

# **Pilot Project: Update NHDFlowlines with Names from the IDWR Water Right Database**

## **Introduction**

There are many names of streams and other water features that are not in either the GNIS or the NHD. Adding names to NHDFlowlines make the NHD more useful for querying and cartography. The Idaho Department of Water Resources (IDWR) has nearly completed an extensive adjudication covering nearly two thirds of the state. During this adjudication, points of diversions (PODs) were required to have a source and a tributary to the source identified. As a result, the IDWR POD database is a source of locally recognized names for many streams and tributaries. By looking at groups of water rights with the same source, it may be possible to use GIS to identify the reach associated with a particular source name.

## **Benefit to the USGS and NHD Community**

- Improved naming of the NHDFlowlines improves querying on the NHD
- Improved naming enhances the cartographic capabilities of the NHD

## **Proposed work**

- Query PODs within the IDWR Water Rights database that do not have corresponding GNIS Ids. Reference the PODs to the NHDFlowlines using HEM or ArcGIS tools to create a route event layer.
- Using imagery, historic maps, local data and sequence with other similarly named PODs to verify naming.
- Submit new names to the GNIS.
- For verified flowlines and accepted names, use the GeoEdit Tools and submit update attribution to the USGS for inclusion into the NHD.

## **Deliverables**

- Updated NHD for project area.
- A short report documenting:
  - Procedures used to update attribution
  - Challenges that are encountered and suggested solution to potential problems
  - An estimate on the resources required to update attribution in other areas within Idaho.