### 1. Title:
Columbia Water Exchange IRZ Lower 100 cfs

### 2. Proposal Preparer(s):
Brian Wolcott

### 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.

- **X a. NEW PROJECT**
- □ b. ON-GOING PROJECT
- □ c. PAST PROJECT

### 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.).

- □ a. Water Conservation & Infrastructure
- □ b. Aquifer Recharge & 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

This Columbia River Water Exchange project would leave Walla Walla River irrigation water instream at points of diversion as needed to meet stream flow needs for fish passage and fish habitat. In exchange for these fish bypass flows, a corresponding amount of water would be pumped from the Columbia River up to the participating Irrigation districts and ditches and pipelines.

This IRZ preliminary study developed costs and operations criteria for exchanging 100 cfs for GFID over a 3 month period. 17,850 acre feet

### 5. Source of Produced Water: Mark all applicable and identify (water right number, shallow or deep basalt aquifer, stream name).

- X a. Existing Water Right

- □ b. Groundwater

- X c. Surface Water

- □ d. Other

### 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?
a. Acre-feet and/or Cubic-feet-per-second:

75 cfs Spring through July 1, and Fall Oct 1 to Dec 1 at Burlingame Diversion

b. Timeframe(s):

Spring Fall

c. Stream Reach Location(s):

Burlingame Diversion/Beet Road

d. UNKNOWN - Need more work (engineering/design/modeling, etc.) to estimate potential instream flow outputs of project. Will results of this work be concluded within one year to inform potential project flow outputs? Describe additional work needed and cost estimate.

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 - protection under existing regulations expected to WW River mouth or in limited reach?

□ b. NO or X c. UNKNOWN – Results and implementation of flow protection study likely necessary to ensure flow protection.

Protection is unknown

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

a. Project Development and Design:
$2,280,000 (IRZ study)

b. Project Construction:
$56,820,000 (IRZ study) does not include design costs

c. Construction cost per AF and/or CFS:
$568,200/CFS, $3183.19/acre foot (IRZ study)

d. Project Annual O&M:
$875,000 (IRZ study)

□ c. UNKNOWN - Need engineering/design work to estimate costs

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

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, )
### 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)

- How to account for seepage losses of bypassed water on way to Columbia.
- Who pays pumping costs?
- How to protect bypass.

### 12. Estimated Time Frame to Implement Project?

10-20 years?