main residence was graded (Google, Inc. 2025; Nationwide Environmental Title Research 2025). The farm was one of many agricultural properties in Larimer County and does not represent a significant period or event in agricultural development (Criterion A). Although the farm is associated with several early settlers and farmers in Larimer County, including Roy Portner, Harold Einarsen, and Sam Matsuda, archival research demonstrates that these individuals were not any person important to history (Criterion B). The main residence is not associated with an architectural style and the other buildings and features do not embody a distinctive architectural type, period, or method of construction (Criterion C). The farm buildings have been razed, and large portions of the site have been graded; therefore, there is no potential for significant subsurface cultural deposits (Criterion D).

The Einarsen Farm retains integrity of location, design, and association. The farm remains in its original location, and the design of the farming complex is retained as the historical parcel and the field continues to be used for agriculture. Association is also retained through the remaining buildings and continued use for agriculture. The farm no longer retains integrity of materials due to the degradation of the buildings and features from abandonment, which has led to the loss of feeling, although some aspects of feeling are retained as the fields continue to be worked. Aspects of setting have also been impacted by the construction of I-25 and the removal of buildings on the property. The aspect of workmanship did not exist historically.

Management Recommendation: ERO recommends no further work.

Summary and Management Recommendations

ERO redocumented four sites: a segment of the Larimer and Weld Canal (5LR863.3), a segment of the Poudre to Richards Lake Transmission Line (5LR9457.1), a segment of the Cheyenne to Richards Lake Transmission Line (5LR9458.2), and the Einarsen Farm (5LR11396). 5LR863.3 is recommended supporting of the eligibility of the entire resource for listing in the NRHP. The project does not propose any alterations to the ditch. The existing stormwater outfall into the ditch would be abandoned and therefore, ERO recommends no further work. 5LR9457.1 and 5LR9458.2 are recommended nonsupporting of the eligibility of the entire resource for listing in the NRHP, and 5LR11396 is recommended not eligible for listing in the NRHP. ERO recommends a determination of *no historic properties affected* pursuant to 36 CFR 800.4(d)(1) of the NHPA.

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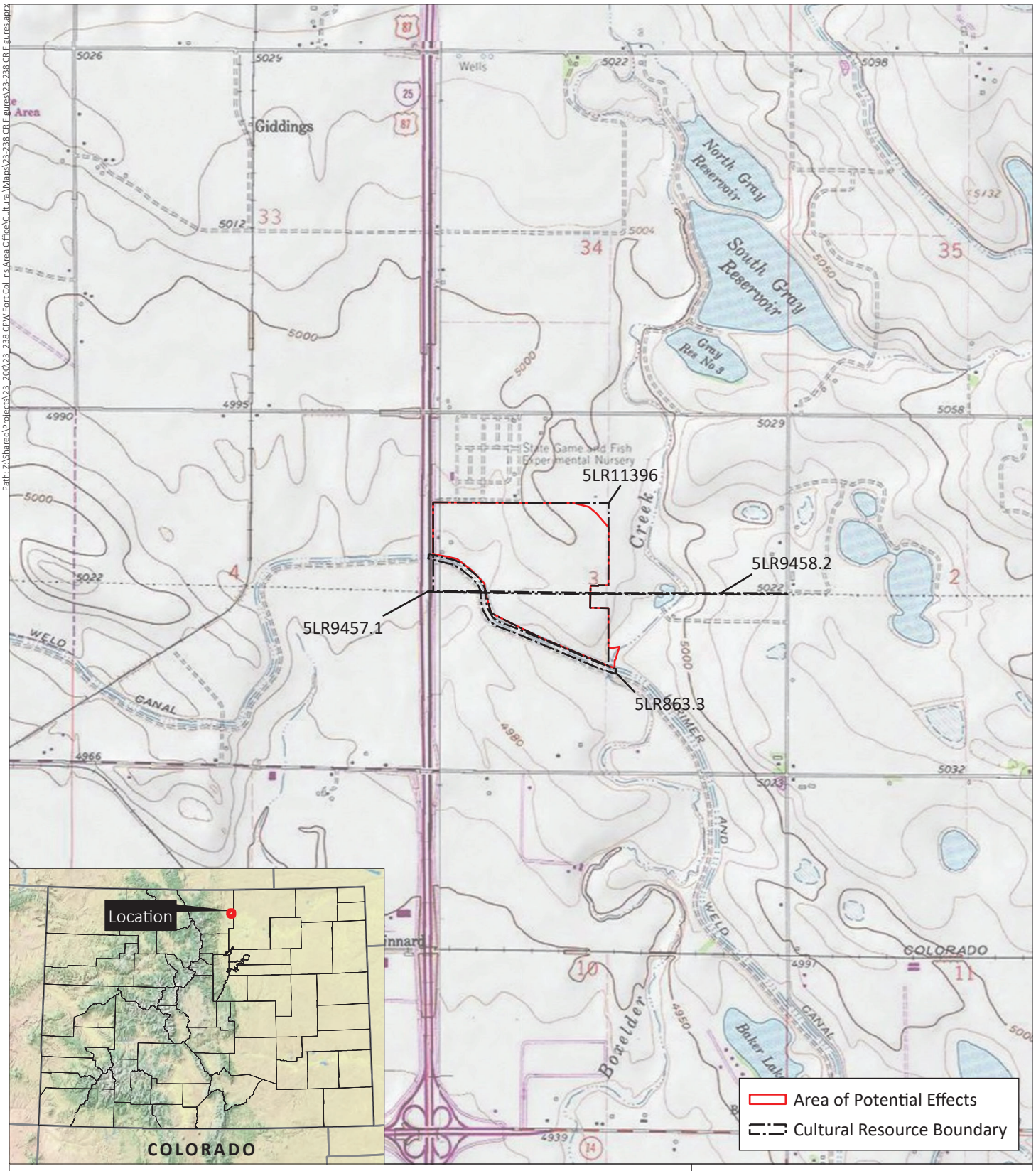
Appendix A Cultural Resource Location Map
For Official Use Only: Disclosure of Site Locations Prohibited (43 CFR 7.18)



Cultural Resource Survey
Colorado Parks and Wildlife Kelley Property Drainage Facility
Larimer County, Colorado

Section 3, T7N, R68W; 6th PM
USGS Fort Collins, CO Quadrangle (1:24,000; 1985)
USGS Timnath, CO Quadrangle (1:24,000; 1973)
Larimer County, Colorado

N

0 1,000 2,000 Feet
1:24,000

Figure A1
Cultural Resource Location Map

Prepared for:
Colorado Parks and Wildlife
File: 23-238 CR Figures.aprx (ME)
July 2, 2025

ERO Resources Corp.

Appendix B OAHP Cultural Resource Documentation Forms
For Official Use Only: Disclosure of Site Locations Prohibited (43 CFR 7.18)

Appendix D Project Plan Sheet

I-25 NE FRONTAGE ROAD IMPROVEMENTS

CPW FORT COLLINS OFFICE RELOCATION PROJECT

'C' SHAPED COLLECTION CHANNEL

CPW SITE ACCESS

PROPOSED KELLEY STREET (BY OTHERS)

30' LIVESTOCK EASEMENT REC. NO. 867309

48.00' CHANNEL SECTION 1

FRONT RANGE STORAGE EMERGENCY ACCESS

20' ELCO RIGHT OF WAY EASEMENT BOOK 2160 PAGE 860

48.00' TOP OF BANK TO TOP OF BANK

20.00' FL TO FL

I-25 NE FRONTAGE ROAD

FRONT RANGE STORAGE SITE PLAN (BY OTHERS)

10.00' ACCESS ROAD

8' UTILITY EASEMENT REC. NO. 19910065756

25' ACCESS EASEMENT BOOK 1605 PAGE 305

40' ELCO WATERLINE EASEMENT REC. NO. 20230044672

20' NWCWD EASEMENT REC. NO. 19920072613

48.00' BEGIN TRANSITION 1

220.00'

70.00' END TRANSITION 1

EXISTING ACESS ROAD

LARIMER AND WELD CANAL

FRONT RANGE STORAGE RAIN GARDEN

40' ELCO WATERLINE EASEMENT REC. NO. 20230044672

20' ELCO RIGHT OF WAY EASEMENT BOOK 1208 PAGE 283

20' EASEMENT BOOK 1278 PAGE 489

20' ELCO RIGHT OF WAY EASEMENT BOOK 2160 PAGE 860

RAIN GARDEN SPILLWAY INTO CHANNEL

20' NWCWD EASEMENT REC. NO. 19920072613

25' ACCESS EASEMENT BOOK 1605 PAGE 305

70.00' CHANNEL SECTION 2

70.00' TOP OF BANK TO TOP OF BANK

20' NWCWD EASEMENT REC. NO. 19920072613

WATER LINE LOWERING

40' ELCO WATERLINE EASEMENT REC. NO. 20230044672

EX. TELECOM. POLE TO BE RELOCATED

40' ELCO WATERLINE EASEMENT REC. NO. 20230044672

30.00' FL TO FL

LARIMER AND WELD CANAL

TRI-STATE POWER SUBSTATION

20' NWCWD EASEMENT REC. NO. 19920072613

75' TRANSMISSION LINE EASEMENT BOOK 914 PAGE 387

BOXELDER CREEK FLOODWAY

10' UE BOOK 1791 PAGE 732

BOXELDER CREEK FLOODPLAIN

60' TRANSMISSION LINE EASEMENT BOOK 1605 PAGE 303

72.00'

BOXELDER CREEK FLOWLINE

70.00' BEGIN TRANSITION 2

78.00' END TRANSITION 2

80.00'

78.00' CHANNEL SECTION 3

78.00' TO OF BANK TO TOP OF BANK

30.00' FL TO FL

78.00' BEGIN TRANSITION 3

150.00' END TRANSITION 3

LARIMER AND WELD CANAL

OUTFALL TO BOXELDER CREEK

RIGHT OF WAY EASEMENT BOOK 1612 PAGE 971

40' ELCO WATERLINE EASEMENT REC. NO. 20230044672

25' ACCESS EASEMENT BOOK 1605 PAGE 305

12' UE COMMUNICATION SYSTEMS EASEMENT REC. NO. 1987003499 REC. NO. 1987003500

EX. CULVERT TO BE REMOVED

10' UE BOOK 1791 PAGE 732

0 75' 150' 300'

PEC
PROFESSIONAL ENGINEERING CONSULTANTS
351 LINDEN STREET SUITE 100
FT. COLLINS, CO 80524
970-232-9558 www.pec1.com

CPW & FREEDOM STORAGE JOINT OUTFALL CHANNEL

1312-1626 NE FRONTAGE RD
FORT COLLINS, CO 80524

Issue:		

JOB NO.	210628-000
DATE	27 JUNE 2025
PM	KJB
DESIGNED BY	EP
DRAWN BY	NAR
CHECKED BY	KJB

OVERALL CHANNEL PLAN

JOC C104

SAVED 6/27/2025 8:34:41 AM BY CONOR.RYAN
PLOTTED 6/27/2025 3:49:47 PM BY CONOR RYAN
U:\FTCOLLINS\2021\210628\000\MUNI\DRAWINGS\210628-000 - JOC C104 - OVERALL CHANNEL PLAN.DWG