Toronto and Region Conservation
for The Living City

January 14, 2013

Leslie Gooding and Karen Yukich
Co-Chairs
High Park Natural Environment Committee

Dear Ms. Gooding and Ms. Yukich:

I appreciate the concern expressed by the High Park Natural Environment Committee and the desire to protect the natural resources in and around Grenadier Pond.

Toronto and Region Conservation (TRCA) conducted several electrofishing surveys for the purpose of scientific monitoring and public education and awareness. Over the last 15 years, TRCA has electrofished Grenadier Pond on eleven occasions. Of these eleven occasions, six were performed for scientific purposes and five were performed for educational/scientific purposes.

The following is an account of the electrofishing visits:

- In 1995 and 1997, Grenadier Pond was electrofished as part of the monitoring program for the restoration work that was completed on the south west shore. Both pre-construction and post-construction surveys were undertaken that provided results of fish utilization on or near the restored habitat.

- In 2004 and 2005, Grenadier Pond was electrofished on three occasions. This monitoring was part of the Asian Carp Surveillance Program. Asian Carp is an exotic invasive species that is very harmful to the aquatic ecosystem. In 2003, an Asian Carp was captured during routine electrofishing monitoring in the Lower Don River which caused great concern. Articles with photos of the Asian Carp were posted in local newspapers to gather feedback from anglers who may have captured this species on the Toronto Waterfront. Shortly after this posting, TRCA received confirmation that a large Asian Carp had been captured by an angler on the south shore of Grenadier Pond. The Asian Carp Surveillance Program was then implemented within Grenadier Pond. Fortunately, no Asian Carp have been captured during TRCA's monitoring at Grenadier Pond since then.

- In 2007 and 2008, TRCA undertook electrofishing in Grenadier Pond to inform and confirm the success of the shoreline naturalization and the installation of bass spawning shoals at the north end of the pond. Again, both pre-construction and post-construction surveys were undertaken that provided results of fish utilization on or near the restored habitat. Based on the electofishing data, as well as visual observations, this restoration

project was successful, as bass and pumpkinseed were observed occupying and using the shoals.

- Since 2009, Grenadier Pond was electrofished once a year for the Family Fishing Day event with the exception of 2012, where it was electofished for the Family Fishing Day event as well as The Skill, The Science and The Stuff events.

It is important to recognize that education is a valuable component used in many management plans, strategies and proposals. By educating the general public on the ecology, identification and proper handling of fish, they will have a better understanding of the significance of Grenadier Pond and its wildlife communities. Public education is a critical component in the protection of the pond's natural resources and the temporary capture of fish for interpretation to the public is often a memorable experience that not only improves awareness, but also promotes care and stewardship of the pond, and the broader park.

Furthermore, all of the fish collected for demonstration purposes are also included as part of the scientific monitoring samples. The data collected during these educational events can be used to better understand the fish population dynamics to inform restoration projects such as the rehabilitation proposal for Grenadier Pond.

On December 20, 2012, I received an e-mail from the High Park Natural Environment Committee which included a "Summary of Incidents to Wildlife at Grenadier Pond Relating to Fishing". Included in this summary was an article from 1983 on "The Physiological effect of electrofishing".

Current day electrofishing is a state of the art technology which uses a common scientific method and has made significant technological advances over the last 10 years and certainly cannot be compared to electrofishing methods that took place 29 years ago. If done properly electrofishing effects on fish are minimal. Many hatcheries use electrofishing to collect spawning females as it does not harm the eggs.

Some of the advances in training and technology include:

- Improved anode design to reduce the voltage gradient need to immobilize fish; turbidity meters are used to test the conductivity of the water so amperage can be set to the appropriate level;

- Advanced operator controls including the ability to control frequency and duty cycles reducing the need for electrical energy required to immobilize fish;

- Using direct current vs alternating current greatly reduces risk to fish;

- Electrofishing boat has two large fish recovery live wells with four aerators;

- Operators must attend a comprehensive 3 day provincially regulated course and accumulate 200 hours of supervised electrofishing experience before they can be certified.

The species composition of Grenadier Pond is primarily comprised of warm water fish. Consistent Northern pike and Largemouth bass numbers indicate self-sustaining populations as well as a substantial forage base within the pond. Continuous monitoring over the years has shown that the diversity of species has not changed and the abundance of fish has also remained stable. No sensitive species have been found in the pond. The presence of Common carp, Goldfish and hybrids of the same are a concern.

TRCA has not completed a fisheries management plan specifically for Grenadier Pond although a Humber River Fisheries Management Plan has been drafted which includes Grenadier Pond. The allegations of irresponsible fishing in High Park are of great concern and certainly need to be addressed. TRCA will work with our partners, the City of Toronto and the Ministry of Natural Resources, who regulate fishing in Ontario, as well as local stewardship groups such as the High Park Natural Environment Committee to find solutions to this problem. The inclusion of "Responsible Angling" will be addressed in future fish focused events at the park with the goal to reduce injury to all wildlife in or near the pond.

TRCA does not coordinate these public fishing events at High Park, so if a moratorium is to be considered it will need to be discussed by event coordinators.

Yours truly,

Danny Moro
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Restoration Services Division

cc: Councillor Sarah Doucette, City of Toronto
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