

Proposed Question/Items for BWRGWMA Technical Work Group

Questions drafted by IDWR: 08/12/2021 – modified based on written comments from Greg Sullivan and input from the TWG

1. Recommend quantitative tools or methodologies for predicting irrigation season water supplies for surface water sources in the Big Wood River Ground Water Management Area, including the Big Wood River above Magic Reservoir, the Big Wood River below Magic Reservoir, Silver Creek, and the Little Wood River below the confluence with Silver Creek, and Camas Creek.
 - a. Recommended methodologies should evaluate historical analogous water years and anticipated deliverable water rights by priority.
 - b. Develop criteria for selection and evaluation of suitability of analogous years (e.g., even though the SWSI's may generally indicate similar hydrologic conditions, other relevant conditions should also be evaluated for similarity to the current/upcoming year (water use practices, reservoir storage, cropping patterns, fallowing programs, water rights administration, runoff timing, unusual weather events, etc.))
2. Recommend groundwater diversion limits based on forecasted irrigation season water supplies. (Also consider/evaluate consumptive use limits and/or irrigated area limits)
 - a. Annual, monthly, daily volumes?
 - b. Irrigation pumping limits
 - c. Non-irrigation pumping limits
3. Estimate depletions to Camas Creek resulting from groundwater pumping.
 - a. Can timing, location, and amount of depletions be estimated?
 - b. Discuss whether this is for the purpose of estimating impacts from pumping to Camas Creek surface water rights, impacts to inflows to Magic Reservoir, or both.
4. Estimate the potential benefits to aquifer storage and to stream reach gains (timing, location, and amount) in Camas Creek, the Big Wood River including Magic Reservoir, and Silver Creek of the following aquifer/streamflow enhancement activities:
 - a. Fallowing farmland
 - b. End-gun removals from center pivot irrigation systems
 - c. Growing crops that are less consumptive; reduce consumptive use through shorter season of use
 - d. Additional conservation measures (i.e., irrigation/delivery system efficiency improvements, other conservation measures related to non-irrigation systems)

- e. Groundwater to surface water conversions
 - f. Aquifer recharge using flood flows and/or surface water rentals
5. Use of the WRV1.1 Model to evaluate the hydrologic impacts of groundwater curtailment upstream of Glendale Bridge:
- a. All pumping
 - b. Irrigation pumping
 - c. Non-irrigation pumping