

# Update NHD in the Treasure Valley

## Introduction

In Idaho, water resources management is critical to the State's agriculturally-based economy. Without adequate tools to plan and design water projects, planners and engineers have a more difficult task implementing water-related projects. In Idaho it is important to have digital data and maps representing existing hydrography for water related projects. Accurate digital data provides hydrologists with base data that is needed for water modeling analysis.

The Lower Boise hydrologic unit (17050114) is in southwest Idaho and includes the city of Boise, where the state capitol is housed. The hydrologic unit includes the cities of Boise, Caldwell, Garden City, Greenleaf, Kuna, Meridian, Nampa and Wilder encompassing nearly 35% of the State population. The primary river in this hydrologic unit is the Boise River and includes the section of the Boise River from Lucky Peak Dam to the Snake River. The average annual runoff for the Boise River is 1.9 million acre-feet from Lucky Peak Dam. Of these 1.9 million acres-feet, 1.6 million acre-feet is diverted for irrigation use. With the population growth within this basin and the irrigation diversion that have been implemented, the current NHD does not reflect changes seen on the ground. IDWR proposes to update the area indicated in figure 1 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). At the completion of this project, additional input from 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.

