

**Project Name** | THPP Infiltration Monitoring**Date** | 1/31/24**To / Contact info** | BCWD Board of Managers**Cc / Contact info** | Karen Kill, Administrator**From / Contact info** | Mike Majeski, Conservation Biologist**Regarding** | THPP Monitoring for 2024

The following scope of services outlines the tasks to conduct routine infiltration monitoring at the Trout Habitat Preservation Project (THPP) during the 2024 monitoring season per recommendations outlined in the 2023 budget recommendations memo.

## Background

The THPP was constructed in the winter of 1999 to alleviate high water conditions in the Goggins/School Section lakes system while protecting cold water resources within Brown's Creek. A series of wetlands and infiltration basins were constructed and enhanced to store and infiltrate water, thereby reducing the amount of water discharged to the headwaters of Brown's Creek. The THPP system also captures and infiltrates water from the surrounding 723-acre subwatershed during years when the Goggins/ School Section lakes system is not outletting. The water levels in Goggins Lake have fluctuated drastically over the last two decades, with record high water levels in 1998 (elevation 972.69 feet) followed by record low water levels in 2010 (elevation 960.35 feet). Water levels at Goggins Lake in the fall of 2023 were near elevation 965.0 feet which is approximately 5.0 feet below the lake outlet elevation and 1.5 feet below the Ordinary High Water Level (OHWL).

When Goggin's Lake is below the outlet elevation, the BCWD Board recommends infiltration monitoring at THPP should occur once every three years to monitor system performance. It has been three years since infiltration monitoring was conducted at THPP (2021); therefore, it is recommended that infiltration rates be monitored at the Basin 1-3 complex to compare data with previous analyses. Results from the analysis will help inform if infiltration trench improvements or repairs are necessary to maintain the function of the infiltration system.

## Recommended Scope of Services for 2024

### *EOR Tasks:*

- Install two level loggers to monitor infiltration rates at the Basin 1-3 complex, install a temperature logger at the THPP outlet to record temperatures during discharge events, and prepare a memorandum summarizing the data. The anticipated cost for equipment installation, infiltration monitoring, data analysis, equipment removal/storage/maintenance, and reporting for 2024 is estimated at \$6,490. Note, if snowmelt or rainwater runoff does not inundate the THPP facility in 2024, this task will not be conducted.

## **Requested Actions**

1. Approve a budget of \$6,490 from account number 903-0001 to conduct infiltration monitoring at the Basin 1-3 complex as described above if basin inundation occurs in 2024.