

Wayland, Joshua

From: Keller, Kevin <Kevin.Keller@hdrinc.com>
Sent: Friday, March 22, 2019 3:23 PM
To: Wayland, Joshua; Diller, Elizabeth
Cc: Hemphill, Mark; Klaumann, Anthony; Nichols, Karen; Perkins, Michael; Brian Barton; Jenna Jorgensen; 'Mike Mckee'; 10145616_7CountyCoalitionUBR TO1
Subject: UBRy Revised Wetlands Methodology and Draft Class 2 Cultural Survey Methodology
Attachments: UBRy Delineation Methodology revised 03222019.pdf; UBRy DRAFT Cultural Resources reconnaissance methodology.docx

Josh and Elizabeth,

Please find attached a revised Wetlands Delineation Methodology in response to your comments. Also attached is a draft Class 2 Cultural Resources Reconnaissance Methodology for your review.

Kevin

Kevin Keller, PG
Vice President/Senior Professional Associate

HDR
10450 Holmes Road, Suite 600
Kansas City, MO 64131-3471
D 816.347.1183 M 913.638.2571
kevin.keller@hdrinc.com

hdrinc.com/follow-us

Uinta Basin Railway: Revised Draft Wetland Delineation Field Methodology

Background

This plan outlines the revised methodology for the collection of the baseline (existing condition) waters of the United States (WOUS) data for the three proposed railway routes (Indian Canyon, Wells Draw and Craig) identified by the Seven County Infrastructure Coalition (Coalition) for the proposed Uinta Basin Railway. The proposed methodology was discussed with the U.S. Army Corps of Engineers (USACE), Utah and Nevada Section Office (Bountiful office) and Surface Transportation Board (STB). The Bountiful office indicated they would work with the STB as a cooperating agency during the NEPA process, and coordination is expected to be through the Bountiful office for work conducted along the proposed routes in both Utah and Colorado. This revised methodology includes procedural clarifications based on comments from both the USACE and STB.

The STB will be the lead agency to prepare an Environmental Impact Statement (EIS). STB will develop the final set of reasonable and feasible alternatives that will be considered in the EIS during the scoping process. If additional route alternatives are identified during the scoping process, delineation would be conducted for those route alternatives using methods commensurate with the methods used for the three routes proposed by the Coalition. The wetland delineation work that would be conducted under this plan will support both the analysis in the EIS and Individual Permit Application

HDR plans to conduct field delineation survey of WOUS, along the three proposed routes, see Figure 1, within a 2000-foot wide route corridor. In consultation with STB, HDR and the Coalition determined that the proposed routes would occur within a 2000-foot wide corridor, designated as 1000-feet on each side of the nominal centerline of the railway, and that width would be appropriate at this time due to the current level of engineering analysis. As more detailed engineering analyses (including aerial photogrammetry, geotechnical investigations and tunnel evaluations) occur, it is anticipated the railway route centerline may shift within this designated 2000-foot wide corridor. If for some reason, the more detailed engineering design requires placing the railway route centerline inclusive of its permanent embankment, cut, drainage structures or other permanent features, outside of the 2000-foot wide corridor, then additional field resources will be mobilized to study the added route corridor width.

Based on the February 15, 2019 railway routes developed by the Coalition, the total mileage for all three proposed routes is approximately 370 miles; however, there are approximately 310 unique miles, after deducting overlapping route segments and deducting for potential reuse of the existing Desert Power Railroad (DPR) on one or more of the routes. Current engineering analysis indicates that the new railway would tie directly to and use the existing DPR railroad infrastructure, with no modifications to the DPR railroad embankment or waterway crossings required.

KEY

Railway Termini

① Myton
② Leland Bench

Legend:

- Existing Railway
- Primary Highway
- Secondary Highway
- State Boundaries
- County Boundaries
- US Forest Service
- US Forest Service Roadless Inventory
- US Forest Service Wilderness Areas
- National Park Service
- BLM ACEC
- Tribal Land
- Rivers
- Indian Canyon
- Wells Draw
- Craig
- UP Union Pacific Railroad
- BNSF BNSF Railway
- UTAH Utah Railway
- DPR Deseret Power Railroad
- () Trackage Rights

Proposed Routes

UINTA BASIN RAILWAY

HDR proposes to conduct field work to identify potential WOUS for the three proposed routes, as shown in Figure 1, above, pending property access permissions. If property access is not granted, WOUS delineation methodology will follow procedures outlined in the subsequent section.

- 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987)
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008)
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast (Version 2.0) (USACE 2010)

- *A Field Guide for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual* (Lichvar and McColley 2008) and *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Curtis and Lichvar 2010)
- *A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States* (Mersel and Lichvar 2014)

HDR will collect field data to delineate aquatic resources (wetlands and other waters such as streams and lakes) within the study area developed in consultation with STB and the USACE that is adequate to prepare an aquatic resources delineation report in general accordance with the *Minimum Standards for Acceptance* for the USACE Sacramento District. Anticipated fieldwork methods to address these standards are as follows:

- At least one set of paired data points, documented in data forms, for each wetland resource or complex.
- Data points and cross-sections for streams, documented in data forms for ephemeral and intermittent streams.
- Comments in data forms will include site observations that qualitatively describe general condition and functions of delineated aquatic resources.
- Wetlands and other aquatic resources in the survey area will be mapped in the field using an iPad that is linked to a global positioning system (GPS) unit with sub-meter accuracy.
- Site photos of each aquatic resource delineated.

Landscape characteristics across a majority of the three route corridors pertain to the Arid West Region. A portion of the proposed route corridors, through the Roan Cliffs and the West Tavaputs Plateau, can be characterized as mountainous terrain. HDR proposes to use the Arid West supplements (for wetlands and streams) for most of the survey area, and where landscape characteristics are considered montane, will use the Western Mountain, Valleys and Coast supplement.

In 2014, HDR conducted aquatic resources delineation surveys for UDOT's Uinta Basin Railroad project. These surveys were never submitted to the USACE for jurisdictional determination, as the project was cancelled. The 2014 surveys were conducted on portions of the proposed routes, covering about 85 miles. The 2014 surveys were conducted in accordance with the supplements and guides listed above. HDR proposes to visit the 2014 surveyed areas to verify through visual observation that the hydrology and vegetation characteristics appear consistent with the 2014 delineation survey. Delineation data forms from 2014 would be incorporated for verified aquatic resources. New data forms would be employed to delineate sites with differences, including landscape characteristic differences, from the 2014 delineation survey. It was noted that should the 2014 survey verification effort indicate a lack of hydrology,

care will be taken to evaluate the effects of the recent drought prior to removing an area that was previously classified as a WOUS based on adequate hydrology.

WOUS Desktop Delineation Methodology

This section applies to delineation procedures for properties, where access is not permitted.

HDR will conduct the WOUS identification by reviewing aerial and satellite imagery, existing wetland and soil maps. Once the desktop review is conducted, field verification of conditions will be conducted near to or adjacent to the actual parcel. As streams, including ephemeral drainages do not stop at parcel boundaries, conditions upstream or downstream along the drainages will be field verified and documented. These areas would be documented and included in the Aquatic Resources Report for review by STB during the NEPA evaluation.

Aquatic Resources Report

To formally identify aquatic resources that qualify as WOUS, HDR will prepare an aquatic resources report that is adequate to support STB's environmental review.

Aquatic Resources Delineation Report

HDR will prepare and submit the aquatic resources delineation report in accordance with the *Minimum Standards for Acceptance* for the USACE Sacramento District review during the Individual Permit Application process.

TECHNICAL MEMORANDUM

To: Kevin Keller
HDR

From: Matt Edwards, Principal Investigator

Date: March 22, 2019

Re: **Uinta Basin Railway: Draft Cultural Resources Field Reconnaissance Methodology / SWCA Project No. 53323**

BACKGROUND

This plan outlines SWCA Environmental Consultant's (SWCA) proposed methodology for collecting comparable affected environment data pertaining to cultural resources for three alternative routes (Indian Canyon, Wells Draw and Craig; Figure 1) proposed by the Seven County Infrastructure Coalition (Coalition) for the Uinta Basin Railway project (Project) to be evaluated by the Surface Transportation Board (STB) in an Environmental Impact Statement (EIS). If additional alternatives are identified during the scoping process, these methods will be applied to those alternatives as well. The methodology described here for **archaeology** is intended to support analysis in the EIS only and alone does not constitute adequate identification for compliance with Section 106 of the National Historic Preservation Act, which will be required for final project permitting once an alternative is selected. The proposed approach for **architectural history** will meet these standards.

Based on the proposed route alternatives provided to SWCA on February 15, 2019, the total area of potential effect (APE) for the project at this point is composed of about 433 linear miles and 204,000 acres. The Indian Canyon and Wells Draw alternatives are entirely within Utah but the Craig alternative extends into Colorado.

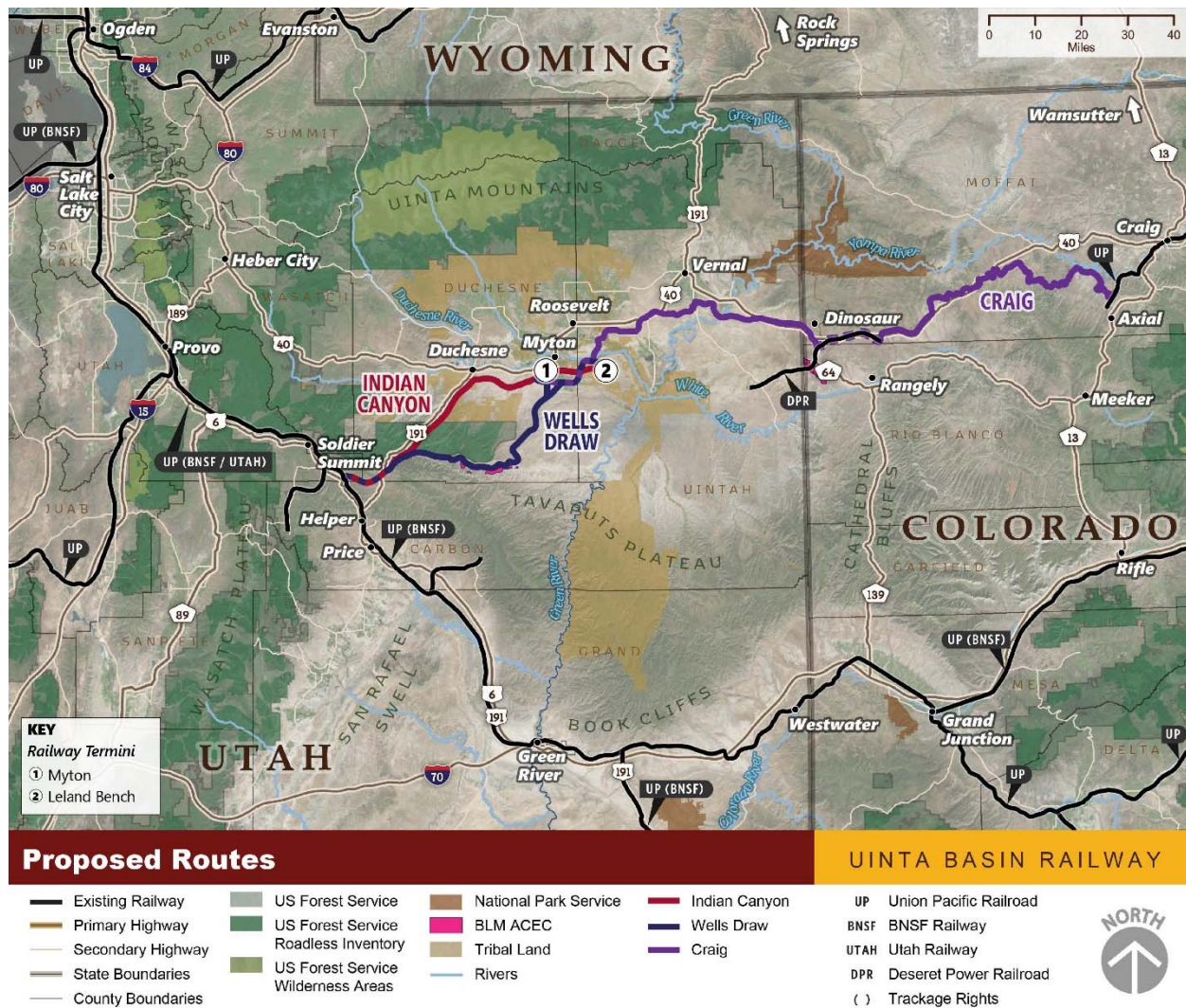


Figure 1. Route Alternatives

Previous Work

In 2014, HDR and SWCA conducted cultural resources assessments for Utah Department of Transportation's (UDOT) Uinta Basin Railroad project. Much of the Indian Canyon alternative proposed by the current Project follows the route evaluated during this previous work. Therefore, the methodology described here is intended to match as closely as possible the approach used during that project so that the three Project alternatives can be fairly compared in the EIS. Although UDOT's project was abandoned prior to publication of an EIS, data from the cultural resources reconnaissance efforts were submitted to the Utah State Historic Preservation Office (SHPO) but were not formally reviewed by them or any of the involved federal agencies.

DESKTOP ANALYSIS

High level consideration for impacts to particularly important cultural resources or areas were included in the development of alternatives being carried forward in the EIS. Additionally, as a first step before performing any fieldwork, SWCA will conduct a formal file search for previous cultural resources

studies, archaeological sites, and historic architectural properties within a half-mile buffer of each alternative; this will include an on-line search of the Utah Division of State History (UDSH) database (Preservation Pro) and a request for data from the Colorado Historical Society – Office of Archaeology and Historic Preservation’s Compass system (for the Craig route).

RECONNAISSANCE SURVEYS

Archaeological Resources

SWCA will conduct preliminary, reconnaissance level inventories to support planning and consideration of alternatives in the draft EIS. Thorough, intensive-level archaeological survey can then be conducted of the selected preferred alternative carried forward in the final EIS or stipulated in a programmatic agreement for compliance with Section 106 developed in support of the NEPA record of decision (ROD). To accomplish this, SWCA will conduct field survey using 15 m (20 m in the Colorado portion of the Craig route) transects targeting sample areas within each environmental zone traversed by a given alternative with the goal of evaluating 15% of that alternative’s APE. The result will be a representative sample of archaeological resources allowing for valid comparison of alternatives during the NEPA process. It will provide enough data for such a comparison but will not unnecessarily expend time and money at this stage in the planning process.

All archaeological sites encountered during the reconnaissance-level survey will be documented on Utah Archaeological Site Forms or Colorado Management Data Forms as appropriate, and each site will be evaluated for its eligibility to the NRHP. Previously documented sites located along the survey transects for each alternative will be revisited and updated as necessary to indicate their current condition. Minor adjustments to project alternatives over the course of the EIS may not require supplemental fieldwork if the relative ratio of survey coverage between alternatives is maintained; however, major adjustments that result in disproportionate survey coverage between alternatives are likely to necessitate additional fieldwork. The results of the reconnaissance-level survey will be reported in a summary technical report with accompanying site forms.

Architectural Historical Resources

The project area is comprised almost entirely of rural and undeveloped land. It is anticipated that historic buildings and structures will be identified but that they will be few and widely scattered. Therefore, a selective reconnaissance-level survey (RLS) of historic buildings that are 43 years old or older for the entire length of the proposed alignments will be conducted. An RLS of Indian Canyon was already conducted in 2014 during the UDOT study although this may require updates to include any resources that aged into consideration during the intervening five years.

SWCA will gather information on each property that requires documentation through examination of the exterior of the property, notation on architectural type and style, documentation of alterations that would affect the eligibility of the property for the NRHP, and photographic documentation in accordance with the RLS SOP. A technical report summarizing methods, survey results, and recommendations of NRHP eligibility for each documented property will be prepared upon completion of the RLS.