

June 11, 2020

Drue DeBerry
U.S. Fish and Wildlife Service
Colorado Field Office
Denver Federal Center (MS 65412)
PO Box 25486
Denver, Colorado 80225

Re: Threatened and Endangered Species Habitat Assessment – Town of Superior Roger’s
Farm Development, Boulder County, Colorado

Dear Mr. DeBerry:

Second Avenue Superior Properties, LLC (SASP), is submitting a Conditional Letter of Map Revision (CLOMR-F) to the Federal Emergency Management Agency (FEMA) for its review and approval for the regulatory floodplain on a property located southwest of the intersection of U.S. 36 and McCaslin Boulevard in Boulder County, Colorado (Figure 1; project area). The project area occurs within the Coal Creek 100-year floodplain. As part of the CLOMR submittal process, SASP must provide documentation to FEMA that the project is in compliance with the Clean Water Act (CWA) and the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (ESA). SASP retained ERO Resources Corporation (ERO) to assess the project area for the presence of potential habitat for federally listed threatened, endangered, and candidate species. A CWA Section 404 permit will not be required for the proposed modifications to the regulatory floodplain because no potential wetlands or waters of the U.S. occur in the project area. ERO, on behalf of SASP, is requesting Technical Assistance from the U.S. Fish and Wildlife Service (Service) regarding threatened and endangered species for the CLOMR application.

Project Location

The project area is in Superior, Colorado west of McCaslin Boulevard southwest of the intersection of U.S. 36 and McCaslin Boulevard. The project area is in Section 24, Township 1 South, Range 70 West and Section 19, Township 1 South, Range 69 West of the 6th Principal Meridian in Boulder County, Colorado (Figure 1). The UTM coordinates of the approximate center of the project area are 522890mE, 4386309mN, Zone 13. The latitude/longitude of the project area is 39.951204°N/105.166593°W. The elevation of the project area is approximately 5,495 feet above sea level.

Denver
1842 Clarkson St.
Denver, CO 80218
303.830.1188

Durango
1015 ½ Main Avenue
Durango, CO 81301
970.422.2136

Hotchkiss
P.O. Box 932
161 South 2nd St.
Hotchkiss, CO 81419
970.872.3020

Idaho
4001 East Main Street
Emmett, ID 83617
208.365.7684

Project Description

The project consists of residential development that is proposed between 2nd Avenue and McCaslin Boulevard, south of Coal Creek (see attached site plan). A total of 27 single-family home and 61 wee cottage homes (attached and detached) are proposed within the development. Three road extensions would also be constructed within the development – Douglas Street, 1st Avenue, and a third road south of Douglas Street. No buildings or roads would occur within the Coal Creek riparian corridor. A water quality pond would be constructed north of the proposed development near the Coal Creek riparian corridor (see attached site plan). The pond would outfall into Coal Creek. The outfall would daylight above the ordinary high water mark of the creek in uplands and, therefore, no Section 404 permit is anticipated.

Site Description

The project area encompasses an approximate 18-acre parcel of land located within the Town boundary. The project area is bordered by McCaslin Boulevard to the east, 2nd Avenue to the west, Coal Creek to the north, and the Mayhoffer-Singletree Trail to the south (Figure 2). Coal Creek occurs along the northern boundary of the project area and flows west to east. Coal Creek consists of a 15- to 25-foot-wide channel in the project area. South of Coal Creek, the project area consists of agricultural land that formerly contained a residence and several small outbuildings. Residential development occurs north of the project area. Undeveloped or agricultural land occurs south of the project area boundary. The Mayhoffer-Singletree Trail forms the southern boundary of the project area.

Ecological Features of the Project Area

The majority of the project area is disturbed upland grassland that has been continuously grazed for several decades. The majority of the species are nonnative and include orchardgrass (*Dactylis glomerata*) and smooth brome (*Bromus inermis*). Several weedy species including Russian thistle (*Salsola kali*), Scotch thistle (*Onopordum acanthium*), Canada thistle (*Cirsium arvense*), and musk thistle (*Carduus nutans*) occur throughout the project area.

The Coal Creek riparian corridor is located north of the project area. The vegetation along Coal Creek includes crack willow (*Salix fragilis*), Russian olive (*Elaeagnus angustifolia*), and plains cottonwood (*Populus deltoides*) (Photos 1 and 2). Understory vegetation consists mostly of meadow fescue (*Festuca pratensis*), orchardgrass, and cocklebur (*Xanthium strumarium*). No wetlands occur along Coal Creek near the project area. Generally, areas within and adjacent to the Coal Creek 100-year floodplain, outside of the riparian corridor are mostly disturbed upland grassland (Photo 3). Nearby residential development to the north of Coal Creek, continuous cattle grazing, and intrusion of nonnative plant species have led to the disturbed conditions along the Coal Creek 100-year floodplain.

That Natural Resource Conservation Service (NRCS) as mapped soils in the area as Nunn clay loam and Manter sandy loam (NRCS 2018). Soils in the area appear to have been disturbed from previous development and grazing activities.

Endangered Species Act Compliance

On March 15 and October 12, 2016, Courtney Marne and Clint Henke with ERO assessed the project area (2016 site visits) for potential habitat for federally listed threatened and endangered species protected under the ESA. The project area does not fall within Service habitat or survey guidelines for the majority of the species listed by the Service as potentially occurring in Boulder County (Table 1). An official list of species that potentially occur in the project area is attached to this letter (Service 2018). Because the project area falls within survey guidelines for Preble’s meadow jumping mouse (*Zapus hudsonius preblei* or Preble’s), Ute ladies’-tresses orchid (*Spiranthes diluvialis* or ULTO), and Colorado butterfly plant (*Gaura neomexicana* ssp. *coloradensis* or CBP), ERO assessed the project area for habitat for these species.

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

Common Name	Scientific Name	Status*	Habitat	Habitat Present or Potential to be Affected by Project?
Mammals				
Canada lynx	<i>Lynx canadensis</i>	T	Climax boreal forest with a dense understory of thickets and windfalls	No habitat, no potential to affect
North American wolverine	<i>Gulo gulo luscus</i>	PT	Subalpine and alpine forests	No habitat, no potential to affect
Preble’s meadow jumping mouse	<i>Zapus hudsonius preblei</i>	T	Shrub riparian/wet meadows	No habitat
Birds				
Interior least tern**	<i>Sterna antillarum athalassos</i>	E	Sandy/pebble beaches on lakes, reservoirs, and rivers	No habitat and no depletions anticipated
Mexican spotted owl	<i>Strix occidentalis</i>	T	Closed canopy forests in steep canyons	No habitat, no potential to affect
Piping plover**	<i>Charadrius melodus</i>	T	Sandy lakeshore beaches and river sandbars	No habitat and no depletions anticipated
Whooping crane**	<i>Grus americana</i>	E	Mudflats around reservoirs and in agricultural areas	No habitat and no depletions anticipated
Fish				
Greenback cutthroat trout	<i>Oncorhynchus clarki stomias</i>	T	Cold, clear, gravel headwater streams and mountain lakes	No habitat
Pallid sturgeon**	<i>Scaphirhynchus albus</i>	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?
Plants				
Colorado butterfly plant	<i>Gaura neomexicana ssp. coloradensis</i>	T	Subirrigated alluvial soils on level floodplains and drainage bottoms between 5,000 and 6,400 feet in elevation	No habitat
Ute ladies'-tresses orchid	<i>Spiranthes diluvialis</i>	T	Moist to wet alluvial meadows, floodplains of perennial streams, and around springs and lakes below 6,500 feet in elevation	No habitat
Western prairie fringed orchid**	<i>Platanthera praeclara</i>	T	Moist to wet prairies and meadows	No habitat and no depletions anticipated

*T = Federally Threatened Species, E = Federally Endangered Species; PT = Proposed Threatened.

**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 2018.

The proposed project would not affect the Canada lynx, North American wolverine, Mexican spotted owl, or greenback cutthroat trout because of the lack of habitat within the project area. The interior least tern, piping plover, whooping crane, pallid sturgeon, and western prairie fringed orchid are species that are affected by continued or ongoing water 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. Because of the lack of habitat and depletions, the proposed project would not affect these species.

Because of the association of Preble's, ULTO, and CBP to wetland/riparian habitat along the Colorado Front Range, ERO evaluated the potential for these species to occur in the project area.

Rationale for Excluding the Project Area as Potential Preble's Habitat

A Preble's individual was captured about 1 mile upstream of the project area in 1999 (Beane 1999). The positive capture was located on Boulder County Open Space in an area with a broad riparian corridor dominated by native shrubs. Trapping surveys approximately 0.5 mile upstream and 0.25 mile downstream yielded no captures (ERO 1999, 2002).

ERO assessed the project area for potential Preble's habitat. ERO believes the proposed project would not likely impact Preble's habitat because:

- **Lack of Habitat:** The project area lacks adequate shrub cover by sandbar willow and other riparian shrubs typically associated with Preble's habitat. Herbaceous vegetation cover is very low throughout the project area due to extensive past grazing. The majority of herbaceous species that do occur in the project area are nonnative weedy species. In addition, the proposed project would not impact Coal Creek or its associated riparian corridor.

- **Habitat Fragmentation and Human Disturbance:** The project area is located within a narrow riparian corridor that is fragmented by roads and a recreation trail and is bordered by development including residential development and the Town Hall.
- **Project Area is Not Identified as Critical Habitat:** The project area contains no designated critical habitat and the nearest Preble's critical habitat is more than 3.5 miles south of the project area along South Boulder Creek.

Given the above information, it is unlikely the project area supports a population of Preble's or that the continued existence of Preble's would be adversely affected by the proposed project. Because of the degraded nature of the habitat near the project area, ERO believes that effects on Preble's from the project would be insignificant and discountable and that the proposed project may affect, but is unlikely to adversely affect, Preble's.

Rationale for Excluding the Project Area as Potential ULTO Habitat

ERO determined the project area is not conducive to the establishment of ULTO and differs from the criteria of the Service's November 1992 (Service 1992) Interim Survey Requirements for *Spiranthes diluvialis* for the following reasons:

- **Lack of Habitat:** The herbaceous vegetation observed during the 2016 site visits was dominated by species not typically associated with ULTO, and the project area lacks the wet meadow habitat associated with ULTO. The project area has a dense overstory of plains cottonwood and crack willow trees that are not conducive to the establishment of ULTO. The proposed project would occur in upland areas.

Rationale for Excluding the Project Area as Potential CBP Habitat

The Service has not established formal survey guidelines for CBP, but has indicated that areas similar to, and slightly drier than, ULTO habitat should be assessed. ERO determined that habitat for CBP does not occur in the project area for the same reasons as described for ULTO.

Conclusions

There is no potential habitat for threatened or endangered species in the project area. Preble's has been captured about 1 mile upstream of the project area (Beane 1999). However, trapping surveys near the project area have yielded no captures and the proposed project would not impact Coal Creek or its associated riparian corridor. Much of the project area has been heavily grazed, which likely led to degradation of the riparian corridor along Coal Creek. Since there is a known Preble's capture site upstream of the project area (Beane 1999), it is remotely possible that Preble's could occur along Coal Creek near the project area. However, because no structures would be placed along Coal Creek, any effects on Preble's from the proposed project would likely be insignificant and discountable and, therefore, the project may affect, but is unlikely to adversely affect, Preble's. ERO believes there would be no effect on any other threatened or endangered species that potentially occur in the project area (Table 2).

Table 2. Preliminary effects determination for federally threatened and endangered species.

Species	Preliminary Conclusion
Canada lynx	No effect
North American wolverine	No effect
Preble's meadow jumping mouse	May affect, not likely to adversely affect
Interior least tern	No effect
Mexican spotted owl	No effect
Piping plover	No effect
Whooping crane	No effect
Greenback cutthroat trout	No effect
Pallid sturgeon	No effect
Colorado butterfly plant	No effect
Ute ladies'-tresses orchid	No effect
Western prairie fringed orchid	No effect

Please call if you need additional information or have any questions. I look forward to hearing from you.

Sincerely,



Clint Henke
Biologist

Attachments: Figures 1 and 2; Photo Log; Site Plan; List of Species

cc via email: Jim Brzostowicz – Civil Resources, LLC

Site Information

Location: Section 24, Township 1 South, Range 70 West and Section 19, Township 1 South, Range 69 West of the 6th Principal Meridian in Boulder County, Colorado.

Elevation: Approximately 5,495 feet above sea level.

Latitude/Longitude: 39.951204°N/ 105.166593°W.

UTM Coordinates: 522890mE, 4386309mN, Zone 13.

Soils: Nunn clay loam, and Manter sandy loam.

Site Hydrology: Coal Creek.

References

Beane, R. 1999. Trapping Survey Results submitted to the U.S. Fish and Wildlife Service at Coal Creek on Boulder County Open Space. Reference provided by U.S. Fish and Wildlife Service (2018).

- ERO Resources Corporation (ERO). 1999. Trapping survey results submitted to U.S. Fish and Wildlife Service at Coal Creek. Reference provided by U.S. Fish and Wildlife Service (2018).
- ERO Resources Corporation (ERO). 2002. Trapping survey results submitted to U.S. Fish and Wildlife Service at Coal Creek. Reference provided by U.S. Fish and Wildlife Service (2014).
- U.S. Department of Agriculture, Natural Resource Conservation Service. 2018. Web Soil Survey. <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Last accessed January 31, 2018.
- U.S. Fish and Wildlife Service (Service). 1992. Interim Survey Requirements for *Spiranthes diluvialis*.
- U.S. Fish and Wildlife Service (Service). 2018. Endangered, Threatened, Proposed and Candidate Species. <http://ecos.fws.gov/ipac/>. Last accessed January 31, 2018.

Qualifications of Surveyors

Qualifications of Clint R. Henke have been previously submitted to the Service and are available upon request. Clint R. Henke has a B.S. in Biology from Fort Lewis College and an M.S. in Environmental Science from the University of Colorado at Denver. Clint has more than 16 years of experience performing Preble's habitat assessments and presence/absence surveys, and has experience identifying and handling Preble's in the field. Clint also has more than 16 years' experience conducting biological inventories and biographical mapping. Clint is also familiar with *Spiranthes diluvialis* survey guidelines and has viewed *Spiranthes* in the field.



Superior 2nd Ave Development

Section 24, T1S, R70W; Section 19, T1S, R69W; 6th PM
 UTM NAD 83: Zone 13N; 485767mE, 4422336mN
 Latitude, Longitude: 39.951036°N, 105.166628°W
 USGS Louisville, CO Quadrangle
 Boulder County, Colorado



Figure 1 Vicinity Map

Prepared for: 2nd Avenue
 Superior Properties, LLC
 File: 6517 Figure 1.mxd (GS)
 June 11, 2020





Superior 2nd Ave Development

Study Area Boundary

Image Source: Google Earth©, September 2019

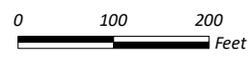


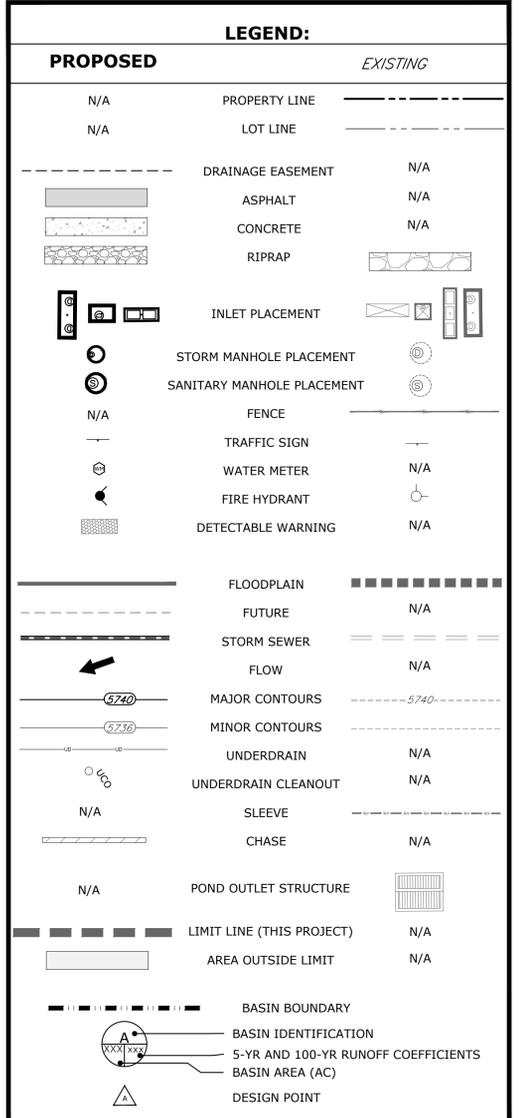
Figure 2 Project Area Overview

Prepared for: 2nd Avenue
 Superior Properties, LLC
 File: 6517 Figure 2.mxd (GS)
 June 11, 2020

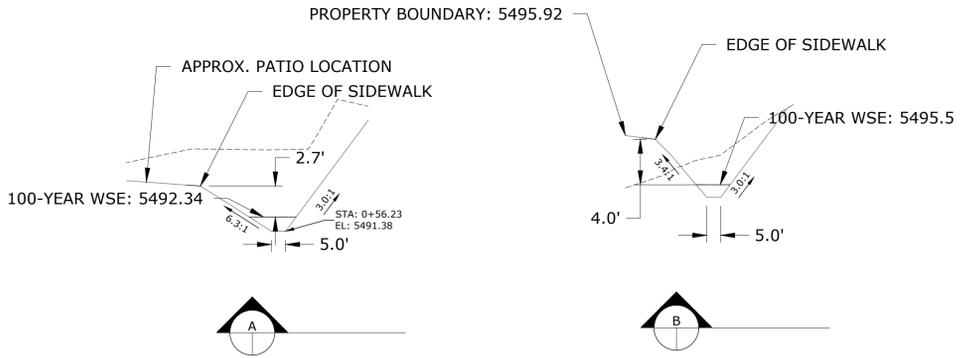




Sub-Basin I.D.	Design Point	Total Area (ac)	Runoff Coefficient "C"		Runoff (cfs)		Design Point Location (Phase)
			5-Year	100-Year	5-Year	100-Year	
S-0	S0	0.39	0.35	0.63	0.50	2.07	Inlet 201.3 (Ph 1)
S-1	S1	0.27	0.21	0.56	0.21	1.26	Inlet 201.5 (Ph 1)
S-2	S2	0.80	0.53	0.73	1.13	3.58	Inlet 201.4 (Ph 1)
S-3	S3	1.06	0.49	0.71	1.38	4.61	Inlet 202.2 (Ph 1)
S-4	S4	1.11	0.34	0.62	1.14	4.88	Inlet 202.1 (Ph 1)
S-5	S5	0.17	0.65	0.79	0.40	1.13	Inlet 205 (Ph 1)
S-6	S6	1.89	0.52	0.73	2.56	8.23	Inlet 204 (Ph 1)
S-7	S7	0.78	0.63	0.78	1.61	4.57	Inlet 203A (Ph 2)
S-8	S8	1.14	0.73	0.83	2.79	7.26	Inlet 402A (Ph 2)
S-9	S9	1.09	0.52	0.63	1.90	5.34	Inlet 301 (Ph 2)
S-10	S10	0.33	0.56	0.65	0.68	1.84	Inlet 102A (Ph 2)
S-11	S11	0.03	0.09	0.25	0.01	0.06	Ex Inlet 1
R-1	R1	1.29	0.42	0.68	1.49	5.55	Ex Inlet 3
R-2	R2	0.18	0.73	0.82	0.47	1.23	Inlet 102 (Ph 2)
R-3	R3	0.14	0.73	0.79	0.37	0.94	Inlet 201.2 (Ph 1)
R-4	R4	0.71	0.58	0.75	1.49	4.46	Inlet 201.1 (Ph 1)
R-5	R5	0.18	0.57	0.66	0.38	1.02	Rundown
RD-1	D4	0.57	0.42	0.67	0.74	2.74	Rundown
CH-1A	C1A	0.96	0.14	0.54	0.42	3.70	Culvert
CH-1B	C1B	3.33	0.14	0.54	0.96	8.23	Culvert
CH-2	C2	0.44	0.26	0.41	0.31	1.14	Culvert
CH-3	C3	0.59	0.07	0.21	0.13	0.97	Channel
P-1	P1	0.57	0.06	0.20	0.12	0.93	Pond Outlet
OS-1	O1	18.67	0.01	0.13	0.40	12.03	Overland
OS-2	O2	1.89	0.05	0.49	0.35	7.82	Overland
OS-3	O3	2.58	0.05	0.49	0.47	10.67	Overland



NOTE: OFFSITE BASINS ARE DEPICTED IN THE HISTORIC DRAINAGE PLAN AND PHASE 1 PROPOSED DRAINAGE PLAN LOCATED IN THE DRAINAGE CONFORMANCE LETTER



ROGERS FARM PHASE 2
 SUPERIOR, COLORADO
 FINAL DEVELOPMENT PLAN

Drawn by: CAI
 Checked by: JAB
 Issue Date: 11/08/2019
 Revisions: 05/26/20

Sheet Name
OVERALL DRAINAGE PLAN

Sheet Number
C5.0
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