WESTERN BIONOMICS INC.
Natural Resource Management Services

31040 Willow Lane
Steamboat Springs, CO 80487
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Ph/Mobile 970-846-8223

December 14, 2022

Mr. Tucker Feyder, Project Manager
US Army Corps of Engineers, Grand Junction Field Office
400 Rood Ave., Room 224
Grand Junction, CO 81501

RE: SPK-2007-1323 – The Astrid – Pre-Construction Notification

Dear Tucker:

This Pre-Construction Notification has been prepared at the request of the *Steamboat Esquiar LP* to receive written verification that the proposed project, The Astrid development, is consistent with regulations implementing Section 404 of the Clean Water Act. The landowner/proponent's contact information is included below:

Landowner/Proponent: Steamboat Esquiar LP
ATTN: W. Brodie Sherman
4265 San Felipe, Ste #970
Houston, TX 77027
brodie@fusefv.com
713-854-6221

Primary Contact: Kelly Colfer

This parcel has prior history with the Corps of Engineers (SPK-2007-1323) culminating with an October 31, 2007, letter signed by Jason Gipson, Acting Chief, Intermountain Regulatory Section. Mr Gipson's letter stated that wetlands on the site, "are not regulated under Section 404 of the Clean Water Act, or Section 10 of the Rivers and Harbors Act, since they are isolated interstate, non-navigable wetlands and do not have a significant nexus to Traditional Navigable Waters."

Due to the site's prior regulatory history, this PCN is configured somewhat differently than normal. I re-delineated aquatic resources on the site this year and have included the results of that delineation. Then I will summarize the results of the prior consultation, so that you can verify that these wetlands are still not regulated if you so choose. I will also include enough information so that if you determine that onsite wetlands are jurisdictional, you can permit the project under the Nationwide Permit program.

I'll look forward to your response to this submittal.

Sincerely,
Western Bionomics Inc.

Kelly Colfer
President

Enclosure: The Astrid – Pre-Construction Notification

cc: Mike Beurskens, Baseline Engineering Corp.

THE ASTRID

SPK-2007-1323

PRE-CONSTRUCTION NOTIFICATION

December 14, 2022

Prepared For
Steamboat Esquiar LP
4265 San Felipe, Ste #970
Houston, TX 77027

and

United States Army Corps of Engineers, Albuquerque District
Western Colorado Regulatory Office
400 Rood Avenue Room 142
Grand Junction, CO 81501-2563

Prepared By
WESTERN BIONOMICS INC.
Natural Resource Management Services
31040 Willow Lane • Steamboat Springs, CO 80487
Ph: 970-846-8223 • kscolfer@westernbionomics.com

EXECUTIVE SUMMARY

Steamboat Esquiar LP intends to develop a condominium complex on Lots 9 & 10 of the Ski Trail Subdivision Filing 3, in Steamboat Springs, CO. Total site area is about 4.25 acres. To facilitate the project's compliance with the Clean Water Act, Western Bionomics is submitting this PCN. The site was previously subject of an Approved Jurisdictional Determination (AJD) conducted in 2006/07. On October 31, 2007, Jason Gipson, Acting Chief, Intermountain Regulatory Section, provided an AJD verification letter, stating that wetlands on the site, "are not regulated under Section 404 of the Clean Water Act, or Section 10 of the Rivers and Harbors Act, since they are isolated interstate, non-navigable wetlands and do not have a significant nexus to Traditional Navigable Waters."

I anticipate that the Corps will uphold this 2007 determination; however, in the event that the regulatory environment has changed since 2007, requiring the Corps to make a different jurisdictional determination, this PCN is formatted in such a manner that the Corps can verify that the project complies with regulations that implement the Nationwide Permit Program. This document establishes the current limits of aquatic resources that appear to meet the definition of wetlands based solely on site-specific conditions.

A total of 4,368 square feet (0.10) acres of palustrine emergent herbaceous wetlands were delineated in 2 polygons within the Project Assessment Area. The proposed project would result in total disturbance to wetland of 2,326 square feet. Mitigation is not proposed since the total impact is less than 1/10 acre.

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ACRONYMS AND ABBREVIATIONS

BMP	Best Management Practice
OHWM	Ordinary High Water Mark
PEM	Palustrine Emergent Wetland Vegetation
PFO	Palustrine Forested Wetland Vegetation
PSS	Palustrine Scrub-Shrub Wetland Vegetation
COE	US Army Corps of Engineers
FWS	US Fish and Wildlife Service
UTM	Universal Transverse Mercator coordinate system
AA	Water Resource Assessment Area

1. INTRODUCTION

Steamboat Esquiar LP intends to develop a condominium complex on Lots 9 & 10 of the Ski Trail Subdivision Filing 3, in Steamboat Springs, CO. Part of the property ownership includes the adjoining Outlot, and a small triangle of property at the intersection of Gondola Lane and Ski Trail Lane between Gondola Lana and the Ski Trail Condominiums. Total site area is about 4.25 acres. To facilitate the project's compliance with the Clean Water Act, Western Bionomics is submitting this PCN. The project proponent and primary contacts are listed below.

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ATTN: W. Brodie Sherman
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I anticipate that the Corps will uphold this 2007 determination; however, in the event that the regulatory environment has changed since 2007, requiring the Corps to make a different jurisdictional determination, this PCN is formatted in such a manner that the Corps can verify that the project complies with regulations that implement the Nationwide Permit Program. This document establishes the current limits of aquatic resources that appear to meet the definition of wetlands based solely on site-specific conditions. I will not further attempt to define adjacency or federal nexus since this information was adequately provided in 2007; rather I will provide, in the Appendices, the 2007 AJD submittal and Corps' verification letter.

The following narrative presents the methods used to delineate aquatic resources, the results of my investigation, a description of the proposed project, and a listing of aquatic resource impacts. Representative drawings are included in Appendix A & B. Representative photographs are in Appendix C. A plant list is in Appendix D. The NRCS Soil Map is in Appendix E. Field data sheets are in Appendix F. The list of threatened and endangered species retrieved from IPaC is in Appendix G, and the OAHP file search results are in Appendix H.

2. LOCATION

The project assessment area is located in the Mountain Resort area within the City of Steamboat Springs, Routt County, Colorado (See Vicinity Map, Appendix B). The assessment area can be found on the USGS Steamboat Springs 7.5' series topographic quadrangle, where it occupies 4.25± acres in T6N, R84W, Section 27, at 40. 456839°, -106. 800083° (WGS 84). Plant communities on the property include upland grassland, mountain shrubland, aspen woodland, and PEM wetland.

The project assessment area has been defined to encompass all areas that could potentially be affected by the proposed project. The project area can be reached from the Routt County Courthouse by traveling east on Lincoln Ave / Highway 40 for 1.5 miles to the Mount Werner exit. Turn left onto Mount Werner Road and travel 1.1 miles. At the roundabout continue straight onto Après Ski Way, travel for 0.3 mile to Ski Trail Lane. Turn left onto Ski Trail Lane, travel 0.3 mile to the Ski Inn parking lot, which is the most convenient point from which to currently access the parcel.

3. AQUATIC RESOURCE DELINEATION METHODS

This site was first delineated by David Johnson, Western Ecological Resource, Inc., in 2007, and assigned COE File Number SPK-2007-1323. The 2007 project was never built. In 2019, I was asked to delineate and permit a newly proposed project on the site. The 2019 client provided me with documents from the 2007 delineation, including a 2007 draft letter from David Johnson, addressed to Nathan Green, the Corps Project Manager at that time for Routt County and an October 31, 2007, letter signed by Jason Gipson, Acting Chief, Intermountain Regulatory Section. Mr Gipson's letter stated that wetlands on the site, "are not regulated under Section 404 of the Clean Water Act, or Section 10 of the Rivers and Harbors Act, since they are isolated interstate, non-navigable wetlands and do not have a significant nexus to Traditional Navigable Waters" (Mr. Gipson's letter is located in Appendix I).

Upon seeing this information in 2019, I prepared a Freedom of Information Act (FOIA) request to obtain all information pertaining to the 2007 project. Information received from the 2019 FOIA is included in Appendix J. The FOIA information includes the final request for an AJD dated July 2007. Based on the 2007 documentation and the information received from the FOIA request, it is apparent that the Corps' determined in 2007 that wetlands on the site are not jurisdictional. The 2019 project was also abandoned and not implemented. I will not reiterate in detail all of the information provided in the FOIA request; that information is presented in Appendix J

While I anticipate that the Corps will uphold the 2007 determination of non-jurisdiction, I re-visited the site on October 14, 2022, and performed a new wetland delineation to document any changes that may have occurred since 2007. Since that time, one Edgemont Condominium Building was built along with a swimming pool and access road. Drainage associated with the Edgemont building appears to have supplemented hydrology on the site, as wetlands that were not present in 2007 are apparent currently. Both wetlands occur at the terminus of drainage structures originating from the Edgemont and adjacent Bear Claw condominiums, as will be explained in Section 4.

Sample plots were established near the edge of each change in plant community type in order to ascertain whether the site was a wetland or upland. Each sample plot was numbered and designated with pink flagging. Ecosystem parameters (vegetation, soils, and hydrology) were characterized and recorded on field data forms (Appendix F) at each observation point, as per Army Corps guidelines (US Army Corps of Engineers Wetland Delineation Manual, 1987; Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, U.S. Army Corps of Engineers, 2010). The location of sample plots was mapped and is displayed on the drawing located in Appendix A.

Based on observations of all three wetland parameters at each sample plot, wetland boundaries were designated with fluorescent pink flagging. Boundary markers were individually numbered by Western Bionomics personnel and recorded by the surveyor to provide reference.

A point-to-point survey of the delineated boundaries of each wetland was conducted by Landmark Consultants and mapped relative to the Colorado State Plane datum. The surveyed aquatic resource

boundaries were overlaid on a 2019 geo-referenced aerial photograph registered on the Colorado State Plane datum.

The characteristics of vegetation, soils, and hydrology within wetlands and uplands on the parcel are presented in Section 4 of this report.

4. AQUATIC RESOURCE DELINEATION RESULTS

The Astrid parcel is located adjacent to the Steamboat Ski Area on a hillslope descending from the Stampede ski trail. The bottom of the slope terminates in an ephemeral draw that carries water during snowmelt, and I assume, during extreme precipitation events. While shallow, narrow channels are present in the bottom of the draw, none are contiguous and either originate from sites upgradient in the draw that carry overland flow, with no bed and bank, or else terminate and flow overland with no apparent bed and bank. Several culverts are present on the parcel. Most of these culverts are placed in locations that are used as condominium access ski trails crossing the bottom of the draw during the winter.

The 2007 delineation presented a map of aquatic resources (Figure 2. Revised Wetland Map, Lots 9&10 and Adjacent Outlot, Ski Trail Subdivision) on the site. That map presents the bottom of the ephemeral draw as containing "Jurisdictional Ditches" and "Upland Swales." These sites correspond to locations in the draw where bed and bank exists, i.e. a "Jurisdictional Ditch," and sites where no bed and bank exists, i.e. "Upland Swales." Despite the terminology used in Figure 2 of the 2007 Delineation Report, Jason Gibson's letter made it apparent that none of the aquatic resources on the site were deemed jurisdictional.

My 2022 wetland sample plots revealed the boundary between sites which exhibited all 3 wetland parameters and sites which were lacking one or more wetland parameters. Based on the presence or absence of parameters, 2 wetland polygons were designated. **A total of 4,368 square feet (0.10) acres of palustrine emergent herbaceous wetlands were delineated in 2 polygons within the Project Assessment Area**.

4.1 THREATENED AND ENDANGERED SPECIES

A US Fish & Wildlife Service (USFWS) "resource list" was retrieved from the Information for Planning and Consultation (IPaC) website[1] (Appendix G). The resource list describes species and other resources such as critical habitat under the USFWS's jurisdiction that are known or expected to occur on or near the project area. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. Species on the IPaC list included Canada lynx (*Lynx canadensis*), Gray Wolf (*Canis lupus*), Mexican spotted owl (*Strix occidentalis lucida*), yellow-billed cuckoo (*Coccyzus americanus*), Bonytail Chub (*Gila elegans*), Colorado Pikeminnow (*Ptychocheilus lucius*), Humpback Chub (*Gila cypha*), Razorback Sucker (*Xyrauchen texanus*). The resource list further disclosed that, "there are no critical habitats at this location."

Canada lynx – Lynx are temperate forest dwelling carnivores. They are mostly dependent upon snowshoe hare for prey; red squirrels are probably secondary in importance. They also have been documented preying upon other mammals, grouse, and ptarmigan during the summer months. Hares not only determine where lynx are found, but also influence how many lynx may occupy an area. In the southern Rocky Mountains, lynx are predominately found above 8,000 feet in Engelmann spruce, subalpine fir, and lodgepole pine forests. They typically utilize areas during winter where low topographic relief creates continuous forest communities of varying stand ages and provides moist forest floor conditions to support hares. Lynx require

[1] https://ecos.fws.gov/ipac

a mosaic of generally forested habitats in which to den, forage, rest, and travel. There is no habitat as described above for Canada lynx in the project AA.

Gray Wolf –The gray wolf is a highly adaptable species that can thrive in a wide range of habitats including temperate forests, mountains, tundra, taiga, and grasslands. At one time extirpated from the state, wolves have recently returned to Colorado; one pack has taken up residence in Moffat County and another in Jackson County. To date, there have been no observations of wolves in Routt County, therefore, wolves are not expected within the project AA.

Mexican spotted owl – The Mexican spotted owl occupies a variety of steep, rocky-canyon habitats with complex tributary canyons, a variety of desert scrub and riparian vegetation communities, and prominent vertical cliffs. Within these canyons, owls nest in protected caves and roost in caves and on rocky ledges as well as in trees; Douglas-fir is the most common nest tree in many areas. The project area does not provide habitat for Mexican spotted owl. Since habitat for this species is absent in the project area, there will be no direct, indirect, or cumulative effects on this species.

Yellow-billed Cuckoo - Yellow-billed Cuckoos use wooded habitat with dense cover and water nearby, including woodlands with low, scrubby, vegetation, overgrown orchards, abandoned farmland, and dense thickets along streams and marshes. There is no habitat meeting this description in the project area, which is located outside mapped critical habitat for this species (IPaC report).

Colorado River Basin Endangered Fish – The Bonytail Chub, Colorado Pikeminnow, Humpback Chub, and Razorback Sucker are known colloquially as the "Colorado River Basin endangered fish." Habitat for these fish exists far downstream of the project area. The USFWS has determined that water depletions, water quality degradation, and regulated flows are the current activities with the greatest impact on all of the endangered Colorado River fishes. The USFWS has further determined that activities resulting in water depletion in the Upper Colorado River Basin may jeopardize the continued existence of the four endangered fish.

4.2 Cultural Resources

A search of the Colorado Inventory of Cultural Resources was conducted by the Colorado Office of Archaeology and Historic Preservation. The search results (Appendix H) indicate SEARCH RESULTS NOT RECEIVED YET. Furthermore, there were no structures or other anthropogenic artifacts observed within the project area while conducting the wetland delineation for the project.

The following subsections present the results of the field examinations with respect to soil parameters, vegetation composition, and hydrological indicators. Sample plot data sheets are located in Appendix E.

No evidence of threatened or endangered animal or plant species was observed or has been documented anywhere within or adjacent to the proposed project area.

4.3 Landscape Setting

Acreage of Aquatic Resource Assessment Area:	4.25 acres
Total Acreage of Wetland:	0.10 acre
Topography:	Hillslope and ephemeral drainage
Geologic Features:	Mount Werner, Park Range
Major Water Bodies:	None
Surface Water Flow:	Towards the storm sewer system draining to the Yampa River
Plant Community Types:	Palustrine emergent herbaceous

Existing Vegetation:	Sedges, rushes, grasses
Current Land Use:	Vacant
Major Recent or historical disturbances:	Located in urban condominium area, multiple drainage features constructed to drain this and adjacent sites
Season During Site Visit:	Fall
Flood/Drought Conditions:	No
Irrigation Practices:	None
Modifications to the Site:	Multiple drainage features constructed to drain this and adjacent sites
Atypical Characteristics:	None
Entire Assessment Area Field Verified?	Yes

4.4 AQUATIC RESOURCES

4.4.1 Overview

Aquatic resources mapped within the assessment area exhibit the characteristics set forth in Environmental Laboratory (1987) and U.S. Army Corps of Engineers (2010). Wetlands within the Assessment Area (AA) are PEM wetlands dominated by sedges, rushes, and grasses. Sites mapped as wetland exhibit the presence of all 3 wetland parameters (hydrophytic vegetation, hydric soil, and wetland hydrology). Wetland boundaries were delineated where one or more wetland parameters were not observed in wetland sample plots. Table 1, below, provides a summary of aquatic resources mapped on the parcel.

Table 1. AQUATIC RESOURCES WITHIN THE SURVEY AREA

Aquatic Resource Name	Aquatic Resources Classification		Aquatic Resource Size (sqft)	Aquatic Resource Size (linear feet)
	Cowardin	Location (lat/long)		
Wetland A	PEM	40.456382°, -106.800605°	4,202	123
Wetland B	PEM	40.457042°, -106.798997°	166	24
Total			**4,368**	

The following sections provide details relative to physical characteristics present within the assessment area.

4.4.2 Physical Characteristics

4.4.2.1 Soils

Soil survey information compiled by the Natural Resources Conservation Service (NRCS) identifies 1 mapping unit within the limits of the project area – 50F, Routt loam, 25 to 65 percent slopes, very stony. This soil is included on the NRCS list of hydric soils. An NRCS Custom Soil Report, including the Soil Map, is included in Appendix E.

4.4.2.2 Vegetation

Within the boundaries of the assessment area, hydrophytic vegetation was dominant within delineated wetlands. Reed canarygrass was occasionally dominant outside the wetland boundary within the ephemeral channel. Willows, cattails, spreading bentgrass, and several rush species (all hydrophytes) were present in the ditch filled by the Edgemont foundation drain. Neither hydric soil nor wetland hydrology were present, and the preamble to the Clean Water Act specifically such sites from federal jurisdiction. The dominant plant associations can be broadly characterized as follows:

- Upland grasslands dominated by smooth brome,
- Mountain shrublands dominated by chokecherry, serviceberry, aspen, snowberry, and Woods rose,
- PEM wetlands in the ephemeral drainage bottom dominated by reed canarygrass,
- Foundation drain outflow dominated by hydrophytic shrubs, forbs, and grasses

A list of vegetation found in the assessment area and its wetland indicator status can be found in Appendix D. Vegetation on the assessment area is characteristic of that which is found on similar landscapes in the Yampa Valley.

4.4.2.3 Hydrology

The ephemeral swale on the parcel drains to Burgess Creek, then to Walton Creek, then to the Yampa River, which is a traditionally navigable waterway. While some segments of the swale do exhibit a narrow channel with bed and bank, the channel is not continuous as shown in the wetland delineation map in Appendix A. There is no continuous channel anywhere in the swale that suggests a jurisdictional non-wetland water of the US. Hydrology in the swale is supplemented by a ditch that drains snowmelt from the ski area and the condominium access ski trail to a culvert that spills into the swale. It is further altered by the ditch draining the foundation of the Edgemont Condo that also spills into the swale. Finally, the small wetland in the upper portion of the swale is located at the outlet of a culvert draining the Bear Claw condominium, so it is likely not jurisdictional either.

The 100-year floodplain at the location of the project area has been mapped by FEMA. The project area is not located within the limits of the 100-year floodplain. The conclusion of the 2007 request for an AJD was, “based on the guidance produced by the Corps following the Rapanos v. United States and Carabell v. United States decision, the small wetland, ditch segments, and swale on the project site are not jurisdictional because they do not significantly alter the chemical, physical, and biological integrity of the downstream traditionally navigable water (TNW) of the Yampa River.” Apparently, the Corps agreed with this conclusion as they relinquished jurisdiction in 2007.

Saturation within the root zone, inundation of the sample site, presence of one primary or 2 or more secondary hydrological indicators was confirmed in all sample plots located in areas mapped as wetland.

4.4.3 Interstate or Foreign Commerce

No interstate or foreign commerce was observed to be associated with aquatic resources found on the site, specifically recreation or other use by interstate or foreign travelers, sale of fish or shellfish in interstate or foreign commerce or use by industries operating in interstate or foreign commerce, was observed or documented.

5. AQUATIC RESOURCE DELINEATION SUMMARY

A total of 4,368 square feet (0.10) acres of palustrine emergent herbaceous wetlands were delineated in 2 polygons within the Project Assessment Area. The 100-year floodplain at the location of the project area has been mapped by FEMA. The project area is not located within the limits of the 100-year floodplain.

6. PROPOSED PROJECT

6.1 PROJECT DESCRIPTION

The proposed project is located on Lots 9 & 10 Ski Trail Subdivision Filing 3. Part of the property ownership includes the adjoining Outlot, and a small triangle of property at the intersection of Gondola Lane and Ski Trail Lane between Gondola Lane and Ski Trail Condominiums. Total site area is 4.25± acres.

The previously approved Edgemont project contained two large Condominium buildings. One of which was built and another was to be constructed as Edgemont Phase 2 but was never built. The existing Edgemont condominium building accesses from the upper shared Bear Claw driveway off Ski Trail Lane. The Gondola Lane Road extension from the lower part of Ski Trail Lane, (although approved with the original Edgemont approval), was never constructed. This Gondola Lane Road access will be constructed in the existing Gondola Lane City ROW that is part of the original subdivision plat and will provide public access to the Astrid site for construction of buildings 1 through building 6 and also the pool amenity building.

The current plan contains seven proposed condominium buildings and a pool amenity building with exterior swimming pool, hot tub, and surrounding heated patios. A general description of these proposed buildings is as follows:

- Building 1 will be located slope side and adjacent to and downhill from the existing Edgemont Condominium Building. This building is planned to include about 40 condominium units, common amenity areas, ski storage, ski club, fitness room, and management offices constructed within 7 levels and above 2 levels of underground parking stepped up the hillside with the existing ski slope grade. This structure will be built in concrete and steel with a flat “green roof” with exterior landscaped rooftop patio living areas.
- Building 2-4 will be located on the North and East, (uphill), side of the Gondola Lane access road and are planned to include 6 condominium units in each building with 4 stories of wood framing over a concrete underground single level parking structure. These building will have a conventional sloped roof and their amenities will be located in Building 1 and the pool building. Each of these buildings will have driveway access from Gondola Lane directly to the underground parking level.
- Building 5-6 will be located on the south and west side of the Gondola Lane access road and will include 6 condominium units in each building with 4 stories of wood framing over a concrete underground single level parking structure. These buildings will have a conventional sloped roof and their amenities will be located in Building 1 and the pool building. Building 5 will have driveway access from Gondola Lane and Building 6 vehicle access will come thru Building 5.
- The Pool Building will be located between Building 1 and Building 6 and includes a general common lounge area as well as pool restrooms. The mechanical room areas will be in the interior

with a large exterior snow melted patio surrounding an exterior pool and spa facility for the owners and guests of Building 1 thru Building 7.

- Building 7 will be located on the South side of the Edgemont access drive and is designed to include 4 condominium units with attached 2 car garages for each unit, and 4 stories of wood framing. This building will have a conventional sloped roof and their amenities will be located in Building 1 and the Pool Building. This building was designed and previously approved thru an earlier Development Plan which has now expired. The proposed plans today for Building 7 are essentially the same as the plans from the previous Development Plan application and approval.

There have been significant changes in the resort real estate market since the original Edgemont Development Plan approvals, which have driven the current project design changes to multiple smaller buildings that provide for the ability to phase the vertical construction. These smaller buildings also allow for better view opportunities between the buildings.

A Private Road to be constructed within the existing Gondola Lane ROW will provide access to the buildings 1 thru building 6 and also the pool building. Construction of this road by the developer, will require removal of a portion of the Ski Inn parking lot which currently encroaches into the Gondola Lane Road ROW. The reconstruction of this parking lot is part of this application, and the design and construction will be paid for by The Astrid developer. The Private Road will have grades of 4% - 10 % with the steeper road grades located on the straight sections of the road. A fire department emergency vehicle turnaround will be provided at the end of the road. Ski access will be maintained in an easement along The Astrid's Southwest property line for the neighboring properties.

The Astrid buildings will enhance and complement the mix of resort multifamily structures and activities present in the immediate vicinity by providing new buildings with pedestrian circulation, skier access, and a newly landscaped area. The site plan layout with smaller buildings spread out on the site and the resort multi-family use, will minimize the any adverse impacts on surrounding properties.

6.2 AQUATIC RESOURCE IMPACTS

The proposed project would result in total disturbance to wetland of 2,326 square feet. As shown in the drawings (Appendix B) the disturbance will be a result of cut and fill to build the road providing access to the Astrid development. The impact is unavoidable as it is the only practicable access to the site.

6.3 MITIGATION

The applicant is not proposing any mitigation since the Corps relinquished jurisdiction on these wetlands in 2007, and also since the total wetland impact is less than 1/10 acre.

7. REFERENCES

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss.

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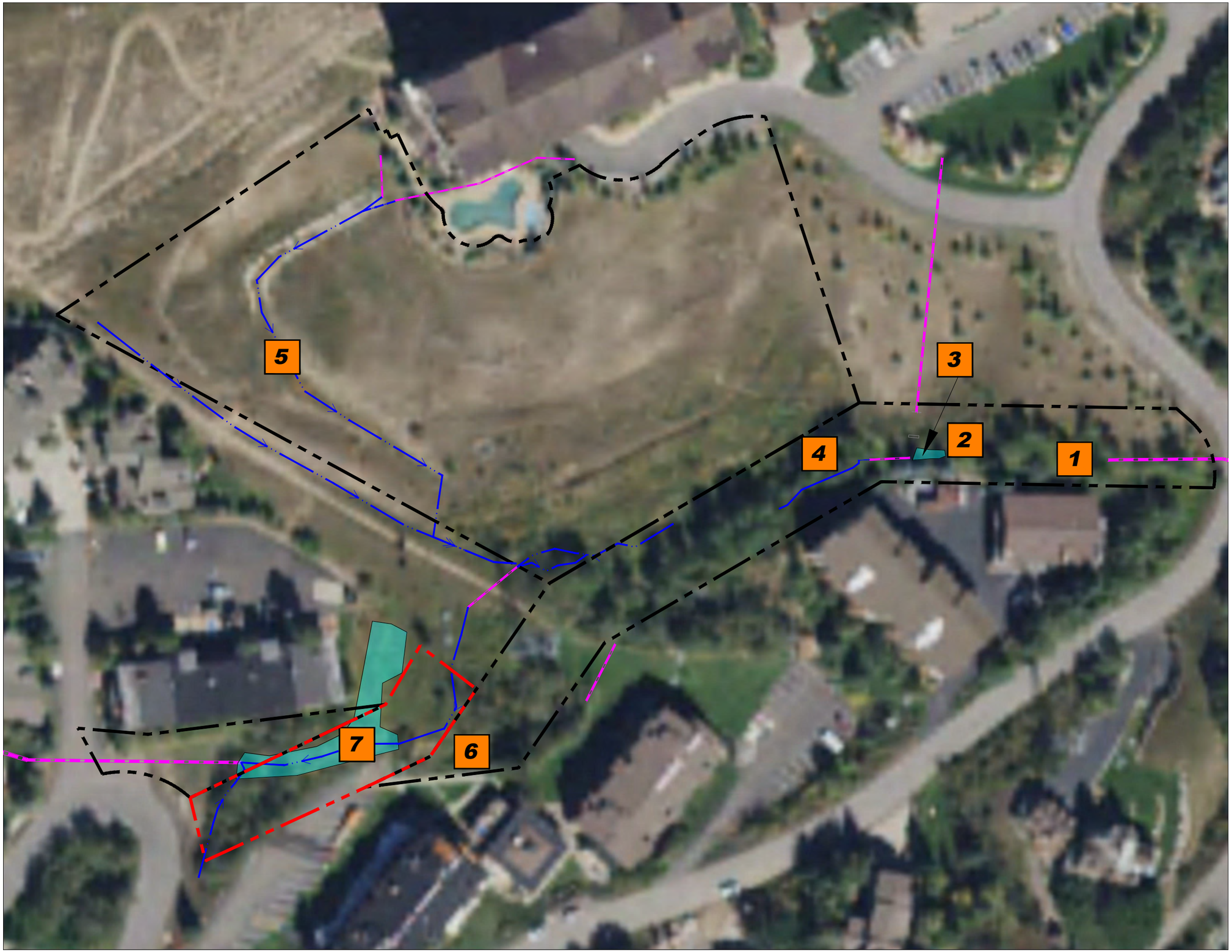
U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers 2018. National Wetland Plant List, version 3.4. http://wetland-plants.usace.army.mil. U.S. Army Corps of Engineers Engineer Research and Development Center Cold Regions Research and Engineering Laboratory, Hanover, NH.

APPENDIX A – AQUATIC RESOURCE DELINEATION MAP



WETLAND

1 SAMPLE POINT

CULVERT

DITCH/CHANNEL

PARCEL BNDRY

CITY ROAD R-O-W

N

Horizontal Scale

70' 0 35'

1" = 70'

THE ASTRID

AQUATIC RESOURCE DELINEATION

Western Bionomics, LLC
Natural Resource Management Services
31040 WILLOW LANE STEAMBOAT SPRINGS, CO 80487 970-846-8223

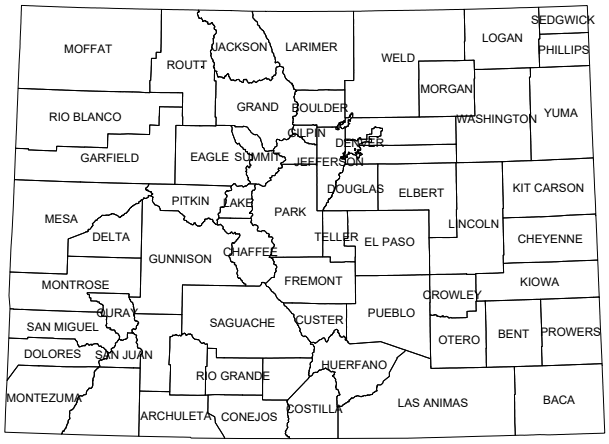
Date: XXXXXXXX | Drawn: KC | Delineated: KC

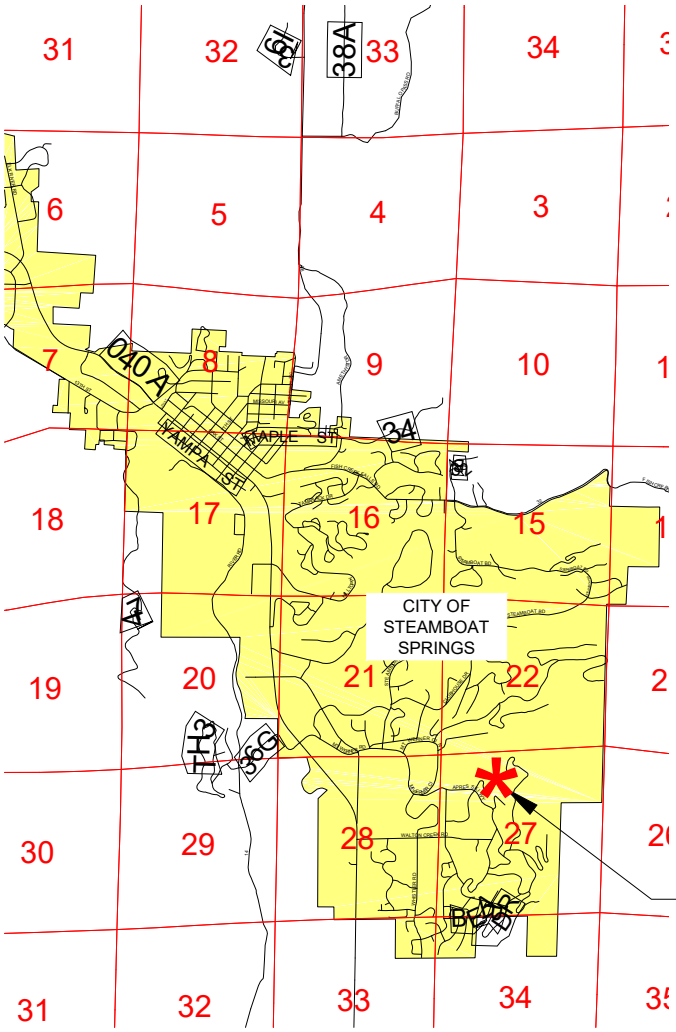
SHEET NO. 1 OF 1

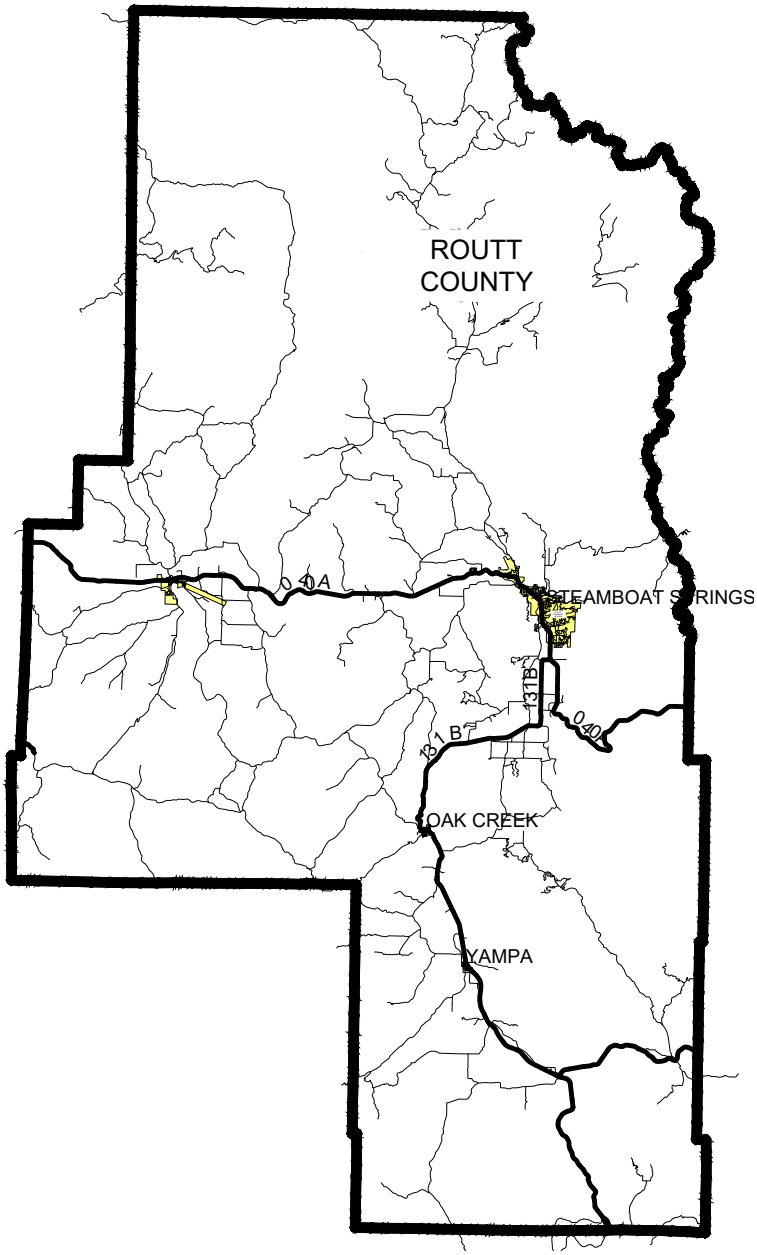
REVISIONS

No.	Item	Date

APPENDIX B – SUPPORTING MAPS

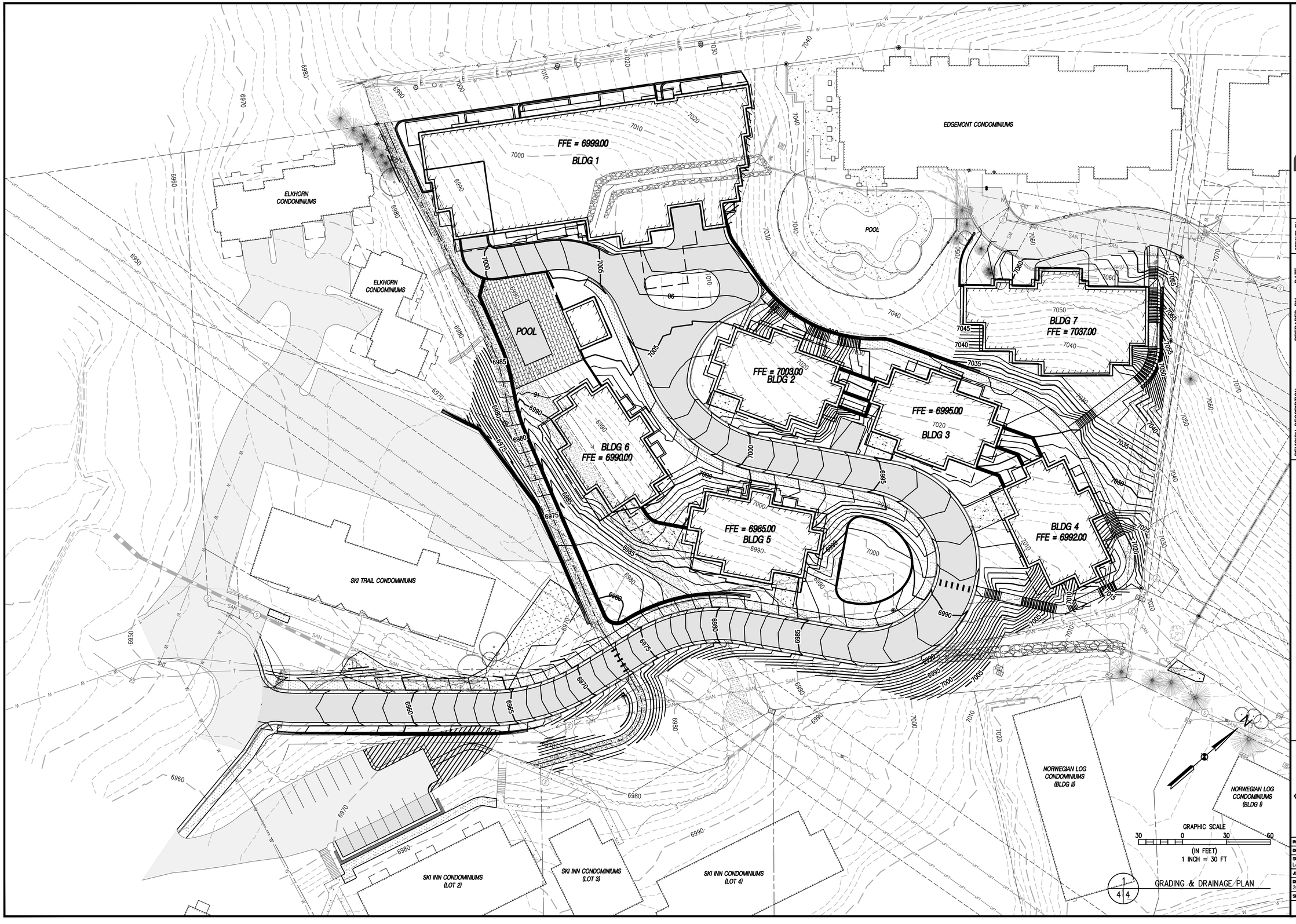






PROJECT LOCATION

THE ASTRID	VICINITY MAP	*Western Bionomics Inc.* *Natural Resource Management Services* 31040 WILLOW LANE STEAMBOAT SPRINGS, CO 80487 970-846-8223	SHEET NO. 1 OF 1 REVISIONS No. / Item / Date



BASELINE
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1169 HILLTOP PKWY, SUITE 204 • STEAMBOAT SPRINGS, CO 80477
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DESIGNED BY	DRAWN BY	CHECKED BY
TJM	TJM	MRB

REVISION	DESCRIPTION	PREPARED BY	DATE

STEAMBOAT ESQUIAR LP

STEAMBOAT SPRINGS ROUTT COUNTY

ASTRID SITE DEVELOPMENT

2410 SKI TRAIL LANE

GRADING & DRAINAGE PLAN

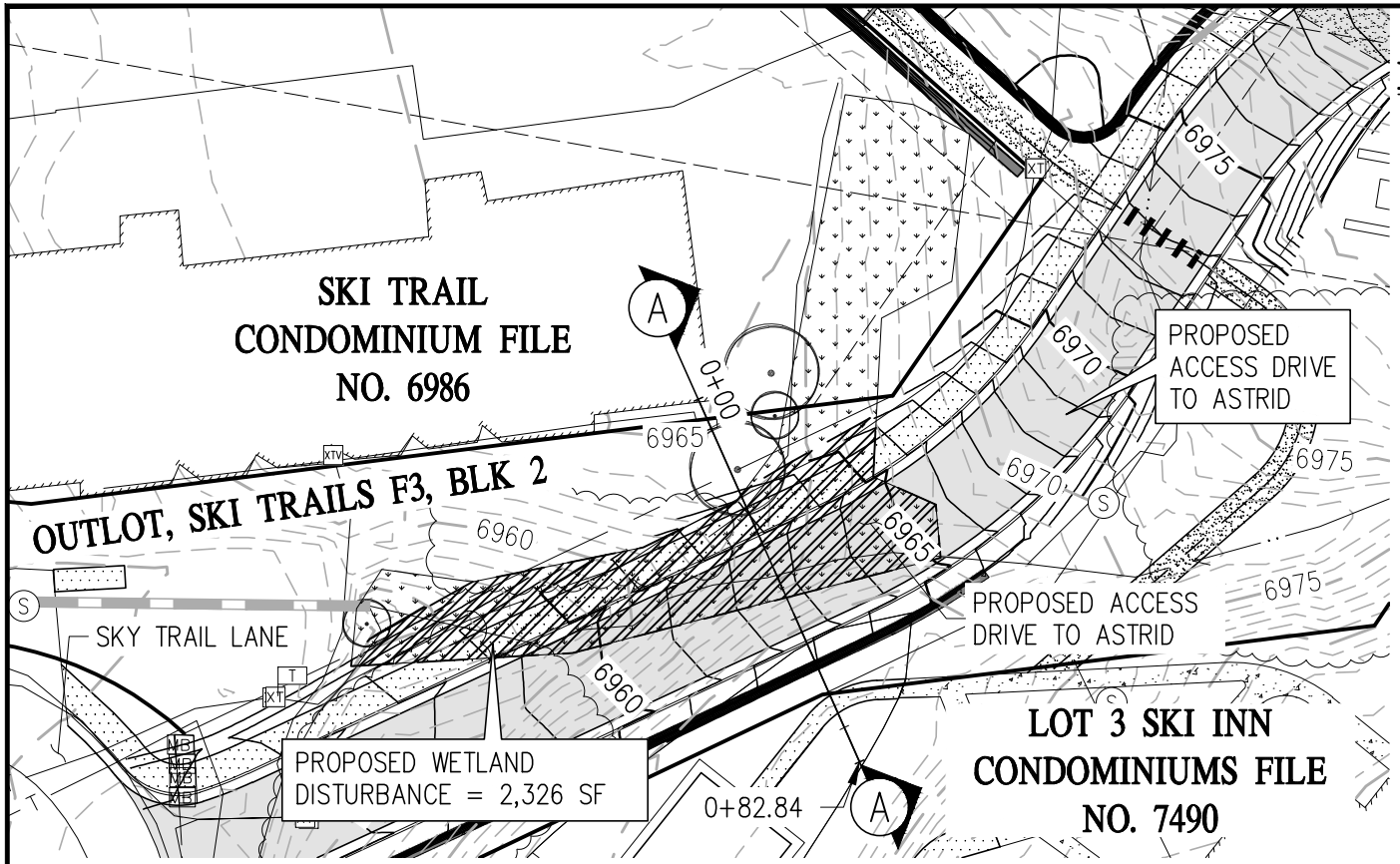
PREPARED UNDER THE DIRECT SUPERVISION OF

PRELIMINARY NOT FOR CONSTRUCTION

FOR AND ON BEHALF OF BASELINE CORPORATION

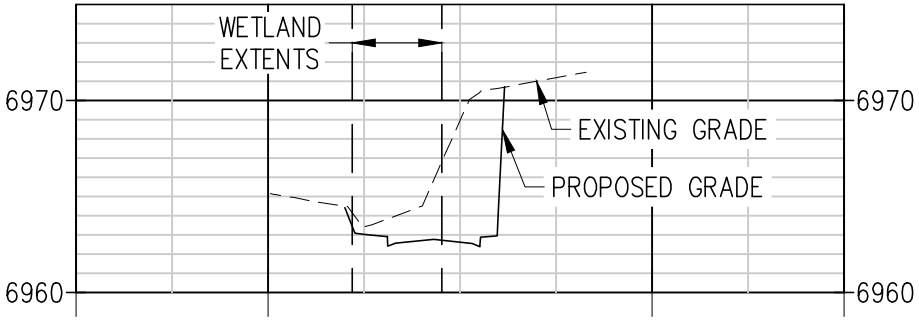
INITIAL SUBMITTAL	XX/XX/XX
DRAWING SIZE	22" X 34"
SURVEY FIRM	LANDMARK, INC
SURVEY DATE	06/03/22
JOB NO.	C020235
DRAWING NAME	20235 GRADING & DRAINAGE PLAN.dwg
SHEET ———— OF	XX

4

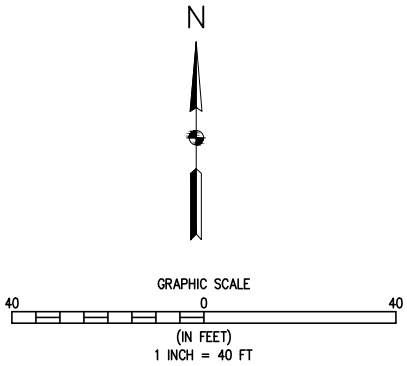


NOTES:

1. PROPOSED 54 CY FILL IN THE WETLANDS
2. PROPOSED 75 CY CUT IN THE WETLANDS



SECTION A-A: WETLANDS CROSS SECTION



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REVISION DESCRIPTION	PREPARED BY	DATE

DESIGNED BY	LAR
DRAWN BY	LAR
CHECKED BY	MRB

STEAMBOAT ESQUIAR LP

CITY OF STEAMBOAT SPRINGS — ROUTT COUNTY

ASTRID SITE DEVELOPMENT

2410 SKI TRAIL LANE

WETLAND DISTURBANCE EXHIBIT

INITIAL SUBMITTAL	12/08/22
DRAWING SIZE	8.5" X 11"
SURVEY FIRM	LANDMARK
SURVEY DATE	11/10/22
JOB NO.	C020235
DRAWING NAME	20235-Wetland Disturbance.dwg
SHEET	01 OF 01

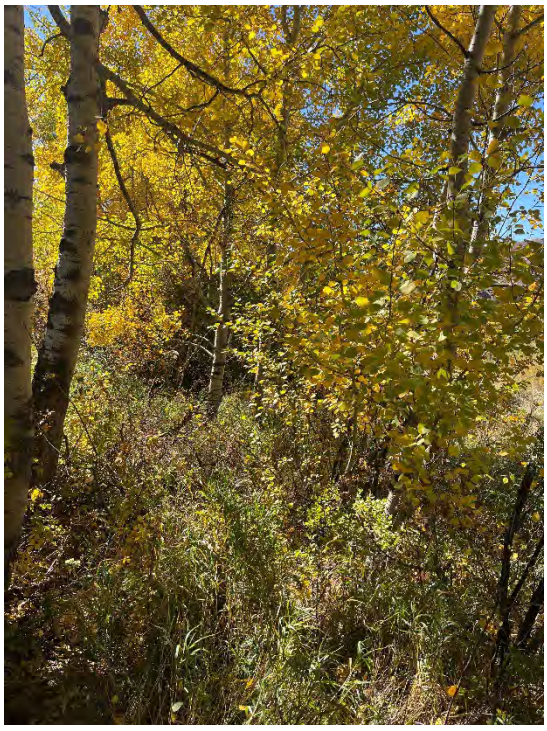
EXH01

APPENDIX C – PHOTOGRAPHS

Plot 1

Plot 2

Plot 3



Plot 4

Photograph from drainage bottom facing uphill towards Edgemont Condominium and Plot 5, which is located in the rock-lined foundation drain outfall visible starting from Edgemont and traveling downhill.

Plot 6

Plot 7

APPENDIX D – PLANT LIST

Table 2. List of Plants on the Property, including Western Mountains, Valleys, and Coast wetland indicator status [A]				
Accepted Symbol	Scientific Name	Common Name	Wetland Indicator Status	
			WMVC Region	AW Region
AGST2	Agrostis stolonifera	Spreading Bent	FAC	FACW
ALPR3	Alopecurus pratensis	Field Meadow-Foxtail	FAC	FACW
AMAL2	Amelanchier alnifolia	Saskatoon Serviceberry	FACU	FACU
BRIN2	Bromus inermis	Smooth Brome	FAC	FACU
CIAR4	Cirsium arvense	Canadian Thistle	FAC	FACU
ELPA3	Eleocharis palustris	Common Spike-Rush	OBL	OBL
EPCI	Epilobium ciliatum	Fringed Willowherb	FACW	FACW
JUCO2	Juncus confusus	Colorado Rush	FAC	FAC
JUEN	Juncus ensifolius	Three Stamen Rush	FACW	FACW
PHAR3	Phalaris arundinacea	Reed Canary Grass	FACW	FACW
POCO	Poa compressa	Flat-Stem Blue Grass	FACU	FACU
POTR5	Populus tremuloides	Quaking Aspen	FACU	FACU
PRVI	Prunus virginiana	Chokecherry	FACU	FAC
PTAQ	Pteridium aquilinum	Northern Bracken Fern	FACU	FACU
ROWO	Rosa woodsii	Woods' Rose	FACU	FACU
RUCR	Rumex crispus	Curly Dock	FAC	FAC
SAEX	Salix exigua	Sandbar Willow	FACW	FACW
SALUL	Salix lasiandra	Whiplash Willow	FACW	FACW
SOSC2	Sorbus scopulina	Mountain Ash	FACU	FACU
SYAL	Symphoricarpos albus	Common Snowberry	FACU	UPL
TYLA	Typha latifolia	Broad-Leaf Cat-Tail	OBL	FACU

[A] U.S. Army Corps of Engineers 2021. National Wetland Plant List, version 3.5. http://wetland-plants.usace.army.mil/

APPENDIX E – NRCS SOIL REPORT

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Routt Area, Colorado, Parts of Rio Blanco and Routt Counties

December 9, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map (The Astrid)

Map Scale: 1:1,530 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Routt Area, Colorado, Parts of Rio Blanco and Routt Counties
Survey Area Data: Version 12, Sep 7, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 2, 2021—Aug 25, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (The Astrid)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
50F	Routt loam, 25 to 65 percent slopes, very stony	4.7	100.0%
Totals for Area of Interest		**4.7**	**100.0%**

Map Unit Descriptions (The Astrid)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Routt Area, Colorado, Parts of Rio Blanco and Routt Counties

50F—Routt loam, 25 to 65 percent slopes, very stony

Map Unit Setting

National map unit symbol: k0gc
Elevation: 6,890 to 8,200 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Routt, very stony, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Routt, Very Stony

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A1 - 1 to 12 inches: loam
A2 - 12 to 22 inches: loam
A3 - 22 to 27 inches: loam
B/E - 27 to 29 inches: clay loam
B/E - 29 to 31 inches: loam
Bt1 - 31 to 46 inches: clay
Bt2 - 46 to 65 inches: clay

Properties and qualities

Slope: 25 to 65 percent
Surface area covered with cobbles, stones or boulders: 1.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C

Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Minor Components

Slater

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F048AY449CO - Aspen Woodland
Other vegetative classification: ASPEN (null_3)
Hydric soil rating: No

Impass

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048BY296CO - Claypan
Hydric soil rating: No

Venable

Percent of map unit: 5 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

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APPENDIX F – FIELD DATA SHEETS

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: ASTRID City/County: SS/RT Sampling Date: 10-14-22

Applicant/Owner: STABT ESQUIVEL State: CO Sampling Point: 1

Investigator(s): KC Section, Township, Range: _____

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

Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ 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 _____	No ✓	Is the Sampled Area within a Wetland? Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. POTR5	10	✓	FAC
2.			
3.			
4.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: _____)			
1. ROWO	10	✓	FACU
2. SVC BRY AMAL2	30	✓	
3. MTN ASH SOSC2	5		
4.			
5.			
= Total Cover			

Herb Stratum (Plot size: _____)			
1. BRIN	70	✓	FACU
2. BRACKEN PTAQ	30	✓	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
= Total Cover			

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
= Total Cover			

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20 (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:

- ___ 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)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

Sampling Point: 1

SOIL

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
10	10YR 3/2						LOAm	

[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)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

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)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- NR Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

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:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: ASNRID City/County: SS/RT Sampling Date: 10-14-22

Applicant/Owner: State: CO Sampling Point: 2

Investigator(s): KC Section, Township, Range:

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

Subregion (LRR): Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ 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 ✓ No ____	Is the Sampled Area within a Wetland? Yes ____ No ✓
Hydric Soil Present?	Yes ____ No ✓	
Wetland Hydrology Present?	Yes ____ No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: ____)			
1. PHAR3	100	✓	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	= Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or 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:

- ___ 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)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: 2

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
10	10YR2/2							

[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)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

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)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- NL Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

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:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: ASTRID City/County: SS/RT Sampling Date: 10-14-22

Applicant/Owner: _____ State: CO Sampling Point: 3

Investigator(s): KC Section, Township, Range: _____

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

Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ 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 ✓ No _____	Is the Sampled Area within a Wetland? Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. PHAR3	100	✓	FACW
2. MARSH WILLOW EPCI	2		FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	_____ = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or 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:

- ___ 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)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: 3

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
10	10YR 3/1		✓				CL	

[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)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

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)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ✓ No ___ Depth (inches): SFC

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:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: ASTRID City/County: SS/RT Sampling Date: 10-14-22

Applicant/Owner: _____ State: CO Sampling Point: 4

Investigator(s): KC Section, Township, Range: _____

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

Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ 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 _____	No ✓	Is the Sampled Area within a Wetland? Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. POTR5	15	✓	FAC
2.			
3.			
4.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: _____)			
1. MTN MAPLE SOSC	10		FACW
2. CHOKE PRVI	10		
3. SNOWB SYAL	30	✓	
4. ROWO	20	✓	
5. SVC BRY AMAL2	5		
	= Total Cover		

Herb Stratum (Plot size: _____)			
1. BRIN	90	✓	FACW
2. MARSH WILLOW EPCI	10		FACW
3. CIAR4	5		FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	= Total Cover		

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (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:

- ___ 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)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: 4

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
10	10YR2/1						LOAM	

[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)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

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)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

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:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: ASTRID City/County: SS / RT Sampling Date: 10-14-22

Applicant/Owner: State: CO Sampling Point: 5

Investigator(s): KC Section, Township, Range:

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

Subregion (LRR): Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ 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 ✓ No	Is the Sampled Area within a Wetland? Yes No ✓
Hydric Soil Present?	Yes No ✓	
Wetland Hydrology Present?	Yes ✓ No	

Remarks: FOUNDATION DRAIN & UPLAND DITCH

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1. SAEX	5	✓	FACW
2. SALA	7	✓	OBL
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. BULRUSH SCMI2	5		OBL
2. 3-STAMEN JUGE	10		FACW
3. AGSP	15	✓	FACW
4. JUCO	10		FAC
5. TYLA	40	✓	OBL
6. SPIKE RUSH ELPA3	10		OBL
7. POCO	10		FACW
8.			
9.			
10.			
11.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (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:

- ___ 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)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ✓ No

Remarks:

SOIL

Sampling Point: 5

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

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

[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)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

EXCAVATED TO SUBSOIL. NOT DEPLETED MATRIX.

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)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ✓ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

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:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: ASTRID City/County: SS/RT Sampling Date: 10-14-22

Applicant/Owner: _____ State: CA Sampling Point: 6

Investigator(s): _____ Section, Township, Range: _____

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

Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ 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 ✓ No _____	Is the Sampled Area within a Wetland? Yes _____ No ✓
Hydric Soil Present?	Yes _____ No ✓	
Wetland Hydrology Present?	Yes _____ No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. ALPR3	80	✓	FAC
2. DOCK RUCR	10		FAC
3. CIAR4	10		FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	_____ = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (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:

___ 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)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: 6

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
10	10YR 3/1						LOAM	

[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)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

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)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

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:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: ASTRID City/County: SS/RT Sampling Date: 10-17-22

Applicant/Owner: _____ State: ID Sampling Point: 7

Investigator(s): KC Section, Township, Range: _____

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

Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ 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 ✓ No _____	Is the Sampled Area within a Wetland? Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: _____)			
1. PHAR3	100	✓	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	= Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or 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:

___ 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)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: 7

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
10	10YR 3/1		7.5YR 4/4	8	C	M	Loam	

[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)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

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)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

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): 6"

Wetland Hydrology Present? Yes ✓ No ___

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

Remarks:

APPENDIX G – IPAC LIST

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Western Colorado Ecological Services Field Office
445 West Gunnison Avenue, Suite 240
Grand Junction, CO 81501-5711
Phone: (970) 628-7180 Fax: (970) 245-6933

In Reply Refer To:
Project Code: 2023-0025474
Project Name: Astrid

December 14, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Western Colorado Ecological Services Field Office
445 West Gunnison Avenue, Suite 240
Grand Junction, CO 81501-5711
(970) 628-7180

Project Summary

Project Code: 2023-0025474
Project Name: Astrid
Project Type: New Constr - Above Ground
Project Description: Condominium construction
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.45694445,-106.7999924436063,14z

Counties: Routt County, Colorado

Endangered Species Act Species

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Canada Lynx *Lynx canadensis* Population: Wherever Found in Contiguous U.S. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3652	Threatened
Gray Wolf *Canis lupus* Population: U.S.A.: All of AL, AR, CA, CO, CT, DE, FL, GA, IA, IN, IL, KS, KY, LA, MA, MD, ME, MI, MO, MS, NC, ND, NE, NH, NJ, NV, NY, OH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, and WV; and portions of AZ, NM, OR, UT, and WA. Mexico. There is **final** critical habitat for this species. This species only needs to be considered under the following conditions: ▪ Lone, dispersing gray wolves may be present throughout the state of Colorado. If your activity includes a predator management program, please consider this species in your environmental review. Species profile: https://ecos.fws.gov/ecp/species/4488	Endangered

Birds

NAME STATUS

Mexican Spotted Owl *Strix occidentalis lucida* Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/8196

Yellow-billed Cuckoo *Coccyzus americanus* Threatened

Population: Western U.S. DPS
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/3911

Fishes

NAME STATUS

Bonytail *Gila elegans* Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/1377

Colorado Pikeminnow *Ptychocheilus lucius* Endangered

Population: Wherever found, except where listed as an experimental population
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/3531

Humpback Chub *Gila cypha* Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/3930

Razorback Sucker *Xyrauchen texanus* Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
This species only needs to be considered under the following conditions:

- Water depletions in the upper Colorado River basin adversely affect this species and its critical habitat. Effects of water depletions must be considered even outside of occupied range.

Species profile: https://ecos.fws.gov/ecp/species/530

Insects

NAME STATUS

Monarch Butterfly *Danaus plexippus* Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Dec 1 to Aug 31
Black Rosy-finch *Leucosticte atrata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9460	Breeds Jun 15 to Aug 31

NAME	BREEDING SEASON
Black Swift *Cypseloides niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Brown-capped Rosy-finch *Leucosticte australis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 15 to Sep 15
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
Cassin's Finch *Carpodacus cassinii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15
Clark's Nutcracker *Nucifraga columbiana* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Jan 15 to Jul 15
Evening Grosbeak *Coccothraustes vespertinus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Aug 10
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Pinyon Jay *Gymnorhinus cyanocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9420	Breeds Feb 15 to Jul 15
Virginia's Warbler *Vermivora virginiae* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9441	Breeds May 1 to Jul 31
Western Grebe *aechmophorus occidentalis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the

FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point

within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report
The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no

data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPaC User Contact Information

Agency: Army Corps of Engineers
Name: Kelly Colfer
Address: 31040 Willow Lane
City: Steamboat Springs
State: CO
Zip: 80487
Email kscolfer@westernbionomics.com
Phone: 9708468223

APPENDIX H – OAHP FILE SEARCH RESULTS

APPENDIX I – 2007 CORPS' VERIFICATION LETTER

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

October 31, 2007

Regulatory Branch (SPK-2007-1323)

Garrett Simon
The Atira Group
1120 S. Lincoln Ave., Suite F
PO Box 880693
Steamboat Springs, CO 80488

Dear Mr. Simon:

We are responding to your consultant's request for an approved jurisdictional determination for the Ski Trail Subdivision Project. This approximately 5.3-acre site is located at Lot 9 and 10 and a 1.41 acre Out-lot, within Section 29, Township 6 North, Range 84 West, 6th PM, City of Steamboat Springs, Routt County, Colorado.

Based on available information, we concur with the estimate of waters of the United States, as depicted on the July 2007, Figure 2. Wetland Map Lots 9 & 10 and Adjacent Out-lot Ski Trail Subdivision drawing prepared by Western Ecological Resource, Incorporated. Approximately 0.19 acre of wetlands are present within the survey area. These waters are not regulated under Section 404 of the Clean Water Act, or Section 10 of the Rivers and Harbors Act, since they are isolated interstate, non-navigable wetlands and do not have a significant nexus to Traditional Navigable Waters.

This verification is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This letter contains an approved jurisdictional determination for your subject site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331.

A Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form is enclosed. If you request to appeal this determination you must submit a completed RFA form to the South Pacific Division Office at the following address: Administrative Appeal Review Officer, Army Corps of Engineers, South Pacific Division, CESPD-PDS-O, 1455 Market Street, San Francisco, California 94103-1399, Telephone: 415-503-6574, FAX: 415-503-6646.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the NAP. Should you decide to submit an RFA form, it must be received at the above address by 60 days from the date of this letter. It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this letter.

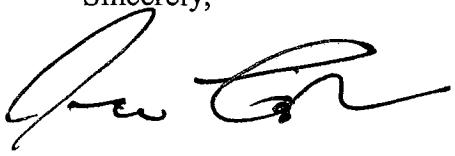
You should provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

This determination has been conducted to identify the limits of Corps of Engineers' Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

We appreciate your feedback. At your earliest convenience, please complete our customer survey at *http://www.spk.usace.army.mil/customer_survey.html*. Your passcode is "yastrzemski".

Please refer to identification number SPK-2007-1323 in any correspondence concerning this project. If you have any questions, please contact Nathan Green at the Colorado/Gunnison Basin Regulatory Office, 400 Rood Avenue, Room 142, Grand Junction, Colorado 81501-2563, email *nathan.j.green@usace.army.mil*, or telephone (970) 243-1199 extension 12. For further information on our program you may use our website: *www.spk.usace.army.mil/regulatory.html*.

Sincerely,



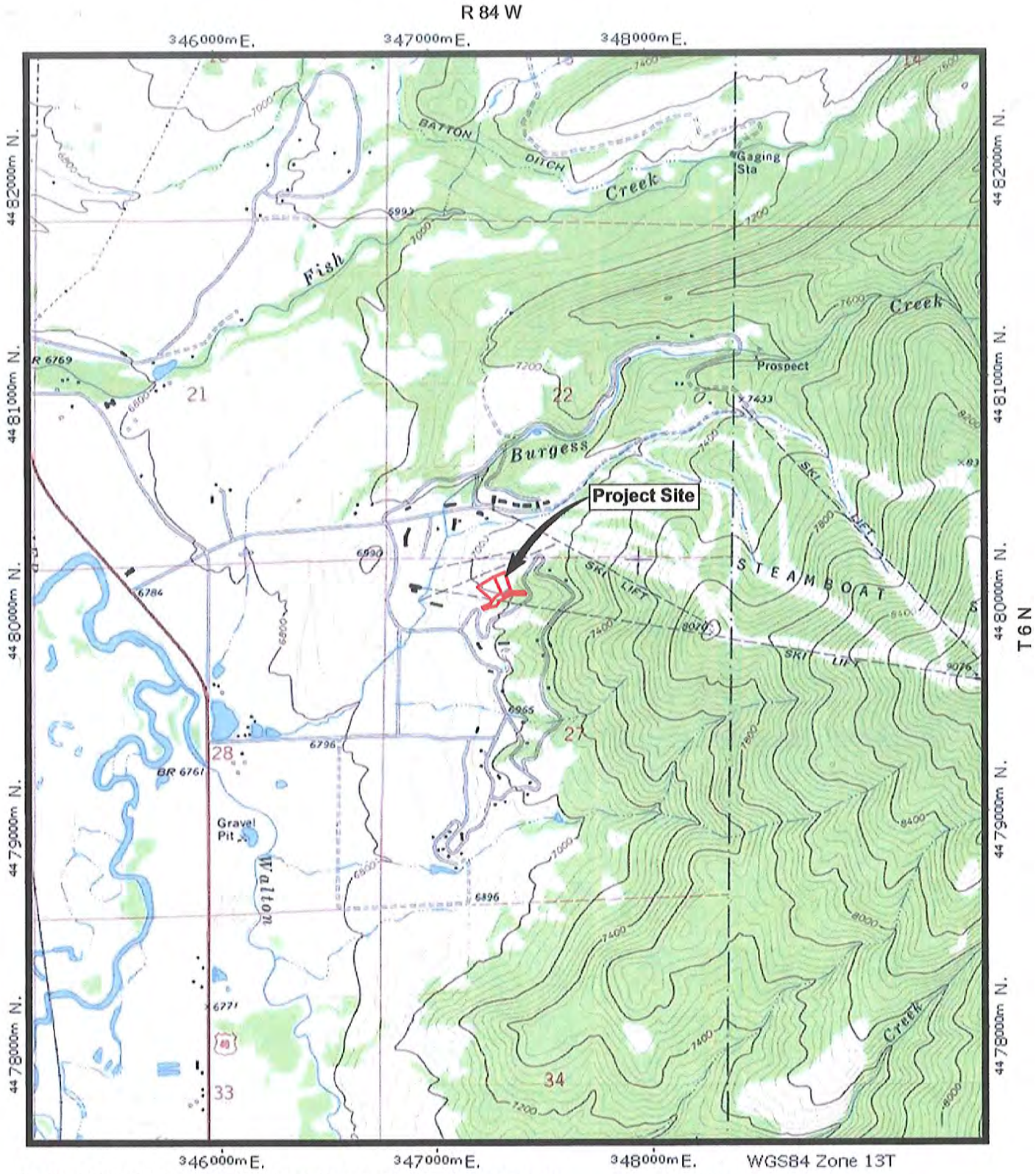
Jason Gipson,
Acting Chief, Intermountain Regulatory Section

Enclosures

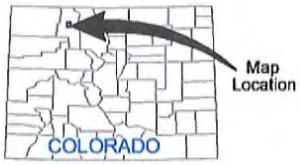
Green
Gipson
10/31/07

Copy furnished without enclosures:

Mr. David Johnson, Western Ecological Resource, Incorporated, 711 Walnut Street, Boulder, Colorado 80302
City of Steamboat Springs Planning Services, 124 10th Street, P.O. Box 775088, Steamboat Springs, CO 80477-5088



BASE: USGS 7.5 Minute Steamboat Springs Colorado Quadrangle
Photorevised: 1969



WESTERN ECOLOGICAL RESOURCE, INC.
711 Walnut Street • Boulder, CO 80302

N

Figure 1.
Project Location Map
Lots 9 & 10 and Adjacent Outlot
Ski Trail Subdivision

Scale 1" = 2000'
Contour Interval = 40'

Figure 2.
Revised Wetland Map*
Lots 9 & 10 and Adjacent Outlot
Ski Trail Subdivision

Legend:

- Jurisdictional Wetlands
- Non-Jurisdictional Wetlands
- Jurisdictional Swale
- Jurisdictional Ditch
- Non-Jurisdictional Ditch
- Existing Sewer Line
- Culverts
- Project Boundary

*Wetland Map revised May 22, 2007 based on field meeting with Nathan Green of the U.S. Army Corps of Engineers on May 10, 2007.

Date: July 2007
Scale: 1 in = 50 ft
Contour Interval = 2 ft

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: **Garrett Simon**	File Number: **SPK-200701323**	Date: **31-Oct-2007**
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
→→	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the DISTRICT Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the DISTRICT Engineer. Your objections must be received by the DISTRICT Engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the DISTRICT Engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the DISTRICT Engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the DISTRICT Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the DIVISION Engineer. This form must be received by the DIVISION Engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the DIVISION Engineer. This form must be received by the DIVISION Engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the DIVISION Engineer. The appeal form must be received by the DIVISION Engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

US Army Engineer District, Sacramento
Jason Gipson
Chief, Intermountain Regulatory Section
533 West 2600 South, Suite 150
Bountiful, UT 84010

(801) 295-8380

If you only have questions regarding the appeal process you may also contact:

Administrative Appeal Review Officer
Army Engineer Division, South Pacific, CESPD-PDS-O
1455 Market Street, San Francisco, CA 94103-1399
(415-503-6574)

(NOTE: This is also the address to which an appeal addressed to the DIVISION Engineer would be mailed.)

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

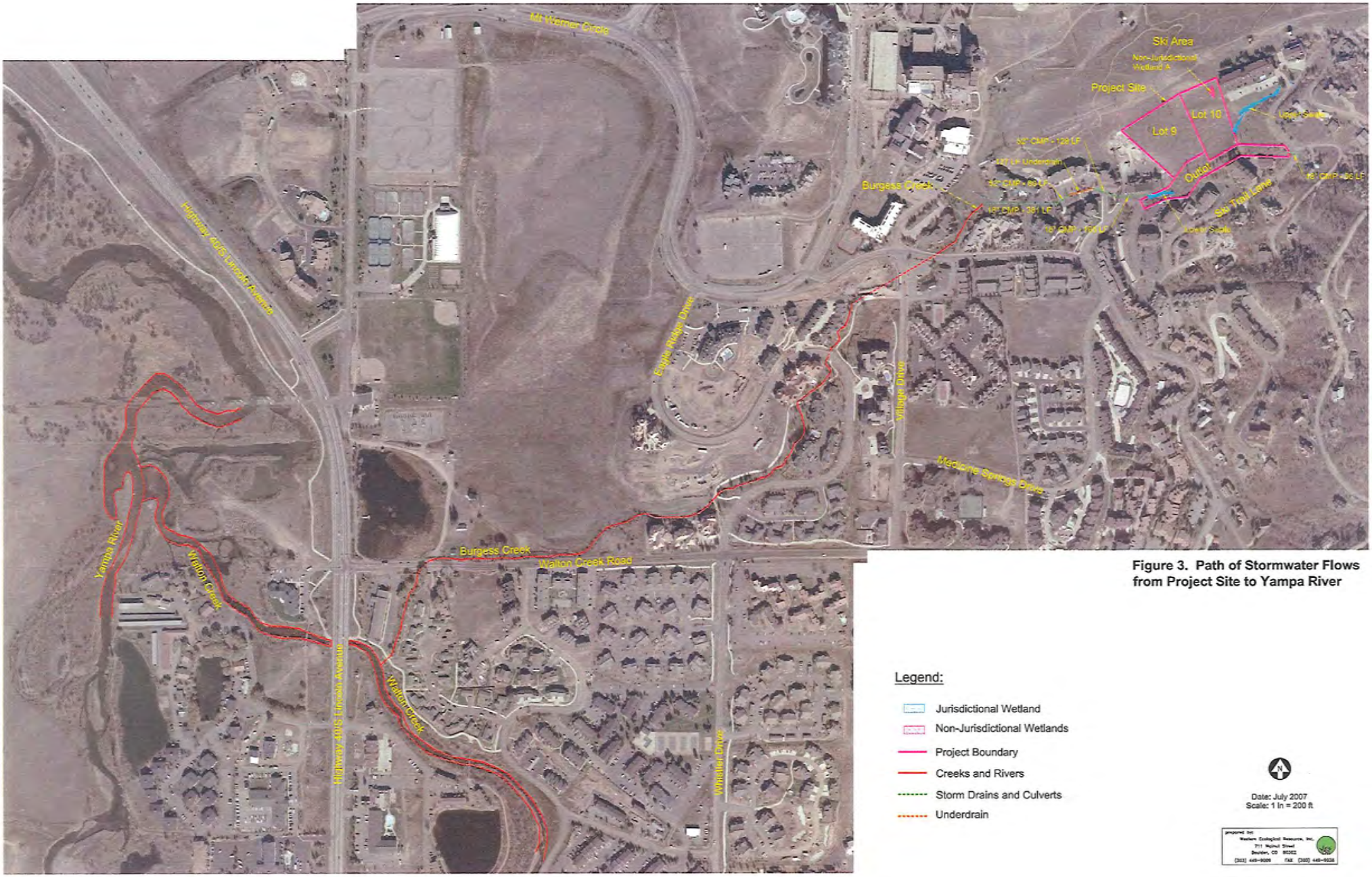


Figure 3. Path of Stormwater Flows from Project Site to Yampa River

APPENDIX J – FOIA INFORMATION

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): July 31, 2007

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Ski Trail Subdivision, 2007-1323

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State:Colorado County/parish/borough: Routt City: Steamboat Springs
Center coordinates of site (lat/long in degree decimal format): Lat. 40.45757° N, Long. -106.79967° W.
Universal Transverse Mercator:
Name of nearest waterbody: Burgess Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Yampa River
Name of watershed or Hydrologic Unit Code (HUC): 14050001
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☒ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: 7/25/07
☒ Field Determination. Date(s): 5/10/07

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☒ TNWs, including territorial seas
      ☒ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: approximately 173 miles or 914984 linear feet: varies width (ft) and/or acres.
      Wetlands: not estimated acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Not established at this time.**
      Elevation of established OHWM (if known):Varies.

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: .

---

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: **Yampa River.**

Summarize rationale supporting determination: The Yampa River, from the Lake Catamount Dam to the confluence with the Green River is currently used for navigation and interstate comerce. There are at least 20 rafting/kayaking outfitters and a minimum of 13 guided fly fishing outfitters that operate on the Yampa River. We have compiled a list of these companies after a brief internet search.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": There are wetlands directly abutting the Yampa River, but this Jurisdictional Determination does not specifically address individual wetlands along this river.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: **acres**
Drainage area: **acres**
Average annual rainfall: 23.4 inches
Average annual snowfall: 165.0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.
☐ Tributary flows through **3** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW[5]: Water flows from the site through approximately 1800 linear feet of culverts and stormwater drains into Burgess Creek, a perennial RPW; which flows into Walton Creek, another perennial RPW, which flows to the Yampa River, a perennial tributart to the Green River, a TNW.
Tributary stream order, if known: 1.

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: There is one natural drainage at the northeast portion of the property. However, the drainage turns into an upland swale prior to entering the next tributary. This drainage is fed by run-off through a culvert, and likely by lawn irrigation from the condominium up on the hill. There are two man-made ditches conveying water from the site. One of them has a discontinuous bed and bank, broken by upland areas. The other one is mostly an upland swale, though the end of it, about 110 feet, has a defined bed and bank, but is lined with erosion control fabric.
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):
☐ Silts ☐ Sands ☐ Concrete
☐ Cobbles ☐ Gravel ☐ Muck
☐ Bedrock ☐ Vegetation. Type/% cover:
☐ Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: none.
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): 11 %

(c) Flow:
Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: Area drains snowmelt runoff and rain events.
Other information on duration and volume: .

Surface flow is: **Pick List.** Characteristics: Surface flow is only confined in the areas where the ditches are present. There are many areas that are connected by overland flow through upland vegetation.

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):
☐ clear, natural line impressed on the bank ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
☐ High Tide Line indicated by: ☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects ☐ survey to available datum;
☐ fine shell or debris deposits (foreshore) ☐ physical markings;
☐ physical markings/characteristics ☐ vegetation lines/changes in vegetation types.

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[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
[6] A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7] Ibid.

☐ tidal gauges
☐ other (list):

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: The water observed during the on-site visit was clear and much of it seemed to be filtered through both wetland and upland vegetation.

Identify specific pollutants, if known: Any pollution on site would likely be from storm water run-off from the surrounding parking lots .

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☐ Wetland fringe. Characteristics: Palustrine emergent.
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size:0.19 acres

Wetland type. Explain: Palustrine Emergent.

Wetland quality. Explain: The wetlands are all herbaceous. There is a small shrub componant just before the water leaves the site into a culvert. Overall wetland quality would be considered moderate to low.

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: Water on the site comes from snowmelt and from discrete rain events.

Surface flow is**: Pick List**

Characteristics: Surface flow is only confined in the areas where the ditches are present. There are many areas that are connected by overland flow through upland vegetation.

Subsurface flow: **Pick List**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: Herbaceous cover of about 95%, the lower wetland has a willow/shrub componant.
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately (0.19) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☒ TNWs: pproximately 173 miles or 914984 linear feet width (ft), Or, acres.
   - ☒ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

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[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: **There is no significant nexus between these wetlands and the Yampa River (see Section C.2. above).**
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☒ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name:1:24,000 Steamboat Springs Quad.
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):Natural Vue/i3 Nationwide Prime - Source ORM 2.
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify): Internet search to determine any interstate commerce connections.

B. ADDITIONAL COMMENTS TO SUPPORT JD: The Yampa River is used for private and commercial rafting and kaying, and for private and guided fishing trips. A list of some of the rafting and fishing outfitters is in the attachment entitled "Yampa River Interstate Commerce". There are also many public access boat ramps, to allow Colorado Residents, as well as visitors to access the River for rafting and fishing. This Jurisdictional Determination extends to the base of Lake Catamount Dam south of the City of Steamboat Springs. It is likely that Stagecoach Reservoir, upstream of Lake Catamount, would also be considered a TNW but that will be covered on a future Jurisdictional Determination.

Isolated

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): July 31, 2007

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Ski Trail Subdivision, 2007-1323

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State:Colorado County/parish/borough: Routt City: Steamboat Springs
Center coordinates of site (lat/long in degree decimal format): Lat. 40.45757° N, Long. -106.79967° W.
Universal Transverse Mercator:
Name of nearest waterbody: Burgess Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Yampa River
Name of watershed or Hydrologic Unit Code (HUC): 14050001
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☒ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: 7/25/07
☒ Field Determination. Date(s): 5/10/07

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☒ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Pick List**
      Elevation of established OHWM (if known):

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

2. **Non-regulated waters/wetlands (check if applicable):**[3]

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **Wetland A is a small wetland (0.03 ac.), high on a hill. This wetland is considered to be an intrastate, isolated wetland with no apparent interstate connection. There is a lack of evidance of surface or subsurface hydrologic conectivity to Burgess Creek, the nearest RPW to the site. This wetland is withinin a depression of an irrigated lawn.**

[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW: .

   Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

   (i) General Area Conditions:
   Watershed size: 81 **acres**
   Drainage area: <1 **acres**
   Average annual rainfall: 23.4 inches
   Average annual snowfall: 165.0 inches

   (ii) Physical Characteristics:
   (a) Relationship with TNW:
   ☐ Tributary flows directly into TNW.
   ☐ Tributary flows through **Pick List** tributaries before entering TNW.

   Project waters are **Pick List** river miles from TNW.
   Project waters are **Pick List** river miles from RPW.
   Project waters are **1-2** aerial (straight) miles from TNW.
   Project waters are **1 (or less)** aerial (straight) miles from RPW.
   Project waters cross or serve as state boundaries. Explain: .

   Identify flow route to TNW[5]: Water does not appear to flow from this small wetland to the Yampa River, the nearest TNW.

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[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known: none.

(b) General Tributary Characteristics (check all that apply):

Tributary is:
- ☐ Natural
- ☐ Artificial (man-made). Explain: .
- ☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
- Average width: feet
- Average depth: feet
- Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):
- ☐ Silts
- ☐ Sands
- ☐ Concrete
- ☐ Cobbles
- ☐ Gravel
- ☐ Muck
- ☐ Bedrock
- ☐ Vegetation. Type/% cover:
- ☐ Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: none.
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Pick List.** Characteristics: There is no evidence of flow from this site to an RPW or TNW.

Subsurface flow: **Unknown**. Explain findings: .
- ☐ Dye (or other) test performed: .

Tributary has (check all that apply):
- ☐ Bed and banks
- ☐ OHWM[6] (check all indicators that apply):
  - ☐ clear, natural line impressed on the bank
  - ☐ changes in the character of soil
  - ☐ shelving
  - ☐ vegetation matted down, bent, or absent
  - ☐ leaf litter disturbed or washed away
  - ☐ sediment deposition
  - ☐ water staining
  - ☐ other (list):
  - ☐ the presence of litter and debris
  - ☐ destruction of terrestrial vegetation
  - ☐ the presence of wrack line
  - ☐ sediment sorting
  - ☐ scour
  - ☐ multiple observed or predicted flow events
  - ☐ abrupt change in plant community
- ☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
- ☐ High Tide Line indicated by:
  - ☐ oil or scum line along shore objects
  - ☐ fine shell or debris deposits (foreshore)
  - ☐ physical markings/characteristics
  - ☐ tidal gauges
  - ☐ other (list):
- ☐ Mean High Water Mark indicated by:
  - ☐ survey to available datum;
  - ☐ physical markings;
  - ☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .
Identify specific pollutants, if known: .

---

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is**: Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: The water observed during the on-site visit was clear and much of it seemed to be filtered through both wetland and upland vegetation.

Identify specific pollutants, if known: Any pollution on site would likely be from storm water run-off from the surrounding parking lots.

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: Wetlands are supported by snowmelt and runoff. Wetlands likely filter the water, but there is much more upland area to filter the runoff. The water running through the site was clear at the time of the on-site inspection. The wetlands most likely support some small mammal and bird habitat. The upland buffers between the wetlnads and the RPW will continue to act as a buffer to remove pollutants.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: There is a low likelihood that pollutants would make it from the site to the Green River, a TNW. The majority of the drainage area is upland in nature, and the tributary (aside from the culvert at the lowest portion of the site) does not have a continuous bed and bank or OHWM. Thus, storm water from the 5.30 acre project site does reach the Green River, however, it is significantly diluted before it flows into the Yampa River. Thus, stormwater runoff from the project site has an extremely low potential to degrade the water quality of the Yampa River. The ditches and adjacent wetlands on the project site do not have a permanent water source and hence do not provide habitat for fish or provide any spawning habitat for fish in the Yampa River. Furthermore, the project site does not provide habitat for shorebirds or waterfowl characteristic to the Yampa River aquatic habitat, wetlands and riparian areas. The project site does not provide any life-cycle support function for fish, waterfowl or shorebirds in the Yampa River wetlands, aquatic habitat and riparian areas. The volume of organic carbon reaching the TNW is extremely small and unmeasurable, and hence has an insignificant impact on wetlands of the TNW and their biological processes. Elimination of the organic carbon input to the Green River from this project site would have no measurable impact on the lifecycle of the wetlands and aquatic habitat of the Green River.

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

   Provide estimates for jurisdictional waters in the review area (check all that apply):
   - ☐ Tributary waters: linear feet width (ft).
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
   - ☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional waters within the review area (check all that apply):
   - ☐ Tributary waters: linear feet width (ft).
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
   - ☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
     - ☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
     - ☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

   Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
   - ☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

   Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
   - ☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
   As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
   - ☐ Demonstrate that impoundment was created from "waters of the U.S.," or
   - ☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
   - ☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

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[8] See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]

- ☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
- ☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- ☐ which are or could be used for industrial purposes by industries in interstate commerce.
- ☐ Interstate isolated waters. Explain: .
- ☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- ☐ Tributary waters: linear feet width (ft).
- ☐ Other non-wetland waters: acres.
  - Identify type(s) of waters: .
- ☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- ☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
  - ☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- ☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: **There is no significant nexus between these wetlands and the Yampa River (see Section C.2. above).**
- ☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- ☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- ☐ Lakes/ponds: acres.
- ☐ Other non-wetland waters: acres. List type of aquatic resource: .
- ☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- ☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- ☐ Lakes/ponds: acres.
- ☐ Other non-wetland waters: acres. List type of aquatic resource: .
- ☒ Wetlands: 0.03 acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
- ☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - ☒ Office concurs with data sheets/delineation report.
  - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps: .
- ☐ Corps navigable waters' study: .
- ☐ U.S. Geological Survey Hydrologic Atlas: .
  - ☐ USGS NHD data.
  - ☐ USGS 8 and 12 digit HUC maps.
- ☒ U.S. Geological Survey map(s). Cite scale & quad name:1:24,000 Steamboat Springs Quad.
- ☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .

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[10] **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):Natural Vue/i3 Nationwide Prime - Source ORM 2.
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify):Request for Jurisdictional Determination,Lots 9 & 10, Outlot & Adjacent Areas, Ski Trail Subdivision, submitted by the applicant's agent.

B. ADDITIONAL COMMENTS TO SUPPORT JD: This site is a small (0.03 acre) depressional wetland within an irrigated lawn. There is no evidence of a surface hydrological connection between this site and the other wetlands on the project site. The site is at the top of a hill. The only source of water for this site is rainfall/snowmelt and lawn irrigation. The wetlands are all herbaceous, dominated by (90% cover) Red Top (Agrostis alba). Overall wetland quality would be considered low.

No Sig. Nexus

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): July 31, 2007

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Ski Trail Subdivision, 2007-1323-GB

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State:Colorado County/parish/borough: Routt City: Steamboat Springs
Center coordinates of site (lat/long in degree decimal format): Lat. 40.45757° N, Long. -106.79967° W.
Universal Transverse Mercator:
Name of nearest waterbody: Burgess Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Yampa River
Name of watershed or Hydrologic Unit Code (HUC): 14050001
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☒ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: 7/25/07
☒ Field Determination. Date(s): 5/10/07

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Not Applicable.**
      Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: .

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[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW: .

   Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

   (i) General Area Conditions:
   Watershed size: 81 **acres**
   Drainage area: 5.1 **acres**
   Average annual rainfall: 23.4 inches
   Average annual snowfall: 165.0 inches

   (ii) Physical Characteristics:
   (a) Relationship with TNW:
   ☐ Tributary flows directly into TNW.
   ☒ Tributary flows through **3** tributaries before entering TNW.

   Project waters are **1-2** river miles from TNW.
   Project waters are **1 (or less)** river miles from RPW.
   Project waters are **1-2** aerial (straight) miles from TNW.
   Project waters are **1 (or less)** aerial (straight) miles from RPW.
   Project waters cross or serve as state boundaries. Explain: .

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW[5]: Water flows from the site through approximately 1800 linear feet of culverts and stormwater drains into Burgess Creek, a perennial RPW; which flows into Walton Creek, another perennial RPW, which flows to the Yampa River, a TNW.
Tributary stream order, if known: 1.

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☒ Natural
☒ Artificial (man-made). Explain: There is one natural drainage at the northeast portion of the property. However, the drainage turns into an upland swale prior to entering the next tributary. This drainage is fed by run-off through a culvert, and likely by lawn irrigation from the condominium up on the hill. There are two man-made ditches conveying water from the site. One of them has a discontinuous bed and bank, broken by upland areas. The other one is mostly an upland swale, though the end of it, about 110 feet, has a defined bed and bank, but is lined with erosion control fabric.
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: ~1 feet
Average depth: ~1 feet
Average side slopes: **Vertical (1:1 or less).**

Primary tributary substrate composition (check all that apply):
☒ Silts ☐ Sands ☐ Concrete
☐ Cobbles ☒ Gravel ☐ Muck
☐ Bedrock ☐ Vegetation. Type/% cover:
☐ Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: none.
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): 11 %

(c) Flow:
Tributary provides for: **Ephemeral flow**
Estimate average number of flow events in review area/year: **2-5**
Describe flow regime: Area drains snowmelt runoff and rain events.
Other information on duration and volume: .

Surface flow is: **Confined.** Characteristics: Surface flow is only confined in the areas where the ditches are present. There are many areas that are connected by overland flow through upland vegetation.

Subsurface flow: **Unknown**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☒ Bed and banks
☐ OHWM[6] (check all indicators that apply):
☐ clear, natural line impressed on the bank ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
☐ High Tide Line indicated by: ☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects ☐ survey to available datum;
☐ fine shell or debris deposits (foreshore) ☐ physical markings;
☐ physical markings/characteristics ☐ vegetation lines/changes in vegetation types.
☐ tidal gauges

[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
[6] A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7] Ibid.

☐ other (list):

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: The water observed during the on-site visit was clear and much of it seemed to be filtered through both wetland and upland vegetation. The majority of the drainage area is undeveloped. The property is adjacent to the base area of the Steamboat Ski Area, though separated by a small ridge.

Identify specific pollutants, if known: Any pollution on site would likely be from storm water run-off from the surrounding parking lots .

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☒ Wetland fringe. Characteristics: Palustrine emergent, mostly herbaceous, dominated by reedcanary grass and red top.
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size:0.16 acres

Wetland type. Explain: Palustrine Emergent.

Wetland quality. Explain: The wetlands are all herbaceous. There is a small shrub componant just before the water leaves the site into a culvert. Overall wetland quality would be considered moderate to low.

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Ephemeral flow**. Explain: Water on the site comes from snowmelt and from discrete rain events.

Surface flow is**: Confined**

Characteristics: Surface flow is only confined in the areas where the ditches are present. There are many areas that are connected by overland flow through upland vegetation.

Subsurface flow: **Unknown**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☒ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **1-2** river miles from TNW.

Project waters are **1 (or less)** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters.**

Estimate approximate location of wetland as within the **500-year or greater** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: The water observed during the on-site visit was clear and much of it seemed to be filtered through both wetland and upland vegetation.

Identify specific pollutants, if known: Any pollution on site would likely be from storm water run-off from the surrounding parking lots.

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☒ Vegetation type/percent cover. Explain: Herbaceous cover of about 95%, the lower wetland has a willow/shrub component.
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **2**

Approximately (0.16) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
y	0.05		
y	0.11		

Summarize overall biological, chemical and physical functions being performed: Wetlands are supported by snowmelt and runoff. The wetlands likely filter the water, but there is much more upland area to filter the runoff. The water running through the site was clear at the time of the on-site inspection. The wetlands most likely support some small mammal and bird habitat. The upland buffers between the wetlands and the RPW will continue to act as a buffer to remove pollutants.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: There is a low likelihood that pollutants would make it from the site to the Yampa River, a TNW. The majority of the drainage area is upland in nature, and the tributary (aside from the culvert at the lowest portion of the site) does not have a continuous bed and bank or OHWM. Storm water from the 5.30 acre project site does reach the Yampa River, however, it is significantly diluted before it flows into the Yampa River. Stormwater runoff from the project site has an extremely low potential to degrade the water quality of the Yampa River. The ditches and adjacent wetlands on the project site do not have a permanent water source and hence do not provide habitat for fish or provide any spawning habitat for fish in the Yampa River. Furthermore, the project site does not provide habitat for shorebirds or waterfowl characteristic to the Yampa River aquatic habitat, wetlands and riparian areas. The project site does not provide any life-cycle support function for fish, waterfowl or shorebirds in the Yampa River wetlands, aquatic habitat and riparian areas. The volume of organic carbon reaching the TNW is extremely small and unmeasurable, and hence has an insignificant impact on wetlands of the TNW and their biological processes. Elimination of the organic carbon input to the Green River from this project site would have no measurable impact on the lifecycle of the wetlands and aquatic habitat of the Green River.

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

   Provide estimates for jurisdictional waters in the review area (check all that apply):
   - ☐ Tributary waters: linear feet width (ft).
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
   - ☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional waters within the review area (check all that apply):
   - ☐ Tributary waters: linear feet width (ft).
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
   - ☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
     - ☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
     - ☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

   Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
   - ☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

   Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
   - ☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
   As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
   - ☐ Demonstrate that impoundment was created from "waters of the U.S.," or
   - ☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
   - ☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

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[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]

- ☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
- ☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- ☐ which are or could be used for industrial purposes by industries in interstate commerce.
- ☐ Interstate isolated waters. Explain: .
- ☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- ☐ Tributary waters: linear feet width (ft).
- ☐ Other non-wetland waters: acres.
  - Identify type(s) of waters: .
- ☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- ☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
  - ☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- ☒ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: **There is no significant nexus between these wetlands and the Yampa River (see Section C.2. above).**
- ☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- ☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- ☐ Lakes/ponds: acres.
- ☐ Other non-wetland waters: acres. List type of aquatic resource: .
- ☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- ☒ Non-wetland waters (i.e., rivers, streams): **994** linear feet, **~1** width (ft).
- ☐ Lakes/ponds: acres.
- ☐ Other non-wetland waters: acres. List type of aquatic resource: .
- ☒ Wetlands: 0.16 acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
- ☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - ☒ Office concurs with data sheets/delineation report.
  - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps: .
- ☐ Corps navigable waters' study: .
- ☐ U.S. Geological Survey Hydrologic Atlas: .
  - ☐ USGS NHD data.
  - ☐ USGS 8 and 12 digit HUC maps.
- ☒ U.S. Geological Survey map(s). Cite scale & quad name:1:24,000 Steamboat Springs Quad.
- ☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .

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[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):Natural Vue/i3 Nationwide Prime - Source ORM 2.
or ☒ Other (Name & Date):Photos taken by consultant 8/10/2006.
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify):Request for Jurisdictional Determination,Lots 9 & 10, Outlot & Adjacent Areas, Ski Trail Subdivision, submitted by the applicant's agent.

B. ADDITIONAL COMMENTS TO SUPPORT JD: We are considering these wetlands to be non-jurisdictional because they do not have siginificant nexus to the Yampa River. We have determined that degredation of these wetlands will not affect the Biological, Chemical, or Physical characteristics of the Nation's Navigable Waterways. This finding is based on the small drainage area, distance from the nearest TNW, absence of an ordinary high water mark, and the temporal nature of the flow regime in this location.

DETERMINATIONS OF NO JURISDICTION FOR ISOLATED, NON-NAVIGABLE, INTRA-STATE WATERS RESULTING FROM U.S. SUPREME COURT DECISION IN SOLID WASTE AGENCY OF NORTHERN COOK COUNTY vs. U.S. ARMY CORPS OF ENGINEERS

DISTRICT OFFICE: U.S. Army Corps of Engineers, Sacramento District
FILE NUMBER: SPK-2007-1323-GB
REGULATORY PROJECT MANAGER: Nathan Green
PROJECT REVIEW/DETERMINATION COMPLETED:8/30/07 In the Office ☑ Yes ☐ No At the project site ☑ Yes ☐ No
PROJECT LOCATION INFORMATION:
State: Colorado County: Routt
Center coordinates of site by latitude & longitude coordinates: Latitude 40.45757° North, Longitude -106.79967° West
Approximate size of site/property (including uplands & in acres): 3.5 acres
Name of waterway: Unnamed
Watershed: Colorado

SITE CONDITIONS									
Type of aquatic resource[1]	**0-1 ac**	**1-3 ac**	**3-5 ac**	**5-10 ac**	**10-25 ac**	**25-50 ac**	**> 50 ac**	**Linear Feet**	**Unknown**
Lake									
River									
Stream									
Dry Wash									
Mudflat									
Sandflat									
Wetlands									
Slough									
Prairie pothole									
Wet meadow	X								
Playa lake									
Vernal pool									
Natural pond									
Other Water (identify type)									

[1]Check appropriate boxes that best describe type of isolated, non-navigable, intra-state water present and best estimate for size of non-jurisdictional aquatic resource area.

Migratory Bird Rule Factors[1]	**If Known**		**If Unknown (Use Best Professional Judgement)**		
	Yes	**No**	**Predicted to Occur**	**Not Expected to Occur**	**Not Able to Make Determination**
Is or would be used as habitat for birds protected by Migratory Bird Treaties?				X	
Is or would be used as habitat by other migratory birds that cross state lines?				X	
Is or would be used as habitat for endangered species?				X	
Is used to irrigate crops sold in interstate commerce?				X	

[1]Check appropriate boxes that best describes potential for applicability of the Migratory Bird Rule to apply to onsite, non-jurisdictional, isolated, non-navigable, intra-state aquatic resource area.

TYPE OF DETERMINATION: ☐ Preliminary ☑ Approved

ADDITIONAL INFORMATION SUPPORTING NJD (e.g., paragraph 1 - site conditions; paragraphs 2-3 - rationale used to determine NJD, including information reviewed to assess potential navigation or interstate commerce connections; and paragraph 4 - site information on waters of the U.S. occurring onsite):

The -acre seasonal wetland has no surface hydrologyconnection to other waters of the U.S. based on topographical constraints. It is therefore considered intrastate and isolated.

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

November 16, 2007

Regulatory Branch (SPK-2007-1323)

Garrett Simon
The Atira Group
1120 S. Lincoln Ave., Suite F
PO Box 880693
Steamboat Springs, CO 80488

Dear Mr. Simon:

We are responding to your consultant's request for an approved jurisdictional determination for the Ski Trail Subdivision Project. This approximately 5.3-acre site is located at Lots 9, 10, 11, 12 and a 1.41 acre Out-lot, within Section 29, Township 6 North, Range 84 West, 6th PM, City of Steamboat Springs, Routt County, Colorado.

Based on available information, we concur with the estimate of waters of the United States, as depicted on the July 2007, Figure 2. Wetland Map Lots 9, 10, 11, 12 and Adjacent Out-lot Ski Trail Subdivision drawing prepared by Western Ecological Resource, Incorporated. Approximately 0.19 acre of wetland is present within the survey area. These waters are not regulated under Section 404 of the Clean Water Act, or Section 10 of the Rivers and Harbors Act, since they are isolated interstate, non-navigable wetlands and do not have a significant nexus to Traditional Navigable Waters.

This verification is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This letter contains an approved jurisdictional determination for your subject site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331.

A Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form is enclosed. If you request to appeal this determination you must submit a completed RFA form to the South Pacific Division Office at the following address: Administrative Appeal Review Officer, Army Corps of Engineers, South Pacific Division, CESPD-PDS-O, 1455 Market Street, San Francisco, California 94103-1399, Telephone: 415-503-6574, FAX: 415-503-6646.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the NAP. Should you decide to submit an RFA form, it must be received at the above address by 60 days from the date of this letter. It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this letter.

You should provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

This determination has been conducted to identify the limits of Corps of Engineers' Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

We appreciate your feedback. At your earliest convenience, please complete our customer survey at *http://www.spk.usace.army.mil/customer_survey.html.* Your passcode is "yastrzemski".

Please refer to identification number SPK-2007-1323 in any correspondence concerning this project. If you have any questions, please contact (b) (6) at the Colorado/Gunnison Basin Regulatory Office, 400 Rood Avenue, Room 142, Grand Junction, Colorado 81501-2563, email (b) (6) *@usace.army.mil*, or telephone (970) 243-1199 extension 12. For further information on our program you may use our website: *www.spk.usace.army.mil/regulatory.html.*

Sincerely,

(b) (6)

Acting Chief, Intermountain Regulatory Section

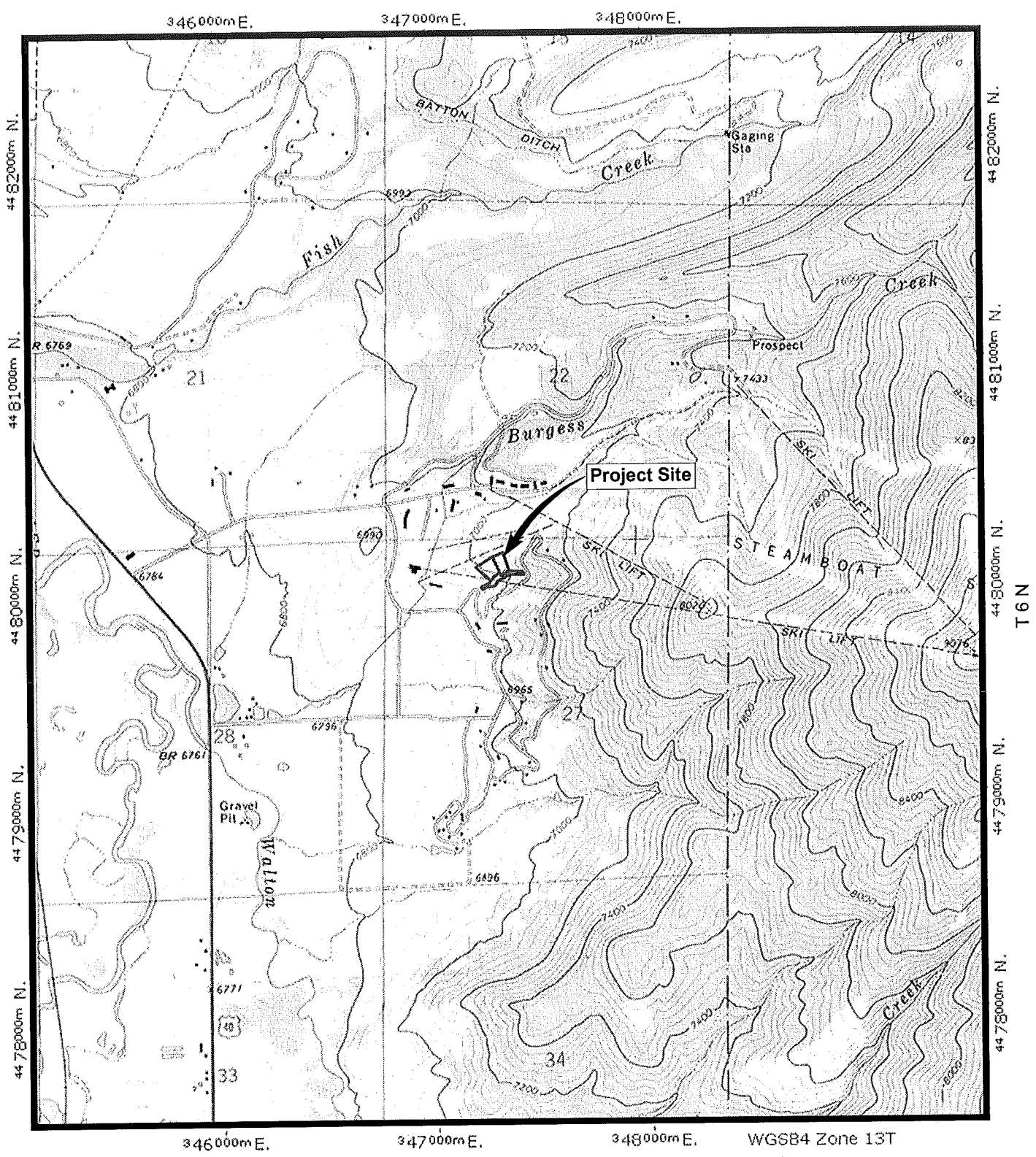
Enclosures

Copy furnished without enclosures:

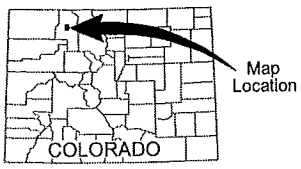
Mr. David Johnson, Western Ecological Resource, Incorporated, 711 Walnut Street, Boulder, Colorado 80302

City of Steamboat Springs Planning Services, 124 10th Street, P.O. Box 775088, Steamboat Springs, CO 80477-5088

(b) (6)



BASE: USGS 7.5 Minute Steamboat Springs Colorado Quadrangle
Photorevised: 1969



WESTERN ECOLOGICAL RESOURCE, INC.
711 Walnut Street • Boulder, CO 80302

N

Figure 1.
Project Location Map
Lots 9 & 10 and Adjacent Outlot
Ski Trail Subdivision

Scale 1" = 2000'
Contour Interval = 40'

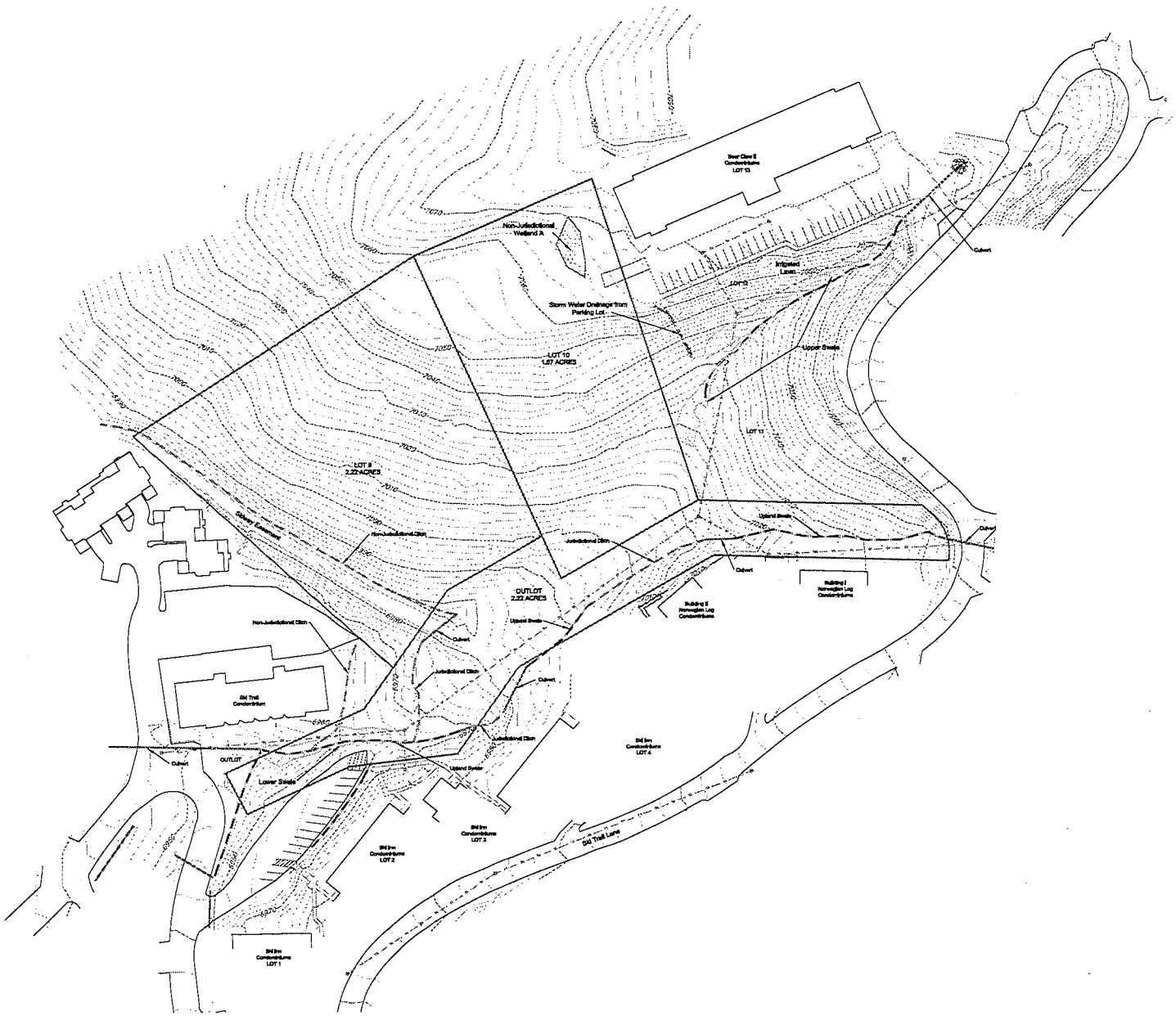


Figure 2.
Revised Wetland Map*
Lots 9 & 10 and Adjacent Outlot
Ski Trail Subdivision

Legend:

- Jurisdictional Wetlands
- Non-Jurisdictional Wetlands
- Jurisdictional Swale
- Jurisdictional Ditch
- Non-Jurisdictional Ditch
- Existing Sewer Line
- Culverts
- Project Boundary

*Wetland Map revised May 22, 2007 based on field meeting with Nathan Green of the U.S. Army Corps of Engineers on May 10, 2007.

Date: July 2007
Scale: 1 In = 50 ft
Contour Interval = 2 ft

prepared by:
Western Ecological Resources, Inc.
711 Walnut Street
Boulder, CO 80302
(303) 448-9009 FAX (303) 448-9038

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: **Garrett Simon**	File Number: **SPK-200701323**	Date:**16-Nov-2007**
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
→→	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the DISTRICT Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the DISTRICT Engineer. Your objections must be received by the DISTRICT Engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the DISTRICT Engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the DISTRICT Engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the DISTRICT Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the DIVISION Engineer. This form must be received by the DIVISION Engineer within 60 days of the date of this notice.

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SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

US Army Engineer District, Sacramento
(b) (6)
Chief, Intermountain Regulatory Section
533 West 2600 South, Suite 150
Bountiful, UT 84010

(801) 295-8380

If you only have questions regarding the appeal process you may also contact:

Administrative Appeal Review Officer
Army Engineer Division, South Pacific, CESPD-PDS-O
1455 Market Street, San Francisco, CA 94103-1399
(415-503-6574)

(NOTE: This is also the address to which an appeal addressed to the DIVISION Engineer would be mailed.)

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

October 31, 2007

Regulatory Branch (SPK-2007-1323)

Garrett Simon
The Atira Group
1120 S. Lincoln Ave., Suite F
PO Box 880693
Steamboat Springs, CO 80488

Dear Mr. Simon:

We are responding to your consultant's request for an approved jurisdictional determination for the Ski Trail Subdivision Project. This approximately 5.3-acre site is located at Lot 9 and 10 and a 1.41 acre Out-lot, within Section 29, Township 6 North, Range 84 West, 6th PM, City of Steamboat Springs, Routt County, Colorado.

Based on available information, we concur with the estimate of waters of the United States, as depicted on the July 2007, Figure 2. Wetland Map Lots 9 & 10 and Adjacent Out-lot Ski Trail Subdivision drawing prepared by Western Ecological Resource, Incorporated. Approximately 0.19 acre of wetlands are present within the survey area. These waters are not regulated under Section 404 of the Clean Water Act, or Section 10 of the Rivers and Harbors Act, since they are isolated interstate, non-navigable wetlands and do not have a significant nexus to Traditional Navigable Waters.

This verification is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This letter contains an approved jurisdictional determination for your subject site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331.

A Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form is enclosed. If you request to appeal this determination you must submit a completed RFA form to the South Pacific Division Office at the following address: Administrative Appeal Review Officer, Army Corps of Engineers, South Pacific Division, CESPD-PDS-O, 1455 Market Street, San Francisco, California 94103-1399, Telephone: 415-503-6574, FAX: 415-503-6646.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the NAP. Should you decide to submit an RFA form, it must be received at the above address by 60 days from the date of this letter. It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this letter.

You should provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

This determination has been conducted to identify the limits of Corps of Engineers' Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

We appreciate your feedback. At your earliest convenience, please complete our customer survey at *http://www.spk.usace.army.mil/customer_survey.html*. Your passcode is "yastrzemski".

Please refer to identification number SPK-2007-1323 in any correspondence concerning this project. If you have any questions, please contact (b) (6) at the Colorado/Gunnison Basin Regulatory Office, 400 Rood Avenue, Room 142, Grand Junction, Colorado 81501-2563, email (b) (6) *@usace.army.mil*, or telephone (970) 243-1199 extension 12. For further information on our program you may use our website: *www.spk.usace.army.mil/regulatory.html*.

Sincerely,

(b) (6)

Acting Chief, Intermountain Regulatory Section

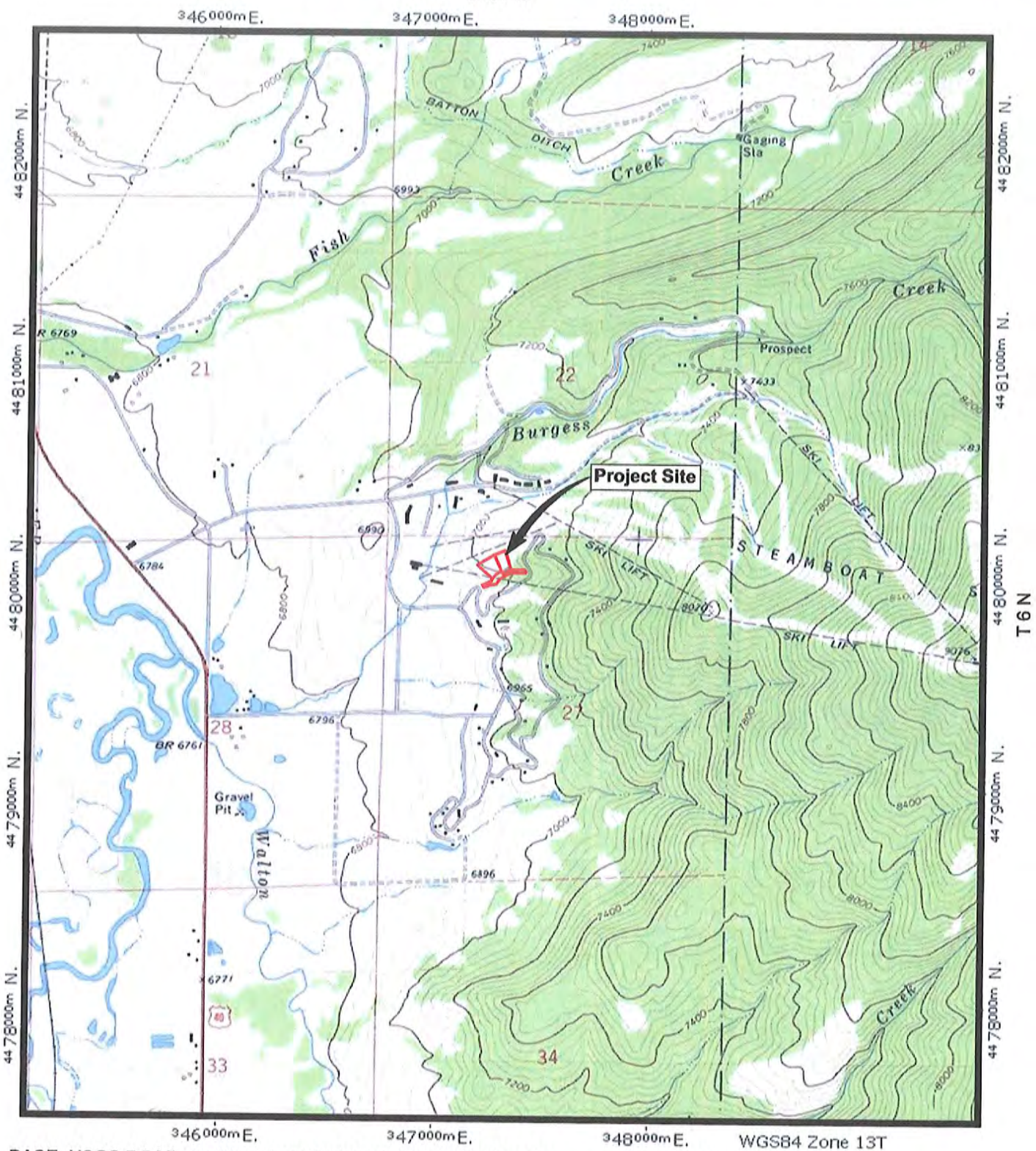
(b) (6)

Enclosures

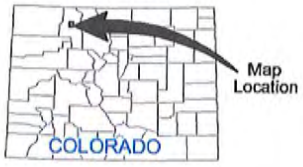
Copy furnished without enclosures:

Mr. David Johnson, Western Ecological Resource, Incorporated, 711 Walnut Street, Boulder Colorado 80302

City of Steamboat Springs Planning Services, 124 10th Street, P.O. Box 775088, Steamboat Springs, CO 80477-5088



BASE: USGS 7.5 Minute Steamboat Springs Colorado Quadrangle
Photorevised: 1969



WESTERN ECOLOGICAL RESOURCE, INC.
711 Walnut Street • Boulder, CO 80302

N

Figure 1.
Project Location Map
Lots 9 & 10 and Adjacent Outlot
Ski Trail Subdivision

Scale 1" = 2000'
Contour Interval = 40'

Figure 2.
Revised Wetland Map*
Lots 9 & 10 and Adjacent Outlot
Ski Trail Subdivision

Legend:

- Jurisdictional Wetlands
- Non-Jurisdictional Wetlands
- Jurisdictional Swale
- Jurisdictional Ditch
- Non-Jurisdictional Ditch
- Existing Sewer Line
- Culverts
- Project Boundary

*Wetland Map revised May 22, 2007 based on field meeting with Nathan Green of the U.S. Army Corps of Engineers on May 10, 2007.

Date: July 2007
Scale: 1 in = 50 ft
Contour Interval = 2 ft

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: **Garrett Simon**	File Number: **SPK-200701323**	Date: **31-Oct-2007**
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
→→	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the DISTRICT Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the DISTRICT Engineer. Your objections must be received by the DISTRICT Engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the DISTRICT Engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the DISTRICT Engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

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	Date:	Telephone number:
Signature of appellant or agent.		

WESTERN ECOLOGICAL RESOURCE, INC.
711 Walnut Street
Boulder, Colorado 80302
(303) 449-9009
Fax (303) 449-9038
mail@westerneco.com

LETTER OF TRANSMITTAL

TO: (b) (6)
U.S. Army Corps of Engineers
402 Rood Avenue, Room 142
Grand Junction, CO 81501

DATE: July 16, 2007

PROJECT: Ski Trail Subdivision, Lots 9 & 10, Outlot & Adjacent Areas

COPIES: 1

FROM: David Johnson

DESCRIPTION: Request for Jurisdictional Determination

FOR:

- [ ] Approval
- [ ] Approved
- [x] Review
- [ ] Approved As Noted
- [ ] Your Files
- [ ] Returned for Correction
- [ ] As Requested
- [ ] Other:

COMMENTS:

Request for Jurisdictional Determination

Lots 9 & 10, Outlot & Adjacent Areas
Ski Trail Subdivision

Routt County, Colorado

prepared for:

The Atira Group
56 Edwards Village Boulevard, Suite 225, Edwards, CO 81632

prepared by:

Western Ecological Resource, Inc.
711 Walnut Street, Boulder, CO 80302

July 2007

WESTERN ECOLOGICAL RESOURCE, INC.
711 Walnut Street
Boulder, Colorado 80302
(303) 449-9009
Fax (303) 449-9038
mail@westerneco.com

July 16, 2007

(b) (6)
U.S. Army Corps of Engineers
402 Rood Avenue, Room 142
Grand Junction, CO 81501-2563

Via Courier

RE: Ski Trail Subdivision
Lots 9, 10, Outlot, and Adjacent Areas
The Atira Group

Dear (b) (6)

On March 5, 2007, we provided the U.S. Army Corps of Engineers (Corps) a Wetland Delineation Report for the Ski Trail Subdivision property located in Section 29, Township 6 North and Range 84 West in Steamboat Springs of Routt County, Colorado (Figure 1). The 5.30 acre project site includes the 2.22 acre Lot 9, the 1.67 acre Lot 10, and the 1.41 acre Outlot.

You visited the project site on May 10, 2007 with Heather Houston of our office and requested minor changes to the waters of the U.S. mapping. As illustrated by Figure 2 (Revised Wetland Map), the project site has a swale with two sections of a small poorly defined ditch, and two culverts that extend 822 linear feet across the Outlot. The last 140 linear feet of this swale has a 0.05 acre wetland. Lot 9 has a ditch that drains to a small depression, then to a culvert, and then to the Outlot Swale. The 113 foot long ditch section which drains from the depression to the Outlot Ditch was considered jurisdictional. This man-made ditch is lined with a permanent erosion control fabric and is dominated by upland weeds and grasses. Lot 10 has a 0.03 acre non-jurisdictional wetland. In addition, the swale off the project site east of Lot 10 has a 0.11 acre wetland.

It is our professional opinion based on the guidance produced by the Corps following the *Rapanos v. United States* and *Carabell v. United States* decision, the small wetland, ditch segments and swale on the project site are not jurisdictional because they do not significantly alter the chemical, physical and biological integrity of the downstream traditional navigable water (TNW) of the Yampa River.

The wetland, swale and ditch segments are not a relatively permanent water (Non-RPW). Therefore, additional data on the ditch and the adjacent 0.05 acre wetland is provided to help the Corps determine if it has a significant nexus to a TNW. Section III.B.1, B.2, B.3, and C of the Approved Jurisdictional Determination Form has been completed to assist the Corps in the significant nexus evaluation.

Section III. B.1. Characteristics of non-TNWs that flow directly or indirectly into TNW.

(i) General Area Conditions

- Watershed Size –5.30 acres of an 81 acre watershed (See Figure 4)
- Drainage Area – 5.30 acres of an 81 acre drainage basin
- Average Annual Rainfall – 23.4 inches
- Average Annual Snowfall – 165.0 inches

(ii) Physical Characteristics

(a) Relationship with TNW

Stormwater from the project site flows through ditches, swales, culverts, and stormwater sewers to Burgess Creek (Order 1), which flows to Walton Creek (Order 3), and then to the Yampa River (Order 4). As illustrated by Figure 3, stormwater leaves the project site via an 18" corrugated metal pipe (CMP) under the access drive to the Ski Trail Condominiums. It then flows 293 feet in stormwater drains (18" & 54" CMPs) to a 127 foot long underdrain, then 461 feet in stormwater drains (18" & 54" CMPs) to Burgess Creek. Thus, Burgess Creek is 881 linear feet from the west end of the project site. A large segment of Burgess Creek is buried upstream of the confluence of the pipe from the project site. The water flows 4,466 linear feet in Burgess Creek, and 1,756 linear feet in Walton Creek to the Yampa River. Thus, stormwater from the project flows 7,103 linear feet (1.34 miles) to the Yampa River (Figure 3). Table 1 provides flow rates for the 10, 50 and 100 year storm events for Burgess Creek, Walton Creek and the Yampa River, and identifies the stream orders.

(b) General Tributary Characteristics

Outlot Ditch/Swale

The man-made Outlot Ditch enters the project site via a 56 foot long culvert under Ski Trail Road (Figure 2) and extends west for 229 linear feet in an upland swale; it then flows through a 30 foot long culvert, then for 207 feet in a small ditch and 35 feet in an upland swale; then to a 48 foot long culvert, and then extends 273 linear feet in a swale to the inlet to a storm drain. The two ditch segments have a poorly defined channel about 12" wide and 12" deep with steep eroded banks. The last 140 foot long section of the swale is through a wetland. The swale on the Outlot is vegetated with a dense growth of upland plants and with a minor presence of wetland plants in some areas. See Photo 1.

The ditch portion of the channel has a silt and gravel substrate. The average slope of the ditch/swale is 11%.

Lot 9 Ditch

The man-made Lot 9 Ditch extends 113 feet from a small upland depression to join the Outlot Ditch/Swale (Figure 2). This ditch is about 18" wide, 18" deep, and is lined with an erosion control fabric. The lined ditch is surrounded by introduced agricultural plants and noxious weeds. This ditch is stable and has no pooled water. The average slope from the culvert to the Outlot Ditch/Swale is about 10%.

(c) Flow

The project site includes 5.30 acres of an 81 acre drainage basin. As illustrated by Figure 4, most of the drainage basin is undeveloped and consists of ski trails dominated by herbaceous vegetation and adjacent forested areas. There is an unvegetated gravel road.

However, runoff from this road is filtered by the extensive areas of upland vegetation. The lower portion of the basin has roads and condominiums.

Landmark Consultants, Inc. (2007) modeled flow rate at point DP3 at 64 cubic feet per second (cfs) for the 25 year storm event, and 106 cfs for the 100 year storm event. This flow includes the stormwater runoff from sub-basin H1 – H5. The 7.94 acres sub-basin H3, which includes Lots 9, 10, some of the Outlot, and the adjacent Lot 13 with the Bear Claw II Condominiums, has a flow of 10.3 cfs for the 25 year event and a flow of 16.8 cfs for the 100 year event. The flow rate for the actual project site would be much less as it is 2.64 acres smaller. The flow in the Lot 9 Ditch would be significantly less than the estimated flows for sub-basin H3.

The Outlot Ditch/Swale and the Lot 9 Ditch are snow covered during the winter and hence have very little, if any, flow. These ditches would have a constant flow from the beginning to the end of snowmelt in the small drainage basin. This period of flow is estimated to be 14-21 days in duration. Following snowmelt, the ditches would have water only during precipitation events intense enough to saturate the soil and produce a runoff. Steamboat Springs receives about 165.0 inches of snowfall per year, and the average precipitation is 23.97 inches (Monthly Climatic Summary, www.wrcc.dri.edu). The average rainfall for Steamboat Springs for the summer is as follows: May 1.4", June 1.5 ", July 2.0", and August 1.7" (http://countrystudies.us/united-states/weather/Colorado/steamboat-springs.htm). The precipitation during these months likely occurs as several storm events, and some would not be intense enough to produce stormwater runoff.

The Lot 9 Ditch and the Outlot Ditch/Swale do not have subsurface flows. The Outlot Ditch/Swale has saturated soil in the wetland area following precipitation events.

(iii) Chemical Characteristics

When water is present in the Lot 9 Ditch and the Outlot Ditch/Swale, it is clear and unpolluted because the sub-basin drainage area is well vegetated and has few, if any, disturbed areas. The only potential sources of pollution would be soil from any unvegetated areas and runoff from condominium parking lots.

(iv) Biological Characteristics

The Outlot Ditch/Swale has two ditch sections with little vegetation, swale sections dominated by upland vegetation, and a 140 linear foot swale section with a 0.05 acre wetland. This ditch/swale does not provide habitat for any federally listed species (Table 2). The Lot 9 Ditch has no wetlands or riparian vegetation and does not provide habitat for any federally listed species. The project site does not provide habitat for either the bald eagle or the yellow-billed cuckoo. The four endangered fish are downstream in the lower Colorado River, and are impacted only by projects that result in water depletion. Development of the project site would not result in any water depletions.

Section III. B.2. Characteristics of Wetlands Adjacent to Non-TNWs that Flow Directly or Indirectly into TNW.

(i) Physical Characteristics

(a) General Characteristics

The Outlot parcel has a 0.05 acre wetland (Photo 2) at the west end of the drainage swale. This wetland is dominated by the undesirable introduced and aggressive reed canarygrass *(Phalaris arundinacea)* which forms large dense stands up to six feet tall. Three other

introduced and undesirable grasses occur in the wetland, including timothy *(Phleum pratense),* meadow foxtail *(Alopecurus pratense)* and Kentucky bluegrass *(Poa pratensis).* Native upland and wetland plants present, but with little cover, include alpine timothy *(Phleum commutatum),* cow parsnip *(Heracleum sphondylium ssp. montanum),* largeleaf avens *(Geum macrophyllum),* willow-leaved dock *(Rumex triangulivalvis),* fireweed *(Epilobium angustifolium),* and smooth horsetail *(Hippochaete laevigata).* Alsike clover *(Trifolium hybridum),* an agricultural plant, is also present. Sparsely represented woody plants include mountain willow *(Salix monticola),* thinleaf alder *(Alnus incana ssp tenuifolia),* and chokecherry *(Prunus virginiana).*

This wetland is classified as a Palustrine System, Emergent Persistent Wetland Class.

This wetland has hydrology, water quality and wildlife habitat functions. Hydrology functions include erosion control, flood peak reduction, and groundwater recharge. The wetland is well vegetated and hence the erosion control function is rated as moderate to high. The flood peak reduction function is rated as low, and there is not groundwater discharge function. Water quality functions include sediment removal and nutrient removal and assimilation. The introduced species dominating this wetland are not known to be particularly effective in nutrient removal. Therefore, the water quality functions are rated as low. The wildlife habitat function is rated as low due to the low structural diversity, the lack of native plants, and the seasonality of the water supply.

(b) General Flow Relationship with Non-TNW
This wetland has no groundwater discharge and hence does not generate any water to flow off-site.

(c) Wetland Adjacency Determination with Non-TNW
This wetland occurs in the swale in the Outlot parcel and abuts the non-TNW.

(d) Proximity (Relationship) to TNW
Water in the swale in which this wetland is located flows through 293 linear feet of storm sewer, 127 feet in an underdrain, and then through 461 feet of a storm sewer to empty into Burgess Creek. The water flows through 4,466 linear feet of Burgess Creek and 1,756 linear feet of Walton Creek before it reaches the Yampa River, the TNW. The wetland is not in the floodplain of any stream, and is approximately 0.88 air miles from the Yampa River.

(ii) Chemical Characteristics

When water is present in the Lot 9 Ditch and the Outlot Ditch/Swale, it is clear and unpolluted because the drainage basin is well vegetated and has few disturbed and unvegetated areas.

(iii) Biological Characteristics

The lined Lot 9 Ditch has no wetlands or riparian vegetation and does not provide habitat for any federally listed species (Table 1). The Outlot Ditch/Swale has two ditch sections with little vegetation, a section with upland vegetation, a 140 linear foot section through a 0.05 acre wetland, and two culverts. This ditch/swale does not provide habitat for any federally listed species (Table 2).

Section III. B.3. Characteristics of All Wetlands Adjacent to the Tributary

There are no other wetlands adjacent to the Lot 9 Ditch or the Outlot Ditch/Swale. There is a swale with wetlands north of the Outlot and east of Lot 10 which has a 0.11 acre wetland, and a small, isolated and non-jurisdictional 0.03 acre Wetland A on the north end of Lot 10.

The Upper Swale Wetland (Photos 3 & 4) begins at the culvert outfall near the driveway for the existing Bear Claw Condominiums and extends downslope for approximately 350 feet before terminating near the eastern corner of Lot 10. There is a narrow man-made channel for much of this distance that terminates near the downslope end of the upper wetland, where the water is spread across the bottom of a broad swale. The Upper Wetland measures approximately 4,892 square feet (0.11 acre).

Under the Cowardin Classification System for Wetlands and Deepwater Habitats (Cowardin et al., 1979), the Upper Swale Wetland is in the Palustrine System, Emergent Persistent Wetland Class.

Woody vegetation along the Upper Swale Wetland is largely confined to the south bank of the small, man-made channel. Young aspen *(Populus tremuloides)* trees grow densely just outside the wetland boundary, with thinleaf alder, Woods' rose *(Rosa woodsii)*, silver sage *(Artemisia cana)*, and chokecherry. In the herbaceous understory, redtop is abundant at the base of the irrigated lawn, and it forms a band along the narrow excavated channel. Water sedge *(Carex aquatilis)* is also common in areas of seepage at the base of the lawn, where it grows with red fescue. Near the lower end of the upper wetland, there are large, dense stands of reed canarygrass *(Phalaris arundinacea)* and the native perennial cloaked bulrush *(Scirpus pallidus)* (Photo 5). Reed canarygrass is also common downslope of the wetland, however, these stands lack hydric soils and were therefore excluded from the wetland boundary. Other common graminoids in the upper wetland include smooth brome *(Bromus inermis)*, which grows densely in the adjacent uplands, Kentucky bluegrass *(Poa pratensis)*, meadow fescue *(Festuca pratensis)*, timothy, orchard grass *(Dactylis glomerata)*, intermediate wheatgrass *(Thinopyrum intermedium)*, and streambank wheatgrass *(Elymus lanceolatus)*. In the shallow water of the channel, American mannagrass *(Glyceria grandis)* forms a small stand. The noxious weed Canada thistle *(Cirsium arvense)* is the most abundant forb along the upper wetland, and it grows densely in the adjacent uplands. Other common forbs include northern willowherb, alsike clover, red clover *(Trifolium pratense)*, willow-leaved dock *(Rumex triangulivalvis)*, yellow sweet clover *(Melilotus officinalis)*, and goldenrod *(Solidago sp.)*.

The Upper Swale Wetland has multiple sources of hydrology. Stormwater runoff is conveyed to the drainage from several culverts and man-made ditches. Irrigation of landscaped areas surrounding the existing condominiums also provides surface runoff and enhances the ground water along the drainage. In particular, the lawn of the Bear Claw Condominiums is quite steep and has a southerly aspect, and is therefore heavily irrigated. A sewer line that crosses the channel and extends across the irrigated lawn of the Bear Claw Condos may also be conveying groundwater into the upper wetland. In addition, there is a rip-rapped swale that conveys runoff from the parking lot of the Bear Claw Condos downslope to the vicinity of the wetland. Snowmelt is also an important source of hydrology to this wetland. The 8.90 acre sub-basin H2 which flows through this wetland provides a good estimate of the stormwater flow. Specifically, the 25 year storm event generates 11.7 cfs and the 100 year event generates 19.1 cfs.

Wetland A (Photo 5) is 275 feet upslope of the Outlot Ditch/Swale and is 52 feet higher in elevation. There is no surface hydrologic connection to the Outlot Ditch/Swale and no apparent subsurface hydrologic connection to it. Wetland A is in the Palustrine System, Emergent Persistent Wetland Class. The small, herbaceous Wetland A is vegetated by redtop *(Agrostis gigantea)*, red fescue *(Festuca rubra)*, timothy *(Phleum pratense)*, and the forbs alsike clover and northern willowherb *(Epilobium ciliatum)*. Wetland A is supported by and evolved in drainage from the irrigated lawn that pools in a shallow depression. The Corps considers this wetland to be isolated.

Wetlands considered in the Cumulative Analysis include the following:

Wetland/Waters of U.S.	Location	Acreage	Linear Feet	Directly Abuts (Y/N)
Lower Swale Wetland	Outlot	0.05	—	Yes
Ditch/Swale/Culvert	Outlot	—	881	Yes
Wetland A	Lot 10	0.03		No
Ditch	Lot 9	—	113	No
Upper Swale Wetland	Lot 13	0.11	—	Yes
	Total	0.19	994	

The biological, chemical and physical functions of these waters of the U.S. are discussed in Sections 1 & 2.

Section III. C. Significant Nexus Determination

- Does the tributary, in combination with adjacent wetlands, have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching the TNW?

  As previously noted, water from the project site flows through ditches and storm sewers to Burgess Creek, then to Walton Creek, and then to the Yampa River. The 7.94 acre sub-drainage basin on which the project site is located is relatively undeveloped, but does have a road and condominium. The drainage basin does not have any pollution source as there are few unvegetated areas. Thus, it is very unlikely that pollutants would be generated on the project site and conveyed to the TNW.

  When flood water from the project site and the drainage basin merges with Burgess Creek, a perennial stream, it is diluted by a much larger flow volume. Similarly, once flood water from Burgess Creek reaches the larger Walton Creek it is further diluted. When water from Walton Creek reaches the much larger Yampa River, it is even further diluted. Thus, storm water from the 5.30 acre project site does reach the Yampa River, however, it is significantly diluted before it flows into the Yampa River. Thus, stormwater runoff from the project site has an extremely low potential to degrade the water quality of the Yampa River. The 100 year stormwater flow of sub-basin H3 is 19.1 cfs, and the 100 year flow of the Yampa River is 8,250 cfs.

  The drainage ditches, upland vegetated swales, and wetland swales on the project site have little potential to remove sediment or assimilate pollutants. Thus, the wetlands considered in the cumulative analysis have a very low potential to enhance the water quality of the Yampa River.

- Does the tributary, in combination with adjacent wetlands, provide habitat and life cycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?

  The ditches and adjacent wetlands on the project site do not have a permanent water source and hence do not provide habitat for fish or provide any spawning habitat for fish in the Yampa River. Furthermore, the project site does not provide habitat for shorebirds or waterfowl characteristic to the Yampa River aquatic habitat, wetlands and riparian

areas. The project site does not provide any life-cycle support function for fish, waterfowl or shorebirds in the Yampa River wetlands, aquatic habitat and riparian areas.

- Does the tributary, in combination with adjacent wetlands, have the capacity to transfer nutrients and organic carbon that support the downstream foodweb?

  The 0.05 acre Lower Ditch/Swale Wetland is dominated by undesirable introduced graminoids. When the annual growth of these plants dies, it decays and is washed into the storm sewer and eventually to Burgess Creek and further downstream, perhaps even to the Yampa River. However, the volume of organic carbon reaching the TNW is extremely small and unmeasurable, and hence has an insignificant impact on wetlands of the TNW and their biological processes. Elimination of the organic carbon input to the Yampa River from this project site would have no measurable impact on the lifecycle of the wetlands and aquatic habitat of the Yampa River

- Does the tributary, in combination with adjacent wetlands, have other relationships to the physical, chemical, or biological integrity of the TNW?

  The project site wetlands have no other relationships to the TNW.

Summary

The 0.05 acre wetland in the swale of the Outlot, and the ditches on the Outlot and Lot 9 do not have a significant nexus to the Yampa River, a TNW, because:

- Prior to development, no ditches or wetlands existed on the project site or adjacent areas. The ditches and small wetland developed after the lower drainage basin was urbanized. Please note, these wetlands are dominated by undesirable introduced herbaceous plants.
- The 5.30 acre project site is relatively well vegetated and is not a source of any pollutants. Thus, the project site has an extremely low potential to generate pollutants and impact the TNW.
- The hydrology, water quality and wildlife habitat functions of the small wetland and ditches generally have very low values and provide no, or an insignificant and unmeasurable, benefit to the TNW.
- There is no significant hydrologic connection to the TNW because there is no permanent water source on the project site, and the volume, duration and frequency of stormwater flows is very low (Table 1).
- There is no significant ecologic connection to the TNW. There is no permanent water source on the project site, no pollution source on the project site, and only infrequent periods of stormwater flow to the TNW. The project site has a small wetland, but it generally has very low water quality and flood storage functions. This wetland has little, if any, measurable capability to improve the water quality of the TNW. Finally, this wetland has no measurable impact on the life cycle support functions for fish and other species.
- We concur with Section 3 (Certain Adjacent Wetlands and Non-Navigable Tributaries that are Not Relatively Permanent) of the Clean Water Act Justification which states, "The following geographic features generally are not jurisdictional waters:

  Swales or erosional features (e.g. gullies, small washes characterized by low volume, infrequent, or short duration flow)."

- In summary, The small 0.05 acre wetland on the project site does not significantly alter the chemical, physical and biological integrity of the downstream navigable waters of the Yampa River.

Nathan, please call if you need further information. The Atira Group would like to quickly resolve the jurisdictional status of project area waters of the U.S. features.

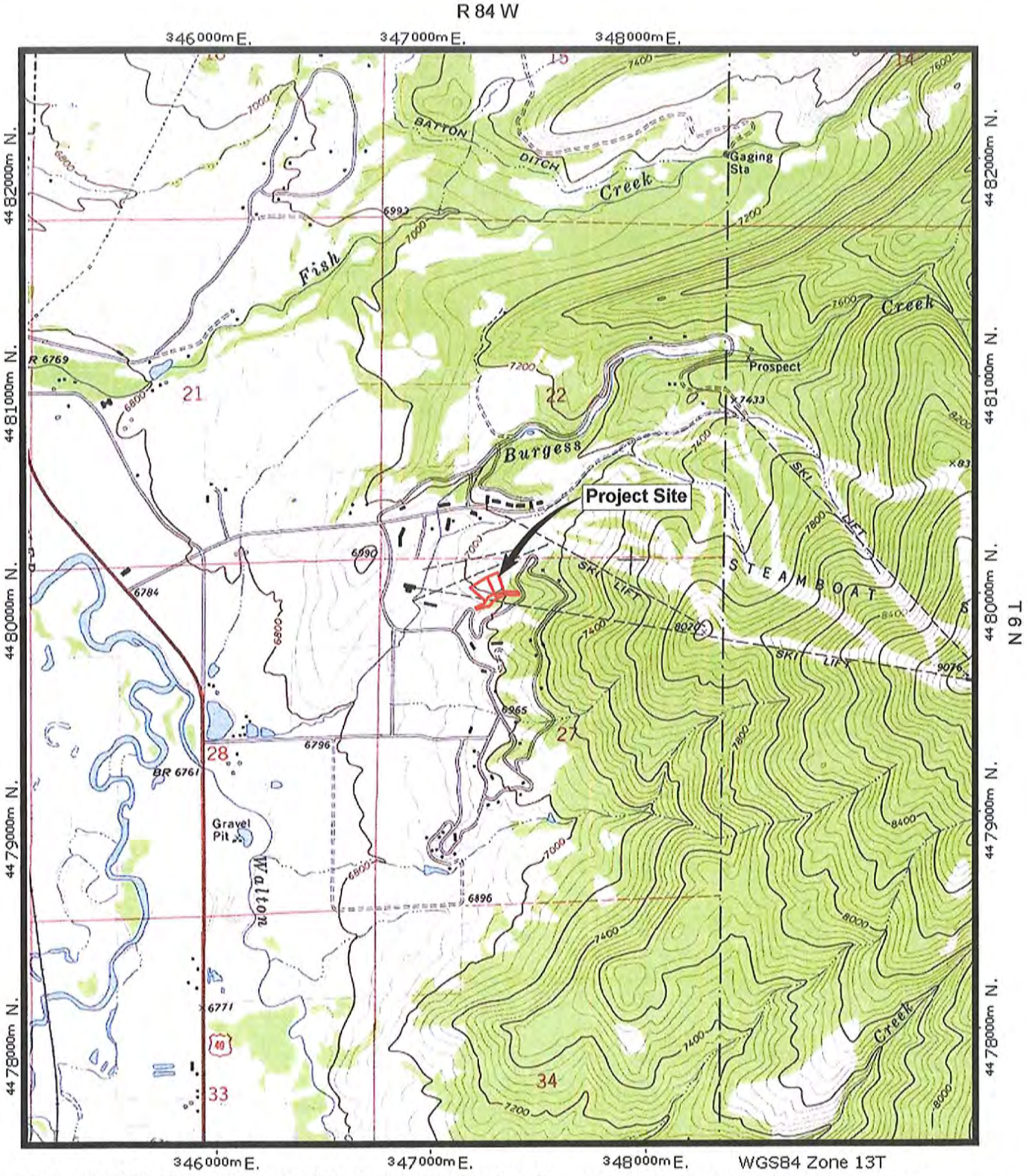
Sincerely,

David Johnson
Ecologist

DJ/ssc

CC: Garrett Simon
Lance Badger
Eric Griepentrog

Enclosures



BASE: USGS 7.5 Minute Steamboat Springs Colorado Quadrangle
Photorevised: 1969

FIGURE 1. Project Location Map
Lots 9 & 10 and Adjacent Outlot
Ski Trail Subdivision

WESTERN ECOLOGICAL RESOURCE, INC.
711 Walnut Street • Boulder, CO 80302

N

Scale 1" = 2000'
Contour Interval = 20'

TABLE 1
Stream Flow Data
Ski Trail Subdivision

Stream/River	Stream/River Order	Location	Flow (cfs) 10 yr	50 yr	100 yr	Length of Flow (feet)
Burgess Creek	1	At Mouth	290	370	400	4,466
Walton Creek	3	At Mouth	1,480	1,840	1,980	1,756
Yampa River	4	Confluence with Walton Creek	6,390	7,730	8,250	

TABLE 2
Federally Listed Species
Routt County, Colorado
Ski Trail Subdivision

Scientific Name	Common Name	Status
Birds		
Haliaeetus leucocephalus	Bald Eagle	Threatened
Coccyzus americanus	Yellow-Billed Cuckoo	Candidate
Fish*		
Gilia cypha	Humpback chub	Endangered
Gilia elegans	Bonytail chub	Endangered
Ptychocheilus lucius	Colorado pikeminnow	Endangered
Xyrauchen texanus	Razorback sucker	Endangered

*These fish all occur in the Upper Colorado and San Juan River Basin and are potentially impacted by projects that cause water depletions in these streams.

Source: Colorado Field Office County List, updated November 2005. U.S. Fish & Wildlife Service. Lakewood, Colorado.

Photo 1. Overview of the Outlot and Lower Swale Wetland from the lawn of the existing Bear Claw Condominiums, view to the southwest. (8/10/06).

Photo 2. The Lower Swale Wetland is dominated by reed canarygrass and redtop, introduced grasses. (8/10/06).

Photo 3. Ditch in the Upper Swale Wetland. (11/3/06).

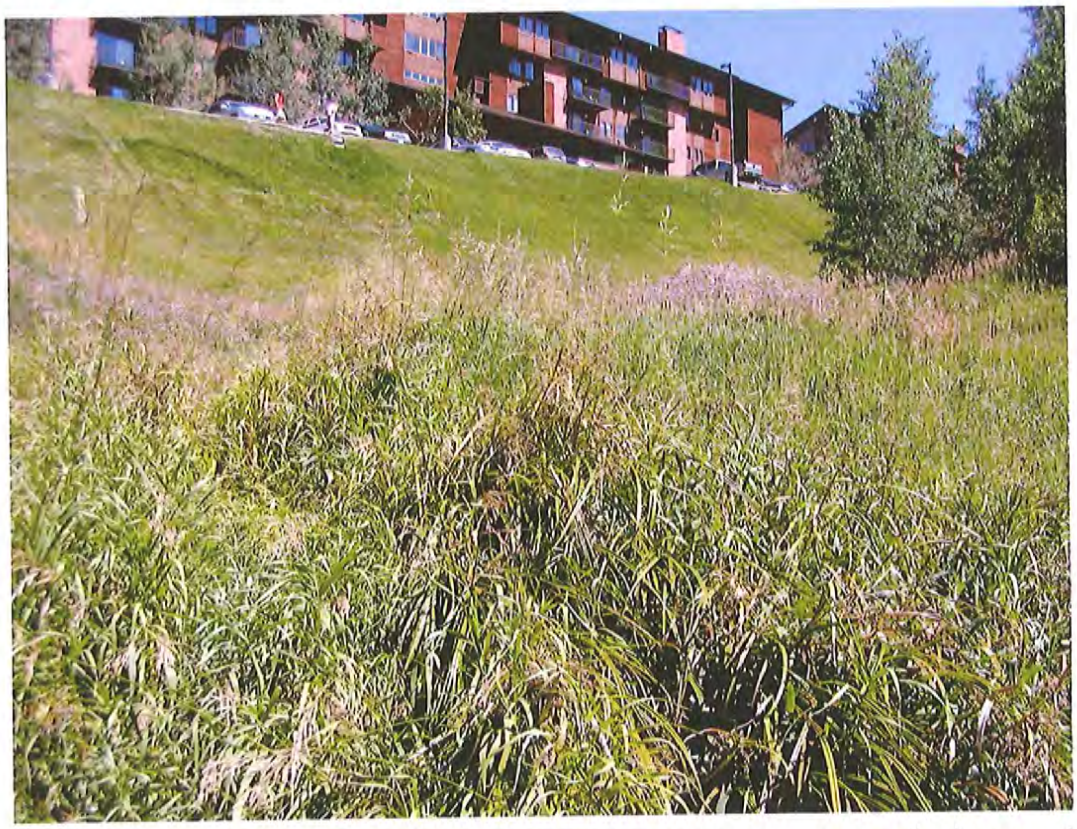
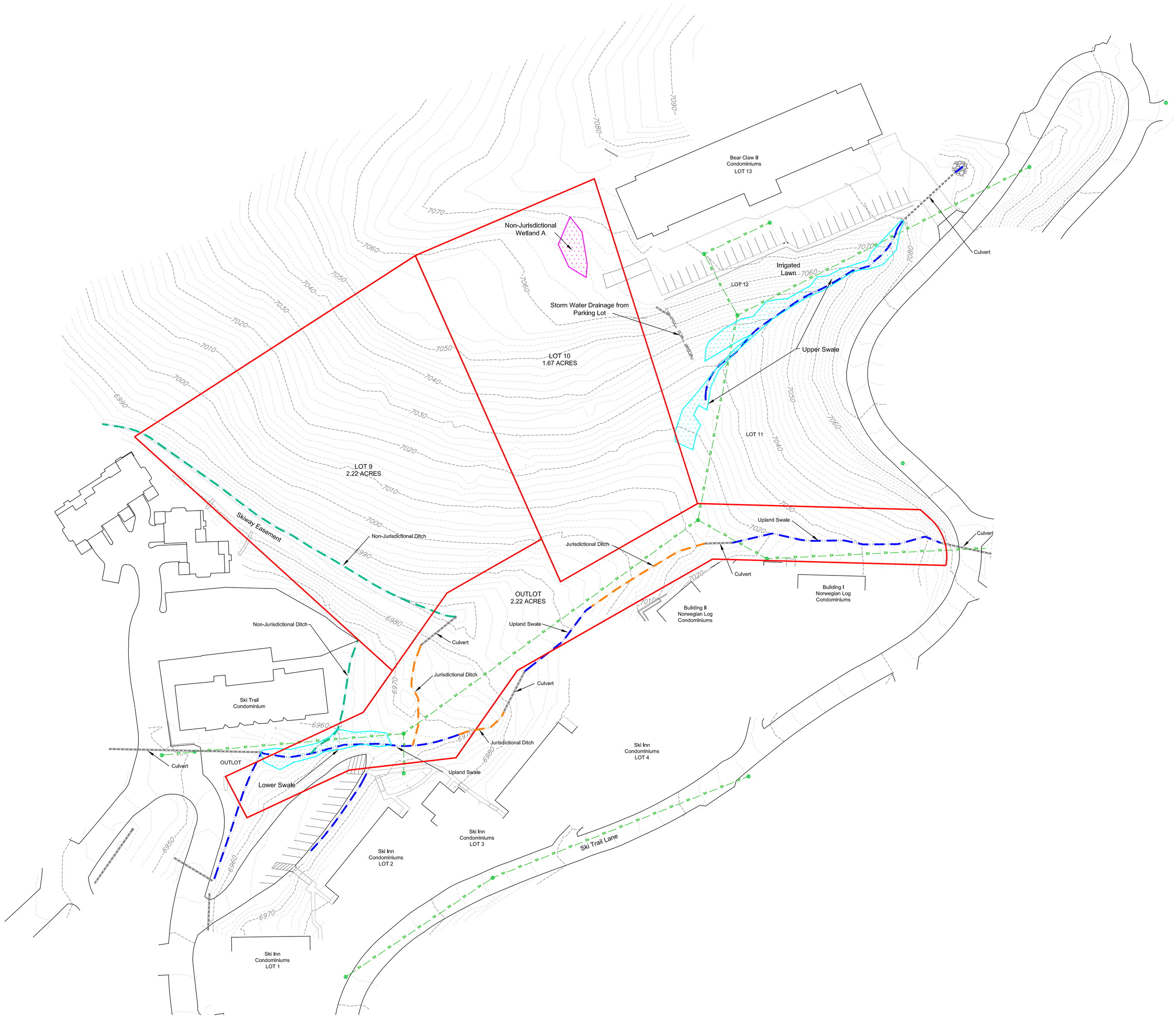


Photo 4. Stands of cloaked bulrush and reed canarygrass are common near the lower end of the Upper Swale Wetland. (8/10/06).

Photo 5. Wetland A is supported by irrigation runoff from the lawn in the foreground that pools in a shallow depression. (11/3/06).

Figure 2.
Revised Wetland Map*
Lots 9 & 10 and Adjacent Outlot
Ski Trail Subdivision



Legend:

- Jurisdictional Wetlands
- Non-Jurisdictional Wetlands
- Jurisdictional Swale
- Jurisdictional Ditch
- Non-Jurisdictional Ditch
- Existing Sewer Line
- Culverts
- Project Boundary

*Wetland Map revised May 22, 2007 based on field meeting with Nathan Green of the U.S. Army Corps of Engineers on May 10, 2007.

Date: July 2007
Scale: 1 in = 50 ft
Contour Interval = 2 ft

prepared by:
Western Ecological Resource, Inc.
711 Walnut Street
Boulder, CO 80302
(303) 449-9009 FAX (303) 449-9038

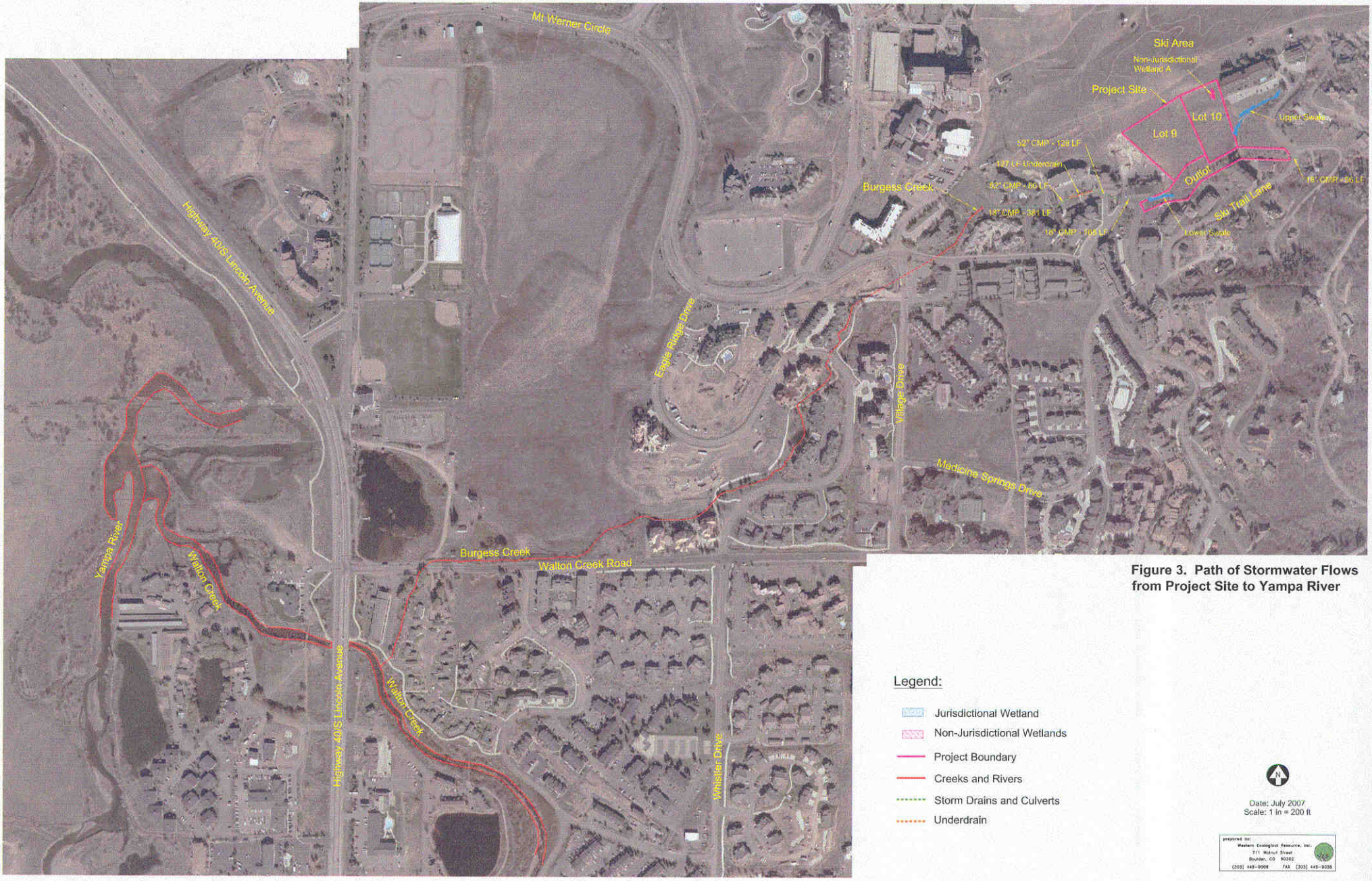


Figure 3. Path of Stormwater Flows from Project Site to Yampa River

Legend:

- Jurisdictional Wetland
- Non-Jurisdictional Wetlands
- Project Boundary
- Creeks and Rivers
- Storm Drains and Culverts
- Underdrain

Date: July 2007
Scale: 1 in = 200 ft

prepared by:
Western Ecological Resource, Inc.
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Figure 4.
Project Site Drainage Basin

Legend:

- Existing Basin Boundary
- Property Boundary
- Ditches and Drainages
- Drainage Arrow
- Design Point
- H2 — Historic/Offsite Basin Designation
  - 8.90 — Basin Area (Acres)
  - 11.7 — 25-YR Runoff (CFS)
  - 19.1 — 100-YR Runoff (CFS)

N

Date: July 2007
Scale: 1" = 200 ft

Source: Landmark Consultants, Inc.
Steamboat Springs, Colorado

prepared by:
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mail@westerneco.com

May 23, 2007

(b) (6)
U.S. Army Corps of Engineers
402 Rood Avenue, Room 142
Grand Junction, CO 81501-2563

Via Mail

RE: Lots 9, 10 and Adjacent Outlot, Ski Trail Subdivision

Dear (b) (6)

Per your request, we have revised the Wetland Map for Lots 9, 10, and the adjacent outlot of the Ski Trail Subdivision in Steamboat Springs, Colorado. This map reflects your determinations made during the field meeting with Heather Houston of our office on May 10, 2007.

Please call if you have questions.

Sincerely,

David Johnson
Ecologist

DJ/hh

cc: Garrett Simon

Enclosure

LETTER OF TRANSMITTAL

WESTERN ECOLOGICAL RESOURCE, INC.
711 Walnut Street
Boulder, Colorado 80302
(303) 449-9009
Fax (303) 449-9038
mail@westerneco.com

TO: (b) (6)
U.S. Army Corps of Engineers
402 Rood Avenue, Room 142
Grand Junction, CO 81501

DATE: March 5, 2007

PROJECT: Ski Trail Subdivision, Lots 9 & 10, Outlot & Adjacent Areas

COPIES: 1

FROM: David Johnson

DESCRIPTION: Wetland Delineation Report

FOR:

- [x] Approval
- [ ] Review
- [ ] Your Files
- [ ] As Requested
- [ ] Approved
- [ ] Approved As Noted
- [ ] Returned for Correction
- [ ] Other:

COMMENTS:

WESTERN ECOLOGICAL RESOURCE, INC.
711 Walnut Street
Boulder, Colorado 80302
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mail@westerneco.com

March 5, 2007

(b) (6)
U.S. Army Corps of Engineers
402 Rood Avenue
Room 142
Grand Junction, CO 81501

RE: Lots 9 & 10, Outlot & Adjacent Areas

(b) (6)

Please find enclosed a Wetland Delineation Report for areas located on the Ski Trail Subdivision in Steamboat Springs, Colorado. Three small wetlands were delineated. However, in our professional opinion, these wetlands are non-jurisdictional because they do not have a hydrologic connection to jurisdictional waters of the U.S.

Please let us know if you would like us to meet you at the project site to review the wetlands.

Sincerely,

David Johnson
Ecologist

DJ/ssc

Cc: Lance Badger
Garrett Simon

Enclosure

Wetland Delineation Report

Lots 9 & 10, Outlot & Adjacent Areas
Ski Trail Subdivision

Routt County, Colorado

prepared for:

The Atira Group
56 Edwards Village Boulevard, Suite 225, Edwards, CO 81632

prepared by:

Western Ecological Resource, Inc.
711 Walnut Street, Boulder, CO 80302

March 2007

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1.0 Introduction

The Atira Group is evaluating development options for Lots 9 and 10 of the Ski Trail Subdivision, located adjacent to the existing Bear Claw Condominiums in Steamboat Springs, Colorado. Specifically, the project site is located in Section 27 of Township 6 North and Range 84 West in Routt County. To aid in project planning and evaluate options for accessing these lots, a wetland delineation was completed for Lots 9 and 10, the outlot to the south of these lots, and an adjacent area south of the existing Bear Claw Condominiums, which encompasses an unnamed ephemeral drainage.

Please note, all Tables are included with the text, Figures are with the text or inside the back cover of this report, and all Photos are in Section 6.0.

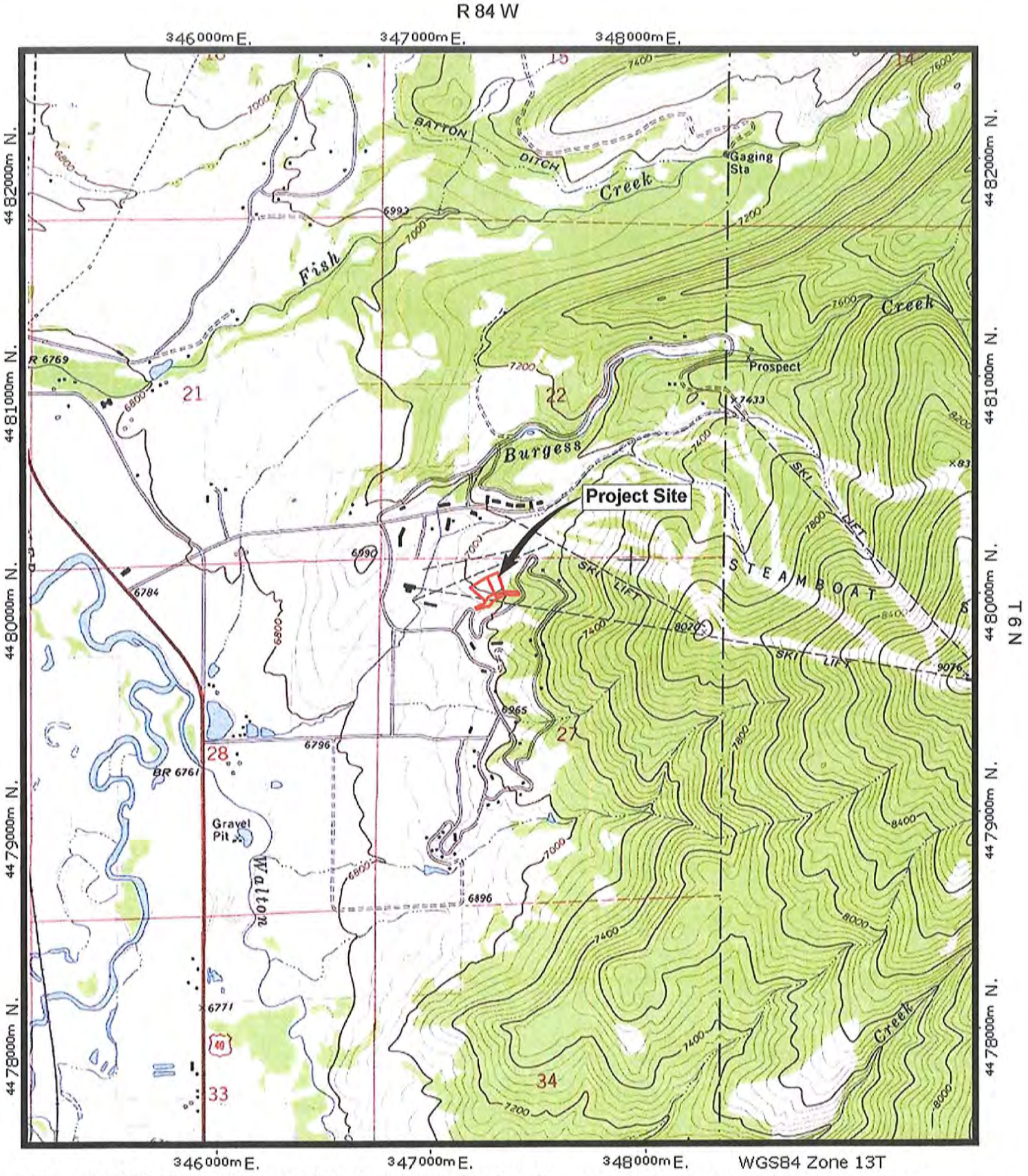
2.0 Environmental Setting

Lots 9 and 10, measuring 2.22 and 1.67 acres respectively, are located on a steep south to southwest slope near the base of the Steamboat Ski Resort at an approximate elevation of 7,000 feet. These lots are located just west of the existing Bear Claw Condominiums, accessed via Ski Trail Lane in the Mountain Village. The outlot is located south of Lots 9 and 10 and the existing Bear Claw Condominiums, and north of the Ski Inn and Norwegian Log Condominiums. The outlot encompasses an ephemeral drainage that flows to the southwest between the condominium buildings (Photo 1). The drainage flows through a culvert under the driveway for the Bear Claw Condominiums, then passes through the outlot where it flows into another culvert under Ski Trail Lane. The ephemeral drainage receives stormwater runoff from several culverts and man-made ditches, irrigation runoff from landscaped areas surrounding the existing condominiums, and a zone of seepage at the toe of the slope below the irrigated lawn for the existing Bear Claw Condominiums. In addition, there is a groundwater discharge into the ephemeral drainage near the location of an existing sewer line crossing (Photo 2). It is possible that water is flowing along the pipeline and being discharged at the location of the crossing. In addition, the sewer line traverses the irrigated lawn below the Bear Claw Condominiums just upslope of the zone of seepage, which may also be creating or contributing to the seeps. A perimeter drain for the Bear Claw Condominiums could cause seepage on the hillside below, however the location of this drain is not currently known. Due to the steepness of the lawn and its southern exposure, it is irrigated daily during the summer months.

Lots 9 and 10 are currently undeveloped, and the ski area boundary is just north of the parcels and the existing Bear Claw Condominiums. A skiway easement crosses the southern boundary of Lot 9, and a gondola traverses the southern corner of Lot 9 as well as the outlot. A small man-made ditch is present at the north edge of the skiway easement on Lot 9, and a culvert directs water in this ditch below the skiway and into the unnamed ephemeral drainage near the southern corner of Lot 9. This ditch does not support herbaceous wetlands. In addition, a second small tributary drainage carries stormwater runoff into the unnamed drainage near the eastern corner of Lot 10. This drainage has a discontinuous bed and bank, but does not support herbaceous wetlands.

3.0 Delineation Methods

Wetlands were delineated by Heather Houston of Western Ecological Resource, Inc. and David Buscher of Buscher Soil and Environmental Consulting in accordance with the U.S. Army Corps of Engineers' Wetland Delineation Manual (1987) on November 2-3, 2006, following an initial field reconnaissance visit on August 10. Specifically, wetland boundaries were delineated and flagged based upon the prevalence of hydrophytic vegetation, hydric soils, and indicators of a wetland hydrology. Field forms for the 14 test pits with vegetation, soils, and hydrology data are included



BASE: USGS 7.5 Minute Steamboat Springs Colorado Quadrangle
Photorevised: 1969

FIGURE 1. Project Location Map
Lots 9 & 10 and Adjacent Outlot
Ski Trail Subdivision

WESTERN ECOLOGICAL RESOURCE, INC.
711 Walnut Street • Boulder, CO 80302

N

Scale 1" = 2000'
Contour Interval = 20'

in Appendix A. In general, plant species names follow Weber and Whitmann (1992). The wetland status of plants follows the 1988 National List for the Intermountain Region. Classification of wetlands follows Cowardin et al. (1979). Wetland boundaries were surveyed by Landmark Consultants, Inc. of Steamboat Springs, Colorado.

3.1 Agency Coordination

The U.S. Army Corps of Engineers will determine if a field review is necessary following their review of this report.

4.0 Wetlands Present

4.1 Upper Unnamed Ephemeral Drainage Wetland

4.1.1 Location

The Upper Wetland in the unnamed ephemeral drainage begins at the culvert outfall near the driveway for the existing Bear Claw Condominiums and extends downslope for approximately 350 feet before terminating near the eastern corner of Lot 10 (Figure 2; Photo 3). The upper wetland includes the discharge point near the sewer line crossing, as well as the zone of seepage at the base of the irrigated lawn. There is a narrow man-made channel for much of this distance that terminates near the downslope end of the upper wetland, where the water is spread across the bottom of a broad swale. The Upper Wetland measures approximately 4,892 square feet (0.11 acre).

4.1.2 Classification

Under the Cowardin Classification System for Wetlands and Deepwater Habitats (Cowardin et al., 1979), the Upper Wetland in the unnamed ephemeral drainage is in the Palustrine System, Emergent Persistent Wetland Class.

4.1.3 Vegetation

Woody vegetation along the Upper Wetland is largely confined to the south bank of the small, man-made channel (Photo 4). Young aspen *(Populus tremuloides)* trees grow densely just outside the wetland boundary, with thinleaf alder *(Alnus incana ssp. tenuifolia)*, Woods' rose *(Rosa woodsii)*, silver sage *(Artemisia cana)*, and choke cherry *(Prunus virginiana ssp. melanocarpa)*. In the herbaceous understory, redtop *(Agrostis alba)* is abundant at the base of the irrigated lawn, and it forms a band along the narrow excavated channel. Water sedge *(Carex aquatilis)* is also common in areas of seepage at the base of the lawn, where it grows with red fescue *(Festuca rubra)*. Near the lower end of the upper wetland, there are large, dense stands of reed canarygrass *(Phalaris arundinacea)* and the native perennial cloaked bulrush *(Scirpus pallidus)* (Photo 5). Reed canarygrass is also common downslope of the wetland, however, these stands lack hydric soils and were therefore excluded from the wetland boundary. Other common graminoids in the upper wetland include smooth brome *(Bromus inermis)*, which grows densely in the adjacent uplands, Kentucky bluegrass *(Poa pratensis)*, meadow fescue *(Festuca pratensis)*, timothy *(Phleum pratense)*, orchard grass *(Dactylis glomerata)*, intermediate wheatgrass *(Thinopyrum intermedium)*, and streambank wheatgrass *(Elymus lanceolatus)*. In the shallow water of the channel, American mannagrass *(Glyceria grandis)* forms a small stand. The noxious weed Canada thistle *(Cirsium arvense)* is the most abundant forb along the upper wetland, and it grows densely in the adjacent uplands. Other common forbs include northern willowherb *(Epilobium ciliatum s.l.)*, alsike clover *(Trifolium hybridum)*, red clover *(Trifolium pratense)*, willow-leaved dock *(Rumex triangulivalvis)*, yellow sweet clover *(Melilotus officinalis)*, and goldenrod *(Solidago sp.)*. Table 1 lists the vascular plant species observed in the project area during the wetland delineation.

TABLE 1
Vascular Plant Species List
Bear Claw Project

Scientific Name	Common Name	Family	Origin*	Wetland Status**
Trees				
Populus tremuloides	Aspen	Salicaceae	N	FAC
Shrubs				
Amelanchier alnifolia	Serviceberry	Rosaceae	N	FACU-
Artemisia cana	Silver sage	Asteraceae	N	FAC*
Crataegus rivularis	Hawthorn	Rosaceae	N	NL
Prunus virginiana var. melanocarpa	Choke cherry	Rosaceae	N	FACU
Ribes inerme	Whitestem gooseberry	Grossulariaceae	N	FAC+
Rosa woodsii	Woods' rose	Rosaceae	N	FAC-
Rubus idaeus spp. strigosus	Red raspberry	Rosaceae	N	FACU
Salix monticola	Mountain willow	Salicaceae	N	OBL
Symphoricarpos rotundifolius	Snowberry	Caprifoliaceae	N	NL
Perennial Graminoids				
Agrostis gigantea (A. alba)	Redtop	Poaceae	I	FACW
Alopecurus pratensis	Meadow foxtail	Poaceae	I	NI (FACW)
Bromus inermis	Smooth brome	Poaceae	I	NL
Carex aquatilis	Water sedge	Cyperaceae	N	OBL
Dactylis glomerata	Orchard grass	Poaceae	I	FACU
Elymus lanceolatus	Thickspike wheatgrass	Poaceae	N	NL
Festuca arundinacea	Tall fescue	Poaceae	I	FACW-
Festuca pratensis	Meadow fescue	Poaceae	I	FACU
Festuca rubra	Red fescue	Poaceae	N	FAC
Glyceria grandis (G. maxima)	American mannagrass	Poaceae	N	OBL
Pascopyrum smithii	Western wheatgrass	Poaceae	N	FACU
Phalaris arundinacea	Reed Canarygrass	Poaceae	I	OBL
Phleum commutatum	Alpine timothy	Poaceae	N	FAC
Phleum pratense	Timothy	Poaceae	I	FACU
Poa pratensis	Kentucky bluegrass	Poaceae	I	FACU
Scirpus pallidus	Cloaked bulrush	Cyperaceae	N	OBL
Thinopyrum intermedium	Intermediate wheatgrass	Poaceae	I	NL
Perennial Forbs				
Aster foliaceus	Leafy bracted aster	Asteraceae	N	FACU
Cirsium arvense	Canada thistle	Asteraceae	I+	FACU
Epilobium angustifolium	Fireweed	Onagraceae	N	FACU
Epilobium ciliatum	Northern willowherb	Onagraceae	N	FAC
Geranium richardsonii	Richardson's Geranium	Geraniaceae	N	FACU
Geum macrophyllum	Largeleaf avens	Rosaceae	N	OBL
Heracleum sphondylium ssp. montanum	Cow parsnip	Apiaceae	N	FAC

TABLE 1
Vascular Plant Species List
Bear Claw Project

Scientific Name	Common Name	Family	Origin*	Wetland Status**
Paxistima myrsinites	Mountainlover	Celastraceae	N	NL
Rudbeckia ampla (*R. laciniata var. ampla*)	Goldenglow	Asteraceae	N	FAC+
Rumex triangulivalvis	Willow-leaved dock	Polygonaceae	N	FACW
Solidago canadensis	Canada goldenrod	Asteraceae	N	FACU
Taraxacum officinale	Dandelion	Asteraceae	I	FACU+
Trifolium hybridum	Alsike clover	Fabaceae	I	FAC-
Trifolium pratense	Red clover	Fabaceae	I	FACU
Veratrum tenuipetalum	False hellebore	Melanthiaceae	N	FACW
Ferns & Fern Allies				
Hippochaete laevigata	Smooth horsetail	Equisetaceae	N	FACW
Annual/Biennial Forbs				
Carduus nutans ssp. macrolepis	Musk thistle	Asteraceae	I+	NL
Lactuca serriola	Prickly lettuce	Asteraceae	I	FACU
Melilotus albus	White sweet clover	Fabaceae	I	FACU
Melilotus officinalis	Yellow sweet clover	Fabaceae	I	FACU
Tragopogon dubius	Salsify	Asteraceae	I	NL

* Origin

N = Native
I = Introduced
I+ = Colorado State Noxious Weed

** Wetland Status

OBL = Obligate Wetland
FACW = Facultative Wetland
FAC = Facultative
FACU = Facultative Upland
UPL = Obligate Upland
NI/NO/NL = No Status in this Region

4.1.4 Hydrology

The Upper Wetland has multiple sources of hydrology. Stormwater runoff is conveyed to the drainage from several culverts and man-made ditches. Irrigation of landscaped areas surrounding the existing condominiums also provides surface runoff and enhances the ground water along the drainage. In particular, the lawn of the Bear Claw Condominiums is quite steep and has a southerly aspect, and is therefore heavily irrigated. A sewer line that crosses the channel and extends across the irrigated lawn of the Bear Claw Condos may also be conveying groundwater into the upper wetland. In addition, there is a rip-rapped swale that conveys runoff from the parking lot of the Bear Claw Condos downslope to the vicinity of the wetland. Snowmelt is also an important source of hydrology to this wetland.

4.1.5 Soils

Three soil pits were dug within the surveyed boundary of the Upper Wetland. Pit 2 was dug at the downslope end of the wetland in a marginally hydric area near the wetland boundary. The soil was nearly saturated, and contained both oxidized root channels and mottles, which are indicative of reducing conditions. Pit 5, which was not saturated, was dug in the seepage area within the irrigated lawn, approximately 3½ feet above the elevation of the channel. This pit also contained hydric soils with oxidized root channels and mottles. Pit 8 was dug in the bottom of the ephemeral drainage swale, just upstream of the sewer line crossing and just below the culvert outfall. This soil was not saturated, but did have oxidized root channels and mottles in the upper 12 inches. The hydric soil in all three pits is classified in the Typic Cryaquolls.

4.2 Lower Unnamed Ephemeral Drainage Wetland

4.2.1 Location

The Lower Wetland is located on the west end of the outlot, just south of the Ski Trail Condominiums (Photos 6 & 7). This wetland measures approximately 2,207 square feet (0.05 acre).

4.2.2 Classification

The Lower Wetland is in the Palustrine System, Emergent Persistent Wetland Class.

4.2.3 Vegetation

The Lower Wetland is dominated by the introduced perennial reed canarygrass, which forms a large, dense stand up to six feet tall. Woody plants are common near the culvert inlet and at the margins of the wetland, including mountain willow *(Salix monticola)*, aspen, Woods' rose, thinleaf alder, and choke cherry. In addition to reed canarygrass, redtop is common in the saturated soil habitat, and a few small stands of cloaked bulrush are also present. Less abundant grasses include timothy, alpine timothy *(Phleum commutatum)*, meadow foxtail *(Alopecurus pratensis)*, and Kentucky bluegrass. The most common forbs include cow parsnip *(Heracleum sphondylium ssp. montanum)*, largeleaf avens *(Geum macrophyllum)*, alsike clover, willow-leaved dock, and fireweed *(Epilobium angustifolium)*. Smooth horsetail *(Hippochaete laevigata)* is also present in the Lower Wetland.

4.2.4 Hydrology

The Lower Wetland is supported by snowmelt and stormwater runoff conveyed down the ephemeral drainage, irrigation of adjacent landscaped areas, and a seasonally high groundwater table. At the downslope end of the Lower Wetland, flows in the ephemeral drainage enter a buried storm sewer system.

4.2.5 Soils

Soil Pit 11 was dug within the boundary of the Lower Wetland, and three additional pits were used to identify the upland boundary. The soil in Pit 11 was not saturated, but it contained both oxidized root channels and mottles in the upper 12 inches. The hydric soil in this pit is classified in the Cumulic Cryaquolls.

4.3 Wetland A

4.3.1 Location
Wetland A, measuring approximately 1,175 square feet (0.03 acre), is located above the ephemeral drainage near the northern corner of Lot 10 and just east of the irrigated lawn surrounding the Bear Claw Condominiums in a slight topographic depression (Photo 8).

4.3.2 Classification
Wetland A is in the Palustrine System, Emergent Persistent Wetland Class.

4.3.3 Vegetation
The small, herbaceous Wetland A is vegetated by redtop, red fescue, timothy, and the forbs alsike clover and northern willowherb.

4.3.4 Hydrology
Wetland A is supported by runoff from the irrigated lawn that pools in a shallow depression.

4.3.5 Soils
Soil Pit 12 was dug within Wetland A. This pit was not saturated during the wetland delineation, however both mottles and oxidized root channels were identified in the upper 12 inches. The hydric soil in Pit 12 is classified in the Typic Haplocryolls.

5.0 Analysis of Jurisdictional Status

The Upper and Lower Wetlands in the unnamed ephemeral drainage are likely to be considered isolated, non-jurisdictional features by the U.S. Army Corps of Engineers. The ephemeral drainage is not illustrated on the USGS 7.5 minute quadrangle map for Steamboat Springs, and water from the drainage is conveyed to a buried storm sewer and does not have a surface connection to other waters of the U.S. Likewise, Wetland A is isolated and has no hydrologic connection to jurisdictional waters of the U.S. In addition, Wetland A has been induced by irrigation of the adjacent lawn and does not have a natural wetland hydrology, therefore it is also non-jurisdictional.

6.0 Photos

Photo 1. Overview of the ephemeral drainage and outlot from the lawn of the existing Bear Claw Condominiums, view to the southwest. (8/10/06).

Photo 2. Ground water discharge area just below the sewer line crossing in the Upper Ephemeral Drainage Wetland. (11/3/06).

Photo 3. View of the Upper Ephemeral Drainage Wetland during the delineation in November. (11/3/06).

Photo 4. Redtop, water sedge, and red fescue are common in the Upper Ephemeral Drainage Wetland at the base of the irrigated lawn. (8/10/06).

Photo 5. Stands of cloaked bulrush and reed canarygrass are common near the lower end of the Upper Ephemeral Drainage Wetland. (8/10/06).

Photo 6. The Lower Ephemeral Drainage Wetland is dominated by reed canarygrass and redtop. (8/10/06).

Photo 7. Lower Ephemeral Drainage Wetland, view to the west. (11/3/06).

Photo 8. Wetland A is supported by irrigation runoff from the lawn in the foreground that pools in a shallow depression. (11/3/06).

7.0 References

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Appendix A. Field Data Forms

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw — DATE: 11/2/06
Applicant/Owner: Atira Group — COUNTY: Routt
Investigator: Houston + Buscher — STATE: CO

Do Normal Circumstances exist on the site? (YES) NO — Plot ID: Pit 1
Is the site significantly disturbed (Atypical Situation)? YES (NO) — Community ID: Phalaris
Is the area a potential Problem Area? YES (NO) — Location ID: Near SE corner of Lot 10
(If needed, explain on reverse)

VEGETATION

Dominant Plant Species	Relative Cover: % Overstory	% Understory	Indicator Status
1. Phalaris arundinacea		100	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC): Total % Overstory: — Total % Understory: 100

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations: No saturation
Depth of Surface Water ___ (in.)
Depth to Free Water in Pit ___ (in.)
Depth to Saturated Soil ___ (in.)

Remarks: Soil isn't wet enough
NOT HYDRIC - NOT A WL.

Wetland Hydrology Indicators:

Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
NONE
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

SOILS Pit 1 Bear Claw 11/2/06

Map Unit Name (Series and Phase): _____ Drainage Class: mod well

Taxonomy (Subgroup): Cumulic Haplo cryolls Field Observations Confirm Mapped Type? Yes No

Profile Description: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
			—	—	L, 2 f gr
0-6	A1	10YR 2/1	—	—	L, 2 m SBK
6-14	A2	10YR 2/1	—	—	L, 2 m SBK
14-19	A3	10YR 2/2	—	—	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: SE corner of lot 10. No saturation, no mottles, no oxidized root channels, in broad drainage swale.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw
Applicant/Owner: Atira Group
Investigator: Houston & Buscher
DATE: 11/2/06
COUNTY: Routt
STATE: CO

Do Normal Circumstances exist on the site? (YES) NO
Is the site significantly disturbed (Atypical Situation)? YES (NO)
Is the area a potential Problem Area? YES (NO)
(If needed, explain on reverse)

Plot ID: Pit 2
Community ID: Smallfruit bulrush
Location ID: Closer to bottom of swale ~20 ft. E of #1

VEGETATION

Dominant Plant Species	% Overstory	% Understory	Indicator Status
1. Scirpus ~~microcarpus~~ pallidus		90	OBL
2. Epilobium ciliatum s.l.		3	FAC
3. Poa pratensis		2	FACU
4. Cirsium arvense		5	FACU
5.			
6.			
7.			
8.			
9.			
10.			

Relative Cover

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Total % Overstory: Total % Understory: 93%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations: Nearly saturated
Depth of Surface Water ___ (in.)
Depth to Free Water in Pit ___ (in.)
Depth to Saturated Soil ___ (in.)

Remarks: Marginally hydric - near edge of WL

Wetland Hydrology Indicators:

Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
X Other (Explain in Remarks) Mottles

SOILS Pit 2 Bear Claw 11/2/06

Map Unit Name (Series and Phase): _____ Drainage Class: somewhat poorly

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Typic Cryaquolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	10YR 2/2 10YR 2/2	----	----	L, 2 f gr
4-16	Bw	10YR 3/2 10YR 4/4	7.5YR 3/4	1%, d	L, 2 m SBK

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Next to Pit 1, more in center of drainage in flow path. Very few mottles + oxidized root channels, Bw is nearly saturated, + is very mixed up possible from numerous deposition episodes + some animal burrowing.

WETLAND DETERMINATION

Hydrology - Storm water run off + possible seeps.

		(Circle)
Hydrophytic Vegetation Present?	(Yes) No	
Wetland Hydrology Present?	(Yes) No	Is this Sampling Point Within a Wetland? (Yes) No
Hydric Soils Present?	(Yes) No	

Remarks: Wetness from recent precip events.

Approved by HQUSACE 3/92

DATA FORM

ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw
Applicant/Owner: Atira Group
Investigator: Houston & Buscher

DATE: 11/2/06
COUNTY: Routt
STATE: CO

Do Normal Circumstances exist on the site? (YES) NO
Is the site significantly disturbed (Atypical Situation)? YES (NO)
Is the area a potential Problem Area? YES (NO)
(If needed, explain on reverse)

Plot ID: Pit 3
Community ID: Phalaris
Location ID: Between 1+2 Near SE corner of Lot 10

VEGETATION

Dominant Plant Species	Relative Cover % Overstory	% Understory	Indicator Status
1. Phalaris arundinacea		100	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Total % Overstory: Total % Understory: 100

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks):
- ___ Stream, Lake or Tide Gauge
- ___ Aerial Photographs
- ___ Other
- X No Recorded Data Available

Field Observations: wet but not saturated
- Depth of Surface Water: ___ (in.)
- Depth to Free Water in Pit: ___ (in.)
- Depth to Saturated Soil: ___ (in.)

Remarks: Not a WL - boundary follows line b/w phalaris & scirpus

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

NONE

SOILS Pit 3 Bear Claw 11/2/06

Map Unit Name (Series and Phase): _____ Drainage Class: mod well

Field Observations

Taxonomy (Subgroup): Typic Haplocryalls. Confirm Mapped Type? Yes No

Profile Description: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-7	A	10YR 2/2	—	—	L, 2 f gr
7-15	Bw	10YR 4/2 10YR 3/2	—	—	L, 2 m SBK

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Between Pits 1 + 2, Soil is wet, but not saturated, from recent precip. Observed one mottle in Bw, no oxidized root channels.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks:

Approved by HQUSACE 3/92

DATA FORM

ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw — DATE: 11/2/06
Applicant/Owner: Atira Group — COUNTY: Routt
Investigator: Houston & Buscher — STATE: CO

Do Normal Circumstances exist on the site? (YES) NO — Plot ID: Pit 4
Is the site significantly disturbed (Atypical Situation)? YES (NO) — Community ID: Redtop
Is the area a potential Problem Area? YES (NO) — Location ID: Base of cobble
(If needed, explain on reverse) — Swale from existing condos

VEGETATION

Dominant Plant Species	% Overstory	% Understory	Indicator Status
1. Agrostis alba		60	FACW
2. Phleum pratense		10	FACU
3. Cirsium arvense		10	FACU
4. Scirpus ~~microcarpus~~ pallidus		10	OBL
5. Bromus inermis		5	NI
6. Poa pratensis		5	FACU
7.			
8.			
9.			
10.			

Relative Cover

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Total % Overstory: Total % Understory: 70%

Remarks: Not wet enough here - water flows across + doesn't pool

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations: No saturation
Depth of Surface Water: ___ (in.)
Depth to Free Water in Pit: ___ (in.)
Depth to Saturated Soil: ___ (in.)

Remarks:

Wetland Hydrology Indicators:

Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
NONE
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

SOILS Pit 4 Bean Claw

Map Unit Name (Series and Phase): _____ Drainage Class: mod well

Taxonomy (Subgroup): Typic Haplo cryolls Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-7	A1	10YR2/2	—	—	L, 2 f gr
7-13	A2	10YR3/2	—	—	X cbl Loam part of drainage structure

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: just below parking lot storm water rock structure. No saturation, no mottles, no oxidized root channels, Water flows too quickly + does not pond long enough to develop reducing conditions.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No (Circle)	(Circle)
Wetland Hydrology Present?	Yes (No)	Is this Sampling Point Within a Wetland? Yes (No)
Hydric Soils Present?	Yes (No)	

Remarks:

Approved by HQUSACE 3/92

DATA FORM

ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw — DATE: 11/2/06
Applicant/Owner: Atira Group — COUNTY: Routt
Investigator: Houston + Buscher — STATE: CO

Do Normal Circumstances exist on the site? YES (NO)
Is the site significantly disturbed (Atypical Situation)? (YES) NO
Is the area a potential Problem Area? YES (NO)
(If needed, explain on reverse)

Plot ID: Pit 5
Community ID: Water sedge/
Location ID: red fescue at base of steep irr. lawn just N of drainage

VEGETATION

Dominant Plant Species	% Overstory	% Understory	Indicator Status
1. Festuca rubra		65	FAC
2. Carex aquatilis		35	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Total % Overstory: ____ Total % Understory: 100

Remarks: Steep hillside above drainage is irrigated lawn – also possible influence of perimeter foundation drain for condos. Sedges have invaded lawn – pit is 3-4" above the drainage

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations: NO saturation
Depth of Surface Water: ____ (in.)
Depth to Free Water in Pit: ____ (in.)
Depth to Saturated Soil: ____ (in.)

Remarks: Lawn or drain may provide added hydrology – UPL veg separates this area from the drainage.

Wetland Hydrology Indicators:

Primary Indicators:
____ Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 Inches
____ Water-Stained Leaves
____ Local Soil Survey Data
____ FAC-Neutral Test
X Other (Explain in Remarks) Mottles

SOILS Pit 5 Bear Claw 11/2/06

Map Unit Name (Series and Phase): _____ Drainage Class: somewhat poorly

Taxonomy (Subgroup): Typic Cryaquolls Field Observations Confirm Mapped Type? Yes No

Profile Description: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/2	—	—	cL, 2 f gr
5-15	Bw	10YR 4/2 10YR 3/2	10YR 4/4	1-2%, d	gr-1 cL

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or ~~Low-Chroma~~ Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: At base of steep backslope (≈ 30% slope) that gets irrigated. No saturation, ~~very~~ few mottles + oxidized root channels, many orange weathering rinds around gravels. Hydrology probably from irrigating steep backslope + water collects here at toeslope. Could have some influence from nearby water line.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes No ?
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

Approved by HQUSACE 3/92

DATA FORM

ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw — DATE: 11/2/06
Applicant/Owner: Attra Group — COUNTY: Routt
Investigator: Houston + Buscher — STATE: CO

Do Normal Circumstances exist on the site? YES NO
Is the site significantly disturbed (Atypical Situation)? YES NO
Is the area a potential Problem Area? YES NO
(If needed, explain on reverse)

Plot ID: Pit 6
Community ID: Clover
Location ID: Downslope from #5 closer to drainage

VEGETATION

Dominant Plant Species	% Overstory	% Understory	Indicator Status
1. Trifolium hybridum		85	FAC-
2. Bromus inermis		5	NI
3. Cirsium arvense		5	FACU
4. Trifolium pratense		trace	FACU
5. Taraxacum officinale		trace	FACU+
6. Festuca pratensis		5	FACU
7. Melilotus sp		trace	~~NOL~~ FACU
8.			
9.			
10.			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Total % Overstory: Total % Understory: 0

Remarks: weedy upl veg between lawn + drainage

HYDROLOGY

Recorded Data (Describe in Remarks):
___ Stream, Lake or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations: No saturation
Depth of Surface Water: ___ (in.)
Depth to Free Water in Pit: ___ (in.)
Depth to Saturated Soil: ___ (in.)

Remarks: Soil is marginally hydric + prob. influenced by lawn irrigation above

Wetland Hydrology Indicators:

Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
X Other (Explain in Remarks) Mottles

SOILS Pit 6 Bear Claw 11/2/06

Map Unit Name (Series and Phase): _____ Drainage Class: somewhat poorly

Taxonomy (Subgroup): Typic Cryaquolls Field Observations Confirm Mapped Type? Yes No

Profile Description: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	10YR 2/2	—	—	cl, 2 fgr
4-14	Bw?	10YR 2/1 10YR 3/2 10YR 4/2	7.5YR 4/4 7.5YR 3/4	2/1, d	grl cl

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Just below Pit 5, about 5' N of drainage + 2' above channel bottom, few mottles + a couple oxidized root channels, no saturation. Many orange weathering rines + sand grains. Hydrology questionable.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No) (Circle)	Is this Sampling Point Within a Wetland? (Circle) Yes (No)
Wetland Hydrology Present?	Yes No	
Hydric Soils Present?	(Yes) No	

Remarks:

Approved by HQUSACE 3/92

DATA FORM

ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw — DATE: 11/2/06
Applicant/Owner: Atira Group — COUNTY: Routt
Investigator: Houston + Buscher — STATE: CO

Do Normal Circumstances exist on the site?	YES (NO)	Plot ID: Pit 7
Is the site significantly disturbed (Atypical Situation)?	(YES) NO	Community ID: Red fescue
Is the area a potential Problem Area?	YES (NO)	Location ID: in wet area of irrigated lawn
(If needed, explain on reverse)		

VEGETATION

Dominant Plant Species	% Overstory (Relative Cover)	% Understory (Relative Cover)	Indicator Status
1. Festuca rubra		100	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC): — Total % Overstory: — Total % Understory: 100

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks):
- ___ Stream, Lake or Tide Gauge
- ___ Aerial Photographs
- ___ Other
- X No Recorded Data Available

Field Observations: upper 3" saturated, but snow is currently melting
- Depth of Surface Water: ___ (in.)
- Depth to Free Water in Pit: ___ (in.)
- Depth to Saturated Soil: ___ (in.)

Remarks: Not a wetland hydrology Pit 7 is near or on top of sewer line

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- NONE ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test (no mottles in matrix)
- ___ Other (Explain in Remarks)

SOILS Pit 7 Bear Claw 11/2/06

Map Unit Name (Series and Phase): _____ Drainage Class: somewhat poorly

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Typic Eutrocryepts

Profile Description: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-3	A	10YR2/2	—	—	L, 2 f gr
3-14	Bw?	2.5Y4/1	—	—	grl cl

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Soil probably disturbed.

Remarks: On step backslope, upper 3" are saturated. Many orange sand grains & weathering rinds but no mottles within soil matrix. All mottle-looking features appear to be associated with gravel. No oxidized root channels. Surface saturation may be from pushed onto slope from parking lot, snow

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No (Circle)	Is this Sampling Point Within a Wetland? (Circle) Yes (No)
Wetland Hydrology Present?	Yes (No)	
Hydric Soils Present?	Yes (No)	

Remarks: About 5' above drainage.

Approved by HQUSACE 3/92

DATA FORM

ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw
Applicant/Owner: Atira Group
Investigator: Houston & Buscher

DATE: 11/2/06
COUNTY: Routt
STATE: CO

Do Normal Circumstances exist on the site? YES (NO)
Is the site significantly disturbed (Atypical Situation)? (YES) NO
Is the area a potential Problem Area? YES (NO)
(If needed, explain on reverse)

Plot ID: Pit 8
Community ID: Red top
Location ID: just below culvert near water discharge (seep or spring??)

VEGETATION

Dominant Plant Species	% Overstory	% Understory	Indicator Status
1. Agrostis alba		95	FACW
2. Festuca rubra		5	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Relative Cover

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Total % Overstory: Total % Understory: 100

Remarks: * Discharge appears to be where sewer line crosses the Channel - It's down cut just below this.

HYDROLOGY

___ Recorded Data (Describe In Remarks):
___ Stream, Lake or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations: No saturation
Depth of Surface Water ___ (In.)
Depth to Free Water in Pit ___ (In.)
Depth to Saturated Soil ___ (In.)

Remarks: Just below culvert & above discharge area

Wetland Hydrology Indicators:

Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
X Other (Explain in Remarks) Mottles

SOILS Pit 8 Bear Claw 11/2/06

Map Unit Name (Series and Phase): _____ Drainage Class: poorly

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Typic Cryaquolls

Profile Description: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
			—	—	SL 2 fgr
0-3	A	10YR2/2			L/Sbk, 2 m slk
3-15	Bw	10YR 3/2	7.5YR3/4	5% , d	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or (Low-Chroma) Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Just below culvert at upper end above Spring/Seep in creek. No saturation, Mottles + oxidized root channels in Bw. Hydrology → storm water runoff and possibly high ground water also sewer line runs through this area, Spring/Seep could also be from sewer line.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No (Circle)	Is this Sampling Point Within a Wetland? (Yes) No (Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	(Yes) No	

Remarks:

Approved by HQUSACE 3/92

ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw Condos — DATE: 11/2/06
Applicant/Owner: Atira Group — COUNTY: Routt
Investigator: Houston + Buscher — STATE: CO

Do Normal Circumstances exist on the site? (YES) NO
Is the site significantly disturbed (Atypical Situation)? YES (NO)
Is the area a potential Problem Area? YES (NO)
(If needed, explain on reverse)

Plot ID: Pit 9
Community ID: Brome
Location ID: in Swale below wetland 100/400 Break

VEGETATION

Dominant Plant Species	% Overstory	% Understory	Indicator Status
1. Bromus inermis		100	NT
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Relative Cover

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Total % Overstory: Total % Understory: 0

Remarks: Wetland 100/400 is isolated from rest of drainage

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations: No saturation
Depth of Surface Water ___ (in.)
Depth to Free Water in Pit ___ (in.)
Depth to Saturated Soil ___ (in.)

Remarks:

Wetland Hydrology Indicators:

Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

NONE

SOILS Pit 9 Bear Claw 11/2/06

Map Unit Name (Series and Phase): _____ Drainage Class: mod well

Taxonomy (Subgroup): Cumulic Haplocryolls Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A1	10YR 2/2	—	—	L, 2 f gr
4-18	A2	10YR 2/2	—	—	L, 2 m SBK

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: In drainage swale, below upper wetland. No saturation, no mottles, no oxidized root channels.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No) (Circle)	Is this Sampling Point Within a Wetland? (Circle) Yes (No)
Wetland Hydrology Present?	Yes (No)	
Hydric Soils Present?	Yes (No)	

Remarks:

Approved by HQUSACE 3/92

ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw Condos
Applicant/Owner: Atira Group
Investigator: Houston + Buscher

DATE: 11/2/06
COUNTY: Routt
STATE: CO

Do Normal Circumstances exist on the site? (YES) NO
Is the site significantly disturbed (Atypical Situation)? YES (NO)
Is the area a potential Problem Area? YES (NO)
(If needed, explain on reverse)

Plot ID: Pit 10
Community ID: Dock/Veratrum
Location ID: South Swale
Below Bed & Bank 500

VEGETATION

Dominant Plant Species	% Overstory	% Understory	Indicator Status
1. Rumex triangulivalvis		50	FACW
2. Veratrum tenuipetalum		20	FACW
3. Alopecurus pratensis		30	NI (FACW)
4. Agrostis alba		trace	FACW
5.			
6.			
7.			
8.			
9.			
10.			

Relative Cover

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Total % Overstory: ____ Total % Understory: 100

Remarks:

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations: No saturation
Depth of Surface Water ____ (in.)
Depth to Free Water in Pit ____ (in.)
Depth to Saturated Soil ____ (in.)

Remarks: Soil isn't wet enough
UPL veg down the swale ≥ 10 ft
to west

Wetland Hydrology Indicators:

Primary Indicators:
____ Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
____ Oxidized Root Channels in Upper 12 Inches
____ Water-Stained Leaves
____ Local Soil Survey Data
____ FAC-Neutral Test
X Other (Explain in Remarks) very few Mottles

SOILS Pit 10 Bear Claw 11/2/06

Map Unit Name (Series and Phase): _____ Drainage Class: mod well

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Cumulic Haplocryolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8	A1	10YR 2/2	—	—	SL, 2 f m 5BK
8-14	A2	10YR 3/2	—	—	SL, 1 m 5BK

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: In drainage swale. Observed one m small mottle, no oxidized root channel, no saturation

Culvert up drainage.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No) (Circle)	Is this Sampling Point Within a Wetland? (Circle) Yes (No)
Wetland Hydrology Present?	Yes (No)	
Hydric Soils Present?	Yes (No)	

Remarks:

Approved by HQUSACE 3/92

ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw
Applicant/Owner: Atira Group
Investigator: Houston + Buscher

DATE: 11/3/06
COUNTY: Routt
STATE: CO

Do Normal Circumstances exist on the site? (YES) NO
Is the site significantly disturbed (Atypical Situation)? YES (NO)
Is the area a potential Problem Area? YES (NO)
(If needed, explain on reverse)

Plot ID: Pit 11
Community ID:
Location ID: Lower WL

VEGETATION

Dominant Plant Species	% Overstory	% Understory	Indicator Status
1. Agrostis alba		TR 65	FACW
2. Alopecurus pratensis		15	NI (FACW)
3. Phleum pratense		15	FACU
4. Poa pratensis		5	FACU
5.			
6.			
7.			
8.			
9.			
10.			

Relative Cover

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Total % Overstory: Total % Understory: 80

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks):
- Stream, Lake or Tide Gauge
- Aerial Photographs
- Other
- X No Recorded Data Available

Field Observations: No saturation
- Depth of Surface Water: (In.)
- Depth to Free Water in Pit: (In.)
- Depth to Saturated Soil: (In.)

Remarks: Down gradient of where 2 swales meet, back to WL veg below break

Wetland Hydrology Indicators:

Primary Indicators:
- Inundated
- Saturated in Upper 12 Inches
- Water Marks
- Drift Lines
- Sediment Deposits
- Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- Water-Stained Leaves
- Local Soil Survey Data
- FAC-Neutral Test
- X Other (Explain in Remarks) Mottles

SOILS Pit 11 Bear Clair 11/2/06

Map Unit Name (Series and Phase): _____ Drainage Class: poorly

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Cumulic Cryaquolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
		—	—	—	cl, 2 f gr
0-5	A1	10YR 2/2			
5-14	A2	10YR 2/2	7.5YR 3/4	3/, d	cl, 2 m sbk

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or (Low-Chroma) Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: In lower end of drainage swale, below pit 10. No saturation. Mottles + oxidized root channels in A2. Hydrology → runon

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw — DATE: 11/3/06
Applicant/Owner: Atira Group — COUNTY: Routt
Investigator: Houston + Buscher — STATE: CO

Do Normal Circumstances exist on the site? (YES) NO — Plot ID: Pit 12
Is the site significantly disturbed (Atypical Situation)? YES (NO) — Community ID: Redtop
Is the area a potential Problem Area? YES (NO) — Location ID: lot 10 next to lawn on top of hill - WL 600
(If needed, explain on reverse)

VEGETATION

Dominant Plant Species	% Overstory	% Understory	Indicator Status
1. Agrostis alba		90	FACW
2. Phleum pratense		10	FACU
3. Epilobium sp.		trace	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Total % Overstory: ____ Total % Understory: 90

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations: No saturation
Depth of Surface Water: ____ (In.)
Depth to Free Water in Pit: ____ (In.)
Depth to Saturated Soil: ____ (In.)

Remarks: Pit is in low area next to irrigated lawn that pools irr runoff not a natural hydrology up here

Wetland Hydrology Indicators:

Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
X Other (Explain in Remarks) Mottles

SOILS Pit 12 Bear claw 11/3/06

Map Unit Name (Series and Phase): _____ Drainage Class: poorly

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Typic Haplocryolls

Profile Description: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6	A1	10YR3/2	—	—	gl cl 2 f sbk
6-14	A2	10YR3/2	10YR4/4	5-7%, d	gl cl 2 m sbk

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Just west on Conds. No saturation. Mottles + oxidized root channels in #2. Hydrology from wetting grass.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No (Circle)	Is this Sampling Point Within a Wetland? (Yes) No (Circle)
Wetland Hydrology Present?	(Yes) No?	
Hydric Soils Present?	(Yes) No	

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw Condos
DATE: 11/3/06
Applicant/Owner: Atira Grap
COUNTY: Routt
Investigator: Houston + Buscher
STATE: CO

Do Normal Circumstances exist on the site? (YES) NO
Is the site significantly disturbed (Atypical Situation)? YES (NO)
Is the area a potential Problem Area? YES (NO)
(If needed, explain on reverse)

Plot ID: Pit 13
Community ID: Redtop
Location ID: Next to WL 700 on side of existing Bldg.

VEGETATION

Dominant Plant Species	% Overstory	% Understory	Indicator Status
1. Agrostis alba		70	FACW
2. Phleum pratense		20	FACU
3. Festuca rubra		10	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Relative Cover

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Total % Overstory _____ Total % Understory 80

Remarks:

HYDROLOGY

_____ Recorded Data (Describe in Remarks):
_____ Stream, Lake or Tide Gauge
_____ Aerial Photographs
_____ Other
X No Recorded Data Available

Field Observations: upper 3" saturated
Depth of Surface Water _____ (in.)
Depth to Free Water in Pit _____ (in.)
Depth to Saturated Soil _____ (in.)

Remarks: Soil is not hydric
Not wet enough here.

Wetland Hydrology Indicators:

Primary Indicators:
___ Inundated
X Saturated in Upper 12 inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
NONE
___ Oxidized Root Channels in Upper 12 inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC- Neutral Test
___ Other (Explain in Remarks)

SOILS Pit 13 Bear Claw 11/3/06

Map Unit Name (Series and Phase): _____ Drainage Class: somewhat poorly

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Typic Haplocryolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A1	10YR 3/2	—	—	gr CL 2 fgr
4-14	A2	10YR 3/2 10YR 2/2	—	—	gr CL

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Disturbed soil. Next to rock drain adjacent to Condos. Upper 3" are saturated. Many orange sand grains & orange gravel fragments throughout → these look like mottles but are not, are probably from weathering rinds on rock fragments.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bear Claw Condos	DATE: 11/3/06
Applicant/Owner: Atira Group	COUNTY: Routt
Investigator: Houston + Buscher	STATE: CO
Do Normal Circumstances exist on the site? (YES) NO	Plot ID: Pit 14
Is the site significantly disturbed (Atypical Situation)? YES (NO)	Community ID: Phalaris
Is the area a potential Problem Area? YES (NO)	Location ID: Next to WL
(If needed, explain on reverse)	700

VEGETATION

Dominant Plant Species	% Overstory (Relative Cover)	% Understory (Relative Cover)	Indicator Status
1. Phalaris arundinacea		100	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): Total % Overstory: ____ Total % Understory: 100

Remarks: Phalaris extends up bank next to swale but out of the WL zone.

HYDROLOGY

____ Recorded Data (Describe in Remarks):
- ____ Stream, Lake or Tide Gauge
- ____ Aerial Photographs
- ____ Other
- X No Recorded Data Available

Field Observations: No saturation
- Depth of Surface Water: ____ (in.)
- Depth to Free Water in Pit: ____ (in.)
- Depth to Saturated Soil: ____ (in.)

Remarks: Pit is just outside WL boundary

Wetland Hydrology Indicators:

Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12 inches
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC- Neutral Test
- ____ Other (Explain in Remarks)

NONE

SOILS Pit 14 Bean Claw 11/3/06

Map Unit Name (Series and Phase): _____ Drainage Class: mod well

Taxonomy (Subgroup): Typic Cryorthents Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2	A	10YR2/2	—	—	SL, 2 F gr.
2-16	C	10YR3/3	—	—	V. gr sand, sg

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: On backslope about 4' above drainage. No saturation, no mottles, no oxidized root channels.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

APPENDIX K – PCN FORM

U.S. Army Corps of Engineers

South Pacific Division

Nationwide Permit Pre-Construction Notification (PCN)

This form integrates requirements of the U.S. Army Corps of Engineers (Corps) Nationwide Permit Program within the South Pacific Division (SPD). Boxes 1-10 must be completed to include all information required by General Condition 32. Box 11 (or other sufficient information to show compliance with all General Conditions) must be completed for activities in Arizona, California, Nevada, and Utah, and is recommended for activities in Colorado and New Mexico. If additional space is needed, please provide as a separate attachment. Please refer to the *Instructions for the South Pacific Division Nationwide Permit Pre-Construction Notification (PCN)* (Instructions) for instructions for completing the PCN, as well as additional information on the attachments and tables included with this PCN that may be used.

0. To be filled by the Corps

Application Number:	Date Received:	Date Complete:

1. Prospective Permittee and Agent Name and Addresses (see Instructions)

a. Prospective Permittee

First - Mr. W. Middle - Brodie Last - Sherman

Company - Steamboat Esquiar LP Email Address - brodie@fusefv.com

Address - 4265 San Felipe, Ste #970 City - Houston State - TX Zip - 77027

Phone (Residence/Mobile) - Phone (Business) - (713) 854-6221

b. Agent (if applicable)

First - Mr. Kelly Middle - Steven Last - Colfer

Company - Western Bionomics, Inc. Email Address - kscolfer@westernbionomiics.com

Address - 31040 Willow Lane City - Steamboat Springs State - CO Zip - 80487

Phone (Residence/Mobile) - (970) 846-8223 Phone (Business) - (970) 846-8223

c. Statement of Authorization: I hereby authorize Kelly Colfer, to act in my behalf as my agent for the proposed activity. (Optional, see instructions)

Signature of Applicant

12/14/2022
Date

2. Name and Location of the Proposed Activity (see Instructions)

☐ The proposed work would involve multiple-single and complete projects. See attachment for the information required in Boxes 2 through 10, and 11, if applicable.

a. Project Name or Title:	**b. County, State:**
The Astrid	Routt, Colorado

c. Name of Waterbody: Unnamed tributary to Burgess Creek, tributary to Walton Creek, tributary to the Yampa River, HUC 14050001

d. Coordinates:

☐ Unknown (please provide other location descriptions below)

Latitude - 40.456839 Longitude - -106.80008

e. Other Location Description (optional, see instructions):

f. Driving Directions to the site (optional, see instructions):

The project area can be reached from the Routt County Courthouse by traveling east on Lincoln Ave / Highway 40 for 1.5 miles to the Mount Werner exit. Turn left onto Mount Werner Road and travel 1.1 miles. At the roundabout continue straight onto Après Ski Way, travel for 0.3 mile to Ski Trail Lane. Turn left onto Ski Trail Lane, travel 0.3 mile to the Ski Inn parking lot, which is the most convenient point from which to currently access the parcel.

3. Specific NWP(s) you want to use to authorize the proposed activity (see Instructions)

NWP #14, 29, or 39

4. Description of the Proposed Activity (see Instructions)

a. Complete description of the Proposed Activity:

Please refer to project narrative.

b. Purpose of the Proposed Activity:

Please refer to project narrative.

c. Direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands and other waters of the U.S. expected to result from the NWP(s) activity:

Direct Effects - Loss of 2,326 sqft of wetlands, which would be mitigated as described below.
Indirect Effects would be minimized or eliminated by project BMPs.

d. Description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity:

No mitigation proposed

e. Any other NWP(s), Regional/Programmatic General Permit(s) or Individual Permit(s) used or intended to be used to authorize any part of the proposed activity or any related activity:

None

f. Have sketches been provided containing sufficient detail to provide an illustrative description of the proposed activity?

☒ Yes, Attached ☐ No

☐ N/A; The activity is located in the Los Angeles District boundaries of Arizona and California, See Attachment 1

☐ N/A, The activity is located in the San Francisco District boundaries of California, See Attachment 2

☐ N/A, The activity is located in the Sacramento District boundaries of California, Nevada, or Utah, See Attachment 3

5. Aquatic Resource Delineation (see Instructions)

a. Has a delineation of aquatic resources been conducted in accordance with the current method required by the Corps? ☒ Yes ☐ No

If yes, please attach a copy of the delineation

Note: If no, your PCN is not complete. In accordance with General Condition 32, you may request the Corps delineate the special aquatic sites and other waters on the project site, but there may be a delay. In addition, the PCN will not be considered complete until the delineation has either been submitted to or completed by the Corps, as appropriate.

b. If a delineation has been submitted, would you like the Corps to conduct a jurisdictional determination (preliminary or approved)? ☐ Yes ☒ No

If yes, please complete, sign and return the attached *Appendix 1 – Request for Corps Jurisdictional Determination (JD)* sheet or provide a separate attachment with the information identified in Appendix 1.

6. Compensatory Mitigation (see Instructions)

a. Will the proposed activity result in the loss of greater than 1/10-acre of wetlands? ☐ Yes ☒ No

If yes, describe how you propose to compensate for the loss of each type of wetland:

Note: for the loss of less than 1/10 acre of wetlands, or if no compensatory mitigation is proposed, the Corps may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

b. Will the proposed activity result in the loss of streams or other open waters of the U.S.? ☐ Yes ☒ No

If yes, provide a description of any proposed compensatory mitigation for the loss of each type of stream or other open water:

Note: if no compensatory mitigation is proposed, the Corps may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in no more than minimal adverse environmental effects.

7. Endangered Species Act (ESA) Compliance (see Instructions)

a. For non-Federal permittees (if Federal permittee, check N/A and skip to 7(d))**:** ☐ N/A

(1) Is there any Federally-listed endangered or threatened species or critical habitat that might be affected or is in the vicinity of the activity? ☐ Yes ☒ No

(2) Is the activity located in designated critical habitat for Federally-listed endangered or threatened species? ☐ Yes ☒ No

If yes to either (1) or (2), include the name(s) of those endangered or threatened species that might be affected by the proposed activity or might utilize the designated critical habitat that might be affected by the proposed activity:

1. 2.

3. 4.

5. 6.

If no to both (1) and (2), proceed to Box 8.

Note: If yes to either (1) or (2), note per General Condition 18(c), you shall not begin work on the activity until notified by the Corps that the requirements of the ESA have been satisfied and that the activity is authorized.

b. Has information sufficient to initiate consultation with the U.S. Fish and Wildlife Service/National Marine Fisheries Service for compliance with Section 7 of the ESA been prepared? ☐ Yes ☒ No

If yes, please attach a copy of the information.

c. Additional information you wish to provide regarding compliance with the ESA, if applicable:

The project will not impact individuals or habitat protected by the federal ESA.

d. For Federal permittees, you must provide documentation demonstrating compliance with ESA as a separate attachment.

8. Historic Properties (see Instructions)

a. For non-Federal permittees (if Federal permittee, check N/A and skip to 7(d))**:** ☐ N/A

(1) Is there a known historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places that the NWP may have the potential to affect? ☐ Yes ☒ No

If yes to (1), state which historic property may have the potential to be affected by the proposed activity:

1. 2.

3. 4.

5. 6.

OR

☐ A vicinity map indicating the location of the historic property is enclosed

(2) If no to (1), describe the potential for the proposed work to affect a previously unidentified historic property:

There are no structures with apparent cultural significance on the parcel.

Note: If yes to (1), note per General Condition 20(c), you shall not begin the activity until notified by the Corps that the activity has no potential to cause effects or that consultation under Section 106 of the National Historic Preservation Act (NHPA) has been completed.

b. Has information sufficient to initiate consultation with the State Historic Preservation Officer/Tribal Preservation Officer for compliance with Section 106 of the National Historic Preservation Act (NHPA) been prepared?

☐ Yes ☒ No

If yes, please attach a copy of the information.

c. Additional information you wish to provide regarding compliance with the NHPA, if applicable:

d. For Federal permittees, you must provide documentation demonstrating compliance with NHPA in a separate attachment.

9. National Wild and Scenic Rivers (see Instructions)

a. Will the proposed activity(s) occur in a component of the National Wild and Scenic River System or a river officially designated by Congress as a "Study River" for possible inclusion in the system while the river is in an official study status?

☐ Yes, in a component of a National Wild and Scenic River System; ☐ Yes, in a "study" river ☒ No

If yes, identify the Wild and Scenic River or the "study river"

Note: per General Condition 16(b), you shall not begin the NWP activity until notified by the Corps that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status. If you have received written notification from the Federal agency, please attach the correspondence.

10. Section 408 Permissions (see Instructions)

a. Will the NWP also require permissions from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a Corps federally authorized Civil Works project? ☐ Yes ☒ No

If yes, have you received Section 408 permission to alter, occupy, or use the Corps project? ☐ Yes ☐ No

If yes, please attach the Section 408 permission

If yes, note per General Condition 31, an activity that requires Section 408 permission is not authorized by NWP until the Corps issues the Section 408 permission to alter, occupy, or use the Corps project, and the Corps issues a written NWP verification.

11. Compliance with NWP General Conditions (see Instructions)		
Check	**General Condition**	**Rationale for Compliance with General Condition**
☒	1. Navigation	Complies, project will not impact navigation.
☒	2. Aquatic Life Movements	Complies, project will not impede movement of aquatic life.
☒	3. Spawning Areas	Complies, no spawning areas impacted.
☒	4. Migratory Bird Breeding Areas	Complies, no breeding of migratory birds has been documented on the parcel. No nests would be directly impacted.
☒	5. Shellfish Beds	Complies, no shellfish beds present.
☒	6. Suitable Material	Complies, no unsuitable material will be used.

☒	7. Water Supply Intakes	Complies, no water supply intakes in the project area or affected by the project.
☒	8. Adverse Effects from Impoundments	Complies, there are no impoundments associated with this project.
☒	9. Management of Water Flows	Complies, water flows will not be managed during implementation.
☒	10. Fills Within 100-Year Floodplains	Complies with local floodplain management regulations, the project will not alter the base flood elevation from that which currently exists.
☒	11. Equipment	Complies, heavy equipment working in wetlands or mudflats will be placed on mats, or other measures taken to minimize soil disturbance.
☒	12. Soil Erosion and Sediment Controls	Complies, appropriate soil erosion and sediment controls will be used and maintained.

☒	13. Removal of Temporary Fills	Complies, temporary fills will be removed and the affected areas returned to preconstruction elevations. The affected areas will be revegetated.
☒	14. Proper Maintenance	Complies, all authorized structures and fills shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions.
☒	15. Single and Complete Project	Complies, the PCN represents a single and complete project.
☒	16. Wild and Scenic Rivers	Complies, the Yampa River is not a Wild and Scenic River.
☒	17. Tribal Rights	Complies, the activity will not impair reserved tribal rights.
☒	18. Endangered Species	See Box 7 above.
☒	19. Migratory Bird and Bald and Golden Eagle Permits	Complies, the project will not result in a “take” under the U.S. Fish and Wildlife Service’s regulations governing compliance with the MBTA or the Bald and Golden Eagle Protection Act.

☒	20. Historic Properties	See Box 8 above.
☒	21. Discovery of Previously Unknown Remains and Artifacts	Will comply
☒	22. Designated Critical Resource Waters	Complies, there are no critical resource waters in the project area or affected by the project.
☒	23. Mitigation	See Boxes 4(d) and 6 above.
☒	24. Safety of Impoundment Structures	Complies, there are no Impoundments associated with this project.
☒	25. Water Quality, including status of Section 401 Water Quality Certification	Under the Colorado 401 Certification Regulation, all nationwide permits are certified by statute and do not require a certification by the Colorado WQCD. Applicants for Nationwide Permits do not need to submit any information or documents to the WQCD relative to the 404 permit.
☒	26. Coastal Zone Management, including status of CZM Consistency Certification from the State of California (for projects in or affecting the Coastal Zone)	Not located in coastal zone.

☒	27. Regional and Case-by-Case Conditions	In compliance with all Colorado Regional Conditions.
☒	28. Use of Multiple Nationwide Permits	Complies, this is a single and complete project.
☒	29. Transfer of Nationwide Permit Verifications	Will Comply
☒	30. Compliance Certification	Will Comply
☒	31. Activities Affecting Structures or Works Built by the United States	See Box 10 above.
☒	32. Pre-Construction Notification	In Compliance.