June 15, 2016

Ms Kathryn Ironmonger,
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Re: Municipal Class EA – Hillsburgh Dam and Bridge, Station Street at Upper West Credit River

Thank you for the opportunity to take part in the Public Information Centre on May 19th and to provide written comments related to your Municipal Class EA for the Hillsburgh Dam and Station Street Bridge. Our comments on the proposed options and our suggestions and recommendations follow.

Trout Unlimited Canada strongly supports and endorses either of the set of options in Alternatives C and D of the Class EA as the best long-term solutions for the river and for the Town and community.

Trout Unlimited Canada Trout Unlimited Canada is a National Not-for-Profit, charitable conservation organization founded in 1971. We are a volunteer-driven, science-based organization with over 3,000 members and 34 Chapters across Canada. Our chapter on the Credit is the Greg Clark Chapter. This volunteer base is supported by professional and scientific staff to ensure that the best science possible is applied to the on-the-ground work that we undertake. Our Mandate is to, ***"Conserve, protect and restore Canada's freshwater ecosystems and their coldwater resources for present and future generations."*** Our chapters and members are partnership-focused and action-oriented, becoming involved in habitat projects and watershed renewal programs across Canada. We maintain a strong watershed focus and work with our chapter, members, partners and local communities to develop projects and programs that link to the watershed level and to the relationship between land and water, shorelines, wetlands and stream corridors.

General Comments:

Our long-term concerns about the Hillsburgh Dam and to a certain degree the Station Street Bridge center both on the long-term health of the upper West Credit River as well as the long-term liability and costs associated to the Town of Erin and the citizens of the Village of Hillsburgh if the existing dam remains. There has been a great deal of study on the West Credit River over the years including the completion of a sub-watershed study on the system in 1998. Even back in 1998, the health of the West Credit River, its water quality, biodiversity and health of its native, brook trout community were identified as at risk. The two greatest risks to the health of the upper West Credit were poor landuse practices and the proliferation of on-stream dams and ponds.

Although the upper West Credit River is rich in groundwater resources, the historical construction of many medium to small dams on the river have severely degraded the ability of the groundwater to keep the river clean and cold. Dams act as heat sinks, warming water and releasing it hot to downstream reaches. As a result, temperatures heat up in the summer, and despite groundwater activity, the stream is running a fever, water quality is deteriorating and the native, coldwater fish community is diminishing. The native brook trout is the only native coldwater fish historically found in our eastern streams. The populations of this species have diminished by over 80% in southern Ontario over the last 50 years and we are at risk of losing another Natural Heritage species to Ontario as a result. Though we all work at the challenge of moderating various landuse practices to diminish their negative impacts on our natural environments, the decommissioning of on-line ponds and dams is one of the easiest fixes possible to resolve deteriorating water quality and biodiversity in our streams especially with great climate variability adding to the stress on our water resources.

We understand that the community wishes to see some of the features remaining of the original pond behind the dam and do see a benefit to creating an off-line pond to the community and to the biodiversity of the area. Ideally, creation of an off-line wetland with a small open water area and active marsh around the margins would likely increase the diversity of waterfowl, other birds and amphibians more than a simple pond. Many off-line projects are designed to be too deep to be a wetland, and too shallow to function as an active pond.

We also realize that costs are a major concern for the Town and community but would like to suggest that there are a number of funding sources for work that is designed to improve natural environments that have been affected by onstream dams and ponds. We would be willing to assist the Town in seeking this type of funding to offset the costs of moving towards an Alternative C or D.

Specific Comments on Option Assessment:

We have reviewed the preliminary comparison and ranking of alternatives and have a few comments on some of the criteria, measures and weights.

Hydrogeology – We note a negative or negative/neutral ranking for Alternatives C and D for decommissioning the dam. Though this loss of groundwater elevation can occur with some dam decommissioning, based on the hydrogeology work done in 1998 as part of the subwatershed study, we feel that dug wells in the area or private feature ponds should not be affected by decommissioning OR creation of an off-channel pond since the valley bottom in Hillsburgh has a very high positive gradient that likely creates the control on shallow groundwater depths rather than the pond. Therefore we believe the hydrogeological impacts should be re-ranked to at worst negative/neutral though we believe that they could be rated as neutral.

Species at Risk – We believe that the decommissioning of the pond should be considered neutral/negative for snapping turtles because they can exist and do well in flowing water. There would be a neutral effect with an off-line wetland/pond. For Little Brown Bats, the effect would be negative/neutral for decommissioning since streams produce large amounts of insects as well as ponds. A small offline wetland/pond would be at worst a neutral risk.

Rare Species – Risk to rare seasonal species should be placed in context to the larger landscape when it comes to ranking. Great Egrets do move through the area, especially in the spring and can be found in

flooded fields (as can Trumpeter and Tundra Swans) as well as in artificial ponds. The landscape around the Town of Erin and north has a variety of natural and artificial features that provide opportunity for these species and a short distance north is Luther Marsh which has extensive migratory and seasonal habitat for these species. Though the decommissioning of the dam would certainly be negative to these species, if placed in context, both the decommissioning and offline wetland/pond would should be considered negative/neutral in this context. Since brook trout are becoming rare in a regional context, not removing the dam could be considered a severely negative impact to them under Alternative A and B.

Landscape Features – We believe that if you are considering the long-term benefits of each option, then Alternative A should be considered red or negative since a failure of the dam could cause a cascade affect downstream on other impoundments and even if not, the damage to the natural environment and to properties would be substantial. It is not a neutral risk. Under Alternatives C and D for Options 1, we see that the results of decommissioning would more likely be a negative/neutral, certainly with some loss to the pond community but likely not great to the forested fen since this is more controlled by groundwater discharges that have strong positive gradients and do not rely on the elevation of the pond per se.

Provincially Significant Wetlands (PSW) – We suggest that though the decommissioning options would likely affect some aspects of the wetlands around the verge of the existing pond, off-line pond development should have at worst a neutral impact.

Cultural Heritage – This is always a challenge since we do not have a specific category for "Natural Heritage". Agreed that the existing pond has cultural value, however, it is maintained artificially and could easily fail at some point in the future. Interested in how the historical natural heritage values of this landscape are considered in relation to human-built features and how we factor in long-term sustainability as a value to the natural heritage of the area. In other situations where we have worked on dam decommissioning, the restored natural features are now considered part of the cultural heritage of the community (e.g. Wingham Flats Ecological Park, Wingham, ON).

Public Safety – We only see a change in Alternative B, Option 1 where rebuilding of the dam's earthen berm may in the very short-term be no risk, in the longer-term posses at least a negative/neutral risk.

Overall Ranking – We believe that with adjustments and consideration of additional funds through various environmental programs that Alternatives C and D are preferred and that either Option with the reconstruction of the Station Street Bridge would provide sound long-term solutions for the Town and community. We disagree with the ranking of Alternative B, Option 1 as the best alterative since all the other more environmentally and community sustainable alternatives are all very close.

Summary:

The Town of Erin has an opportunity to increase the long-term sustainability of both built and natural infrastructure in the Village of Hillsburgh. The challenge as always is considering the long-term best solutions versus the shorter-term "easier" but ultimately more costly solutions. We believe that Alternative D with either option for the decommissioning or building of an offline wetland/pond is the

longest term solution and that organizations like ours would be willing to help support and fund-raise to assist the Town to acquire funds to reduce the costs of doing the best environmental option.

We would be happy to discuss the various Alternatives and Options with you, your staff and consultants.

Sincerely,

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