

**Wayland, Joshua**

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**Sent:** Friday, April 05, 2019 10:39 AM  
**To:** Wayland, Joshua; Diller, Elizabeth  
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**Attachments:** UBRY DRAFT Biological Resources Methodology 04042019.pdf

Josh and Elizabeth,

Attached is the biological resources characterization methodology for our upcoming field efforts. We look forward to your review and comments.

Kevin

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# **Uinta Basin Railway: Proposed Draft Reconnaissance-Level Biological Resources Field Methodology**

## **Background**

This plan outlines the proposed methodology for the collection of the baseline (existing condition) biological resources reconnaissance data for the three proposed railway routes (Indian Canyon, Wells Draw, and Craig) identified by Seven County Infrastructure Coalition (Coalition) for the proposed Uinta Basin Railway.

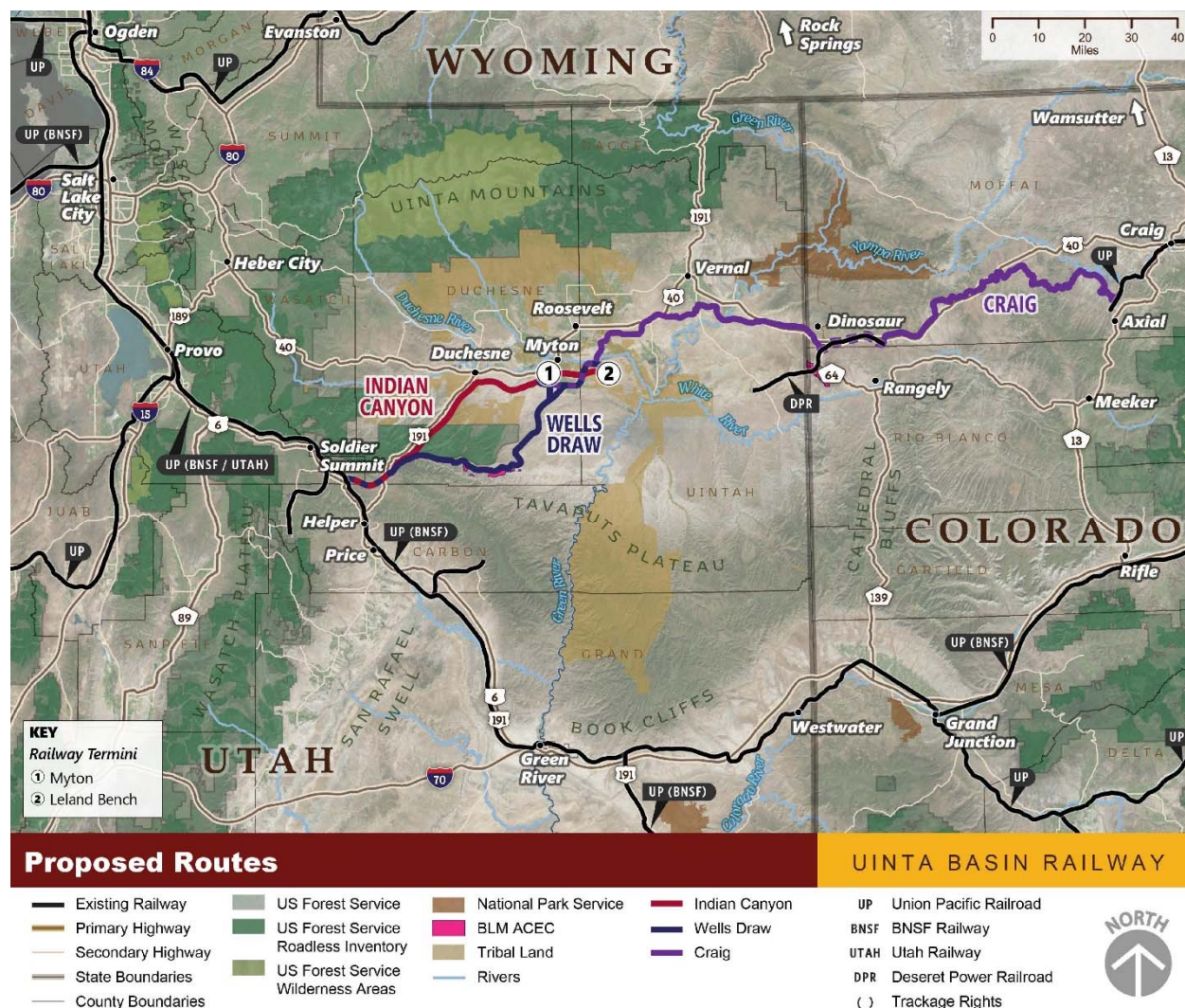
The Surface Transportation Board (STB) will be the lead agency to prepare an Environmental Impact Statement (EIS). The reconnaissance work that would be conducted under this plan will support additional biological surveys, if required, for the analysis in the EIS.

HDR plans to conduct reconnaissance-level field surveys for biological resources along the three proposed routes, see Figure 1, within the 2000-foot route corridor. In consultation with the STB, HDR and the Coalition determined that the proposed routes would occur within a 2000-foot 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 route mileage for all three proposed routes is about 370 miles; however, there is an estimated 310 unique miles, after deducting overlapping route segments and deducting for potential reuse of the existing DPR rail corridor on one or more of the routes. Current engineering analysis indicates 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.

The reconnaissance-level field surveys for biological resources will be conducted concurrently with surveys to delineate wetlands and other aquatic resources. Review of available data, coordination with resource agencies and Federal land managers, and scoping comments from the EIS will help guide biological surveys for the project. The reconnaissance-level field surveys do not include species-specific surveys or other agency protocol surveys that may be conducted later.

**Figure 1. Proposed Route Alignments**



## Reconnaissance-level Methodology for Biological Resources

HDR proposes to conduct field work to characterize biological resources for the three proposed routes, as shown in Figure 1, above, pending property access permissions. If property access is not granted, biological characterization will be based on aquatic resources and desktop analyses. The field work entails reconnaissance-level surveys to characterize general vegetation communities and to help assess habitat suitability for special-status species in the route survey corridors. In this document, special-status species refer to species federally classified threatened, endangered, proposed, and candidate species, and other sensitive species identified for the project.

### Reconnaissance-level Survey Methods

Reconnaissance-level surveys to characterize general vegetation communities and assess habitat suitability for special-status species identified in the project corridors will occur in concert with efforts to delineate wetlands and other aquatic resources in the project corridors.

Biologists will survey the project corridors stopping every 300 meters to take site photos in the four cardinal directions and recording vegetation at the site, noting the percentages of the dominant plant species. Biologists may map the boundaries of distinct vegetation communities along the route and will stop to take photos and record important vegetation communities if there is noticeable change between the 300 meter intervals. If a given interval location is inaccessible, a nearby representative location will be selected. A combination of desktop and on-site mapping will be used to generate general vegetation community maps for the project corridors.

Biologists will also evaluate whether portions of the project corridors provide suitable habitat for special-status species through available data review and agency coordination. Available data sources include:

- U.S. Fish and Wildlife Service
  - o Environmental Conservation Online System-Information, Planning, and Conservation System (ECOS-IPaC)
  - o Endangered Species Database
  - o Utah Field Office Website
- Utah Division of Wildlife Resources
- Colorado Parks and Wildlife
- Utah Natural Heritage Program
- Colorado Natural Heritage Program

Through desktop review including GIS analysis, HDR will preliminarily identify areas within project corridors that might provide suitable habitat for special-status species. Table 1 provides a summary of federally threatened, endangered, or candidate species identified by ECOS-IPaC website as federally listed species that could possibly occurring in project corridors or otherwise be affected by the project.

**Table 1. Federal Threatened, Endangered, or Candidate Species Possibly Occurring in Project Corridors**

| Common Name                  | Scientific Name                  | Federal Status | Project Corridor |       |            |
|------------------------------|----------------------------------|----------------|------------------|-------|------------|
|                              |                                  |                | Indian Canyon    | Craig | Wells Draw |
| Birds                        |                                  |                |                  |       |            |
| Mexican Spotted Owl          | <i>Strix occidentalis lucida</i> | Threatened     | X                | X     | X          |
| Western yellow-billed cuckoo | <i>Coccyzus americanus</i>       | Threatened     | X                | X     | X          |
| Fish                         |                                  |                |                  |       |            |
| Bonytail Chub                | <i>Gila elegans</i>              | Endangered     | X                | X     | X          |
| Colorado Pikeminnow          | <i>Ptychocheilus lucius</i>      | Endangered     | X                | X     | X          |
| Humpback Chub                | <i>Gila cypha</i>                | Endangered     | X                | X     | X          |
| June Sucker                  | <i>Chasmistes liorus</i>         | Endangered     | X                |       | X          |
| Razorback Sucker             | <i>Xyrauchen texanus</i>         | Endangered     | X                | X     | X          |

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| Common Name                 | Scientific Name                               | Federal Status | Project Corridor |       |            |
|-----------------------------|-----------------------------------------------|----------------|------------------|-------|------------|
|                             |                                               |                | Indian Canyon    | Craig | Wells Draw |
| Mammals                     |                                               |                |                  |       |            |
| Black-footed Ferret         | <i>Mustela nigripes</i>                       | Experimental   |                  | X     |            |
| Canada lynx                 | <i>Lynx canadensis</i>                        | Threatened     | X                | X     | X          |
| Plants                      |                                               |                |                  |       |            |
| Barneby Ridge-cress         | <i>Lepidium barnebyanum</i>                   | Endangered     | X                |       | X          |
| Clay Phacelia               | <i>Phacelia argillacea</i>                    | Endangered     | X                |       | X          |
| Jones Cycladenia            | <i>Cycladenia humilis</i> var. <i>jonesii</i> | Threatened     | X                |       | X          |
| Pariette Cactus             | <i>Sclerocactus brevispinus</i>               | Threatened     | X                | X     | X          |
| Uinta Basin Hookless Cactus | <i>Sclerocactus wetlandicus</i>               | Threatened     | X                | X     | X          |
| Ute ladies'-tresses         | <i>Spiranthes diluvialis</i>                  | Threatened     | X                | X     | X          |

Source: USFWS ECOS-IPaC website, accessed 4/2/19

Certain species may be eliminated from further consideration without reconnaissance-level surveys because ECOS-IPaC queries and other data sources generally list species for each county. For example, June sucker is included by ECOS-IPaC for the Indian Canyon and Wells Draw project corridors because a portions of these project corridors are located within Utah County. However, June sucker is endemic to Utah Lake, which is located over 40 miles west of the western terminus of the Indian Canyon route corridor and it does not share any drainage basins with project corridors. Additionally, suitable habitat boundaries for some special-status species will not be evaluated in the field because suitable habitat boundaries or known species distribution have been evaluated and determined by resource agencies. For special-status species lacking definitively mapped suitable habitat boundaries, biologists will evaluate potential areas during field surveys and document whether they appear to provide suitable habitat. Biologists will also record the location of observations such as potential raptor nests and special-status species.

Based on the planned schedule to begin reconnaissance-level surveys with delineation fieldwork in April 2019, HDR recognizes that additional information might be provided after surveys begin, including agency comments and guidance pertaining to special-status species considerations for the project. New information or revised project data may result in identifying additional areas as potentially suitable for special-status species or in revising certain habitat suitability characteristics. Portions of project corridors affected by such changes would likely need to be revisited by biologists to complete habitat suitability evaluations.

## Field Data Collection

Biologists will collect field data during reconnaissance-level surveys using an iPad that is linked to a global positioning system (GPS) unit with sub-meter accuracy. A customized application will enable review of base maps, habitat and vegetation community layers, and collection of points, lines, and polygons integrated with site photos. The following data dictionary will be employed for data collection points:

- 300-meter interval
  - o Interval ID
  - o Select vegetation community
  - o Confirm / Revise community polygon
  - o Select dominant species
    - Select cover categories
  - o Photos (four cardinal directions)
  - o Notes
- Additional Vegetation Community Point
  - o Select vegetation community
  - o Confirm / Revise community polygon
  - o Select dominant species
    - Select cover categories
  - o Photos
  - o Notes
- Habitat Suitability (special-status species)
  - o Select species
    - Review suitability criteria
  - o Site suitable? (Yes/No)
  - o Photos
  - o Notes
    - explain why/why not suitable
    - describe extent / map edits
- Wildlife/Rare Plant Observation
  - o Species / Avian Nest
  - o Photos
  - o Notes