# memo

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| **Project Name** \| | THPP Infiltration Monitoring | **Date** \| | 1/09/25 |
| **To / Contact info** \| | BCWD Board of Managers | | |
| **Cc / Contact info** \| | Karen Kill, Administrator | | |
| **From / Contact info** \| | Mike Majeski, Conservation Biologist | | |
| **Regarding** \| | THPP Monitoring for 2025 | | |

The following scope of services outlines the tasks to conduct infiltration monitoring at the Trout Habitat Preservation Project (THPP) during the 2025 monitoring season. Lack of runoff and basin inundation prevented planned infiltration monitoring in 2024.

## 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 were enhanced, and infiltration basins were constructed 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 several decades, with record high water levels in 1998 (elevation 972.69 feet) followed by record low water levels in 2010 (elevation 960.35 feet). In the fall of 2024, water levels at Goggins Lake were near elevation 965.6 feet which is approximately 4.4 feet below the lake outlet elevation and 0.9 feet below the Ordinary High Water Level (OHWL).

When Goggin's Lake is below the outlet elevation, the BCWD Board recommends monitoring at THPP should occur once every three years to measure infiltration capacity. It has been four years since infiltration monitoring was conducted at THPP (2021) due to persistent drought conditions and lack of basin inundation. If basin inundation occurs in 2025, it is recommended that infiltration rates be measured 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 2025

*EOR Tasks:*

- Install two level loggers to measure 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 is estimated at $6,914. <u>If snowmelt or rainwater runoff does not inundate the THPP facility in 2025, this task will not be conducted.</u>

**<u>Requested Action</u>**

1. Approve a budget of $6,914 from account number 903-0001 to conduct infiltration monitoring at THPP if basin inundation occurs in 2025.