

**Comments on the Revised Application for PTTW at Findlay Creek
Subdivision; Long Term Application EBR010-4670 and MOE
Reference # 4635-7GFNDT**

I was asked by Ecojustice Canada to review and comment on the revised application for a category 3 permit to take water (PTTW) prepared by Golder Associates for the Findlay Creek Subdivision site, Future Stages, dated August 29, 2008. Additional information for the application was provided to the Ministry of Environment (MOE) by Golder Associates in a letter dated September 12, 2008. These current comments are in addition to my earlier comments submitted to Ecojustice Canada concerning the original July 2008 application.

The revised application builds on the original PTTW request, made in July 2008, which requested a PTTW at a rate of 17,020,800 L/day for 365 days per year for 10 years. According to the Golder Associates cover letter of August 29 2008, “the intent of the [original?] application is to obtain a PTTW for all remaining groundwater and surface water takings required to complete the servicing and related construction of the Findlay Creek Village development over a ten year period”. The revised application includes two new areas that are central to the site development, such that part of one of these new areas is currently under construction with PTTW # 1832-7G8KGGK (expires November 30, 2008). How these two areas could be overlooked during submission of the July 2008 application is a mystery; either there is no planning, or oversight of the overall plans, or it was a deliberate omission. On the revised Figure 1 (Site Plan) the two new areas are listed as 2008-2009 work areas, while the “Central Future Stage” area has been changed from 2008-2009 to 2008-2017.

The original July 2008 application stated that work would continue to be over a 4 to 5 month period of the year, but the request was for permission to take water 365 days per year; the request for continuous water taking is still true for the revised application. The original application also stated that water taking would typically be at a rate of 1 million L/day, with peaks for several days at 10 to 18 million L/day; the application request would allow for 17,020,800 L/day, every day, 365 days a year for 10 years. According to the new application, the two new areas would require additional water taking at rates of 1 million and 1.5 million L/day on average, with maximum permitted rates of 3 million and 10 million L/day. If approved, the revised application would now permit up to 30,020,800 L/day of water to be removed from the site; nearly double the original ‘all inclusive’ request for maximum withdrawal and an increase in average withdrawal from 1 million to 3.5 million L/day. It again makes one wonder how this “additional” work was missed in the original application. Presumably, the revised quantities could be accommodated within the original requested volumes, provided not all major pumping days coincided. Therefore, the ‘revisions’ should only need to reflect the additional points from which water would be withdrawn, not an increase in water taking.

There also appears to be some confusion regarding the capabilities of the sedimentation/retention ponds, which are not shown in Figure 1. According to a letter by

Golder Associates, dated July 17, 2008, in which they are making application for an amendment to PTTW # 0816-7E7L9S, the sedimentation/retention ponds are shown as being located between the new "Findlay Creek Extension" (FCE) and the "Existing East-West Ditch". In the letter, Golder states on page 2 that because of "primarily wet weather and beaver activity within the wetland, the surface water levels within the wetland are elevated and causing a continuing high volume of water to flow towards the FCE work area". As a result, "it is expected that the volume of flow will cause operational problems for the sedimentation ponds" and "it is proposed to discharge the pumped water to the existing [recently constructed] western extent of the trunk sewer", which "discharges to the existing [constructed in 2007] storm water management pond (SWMP) located on the east side of Bank Street". In the letter of August 29, 2008 (p. 2) it states that the "intercepted water will be mostly conveyed into the storm sewer"; however, "in order to maintain base flow in Findlay Creek" "a portion of the intercepted water will have to be returned to Findlay Creek". Base flow estimates are given by Golder as varying seasonally between 40 to 60 L/s. The letter also states that "it may also be necessary at some points in the construction for the water to be pumped to a temporary sedimentation pond(s)" to improve water quality. On page 4 (point 3.4) of the amended PTTW (#1832-7G8KGK), it states that "Notwithstanding Table A above, no water shall be taken when the capacity of the retention and sedimentation ponds have reached their respective capacities". This implies that no diversion to the storm sewer system was approved for that permit, yet the request to divert water to the storm water system is again being requested.

This also raises questions of how flooded sedimentation ponds that require water diversion to the storm sewer system are capable of handling perhaps as much as 40 to 60 L/s? If the sedimentation/retention ponds are now able to accept some water and water must be pumped into Findlay Creek to maintain base flow, does this mean that water levels in the wetland have dropped? Usually beaver are very good at maintaining water levels to their liking. Does a significantly decreased water level imply that the beaver constructed structures within the wetland have been destroyed? Since the sedimentation ponds are being flooded due to water levels within the wetland, and large volumes of water must be removed for work on the FCE to continue, it would suggest that the ponds and the FCE are in fact within the boundaries of the previously existing wetland (prior to development activities). This of course would imply that the construction of the FCE, which is to replace the existing east-west ditch located 200 metres to the north, is an attempt to minimize the wetland area and reclaim a 200 metre wide strip of land for additional development.

For the monitoring of construction activities, Table B (p.4 of the MOE PTTW # 1832-7G8KGK) lists only a portion of the observation points described in the Golder documentation that accompanied the original PTTW application in July 2008 with regard to 'trigger water level elevations'. Missing from this new list are monitors BH97-2a,b, BH03-5, BH03-6, BH03-8a,b, and BH03-10a,b. I can find no documentation as to why they are not included in the monitoring network with stated trigger elevations. It is noteworthy that the missing monitors are the ones that often displayed significant water level variations in the past and would have 'triggered' actions due to low water level

elevations. I have not seen any documentation of water levels since the Feb 2008 data, which were included in the original July 2008 application. Therefore, I am uncertain whether the 'missing monitors' are no longer available or simply not monitored. Of the monitors listed in Table B, only BH03-7B and BH03-9A reached the trigger levels once, in the summer/fall of 2007. Monitor BH03-1 reached the trigger level from December 2007 to February 2008, but according to item 3.5 of the same MOE permit document, it now needs to be repaired or replaced prior to the removal of any water. There is no mention in any of the Golder reports how this monitor, or any others, became unserviceable.

In summary, all of the issues raised for the original application are still valid. The revised permit request would increase the allowable water taking per day from 17,020,800 L/day to 30,020,800 L/day continuously for 10 years because of an omission in the original application, even though this 'new construction work' would be completed by the end of 2009. Most of the water that needs to be diverted is due to construction activities that are aimed at reclaiming wetland for development purposes. Finally, the monitoring network appears to have been reduced by eliminating any monitoring points that have caused repeated trigger alarms in the past. Since protection of the wetland is suppose to be an important objective even for the developer, this latest revised application could be considered alarming.

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