

ANALYSIS

Project Name: IDAHO IRRIGATION DISTRICT

Sponsor (s):

Idaho Irrigation District

Project Description:

Part 1- improves current facilities to improve management and measurement of recharge already occurring in the system.

Part 2 – expands current recharge capabilities: Phase 1: map and inventory system for potential recharge sites. Phase 2: technical evaluation of identified sites. Phases 3-5: cost estimates and development of final designs for top sites, construction and future expansion.

Cost Estimates and Funding:

Part 1: \$33,000 (\$19,800 from applicant, \$13,200 proposed ESPA CAMP funding)

Part 2: Phase 1: \$14,000 (\$8,400 sponsor, \$5,600 ESPA CAMP)
Phase 2: \$17,000 (\$10,200 sponsor, \$6,800 ESPA CAMP)
Phases 3 – 5: not specified. Future funding required.

Total cost: \$64,000 (\$38,400 sponsor, \$25,600 ESPA CAMP)

Benefits:

Hydrologic – IID recharge is expected to support natural river flows late in the irrigation season and provide American Falls fill. Modeled steady state and transient analysis indicates 45% and 36% of recharged water will return to the Shelly-Near Blackfoot and Near Blackfoot –Neeley river reaches, most of it within 6 months to 1 year.

Modeled hydrographs of four monitoring wells in the vicinity of IID's service area indicate cyclical static water level rises of approx. 0.1 to 0.5 foot with long-term rises as much as 0.1 ft which are expected to benefit smaller local groundwater users.

Impacts :

Hydrologic – reduction in river flows during recharge

Consistent with ESPA CAMP:

Yes.

Water Rights:

Source of water for recharge will be storage water under the Board's Snake River recharge right. No other water rights are expected to be negatively impacted.

Long-term O&M:

Normal O&M costs of monitoring/measuring facilities are expected.

Potential Issues:

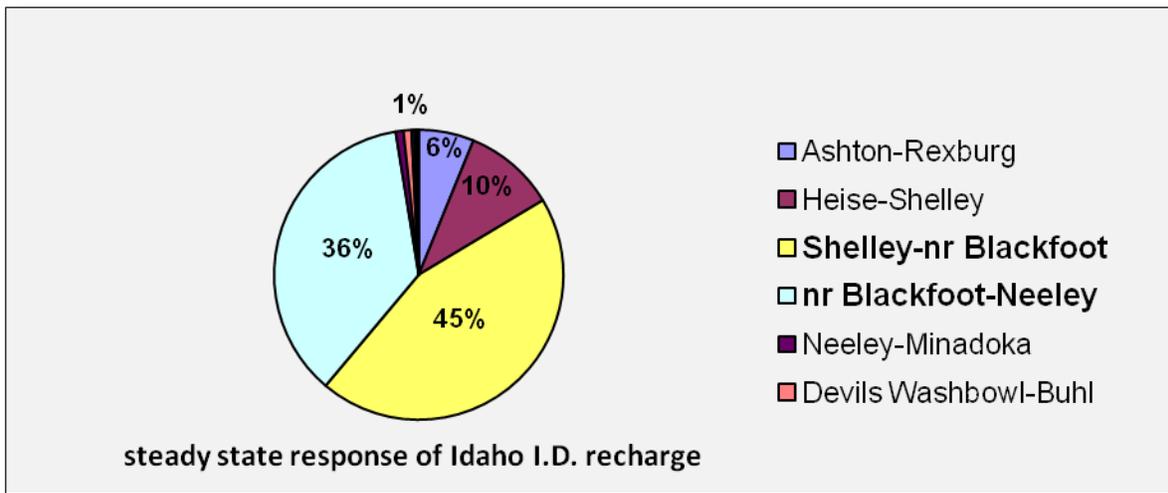
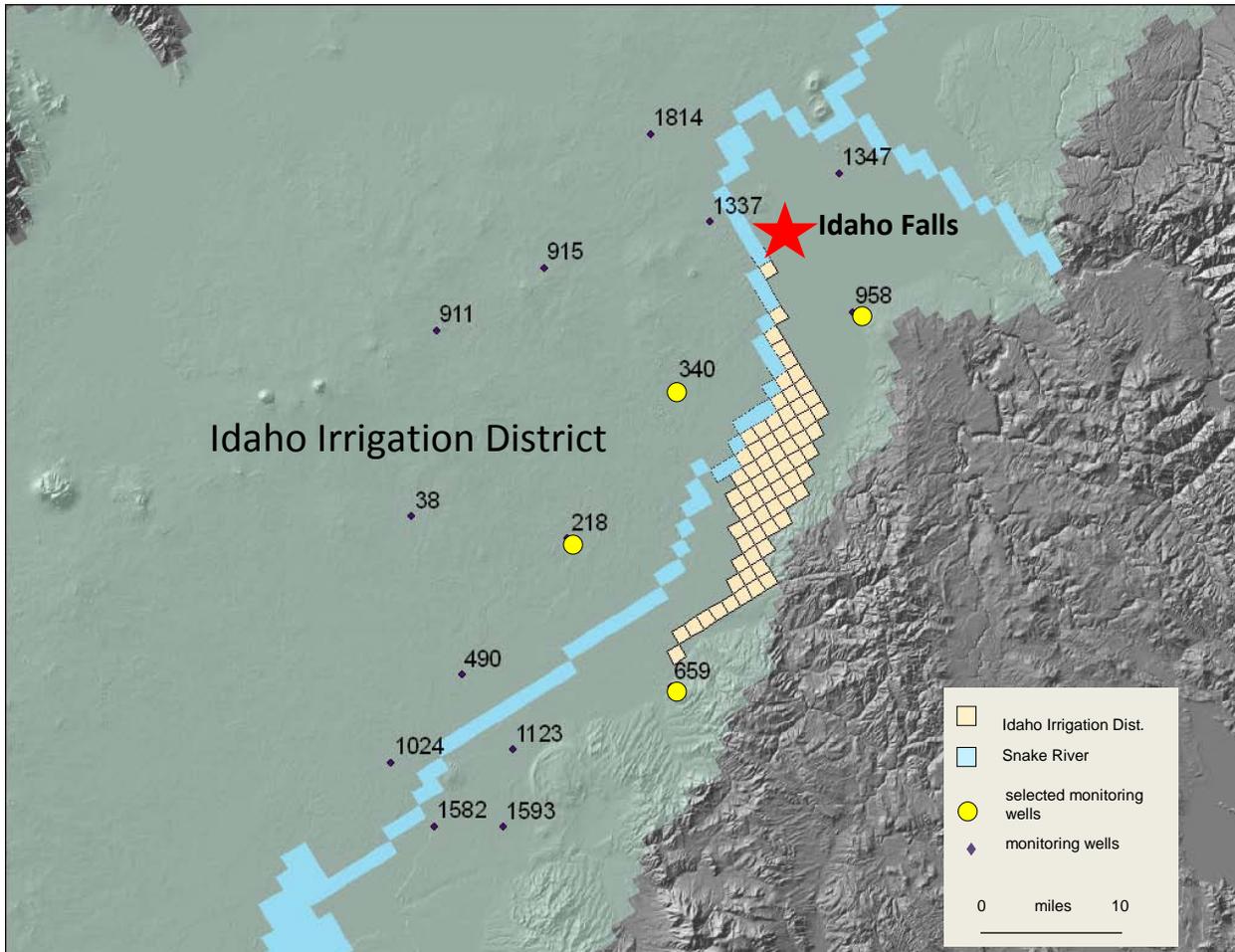
They will be looking for small (5-10 acre) recharge sites in Part 2 of the project and there is no guarantee that suitable recharge sites will be located.

Recommendation:

This project meets all of the Governor's project submission criteria (timely submission, shovel ready, implementable in 2010, positive benefit to the aquifer, at least 60% match available from water users. Thus, the Implementation Committee recommends that the Idaho Irrigation District project be implemented.

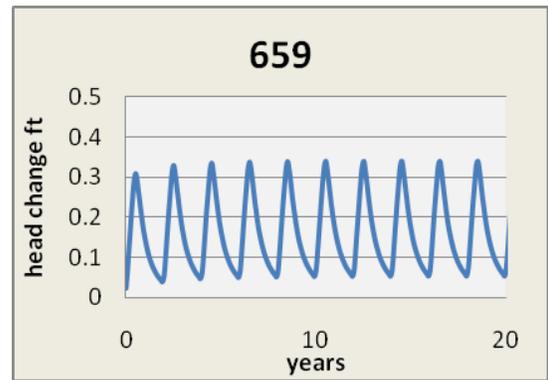
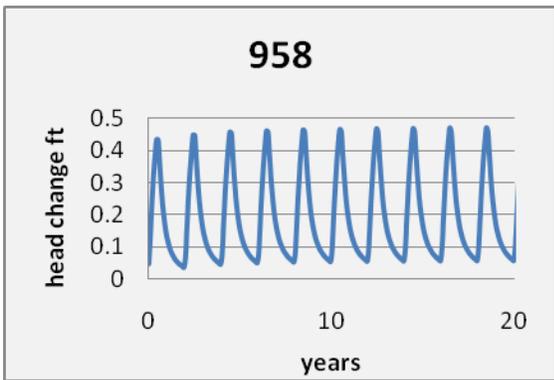
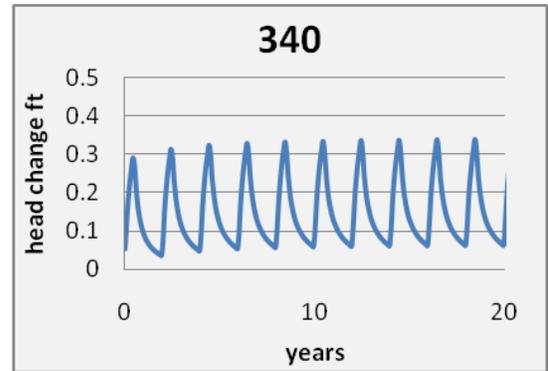
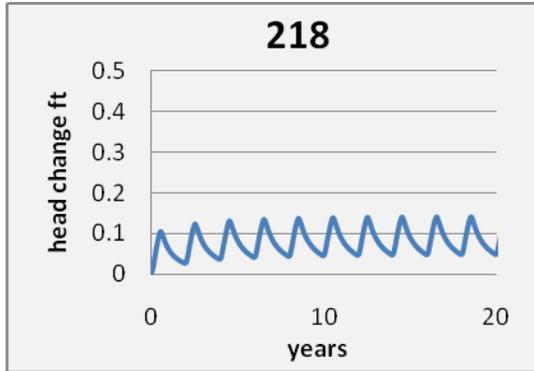
HYDROLOGIC ANALYSIS

IDAHO IRRIGATION DISTRICT



Hydrographs

Water level response in selected monitoring wells to a 10,000 a-f recharge event every other year for 20 years



Transient response to an IID 10,000 acre-feet recharge event every other year, over 20 years in the reaches with the greatest steady state response.

