

Wayland, Joshua

From: Keller, Kevin <Kevin.Keller@hdrinc.com>
Sent: Thursday, April 11, 2019 10:30 AM
To: Wayland, Joshua
Cc: Nichols, Karen; Perkins, Michael; Hemphill, Mark; Klaumann, Anthony; Jenna Jorgensen; Floyd, Kathryn K.; 10145616_7CountyCoalitionUBR TO1; Brian Barton; Mike McKee
Subject: UBRY - Updated wetland delineation methodology, for STB
Attachments: UBRY Delineation Methodologyrevised 04112019.docx

Josh,

Attached is a revised wetlands methodology incorporating your comments below:

- Refer to the desktop methodology for parcels with no access
- Further describe the basis for the qualitative method to characterize WOUS function and condition

This follows up on the email that I sent to you yesterday. Please let us know if you'd like to talk through this.

Kevin

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Uinta Basin Railway: Revised Draft Wetland Delineation Field Methodology

Background

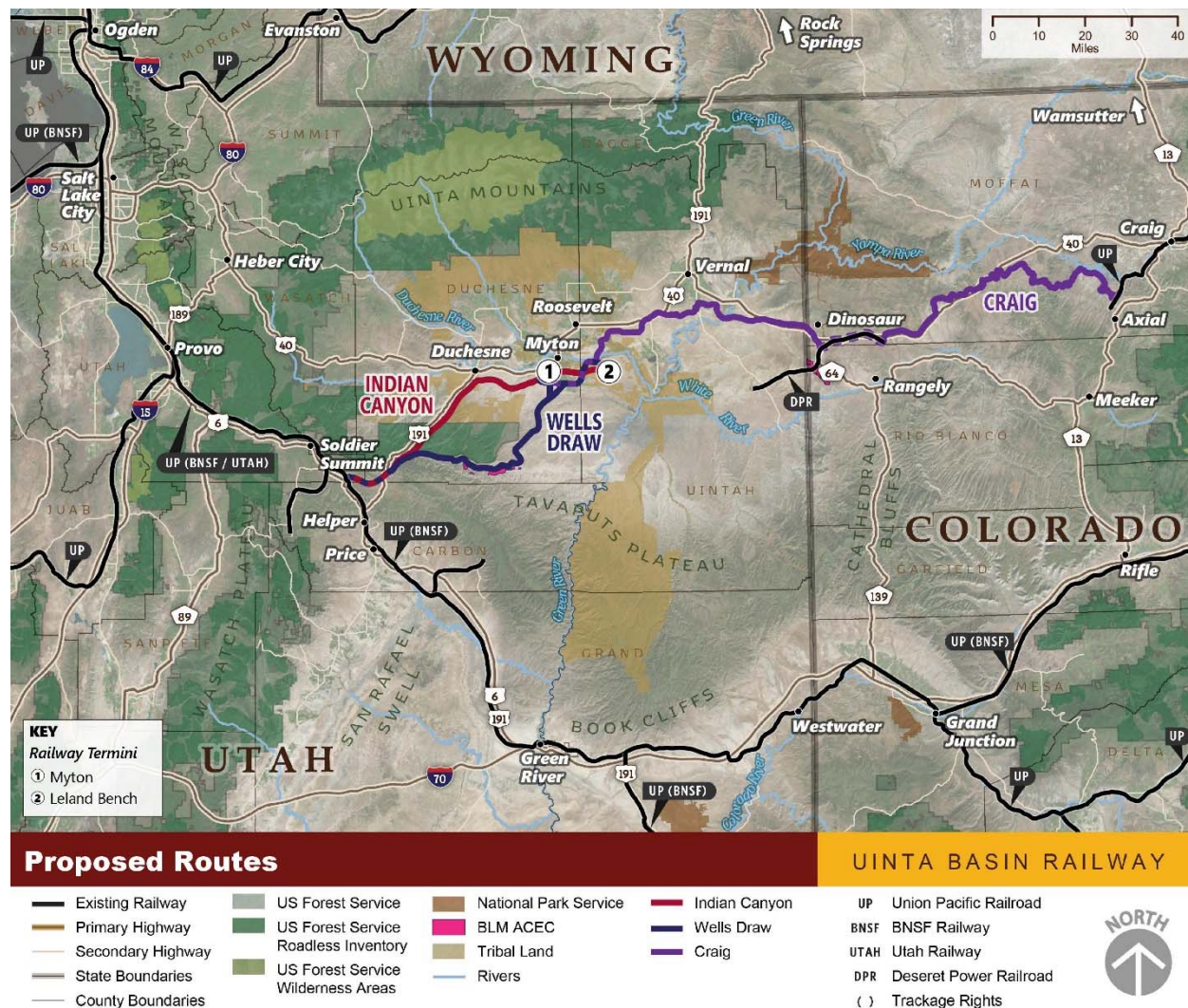
This plan outlines the revised methodology for the collection of the baseline (existing condition) waters of the United States (WOUS) data for the three proposed railway routes (Indian Canyon, Wells Draw and Craig) identified by the Seven County Infrastructure Coalition (Coalition) for the proposed Uinta 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.

Figure 1. Proposed Route Alignments



WOUS Field Delineation Methodology

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 the desktop delineation methodology described below.

HDR will conduct delineation fieldwork in accordance with following Clean Water Act regulations and U.S. Army Corps of Engineers (USACE) procedures, and guidance:

- 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.

As indicated above, collected field data will include qualitatively describing the condition and functions of delineated aquatic resources. The mitigation and monitoring guidelines for the USACE Pacific Division recommend using a functional or condition assessment method (FCAM) when available and practicable, and that project proponents should coordinate with the appropriate USACE office to make this determination. For this project, the USACE Bountiful office indicated condition and functions of aquatic resources within the survey area should be described qualitatively since USACE Utah office does not currently recommend a specific FCAM to assess aquatic resources in Utah and Colorado.

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. This report will include a qualitative assessment of the condition and functions of delineated aquatic resources.