



**PARAGRAPH 35(2)(b) FISHERIES ACT AUTHORIZATION (A DEEMED
PARAGRAPH 34.4(2)(B) AND 35(2)(B) FISHERIES ACT
AUTHORIZATION ISSUED UNDER THE AMENDED FISHERIES ACT)
ALSO ACTING AS A PERMIT UNDER THE SPECIES AT RISK ACT**

Authorization issued to

City of Belleville (*hereafter referred to as the "Proponent"*)

Attention to: Barry Simpson
169 Front Street
Belleville, ON
K8N 2Y8

Location of Proposed Project

Nearest community: Belleville
Province: Ontario
Name of watercourse: Moira River
Longitude and latitude: 44.165356, -77.386451

Description of Proposed Project

The proposed project of which the work, undertaking or activity authorized is a part involves:

Replacement of the Catharine Street Pedestrian Bridge that spans the Moira River, which will involve dismantling an armour stone retaining wall on the east bank, construction of a suspended platform to accommodate bridge demolition and reconstruction, and installation of instream cofferdams.

Description of Authorized work(s), undertaking(s) or activity(ies) likely to result in serious harm to fish:

The work(s), undertaking(s), or activity(ies) associated with the proposed project described above, that are likely to result in serious harm to fish, are:

- Installation of four cement blocks on the riverbed to support a suspended platform that will operate as a demolition and work platform.
- Instream works that include construction of a temporary cofferdam to accommodate excavation and construction of a new midstream pier.
- Construction of a temporary cofferdam around the west abutment.
- Fish rescue within the isolated areas prior to dewatering to relocate fish and mussels.

Description of Authorized activity(ies) likely to result in prohibited impacts to aquatic species at risk, their critical habitat and/or the residences of their individuals:

The activity(ies) associated with the proposed project described above, that are likely to result in prohibited impacts to aquatic species at risk and their critical habitat are:

- Installation of four cement blocks on the riverbed to support a suspended platform that will operate as a demolition and work platform.
- Instream works that include construction of a temporary cofferdam to accommodate excavation and construction of a new midstream pier.
- Construction of a temporary cofferdam around the west abutment.
- Fish rescue within the isolated areas prior to dewatering to relocate fish and mussels.

The serious harm to fish likely to result from the proposed work(s), undertaking(s), or activity(ies), and covered by this authorization are:

- Permanent alteration of:
 - 22 m² of fish habitat associated with excavation for the pier footing to a depth of ~1 m.
 - 66 m² of fish habitat associated with construction of the temporary cofferdam around the midstream pier.
 - 5 m² of fish habitat associated with the installation of four cement blocks on the riverbed to support the suspended working platform.
 - 4 m² of fish habitat associated with the construction of the temporary cofferdam around the west abutment.
- Destruction of 2 m² of fish habitat associated with construction of a new pier.
- Death of fish associated with fish rescue and mussel relocation prior to dewatering within the isolated areas.

The prohibited impacts to aquatic species at risk, their critical habitat and/or the residences of their individuals likely to result from the proposed work(s), undertaking(s), or activity(ies) and covered by this authorization are:

- Killing, harming, harassing, or capturing an individual of Channel Darter (*Percina copelandi*), Lake Ontario population – Endangered, during fish rescue activities prior to dewatering within the isolated areas.
- Destruction of 2 m² of critical habitat of Channel Darter (*Percina copelandi*), Lake Ontario population – Endangered, in the Moira River (44.165356, -77.386451) associated with construction of a new pier.

Conditions of Authorization

The above described work, undertaking or activity must be carried on in accordance with the following conditions.

1. **Conditions that relate to the period during which the work, undertaking or activity can be carried on:**

The work, undertaking or activity is/are authorized to be carried on during the following period:

From June 1, 2020 to September 30, 2021.

If the Proponent cannot complete the work, undertaking or activity during this period, Fisheries and Oceans Canada (DFO) must be notified in advance of the expiration of the above time period.

The periods during which other conditions of this authorization must be complied with are provided in their respective sections below.

- 2. Conditions that relate to measures and standards to avoid and mitigate impacts to fish and fish habitat, including impacts to aquatic species at risk and their critical habitat as well as the introduction of non-indigenous species:**
- 2.1 Sediment and erosion control: Sediment and erosion control measures must be in place and shall be upgraded and maintained, such that release of sediment is avoided at the location of the authorized work, undertaking, or activity.
- 2.1.1 Effective erosion and sediment control measures shall be in place prior to, during, and after construction, and until revegetation or other mitigation measures are sufficient to control erosion, and shall be maintained, repaired, and/or upgraded as required to function properly and prevent sediment from entering fish habitat.
- 2.1.2 All spoil materials and debris shall be disposed of above the high water mark (HWM) such that it does not enter the watercourse. Any materials stored above the HWM shall be stabilized until properly disposed of.
- 2.1.3 Work that could result in sedimentation shall stop during periods of heavy or persistent rainfall.
- 2.2 List of measures and standards to avoid and mitigate impacts to fish and fish habitat including impacts to aquatic species at risk and their critical habitat, as well as the introduction of non-indigenous species:
- 2.2.1 Work shall be conducted during low flow periods to minimize the duration of in-stream work. If in-water work is required, the work area shall be effectively isolated from flow using an appropriate method of isolation and properly inspected and maintained throughout construction. Isolation methods shall be constructed of non-erodible material and designed for effective functioning in lotic conditions.
- 2.2.2 Where water is pumped from fish-frequented waters for any purpose, pump intakes shall be screened in accordance with DFO's *Freshwater Intake End-of-Pipe Fish Screen Guideline* (1995). The outlet shall have a diffuser or be placed in a location that is not subject to erosion from the outflow.
- 2.2.3 Pumping systems shall be sized appropriately to accommodate water quantities during construction, and shall be monitored at all times to ensure proper functioning.
- 2.2.4 Should the need for dewatering arise, water shall be released into a well-vegetated area and not directly into fish-frequented waters. Water returning to fish-frequented waters shall be of equal or better quality than the water in the fish-frequented waters.
- 2.2.5 Fish in isolated areas shall be rescued and released to an area containing sufficient flow and cover prior to any works commencing within the isolated area. Fish rescues shall be conducted by a biologist qualified to identify and relocate species at risk using appropriate and effective capture and handling procedures designed to minimize mortality (e.g. electrofishing, seine netting, minnow trapping). A provincial fish rescue permit shall be obtained prior to fish rescue operations.
- 2.2.6 Fish relocation activities shall occur during the valid authorization period. DFO shall be notified in advance of when these activities are initiated, and if there is a need to amend the valid authorization period.
- 2.2.7 All captures of Channel Darter shall be recorded and digitally vouchered and the species released unharmed to the watercourse downstream of the isolation site. Photo vouchers shall be taken while SAR are fully submersed in a net or viewing box.
- 2.2.7.1 SAR shall be sorted from the non-SAR and processed before all other species.
- 2.2.7.2 During processing, fishes shall be kept in multiple buckets/tubs to reduce overcrowding and water in the buckets/tubs shall be replaced every 10 minutes or otherwise aerated (flow-through, aeration stones, etc.) to maintain dissolved oxygen levels and water temperatures (within $\pm 1^{\circ}\text{C}$).
- 2.2.7.3 Buckets/tubs shall be covered to reduce stress and placed in full shade.

- 2.2.8 To the extent possible, works shall be conducted in a manner whereby any individuals of the species shall be handled only in the circumstances authorized and with the least amount of harm.
- 2.2.9 Every effort shall be made to minimize disruption of important habitat features, including rocks and coarse woody debris. In the event that rocks or coarse woody debris are overprinted or impacted by works, these features shall be moved to a similar location within the watercourse away from the worksite.
- 2.2.10 Water quality sampling shall be conducted during works in or near water, and shall include a minimum of one control site upstream of the zone of influence of the works.
- 2.2.11 Scour protection measures shall be implemented in high velocity areas including the guide bank and embankment.
- 2.2.12 All riprap shall:
 - 2.2.12.1 Be clean and free of fine materials and debris prior to placement and of sufficient size to resist displacement during design flood events;
 - 2.2.12.2 Not be obtained from areas below the ordinary high water mark of any fish-frequented waters;
 - 2.2.12.3 Shall be placed in a non-uniform manner to provide additional aquatic habitat diversity.
- 2.2.13 Disturbed areas associated with the construction site shall be revegetated as soon as possible with native vegetation.
- 2.2.14 Equipment shall arrive on site in a clean condition and be maintained free of fluid leaks, invasive species and noxious weeds.
- 2.2.15 Equipment operating in or near fish-frequented waters shall be operated, refuelled and serviced in a manner that prevents spills, leaks or wash water from entering fish-frequented waters.
- 2.3 Contingency measures: Contingency measures, as described in “*Attachment 8 – Description of Measures and Standards to Avoid or Mitigate Serious Harm to Fish and Aquatic SAR*”, shall be put in place if monitoring required in section 3 below indicates that the measures and standards to avoid and mitigate impacts to fish and fish habitat including impacts to aquatic species at risk and their critical habitat, as well as the introduction of non-indigenous species are not successful. DFO shall be notified immediately in the event that contingency measures are required.
- 2.4 Dates by which these measures and standards shall be implemented: Measures and standards to avoid and mitigate impacts to fish and fish habitat including impacts to aquatic species at risk and their critical habitat, as well as the introduction of non-indigenous species, shall be implemented before, during, and following in-water works.
- 3. **Conditions that relate to monitoring and reporting of measures and standards to avoid and mitigate impacts to fish and fish habitat including impacts to aquatic species at risk and their critical habitat, as well as the introduction of non-indigenous species:**
 - 3.1 Monitoring of avoidance and mitigation measures: The Proponent shall monitor the implementation of avoidance and mitigation measures referred to in section 2 of this authorization and report to DFO, by **November 30, 2021**, and indicate whether the measures and standards to avoid and mitigate impacts to fish and fish habitat including impacts to aquatic species at risk and their critical habitat, as well as the introduction of non-indigenous species were conducted according to the conditions of this authorization. This shall be done, by:
 - 3.1.1 The death of large numbers (≥ 5) of any of the species identified above, resulting from activities authorized by this authorization, shall be reported immediately to DFO.
 - 3.1.2 Vouchers (digital or physical) for each fish species (both species at risk and common species) must be collected at every site following the protocol outlined in Appendix 2 of Mandrak and Bouvier (2014) (Mandrak, N.E., and Bouvier, L.D. 2014. Standardized data collection methods in support of a classification protocol for the designation of watercourses as municipal drains. DFO Can. Sci. Advis. Sec. Res. Doc. 2013/077. v + 26 p.). The applicant

shall retain vouchers unless/until requested by DFO; if desired, vouchers may be disposed of after one (1) year from the time of collection.

- 3.1.3 Using the spreadsheet provided, a summary of data identifying all species (both SAR and non-SAR) caught by site (including number caught, date of capture, latitude, longitude, etc.) should be sent to DFO following the completion of works and no later than **November 30, 2021**.
- 3.1.4 By **December 31, 2021**, a final report shall be sent to DFO detailing any activity authorized by this authorization. The final report must include a summary of the results reported above (including a summary table, methods, appendices of raw data collected for all species and a map indicating all collection sites).
- 3.1.5 Demonstration of effective implementation and functioning: Providing dated photographs and inspection reports to demonstrate effective implementation and functioning of mitigation measures and standards described above to limit the impacts to fish and fish habitat including impacts to aquatic species at risk and their critical habitat, as well as the introduction of non-indigenous species to what is covered by this authorization.
- 3.1.6 Contingency measures: Providing details of any contingency measures that were followed, to prevent impacts greater than those covered by this authorization in the event that mitigation measures did not function as described.

4. Conditions that relate to offsetting:

- 4.1 Letter of credit: DFO may draw upon funds available to DFO as the beneficiary of the letter of credit provided to DFO as part of the application for this authorization in the amount of \$69,700.00 (letter of credit number SBT110476), to cover the costs of implementing and maintaining the offsetting measures required to be implemented under this authorization, including the associated monitoring measures included in section 5 of this authorization, in instances where the Proponent fails to implement these required measures.
- 4.2 Scale and description of offsetting measures: The Proponent shall install vegetation-enhanced armour stone walls on a 25 m section of the east bank, amounting to 50 m² of enhanced fish habitat. In addition, the Proponent shall retrofit 10 parking lot catchbasins with catchbasin shields along a 565 m section of the Moira River on the east bank. The offsetting measures shall be carried out in accordance with the measures set out in the Proponent's offsetting plan dated September 26, 2019 approved by DFO and attached to this authorization.
- 4.3 Offsetting criteria to assess the implementation and effectiveness of the offsetting measures: All fish habitat offsetting measures shall be completed and functioning according to the criteria below:
 - 4.3.1 Offsetting measures shall be completed by **September 30, 2021**.
 - 4.3.2 Effectiveness of the vegetation-enhanced stone revetment shall be assessed by monitoring survival of vegetation (80%).
 - 4.3.3 Effectiveness of the catchbasin shields shall be assessed by monitoring turbidity reduction in the Moira River in the vicinity of the catchbasin locations (50% reduction or greater).
- 4.4 Contingency measures: If the results of monitoring as required in section 5 indicate that the offsetting measures are not completed by the date specified and/or are not functioning according to the above criteria in 4.3, the Proponent shall give written notice to DFO and shall implement the contingency measures and associated monitoring measures, as contained within the approved offsetting plan (attached to this authorization or referenced in section 4.2), and as set out in section 5 of this authorization, to ensure the implementation of the offsetting measures is completed and/or functioning as required by this authorization.
 - 4.4.1 Scale and description of contingency measures: The Proponent shall conduct necessary works, undertakings or activities to ensure the structural stability and ongoing functionality of any contingency offsetting habitat to the satisfaction of DFO, should the initial offsetting plan not meet the requirements for offsetting associated with this authorization.

- 4.4.2 Monitoring measures to ensure offsetting contingency is completed and/or functioning as required: All contingency offsetting measures shall be completed and functioning as described in the approved offsetting plan.
- 4.5 The Proponent shall not carry on any work, undertaking or activity that will adversely impact the offsetting measures.
- 4.6 The Proponent shall obtain written permission for the Proponent, DFO, and anyone authorized to act on behalf of DFO, to access lands, water sources, or water bodies that are not owned by or under the care, control, or administration of the Proponent that must be accessed in order to implement the offsetting measures in this section and the monitoring of said measures.
- 4.7 The Proponent shall provide the written permission to DFO prior to the commencement of the authorized work(s), undertakings(s) or activity(ies) that are likely to result in impacts to fish and fish habitat, including impacts to aquatic species at risk and their critical habitat described herein, and prior to the commencement of the implementation of the Proponent's offsetting plan referred to in condition 4.2 and dated September 26, 2019 that is to take place on lands or in water sources or water bodies not owned by or under the care, control, or administration of the Proponent.
5. **Conditions that relate to monitoring and reporting of implementation of offsetting measures (described in section 4):**
- 5.1 Schedule(s) and criteria: The Proponent shall conduct monitoring of the implementation of offsetting measures according to the timeline and criteria below:
- 5.1.1 The Proponent shall report to DFO on whether the offsetting measures along the Moira River were implemented according to the conditions of this authorization by providing a report to be submitted no later than **November 30, 2021**.
- 5.2 The Proponent shall engage in in post-construction monitoring of the offset works for a period of two years following the completion of offsetting works along the Moira River, with a report to be submitted annually no later than **November 30 of the monitoring year, beginning in 2021**.

Authorization Limitations and Application Conditions

The Proponent is solely responsible for plans and specifications relating to this authorization and for all design, safety and workmanship aspects of all the works associated with this authorization.

The holder of this authorization is hereby authorized under the authority of Paragraph 35(2)(b) of the *Fisheries Act*, R.S.C., 1985, c.F-14, to carry on the work(s), undertaking(s) and/or activity(ies) that are likely to result in serious harm to fish as described herein.

The holder of this authorization is also authorized under the authority of subsections 73(1) and 74 of the *Species at Risk Act* S.C. 2002, c. 29 to carry on the works, undertakings and/or activities that are likely to kill, harm, harass or capture Channel Darter, and destroy the critical habitat of Channel Darter, as described herein.

This authorization may be revoked or amended to ensure the survival or recovery of the above aquatic species at risk. Without limiting the generality of the foregoing, DFO may:

- suspend any authorized activities to avoid or mitigate additional adverse direct or indirect effects to the above aquatic species at risk;
- amend or revoke this authorization; and
- direct the Proponent to carry out at the Proponent's expense any modifications or actions deemed necessary by DFO to avoid or mitigate existing impacts or to avoid further adverse direct and indirect impacts to the above aquatic species at risk.

This authorization does not purport to release the applicant from any obligation to obtain permission from or to comply with the requirements of any other regulatory agencies.

This authorization does not permit the deposit of a deleterious substance in water frequented by fish. Subsection 36(3) of the *Fisheries Act* prohibits the deposit of any deleterious substances into waters frequented by fish unless authorized by regulations made by Governor in Council.

This authorization does not permit the taking of individuals of any aquatic species listed under the *Species at Risk Act* (SARA) (s. 32 of the SARA), or the damage or destruction of residence of individuals of such species (s. 33 of the SARA).


In accordance with *An Act to amend the Fisheries Act and other Acts in consequence*, this authorization is deemed to have been issued under the authority of paragraphs 34.4(2)(b) and 35(2)(b) of the *Fisheries Act* as those paragraphs read after the day on which section 22 of *An Act to amend the Fisheries Act and other Acts in consequence* came into force, on August 28, 2019. This authorization also acts as a permit under the *Species at Risk Act*, as per section 74 of that Act.

The failure to comply with any condition of this authorization constitutes an offence under Paragraphs 40(3)(a) of the *Fisheries Act* and 97(1)(c) of the *Species at Risk Act*, and may result in charges being laid under said Acts.

This authorization must be held on site and work crews must be made familiar with the conditions attached.

This authorization cannot be transferred or assigned to another party. If the work(s), undertaking(s) or activity(ies) authorized to be conducted pursuant to this authorization are expected to be sold or transferred, or other circumstances arise that are expected to result in a new Proponent taking over the work(s), undertaking(s) or activity(ies), the Proponent named in this authorization shall advise DFO in advance.

Date of Issuance: JAN 10 2020

Approved by: 
David Nanang
Regional Director General
Central and Arctic Region
Fisheries and Oceans Canada