

Lemhi NHD Update Project Proposal:

1. Background and Objective

The Lemhi River Subbasin (17060204) is in central Idaho. This subbasin is part of the Salmon River Drainage. The eastern edge of this basin follows the continental divide as well as the state boundary. The primary river in this hydrologic unit is the Lemhi River. The Upper Lemhi River Subbasin is an area of high ecological value. It provides the majority of the Endangered Species Act (ESA) listed spring Chinook salmon spawning habitat in the basin. It also provides habitat to ESA-listed steelhead trout and resident bull trout. Numerous state, federal, county, tribal, and non-profit entities are actively engaged in restoration efforts to address factors limiting the distribution and productivity of these species. These entities include Idaho Fish and Game, Idaho Water Resource Board, Idaho Governor's Office of Species Conservation, Idaho Department of Environmental Quality, Lemhi County Soil and Water Conservation District, US Forest Service, US Bureau of Land Management, US Bureau of Reclamation, Shoshone Bannock Tribes, The Nature Conservancy, Trout Unlimited, and the Lemhi Regional Land Trust.

The current NHD does not reflect changes seen on the ground. IDWR proposes to update the area indicated in Subbasin 17060204 and submit all changes to the USGS for implementation in the NHD. They will update this area using NAIP imagery, historical maps, and local data (if available). The update will include a photo revision of existing digital hydrography and the addition of key priority tributaries or irrigation ditches that are not currently in the NHD. Also, key features like fish screens, passage barriers, and ongoing monitoring sites will be added as event features.

The USGS is the lead federal agency for hydrography mapping under the Office of Budget and Management Circular No. A-16 Revised. This data theme includes surface water features such as lakes, ponds, streams and rivers, canals, oceans, and coastlines. The USGS fulfills this responsibility through the management of the National Hydrography Dataset (NHD), the surface water component of *The National Map*. One element of these responsibilities is coordination with partners such as Idaho Department of Water Resources (IDWR) and their projects to provide updates to the NHD for the Lemhi River Basin.

2. Scope

The Lemhi River Basin project scope is limited to updating NHDFlowline, NHDArea, and NHDWaterbody Feature Classes in the Lemhi River Subbasin (17060204). Geometry and attribution will be updated, including flow direction, names, and vertical relationships. Key features within the Lemhi River SubBasin like fish screens, passage barriers, and ongoing monitoring sites will be added as event features.

Proposed Work on Lemhi River Basin Project: Use NAIP imagery and historical maps to revise existing NHD. Submit updates to the USGS for inclusion into the NHD. Solicit data from irrigation entities and incorporate information as funding allows. Add key features like fish screens, passage barriers, and ongoing monitoring sites as point event features.

3. Project Deliverables

- 1) Updated NHD for project area, including updates to line work, names, feature type, flow direction, and vertical relationships as needed. Event data that consists of fish screens, passage barriers and ongoing monitoring sites within the study area.
- 2) A final written report will be produced documenting
 - a. a comparison of actual accomplishments with the goals and objectives of the award as detailed in the approved scope of work
 - b. a description of reasons why established goals were not met, if appropriate
 - c. any other pertinent information relevant to the project results.