Bear Creek Watershed Association Policy

Approved: April 9, 2008

BCWA Policy 7 - Evergreen Lake Temperature By-Pass

Statement of Basis and Purpose

Thermal Cooling Proposed

Members of Evergreen Trout Unlimited speculated that Bear Creek below Evergreen Lake could be thermally cooled by diverting stream water above Evergreen Lake and bypassing this flow around the lake into lower Bear Creek or by using cooler bottom water from Evergreen Lake to cool lower Bear Creek.

The Evergreen Metropolitan District Board completed an analysis of temperature data collected by the Bear Creek Watershed Association and Evergreen Trout Unlimited. Detailed temperature data was available for Evergreen Lake and at sites above and below the lake. See Attached special report by Michelle Chapman titled "T*emperature and Flow Study of Bear Creek Above and Below Evergreen Lake*."(Michelle Chapman, March 18, 2008).

The analysis specifically assessed if the proposed concept of diverting water around Evergreen Lake could result in effective thermal cooling of Bear Creek below the lake. The data analysis demonstrated that a water bypass has some limited potential to cause minor cooling; it is not an overall effective water quality strategy for thermally cooling Bear Creek below Evergreen Lake. The study concluded:

- When there are conditions of high stream temperatures, there is not enough water available in the Bear Creek system to change the temperature.
- Flow diversions as small as 5-10 cfs would be insufficient to cool the stream below the lake; and
- Removing that water from above the lake would further degrade the quality of the lake.

Association Policy

The Bear Creek Watershed Association reviewed the Evergreen Metropolitan District Board temperature bypass analysis report and takes the following Association policy position:

> *The strategy of taking water from above Evergreen Lake or from the bottom waters of Evergreen Lake and discharging this water into Bear Creek below Evergreen Lake Dam is not an effective or desirable method for thermally cooling Bear Creek. The Association also does not support any type of bypass or diversion of water upstream from Evergreen Lake to below Evergreen Lake Dam that would cause adverse temperature impacts to Evergreen Lake. Consequently, the Association does not support a "thermal cooling diversion strategy" for Evergreen Lake or Bear Creek.*