<table>
<thead>
<tr>
<th>1. Title: Past Irrigation Efficiency:</th>
<th>Gardena Farms Irrigation District #13 (GFID #13) south lateral, north lateral, upper canal 2800, &amp; Riggs/Huesby</th>
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</thead>
<tbody>
<tr>
<td>2. Proposal Preparer(s):</td>
<td>Renee Hadley with Walla Walla County Conservation District</td>
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<td>3. Project Status: Identify whether the proposed project is a past, ongoing or new project and briefly explain the status of the project, including the requested role of the Flow Study in further consideration of the project. If past project, some of the questions below may not be applicable.</td>
<td>a. NEW PROJECT □ b. ON-GOING PROJECT □ c. PAST PROJECT GFID #13 phases were completed from 2002 (Riggs/Huesby) to 2014 (north lateral). Remaining phase includes 11 miles of upper canal to be converted from open ditch to pipe.</td>
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<td>4. General Description of Proposal: Identify the category(s) and briefly explain the proposed project (e.g. location, infrastructure requirements, maintenance requirements, connection to other new, ongoing or past projects, other stakeholders, various sizing or phasing, etc.).</td>
<td>□ a. Water Conservation &amp; Infrastructure □ b. Aquifer Recharge &amp; Aquifer Storage and Recovery □ c. Surface – Groundwater Source Switch □ d. Surface Water Storage □ e. Pump Exchange □ f. Water Right Transactions □ g. Point of Diversion Transfers □ h. Other The point of diversion and beginning of the site is located on the Walla Walla River at RM 36.8/36.9 near the intersection of Beet Road, Frog Hollow Road, and Mojonnier Road, SW of College Place, WA. Projects were constructed in 4 phases: south lateral, north lateral, upper 2800, and Riggs/Huesby. Projects converted 13.8 miles of the Burlingame Ditch into 24 to 66 inch diameter pipe. Project included installing a weed screen, 41 on-farm pump stations, and constructing through 20 road crossings. Project involves less maintenance than the open ditch.</td>
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<td>5. Source of Produced Water: Mark all applicable and identify (water right number, shallow or deep basalt aquifer, stream name).</td>
<td>□ a. Existing Water Right #WW Adj 406 Class 30 for 7,000 acres □ b. Groundwater □ c. Surface Water □ d. Other</td>
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<td>6. Quantity/Timing/Location of Produced Water Instream: Estimate average amount of water, when and where. Can project be considered at various sizes(flow outputs) and/or considered in phases?</td>
<td>a. Acre-feet and/or Cubic-feet-per-second: Project has estimated seepage, evaporation water loss reduction of 11.36 cfs. b. Timeframe(s): Benefits during irrigation season February to June and October to December. c. Stream Reach Location(s): Walla Walla River at RM 36.8 □ d. UNKNOWN -</td>
</tr>
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7. Ability to Protect Produced Water Instream: *Briefly explain how the produced water will be quantified, monitored and protected instream or why it is not currently protectable.*

- a. YES - Application for transfer to Trust of water saved submitted April 2013.
- □ b. NO or
- c. UNKNOWN –

8. Cost Estimates: *Provide known and estimated costs to develop and implement the project.*

- a. Project Development and Design: Phase 1-4 completed (south lateral, north lateral, upper 2800, and Riggs Rd/Huesby pipeline.

- b. Project Construction: $4,733,388

- c. Construction cost per AF and/or CFS: $416,671/cfs in saved seepage/evaporation/tailwater discharge

- d. Project Annual O&M: <$10,000/yr

- □ c. UNKNOWN –

9. Secured Costs: *Has any funding been secured in the past or currently and what is source?*

Bureau of Reclamation (20.94%), Bonneville Power Admin. (20.58%), WA ECY (55.96%), WA State Conservation Commission (1.45%), & GFID #13 irrigators (1.42%)

10. Other Potential Project Advantages: *In addition to helping address flow targets and basin-wide flow issues (Endangered Species Act, Tribal Water Rights, Clean Water Act, etc.), briefly explain other potential benefits (e.g. reduced O&M costs, restores/mimics ecological processes, cropping flexibility,)*

Reduced power consumption for irrigators (from 70psi to 40 psi) and O & M costs. Piping (irrigation efficiency improvements) was in response to ESA litigation in cooperation with GFIS # 13’s aim for increased efficiency.

11. Other Potential Project Disadvantages: *Briefly explain potential drawbacks of the proposal (e.g. reduced GW supply - recharge mitigation need, increased O&M costs, legal implications)*

No known disadvantages described to date.

12. Estimated Time Frame to Implement Project?

Phases 1-4 Completed.