

Big Lost NHD Update Project Proposal:

1. Background and Objective

The Big Lost River SubBasin (17040218) is in south central Idaho. This subbasin is one of four subbasins known as the Sinks Drainages because surface waters sink into the Snake River Plain Aquifer. Groundwater flows southwest toward Thousand Springs near Hagerman, Idaho, where the water emerges from springs. Natural discharge from the Snake River Plain Aquifer within the Thousand Spring area, contributes 70 percent of the Snake River flow between the Milner Dam and King Hill.ⁱ This flow is critically important as irrigation diversions at Milner Dam can reduce the Snake River flows to zero.

The current NHD does not reflect changes seen on the ground. IDWR proposes to update the area indicated in SubBasin 17040218 submit all changes to the USGS for inclusion in the NHD. They will update this area using NAIP imagery, historical maps, and local data (if available). When the initial update is complete additional input will be solicited from local irrigation companies and interested stakeholders.

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 Big Lost Basin.

2. Scope

The Big Lost Basin project scope is limited to updating NHDFlowline, NHDArea, and NHDWaterbody Feature Classes in the Big Lost River Subbasin (17040218). The geometry will be the primary focus with photo revision with NAIP imagery, although care will be give to update flow direction, names, and vertical relationships where needed.

Proposed work on the Big Lost Basin Project: Use 2013 NAIP imagery and historical maps to revise existing NHD. Submit updates to the USGS for inclusion in the NHD. Solicit data from irrigation entities and incorporate information as funding is available.

3. Project Deliverables

Specific deliverables to National Geospatial Program will include:

- 1) Updated NHD for project area, including updates to line work and flow direction. Updates to names, feature type, and vertical relationships will be included as needed.
- 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.

ⁱ http://www.idwr.idaho.gov/waterboard/WaterPlanning/PDFs/2010_Resource-Inventory.pdf p. 34