## Memorandum

Date: May 10, 2019

Re: Environmental Resources Technical Working Group (ERTWG)

## **REQUIRED ACTION:** None

## Background

The Environmental Resources Technical Working Group (ERTWG) was formalized in April of 2017 as a result of conditions agreed upon and set forth under IWRB application for permit numbers 01-7142 and 01-10609. Establishment of the ETRWG was intended to be a mechanism for review and recommendation concerning potential impacts of managed ground water recharge under the above permits. As set forth in the accompanying Memorandum of Agreement, the group is to meet a minimum of twice annually; once prior to the commencement of recharge and once following the end of the recharge season. Upon finding of potential concern, the ERTWG's recommendations are to be set out in a memorandum and submitted to the IWRB for consideration at the next regularly scheduled IWRB meeting.

The ERTWG last met April 24, 2019, and has outlined a number of concerns they would like to present before the IWRB during the July 2019 IWRB meeting in Rexburg.

## **Topics of Concern**

Stream reaches listed as points of diversion for IWRB's managed recharge permits support major trout fisheries. The group has identified four general types of streamflow issues, as well as noted some additional concerns with private managed recharge, and potential benefits of managed recharge to fisheries.

- Winter Flow: lowered wintertime flow limits survival of juvenile fish downstream of Island Park Dam (Henry's Fork) and Island Park Dam (South Fork). This is a primary concern on the Henry's fork below Island Park Dam, and the South Fork above the Great Feeder (GF).
- Springtime freshet: necessary for optimal maintenance of stream and riparian habitat in reaches with mobile bed and active floodplain. The ERTWG has concern and has noted effects from managed recharge on the Lower Henry's Fork/Fall River, the Lower Teton, the South Fork above and below the Great Feeder (effects noted below the GF only), and on the main stem of the Snake River.
- Low mid-summer flow (and associated water temperatures): can limit trout habitat in reaches with high irrigation diversions. The group has noted potential concerns for this issue on the Lower Henry's Fork/Fall River, the Upper and Lower Teton, the main stem of the Snake River. Typical recharge operations do no show effects from this issue given the IWRB managed recharge rights are not in priority, and if they are water supply is sufficient for recharge and adequate streamflow.
- High mid-summer reservoir delivery: decreases water quality and fishing experience. While recognized effects have not been noted, this is an issue of concern for the Henry's Fork below Island Park Dam, and the South Fork above the Great Feeder.
  - o Reservoir outflow concerns are upstream of IWRB managed recharge PODs.

- o Decreased streamflow at times when natural-flow recharge would have no effect.
- Additional physical reservoir delivery during the irrigation season:
  - Decreased water quality and fishing experience downstream of reservoirs
  - Increased sediment transport out of reservoirs
  - Decreased water quality in reservoirs
  - Decreased winter flow to refill
- Noted potential benefits of managed recharge to fisheries:
  - o Increased baseflow in hydraulically connected reaches
  - o Moderated water temperatures (cooler in summer; warmer in winter)
- Other topics of concern:
  - US Bureau of Reclamation concerns with increased fish entrainment due to extended periods of canal operations. Also concern over spread of invasive aquatic species such as Zebra or Quagga Mussels.
  - How will the board plan for and/or respond to potential concerns over climate change?
  - Members of the ERTWG are also listed Protestants to IWRB water right applications in the mid and upper valley. The group has expressed interested in resolution of those protests through the inclusion of the ERTWG as one of the stipulated conditions. It has been noted that this would allow the group to look at recharge on a larger scale; and given the stakeholders are mostly the same, it would also add logistical benefit.
  - The ERTWG has additional concerns over the combined impact of IWRB managed recharge, and that of privately operated managed recharge. Further analysis is needed to determine collective impacts.
  - The ERTWG would like to better understand the intent and proposed course of action for the review and management of private recharge in excess of 10,000 Acre Feet as stipulated by Idaho Code §42-1737. This has been noted as a potential means for assessing cumulative impact of private recharge in conjunction with IWRB managed recharge.
  - There is ongoing concern with understanding intended vs actual impacts of IWRB managed recharge. In order to further analyze this comparison, staff need the ability to assess operations of private managed recharge. Currently there is no universal standard of practice for collecting this information. While it is not the responsibility of the IWRB to facilitate and manage data collection for private recharge, it is necessary for the IWRB to have private recharge data in order to effectively determine the real impacts of its own managed recharge operations.
    - How can IWRB staff work with the Department and/or districts to organize this information?