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BMID File No.: 2005-31

September 10, 2007

Regional District of Central Okanagan
1450 K.L.O. Road
Kelowna, BC
V1W 3Z4

Attention: Leah Hartley, MCIP, Regional Planner

Dear Leah,

RE: File GREX-05-01 Amendment, Hollis Pit

Thank you for requesting comments from our water district regarding the proposed “Hollis Pit” gravel extraction project that is to be located near the confluence of Mission and Pearson Creeks within the Mission Creek watershed.

BMID is one of the largest stakeholders on Mission Creek. As we are not a local authority, municipality or regional district, we are not issued referrals from the Province on these matters. We appreciate that the Regional District have forwarded these documents to us for comment.

We have reviewed the scope and location of the proposed gravel pit and have the following comments:

- Mission Creek Importance to BMID and the Okanagan:** The gravel pit is immediately adjacent to Mission Creek which is a community watershed. Mission Creek is the largest source of water to Okanagan Lake providing more than 1/3 of the total flow into Okanagan Lake. It is also the primary source of water for our Improvement District. We provide water to over 20,000 residents and irrigation water for over 4,100 acres of agricultural lands. BMID is opposed to any activities that may adversely affect the Mission Creek watershed;
- Creek Runoff vs. Elevation:** Runoff from within Mission Creek watershed increases with the elevation of land. The majority of runoff in the Mission Creek watershed is generated at higher elevations such as the lands above Three-Forks Road. The gravel pit lies within an area that experiences annual runoff two to three times higher than that received in the City of Kelowna. If the natural ground cover is disturbed, there is a greater transfer of sediment and pollutants towards the creeks. Leaving the higher elevations of Mission Creek in a natural state is a primary objective for the protection of this community watershed. The area above Three-Forks Road is the most sensitive part of the watershed and the Ministry of Forests recognized this long ago by banning all logging above 4,500 feet. Although the pit is not located this high, it is directly adjacent to the drainage courses from these higher elevations;
- Use of Round-Up:** The application states that noxious weeds are to be controlled with *Round-up* which although is intended to be limited to the root zone of the plants, will inevitably be washed off from time to time into Mission Creek. This practise is not used by our water district staff for the maintenance of our dams. All weeds and undesired vegetation on the face of our dams are hand-pulled or cut.

4. **Incorrect Extraction Volumes:** The application states that the extraction rate for gravel is proposed to be 240,000 tonnes per year (18,000 truck loads per year). For the proposed time frame for hauling, this works out to a truck on the road every two minutes. The stated volume to be extracted from the pit is to be 505,000 m³ (289,000 tonnes) over 17 years. The numbers do not equate as the extraction rate will result in the pit being fully developed in less than two years. There is either an error in the application or the full size of the pit is not being disclosed in this initial application. Upon review of the submitted cross sections, we believe that the 505,000 m³ volume is correct. With the proposed high extraction rate, we question whether there is further intent to obtain additional gravels in the longer term from this site. This error should be corrected and the fully developed limits of the pit should be verified at this time.
5. **Remote Location of Pit:** The pit is located 25 miles from downtown Kelowna. The energy required to move this gravel makes this site more environmentally damaging than other proposed sites closer to town. The local residents inform us of activities that may pose risks to the raw water in Mission Creek. Similar to many of the local residents, we view this gravel pit location as an increased risk and unacceptable. One should not place at risk their most precious natural resource with a gravel pit at the furthest location from where the gravel is required;
6. **The Cost of Water Treatment:** There is currently significant pressure on water utilities in the Central Okanagan to improve drinking water quality. BMID presently has a water treatment plant that utilizes a chemical treatment process. It removes the colour and reduces the turbidity in the raw water. The water received from the upper reaches of Mission Creek does not require chemical treatment as it meets the Guideline for Canadian Drinking Water Quality (GCDWQ) year round (with the exception of storm events). The approach by BMID to maintain a safe water supply is to first protect and maintain the natural water quality to as high a standard as possible. BMID's objective is to provide drinking water in its most natural form with minimal chemical treatment. An alternate approach is to ignore watershed protection and build water filtration plants. The cost for BMID to construct a water filtration plant is \$40,000,000.
7. **Water Withdrawals:** In the application, there is only the mention of water withdrawals for dust control. No mention was made to requirements for water licensing or obtaining flows from either Mission or Pearson Creeks. Gravel extraction washing processes which typically utilize large volumes of water were not checked off. Should any additional withdrawals be necessary, they should be supported by the requirement for the construction of additional storage. It should be made clear at this time whether or not there is any intent in the future to access creek water for gravel washing processes.
8. **Compromised Fish Habitat:** Having a secure natural base flow within Mission Creek is critical to maintaining fish habitat in the lower reaches of Mission Creek. The fishery in lower Mission Creek is known to be stressed. Pearson Creek is the largest unregulated (without any dams) creek in the Mission Creek basin and possibly in the Okanagan. Any diversions from Pearson or Mission Creeks will compromise the already low fish habitat flows in the lower reaches of the creek.
9. **Drought and Withdrawal Impacts:** There are already numerous licensees on Mission Creek who have the ability and the legal right to withdraw water from the base flow of the creek. This currently stresses the fish population in the lower reaches of Mission Creek. What happens now is that BMID releases additional water from storage to ensure that there is a base minimum flow in the creek. During the 2003 drought, the lower reach of Mission Creek was running at a deficit of 10 acre-feet per day (water lost to the aquifer) and make-up flows were provided by BMID.

10. **Mission Creek Water Use Plans:** BMID is currently working with the Ministry of Environment, Regional District, Okanagan Basin Water Board, South East Kelowna Irrigation District, City of Kelowna and other local stakeholders in developing a Water Use Plan for Mission Creek. The Water Use Plan is based on evaluating the creek quantity and management of the quantity for various uses including drinking water and fish habitat. Licensing, future water storage and management of the reservoirs and in-stream flows are to be parts of the overall plan. Any additional licensing of water from higher elevations should not be permitted until that plan is completed as storage must be a part of all future water withdrawals so that the resource is managed in a responsible way for future generations.

There are several sites proposed for gravel extraction east of Kelowna. Some of them would have a greater impact on the water resources than others. Of all of the applications and potential locations, this pit is the one that potentially poses the greatest environmental damage and largest impact on both drinking water and water for fisheries. We strongly oppose this project and will be advising the decision makers with the preceding technical merits for why it should not be approved.

We trust we have made ourselves clear with our opinion on this proposed project.

Yours truly,

Black Mountain Irrigation District



Robert Hrasko, P.Eng.
Administrator

cc: Al Horning, MLA, Kelowna-Lake Country
Board of Directors - Regional District of Central Okanagan