

Update NHD in the Weiser River SubBasin

Introduction

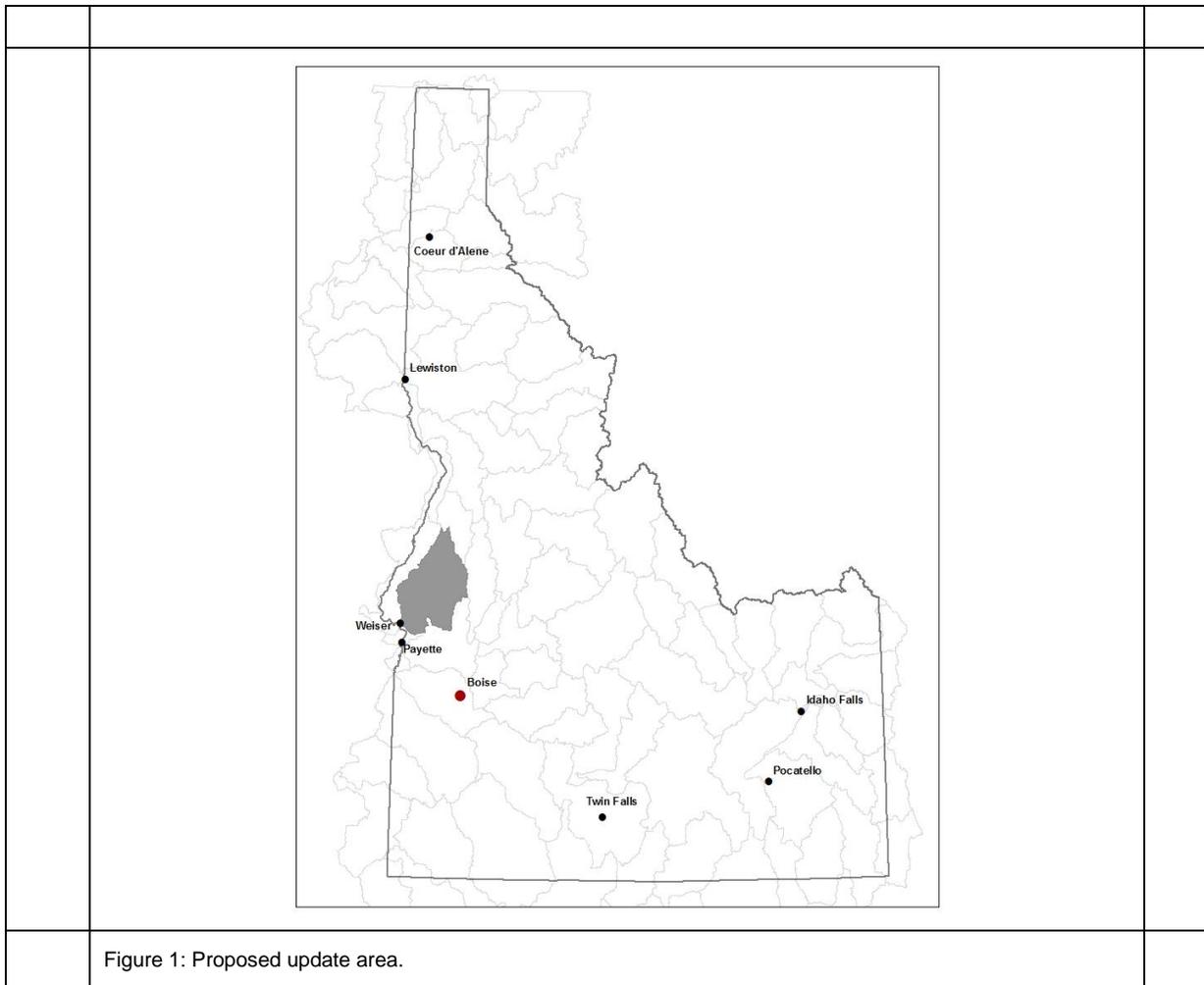
The Weiser River SubBasin consists of the hydrologic unit (HU) 17050124 in southwest Idaho. The primary river in this subbasin is the Weiser River. The HU17050124 includes 16 water delivery organizationsⁱ and the small towns of Council, Cambridge, and Midvale with a combined population of approximately 14,000ⁱⁱ. The City of Weiser, population of over 5500ⁱⁱⁱ, lies where the Weiser River meets the Snake River at the outflow of HU 17050124. Although there are several dams in HU 17050124, the Weiser River is unregulated. The latest flood event, in 2011, resulted in the closure of State Highway 95.^{iv}

The HU 17050124 is an irregular-shaped drainage area of about 1,660 square miles. It is located between latitudes 44 and 45 degrees north, and longitudes 116 and 117 degrees west. Its headwaters are in the Seven Devils Range on the west and north, and in the West Mountains to the east. The basin's north/south length is about 110 miles, with a maximum east/west width of approximately 36 miles.^v

Water storage on Weiser River and at the Galloway site has been studied for decades. In the early 1970s Federal lands for the potential Galloway dam and reservoir site were classified and withdrawn for hydropower purposes by the Federal Power Commission (now the Federal Energy Regulatory Commission). In 2008, the Idaho Water Resources Board was directed by the Idaho Legislature to investigate water storage projects statewide, including the Weiser-Galloway Project. Potential project benefits may include flood risk reduction, hydropower, additional water storage, pump back, irrigation, regional economic development, recreation and flow augmentation requirements for anadromous fish recovery.^{vi} The Weiser-Galloway project area is located approximately at river mile 13.5 on the Weiser River.^{vii}

Subbasin 17050124 is a basin that may be used in Water Rights Accounting, where the goal is to make the administration of water rights and the delivery of water an open and transparent process that can be examined by the public. One important data layer that is necessary for both model display and analysis is accurate hydrography.

Hydrography in subbasin 17050124 is complex due to numerous irrigation canals, laterals, and drainage channels. Irrigation wasteways return flow on both sides of the Weiser River. Due to changes in agricultural practices and the irrigation diversions that have been implemented, the current NHD does not accurately reflect changes seen on the ground. IDWR proposes to update the area indicated in figure 1 and submit all changes to the USGS for inclusion in the NHD. IDWR will update this area using NAIP imagery, historical maps, and local data (if available). At the beginning of this project, additional input will be solicited from local irrigation companies.



Benefits to the USGS and the NHD Community

- Updated NHD in this area is important to cities, irrigation companies, state agencies and federal partners that manage water within this Hydrologic unit.

Proposed work

- Use NAIP imagery and historical maps to revise existing NHD.
- Incorporate data from Bureau of Reclamation plat maps and Ada County digital hydrography.
- Submit updates to the USGS for inclusion into the NHD. Solicit data from irrigation entities and incorporate information as funding is available.

Deliverables

- Updated NHD for project area.
- A short report describing how this project has been carried out as well as challenges that were encountered.

ⁱ Based on analysis of IDWR Water Right data for organizations that qualify under the large place of use statute.

ⁱⁱ Based on 2010 US Census information.

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^{iv} Idaho Flood and Seismic Risk Portfolio, Effective 2012-2017 Produced by RISKMAP in cooperation with IDWR & FEMA Cooperating Technical Partners.

^v https://www.blm.gov/epl-front-office/projects/nepa/30458/39415/41316/Weiser-Galloway_EA_Final_508.pdf p. 2-3

^{vi} http://www.idwr.idaho.gov/waterboard/Meetings_Minutes/agenda/pdf/2013/03mar/5-13/Weiser-GallowayExecutiveBriefingPaperIWRBWorkSession03072013%20-%20V2.pdf

^{vii} https://www.blm.gov/epl-front-office/projects/nepa/30458/39415/41316/Weiser-Galloway_EA_Final_508.pdf

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