

APPENDIX B: FISHERIES ACT AUTHORIZATION



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Ontario and Prairie Region
Fish and Fish Habitat Protection Program
1028 Parsons Rd SW
Edmonton, AB T6X 0J4

Région de l'Ontario et des Prairies
Programme de Protection du poisson et de son habitat
1028 Parsons Rd SW
Edmonton, AB T6X 0J4

June 4, 2026

Our file Notre référence

25-HCAA-01726

City of Winnipeg
Attention: Cam Ward
103-1155 Pacific Avenue
Winnipeg, MB R3E 3P1

Subject: Notification of amendment to conditions of Paragraph 34.4(2)(b) and 35(2)(b) *Fisheries Act* Authorization also acting as a permit under the *Species At Risk Act* (Emergency Circumstances)

Dear Cam Ward:

The Fish and Fish Habitat Protection Program of Fisheries and Oceans Canada (DFO) would like to acknowledge receipt of your request made pursuant to section 5 of the *Authorizations Concerning Fish and Fish Habitat Protection Regulations* (the Regulations) to amend your authorization issued under paragraphs 34.4(2)(b) and 35(2)(b) of the *Fisheries Act* also acting as a permit under the *Species at Risk Act* on May 22, 2026.

The Program has reviewed the content of your amendment request and is notifying you that it is complete and that the authorization is hereby amended effective on this date.

Your authorization is now replaced by the amended and restated authorization attached to this letter. The amendments are:

Condition 1: The work, undertaking or activity that is/are authorized to be carried on during the following Period:

From **Date of Issuance to ~~March 31, 2026~~ March 31, 2027**

Condition 2.1: Erosion and sediment control: Erosion and sediment control measures must be in place and shall be upgraded and maintained,

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such that release of sediment is avoided at the location of the authorized work, undertaking, or activity, **and shall follow the Interim standard: planning for land-based erosion and sediment control**.

Condition 2.2.3: All in-water activities, other than placement of bypass pumps and discharge diffusers, shall be undertaken in isolation (e.g., cofferdam) of open or flowing water to avoid introducing sediment into the watercourse in accordance with **DFO's Interim standard: in-water site isolation**.

Condition 2.2.6: During dewatering, the water shall be released into a well vegetated area or settling basin and not directly into any fish-frequented waters. The pumps used for dewatering shall be equipped with appropriate screens according to ~~DFO's Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater~~ **DFO's interim standard: Water intake end-of-pipe fish screens**. The outlet shall have a diffuser to dissipate energy or shall be placed in a location that is not subject to erosion from the outflow. Water returning to fish-frequented waters shall be of equal or better quality than the water in the fish-frequented waters.

Condition 2.2.8: Prior to any in-water works and/or dewatering activities, a fish rescue shall be completed within all isolated areas **in accordance with DFO's interim standard: Fish capture and relocation**.

Condition 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 within **thirty (30) days following completion of construction or no later than ~~April 30, 2026~~ April 30, 2027**, and indicate whether the measures and standards to avoid and mitigate impacts to fish and fish habitat including impacts to aquatic species at risk, their critical habitat and/or the residences of their individuals were conducted according to the conditions of this authorization.

Condition 3.1.4: **As-builts**: Providing georeferenced 'as-built' drawings and geospatial polygons that accurately represent the footprints of the HADD. Geospatial polygon data should be collected using

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WGS 1984 to four (4) decimal places (e.g., 28.5234°N, 80.6830°W). Geospatial polygon data must be supplied in WGS 1984 and in shapefile (.shp,) format, ensuring that the associated extensions (.dbf, .shx, and .prj) are also included. The geospatial data shall be provided with the avoidance and mitigation report due **on or before April 30, 2026 April 30, 2027**.

Condition 4.2: Scale and description of offsetting measures: The Proponent shall develop and submit an offsetting plan to DFO for approval **no later than April 30, 2026 September 30, 2026**, that details offsetting measures that will be undertaken to counterbalance the unavoidable impacts to fish and fish habitat resulting from the work(s), undertaking(s), or activity(ies) covered by this authorization in consultation with DFO.

Failure to comply with any of the terms or conditions of the authorization as amended may lead to prosecution under the *Fisheries Act* and the *Species at Risk Act*.

A copy of the amended authorization and this letter containing the amendments should be kept on site while the work is in progress and upon request be provided to relevant federal or provincial officials. The authorization holder is responsible for ensuring work crews are familiar with, and able to adhere to, the conditions.

As you are aware, Bill C-68 included new provisions (sections 42.2 to 42.5) in the *Fisheries Act* that require the Minister of Fisheries and Oceans to establish a public registry to facilitate public access to certain records, including amongst other items, authorizations issued pursuant to paragraphs 34.4(2)(b) and 35(2)(b) of the *Fisheries Act*. While the public registry provisions of the *Fisheries Act* are not yet in force, the Department has begun to post a list of authorizations issued since August 28, 2019, when amendments to the fish and fish habitat protection provisions of the Act came into force.

Information pertaining to this authorization will be posted to the *Fisheries Act* Registry and accessible from the Department's website at <https://www.dfo-mpo.gc.ca/pnw-ppe/registry-registre-eng.html> as well as from the Open Government Portal at <https://open.canada.ca/data/en/dataset/2c09d2fd-9a8e-4d8c-b5af-95747e36eaac> and the Common Project Search at <https://common-project-search.canada.ca/>. Information and data will be updated as the Department continues to develop the *Fisheries Act* Registry.

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Any disclosure of information will be conducted in accordance with the *Access to Information Act* and the *Privacy Act*. Should you have any documents that contain sensitive or proprietary information that you believe should be protected from public disclosure, please contact us to discuss whether and how the information may be protected.

If you or anyone conducting work on your behalf have any questions please contact Alan Chang by telephone at (306) 216-8516, or by email at Alan.Chang@dfo-mpo.gc.ca.

Yours sincerely,

Stephanie Jerred
Regulatory Review Manager
Ontario & Prairie Region
Fisheries and Oceans Canada

Attachment: Amended *Fisheries Act* Authorization

cc: Kyle Muirhead (AAE Tech Services Inc.)
Mark Lowdon (AAE Tech Services Inc.)
Lynn Dupuis (DFO)
Leanne Lumb-Collett (DFO)
Alan Chang (DFO)
DFO – Conservation and Protection



Paragraphs 34.4(2)(b) and 35(2)(b) *Fisheries Act* Authorization Also Acting as a Permit Under the *Species at Risk Act* – Emergency Circumstances – Amendment

Authorization issued to

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

Attention to: Cam Ward
103-1155 Pacific Avenue
Winnipeg, MB R3E 3P1

Location of Proposed Project

Nearest community (city, town, village): Winnipeg
Municipality, district, township, county: Winnipeg District
Province: Manitoba
Name of watercourse, waterbody: Red River
Longitude and latitude, UTM Coordinates: 49.90536, -97.11391; 14U 635432 m E, 5529814 m N

Valid Authorization Period

This Authorization remains in force from the **Date of Issuance** until Fisheries and Oceans Canada (DFO) confirms to you in writing that all of the requirements of this Authorization have been met, in particular those requirements relating to monitoring, offsetting measures and contingency measures.

Please note that this Authorization also contains more specific timing requirements and limitations. These are set out in the Conditions of Authorization section.

Description of Proposed Project

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

Emergency rehabilitation of the Louise Bridge (Higgins Avenue crossing) over the Red River in Winnipeg, Manitoba, due to structural deterioration of two support piers. Work includes replacing the bridge deck and preparing for future active transportation upgrades. While the bridge alignment and most structural elements will remain unchanged, in-water works are required to upgrade or replace two piers. Rock access berms will be constructed to isolate and dewater the work areas. Fish and mussel salvage will be conducted prior to in-water activities. The project is located within the critical habitat of the Mapleleaf mussel

(*Quadrula quadrula*), Saskatchewan – Nelson Rivers population, which is listed as Threatened under Schedule 1 of the *Species at Risk Act*.

Description of Authorized work(s), undertaking(s) or activity(ies) likely to result in the death of fish by means other than fishing:

The work(s), undertaking(s), or activity(ies) associated with the proposed project described above, that are likely to result in the death of fish by means other than fishing, are:

- Isolation and dewatering of in-water work areas.
- Fish and/or mussel relocation activities.

Description of Authorized work(s), undertaking(s) or activity(ies) likely to result in the harmful alteration, disruption or destruction of fish habitat:

The work(s), undertaking(s), or activity(ies) associated with the proposed project described above, that are likely to result in the harmful alteration, disruption or destruction of fish habitat, are:

- Placement of temporary rock access berms to facilitate in-water work.

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, their critical habitat and/or the residences of their individuals, are:

- Mussel relocation activities.
- Placement of temporary rock access berms to facilitate in-water work.

The authorized work(s), undertaking(s), or activity(ies) are likely to result in the following impacts to fish and fish habitat:

- The harmful alteration, disruption or destruction of 2,230 m² of critical habitat for Mapleleaf mussel (Saskatchewan – Nelson Rivers population) resulting from the placement of temporary rock access berms.
- The incidental killing, harming, harassing, capturing, or taking of an individual of Mapleleaf mussel (Saskatchewan – Nelson Rivers population) resulting from mussel handling and relocation activities.

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 that is/are authorized to be carried on during the following period:

From the **Date of Issuance to ~~March 31, 2026~~ March 31, 2027**

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. An application for amendment, suspension or cancellation of the authorization should be submitted to DFO.

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, their critical habitat and/or the residences of their individuals.

2.1 Erosion and sediment control: Erosion and sediment 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, **and shall follow the Interim standard: planning for land-based erosion and sediment control.**

2.1.1 Effective erosion and sediment control measures shall be in place prior to, during, and after construction activities and shall remain in place until revegetation or other mitigation measures are sufficient to control erosion.

2.1.2 Erosion and sediment control measures and structures shall be inspected and maintained on a daily basis during the course of construction by an experienced/qualified erosion and sediment control onsite inspector or Qualified Environmental Professional (QEP). Inspections shall occur more frequently prior to and during periods of heavy or persistent precipitation. Structures shall be repaired or upgraded as required.

2.1.3 Measures for managing water flowing onto the site shall be implemented such that sediment is filtered out prior to the water entering a watercourse or waterbody, so the water is of equal or better quality than the receiving waters.

2.1.4 Work that could result in sedimentation shall stop during periods of heavy or persistent precipitation.

2.1.5 All disturbed areas with potential for erosion or introduction of sediment into the watercourse shall be immediately stabilized using temporary erosion and sediment control measures that shall remain in place until vegetation or other long-term erosion and sediment control measures are fully established and functioning.

2.1.6 All temporary, non-biodegradable erosion and sediment control materials shall be removed once vegetation or other long-term erosion and sediment control measures are fully established and functioning.

2.2 List of measures and standards to avoid and mitigate impacts to fish and fish habitat including impacts to aquatic species at risk, their critical habitat and/or the residences of their individuals:

2.2.1 To protect spawning fish, their incubating eggs and larval life stages, no in-water works shall occur during the restricted activity timing window of **April 1 to July 15** of any given year, unless otherwise approved in writing by DFO.

2.2.2 A QEP shall be on site at the onset of in-water activities, shall remain on site during the authorized works, undertakings and activities, and shall keep a record of the days and times they are onsite.

2.2.3 All in-water activities, other than placement of bypass pumps and discharge diffusers, shall be undertaken in isolation (e.g., cofferdam) of open or flowing water to avoid introducing

- sediment into the watercourse in accordance with DFO's Interim standard: in-water site isolation.
- 2.2.4 Temporary isolation shall consist of non-erodible material and be installed in a manner that will mitigate the release of sediment into the watercourse.
- 2.2.5 Isolations shall be installed in a manner that does not pose a barrier to fish migration and a sufficient portion of the river shall remain open. The natural downstream flow shall be maintained.
- 2.2.6 During dewatering, the water shall be released into a well vegetated area or settling basin and not directly into any fish-frequented waters. The pumps used for dewatering shall be equipped with appropriate screens according to ~~DFO's Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater~~ DFO's interim standard: Water intake end-of-pipe fish screens. The outlet shall have a diffuser to dissipate energy or shall be placed in a location that is not subject to erosion from the outflow. Water returning to fish-frequented waters shall be of equal or better quality than the water in the fish-frequented waters.
- 2.2.7 A water quality monitoring plan shall be developed to monitor the effectiveness of measures to control the transport of suspended sediment. The plan shall include response procedures in the event of exceedances of the thresholds specified within it and shall also include the following components:
- 2.2.7.1 All construction monitoring activities related to in-water works shall be coordinated by QEP.
- 2.2.7.2 The criteria outlined in the Canadian Council of Ministers of the Environment (CCME) Canadian Water Quality Guidelines for the Protection of Aquatic Life shall be considered in the development of water quality monitoring thresholds, and exceedances of these thresholds shall be documented and reported to DFO immediately. Corrective measures to prevent additional sediment releases shall also be implemented.
- 2.2.7.3 Water quality shall be monitored regularly for the duration of in-water works to detect a sediment release and support the early implementation of a response plan if a sediment release occurs.
- 2.2.7.4 Monitoring locations shall include sites at a minimum of 50 m upstream of the project location and as far downstream as necessary to measure conditions comparable to background, including a minimum of 100 m downstream of the project area.
- 2.2.7.5 Visual monitoring shall be conducted to detect a sediment release or spill of a deleterious substance resulting from works, undertakings or activities.
- 2.2.8 Prior to any in-water works and/or dewatering activities, a fish rescue shall be completed within all isolated areas in accordance with DFO's interim standard: Fish capture and relocation.
- 2.2.9 If five or more total fish are killed during the fish rescue, work shall stop immediately and DFO shall be contacted to discuss potential changes to methodology.
- 2.2.10 Relocation of resident mussels from the project area shall be undertaken in affected areas prior to the placement of rock into the watercourse.
- 2.2.11 Handling and relocation of aquatic species at risk shall be undertaken by, or under the direct supervision of, a biologist qualified to identify and safely handle aquatic species at risk (SAR).
- 2.2.11.1 **Mussel relocation activities must occur during ice-free conditions. Every effort shall be made to conduct relocation activities when water temperatures are above 16°C.**
- 2.2.11.2 Activities shall be conducted in a manner whereby any individuals of the species shall be handled only in the circumstances authorized herein and with the least amount of harm.
- 2.2.11.3 SAR must be sorted from the non-SAR and processed before all other species.
- 2.2.11.4 Handling and relocation of mussels shall follow the protocols identified in the *Protocol for the detection and relocation of freshwater mussel species at risk in the Ontario Great Lakes*

- area (Mackie et al. 2008) and *Guidance on the collection of freshwater mussel (Bivalvia: Unionida) vouchers within Canada* (Morris et al. 2022).
- 2.2.11.5 During processing, mussels must be kept moist or in water in multiple buckets/tubs to avoid overcrowding, and out of water time shall be minimized. Air and water temperatures shall be monitored to avoid extreme temperatures.
- 2.2.11.6 All captured species shall be relocated to an appropriate location within the same watercourse and in an area that prevents them from being further disturbed by the construction activities.
- 2.2.11.7 All potential relocation areas shall be predetermined and field verified by a qualified biologist prior to mussel rescue activities. Mussels shall be relocated to an area with stable substrates.
- 2.2.11.8 If mortality of **any** individual(s) of Mapleleaf mussel (*Quadrula quadrula*) and/or any other SAR occurs, work shall be halted immediately, and the proponent shall notify DFO. Additional measures to avoid prohibited effects to aquatic SAR shall be developed and submitted to DFO for approval prior to works recommencing.
- 2.2.12 **If mussel relocation activities must occur when water temperatures are below 16°C**, the following mitigation measures shall be implemented to minimize stress and harm to aquatic species at risk:
- 2.2.12.1 Mussels shall be handled and transferred as quickly as possible to minimize time out of water.
- 2.2.12.2 Two support crews shall be present to ensure rapid turnaround between mussel collection and relocation.
- 2.2.12.3 Mussels shall be transported in insulated, temperature-controlled containers (e.g., covered fish totes) to maintain stable temperatures similar to the collection site.
- 2.2.12.4 Salvage operations shall be scheduled during early morning or evening hours to avoid temperature extremes.
- 2.2.12.5 Water temperatures in transport containers and at the relocation site shall be continuously monitored.
- 2.2.12.6 Acclimatization shall be performed using a flushing technique to gradually introduce water from the relocation site into the transport container to equalize temperatures.
- 2.2.12.7 Mussels shall be relocated approximately 650 m downstream to Pritchard Point Park, which shall provide similar habitat conditions, including stable substrates and a unionid community comparable to the original capture area.
- 2.2.13 Any rock used for the project shall be clean and free fine sediments, and shall not be obtained from below the ordinary high water mark of any watercourse or waterbody.
- 2.2.14 Placement of rock shall be performed in a controlled fashion. Rock shall be placed directly on top of the existing substrate to minimize any sediment disturbance on the banks or river bed.
- 2.2.15 Removal of natural woody debris, rocks, sand or other materials from the banks or shoreline shall be limited to the project area.
- 2.2.16 Riparian vegetation shall be removed by pruning or topping instead of grubbing/uprooting to the greatest extent possible.
- 2.2.17 Stream banks and riparian vegetation affected by the works, undertakings, and activities shall be restored to their natural state, including restoration of bank profile and vegetation using a native seed mix.
- 2.2.18 Habitat structure (e.g., large woody debris, boulders, substrate) and stream morphology (i.e., bed and banks, gradient, and contour of the watercourse) disturbed by the works, undertakings, and activities shall be salvaged, reinstated, and/or restored to their initial state.
- 2.2.19 Any other disturbed habitat features shall be replaced and/or restored, and any areas impacted by the works, undertakings and activities shall be remediated.

- 2.2.20 Equipment shall arrive on site in a clean condition and be maintained free of fluid leaks, invasive species, deleterious diseases to aquatic flora and fauna, and noxious weeds.
- 2.2.21 Aquatic invasive species are introduced and spread through transporting water, sands, and sediments, and using contaminated construction equipment. To prevent the spread of aquatic invasive species during construction in aquatic environments:
 - 2.2.21.1 Ensure all equipment arrives on site clean and free of invasive species;
 - 2.2.21.2 Clean, drain, and dry any equipment used in the water; and
 - 2.2.21.3 Never move organisms or water from one waterbody to another.
- 2.2.22 Heavy equipment shall be operated from outside the high-water mark whenever possible.
- 2.2.23 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.
- 2.2.24 Activities near water shall be planned such that materials such as paint, primers, blasting abrasives, rust solvents, degreasers, grout, poured concrete or other chemicals do not enter the watercourse.
- 2.2.25 Any building material used in the watercourse on a permanent basis (i.e., concrete, riprap) shall be handled and treated in a manner to prevent the release or leaching of substances that may be deleterious to fish into the water.
- 2.2.26 Any building material used in the watercourse on a temporary basis shall be removed upon completion of works below the ordinary high-water mark, and the bed and banks restored to their original contour and gradient
- 2.2.27 Any excavated or stockpiled material shall be stored above the ordinary high-water mark and located and stabilized so that it cannot enter the watercourse.
- 2.2.28 Waste material (e.g., dredging spoils, construction waste and materials, uprooted or cut aquatic plants, accumulated debris) shall be stored above the high-water mark, and located and stabilized so that it cannot enter any fish-frequented waters. Upon project completion, spoil material and construction debris shall be removed from the site and properly disposed of in a manner that it cannot enter the fish-frequented waters.
- 2.2.29 A response plan shall be in place in the event of a sediment release or spill of a deleterious substance. A spill kit and spill containment provisions shall be kept on site at all times. Appropriate personnel at the worksite shall be familiar with the location and use of the spill kit and spill response plan.
- 2.2.30 Any spills (e.g., sediment releases, sewage, oil, fuel or other deleterious substance), whether near or directly into a watercourse or waterbody, shall be immediately reported to provincial and federal authorities. Corrective measures to prevent additional releases shall also be implemented.
- 2.3 Contingency measures: DFO shall be notified immediately, and contingency measures shall be put in place by the Proponent if monitoring required in section 3 below indicates the measures and standards to avoid and mitigate impacts to fish and fish habitat including impacts to aquatic species at risk, their critical habitat and /or the residences of their individuals are not successful. In the event of failed measures and standards to avoid and mitigate impacts to fish and fish habitat, the Proponent shall develop and implement contingency measures in consultation with, and to the satisfaction of, DFO to correct the situation and minimize the impact. Monitoring and regular reporting of the corrective actions taken shall be provided to DFO until the contingency measures are successful and the Proponent is in compliance.
- 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, their critical habitat and/or the residences of their individuals shall be implemented prior to the initiation of works, undertakings or activities.

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, their critical habitat and/or the residences of their individuals.

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 within **thirty (30) days following completion of construction or no later than April 30, 2026 April 30, 2027**, and indicate whether the measures and standards to avoid and mitigate impacts to fish and fish habitat including impacts to aquatic species at risk, their critical habitat and/or the residences of their individuals were conducted according to the conditions of this authorization. This shall be done, by:

- 3.1.1 Demonstration of effective implementation and functioning: Providing dated photographs, inspection reports (including onsite hours for the QEP), and water quality data 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, their critical habitat and/or the residences of their individuals to what is covered by this authorization.
- 3.1.2 Fish and/or mussel rescue and relocation measures: The Proponent shall conduct monitoring to minimize the risk of injury or death of fish and/or mussel during water drawdown and fish and/or mussel relocation operations. Such activities shall include continual monitoring of fish and/or mussel health throughout the fish and/or mussel relocation operations.
- 3.1.3 Assessment of river conditions: Assessment of Red River in the vicinity of the project, including stream geomorphology, hydrology, and overall stability of the watercourse bed and banks to ensure the habitat and channel are functioning and stable. This will include a general field reconnaissance along the length of the channel following construction and after the first high flow event to identify potential areas of erosion concern and/or channel movement beyond expected natural fluvial processes.
- 3.1.4 As-builts: Providing georeferenced 'as-built' drawings and geospatial polygons that accurately represent the footprints of the HADD. Geospatial polygon data should be collected using WGS 1984 to four (4) decimal places (e.g., 28.5234°N, 80.6830°W). Geospatial polygon data must be supplied in WGS 1984 and in shapefile (.shp,) format, ensuring that the associated extensions (.dbf, .shx, and .prj) are also included. The geospatial data shall be provided with the avoidance and mitigation report due **on or before April 30, 2026 April 30, 2027**. In addition, the following data must also be supplied in an Excel file (i.e., metadata):
 - 3.1.4.1 HADD area per habitat type (based on location relative to the high water mark);
 - 3.1.4.2 Date(s) that the construction work(s), undertaking(s), and activity(ies) was/were completed; and
 - 3.1.4.3 Brand name and model of GPS unit, the coordinate system used, and guaranteed accuracy of GPS unit (e.g., ± 1 m).
- 3.1.5 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.

3.2 Other monitoring and reporting conditions:

- 3.2.1 The Proponent shall notify DFO prior to starting any works below the high water mark. Such notifications shall be directed to the DFO assessor and DFO.OP.10DayNotification-Notification10Jours.OP.MPO@dfo-mpo.gc.ca. The notification shall include the starting date of the works, undertakings, or activities as well as the name of the contractor(s) conducting the works and QEP overseeing the works.

- 3.2.2 The injury or death of **any** individuals of Mapleleaf mussel and/or any other SAR resulting from activities authorized herein shall be reported to DFO at the end of each day of the occurrence along with digital (photo) vouchers. Additional measures to avoid and mitigate harm and impacts to aquatic species at risk shall be developed and submitted to DFO (if requested) for approval prior to works recommencing.
- 3.2.3 If five or more individuals of a fish or mussel species other than SAR are killed during relocations, work shall stop immediately and DFO shall be contacted to discuss potential changes to methodology.
- 3.2.4 Digital (photo) vouchers for each species must be collected at the site following the protocol outlined in *Guidance on the collection of freshwater mussel (Bivalvia: Unionida) vouchers within Canada* (Morris et al. 2022) and/or *Voucher collection guidance for freshwater fishes in DFO's Ontario and Prairie, and Arctic regions* (Mandrak et al. 2022). Vouchers shall be retained unless/until requested by DFO; if desired, vouchers may be disposed of after one (1) year from the time of collection.
- 3.2.5 Using the spreadsheet provided, a data summary identifying all species (both SAR and non-SAR) caught by site (including number caught, date of capture, latitude and longitude, etc.) must be sent to DFO **within 30 days following the date on which relocation activities are undertaken**. The report shall include a summary of the results including summary table, methods, appendices of raw data collected for all species, digital vouchers, and a map indicating all collection sites.

4. Conditions that relate to offsetting

- 4.1 Letter of credit [or performance bond or any other equivalent financial guarantee accepted by DFO]: The Proponent will be required to provide an irrevocable letter of credit or another equivalent financial guarantee, including a performance bond, once an offsetting/monitoring plan has been prepared and submitted to DFO, in accordance with the *Policy for Applying Measures to Offset Adverse Effects on Fish and Fish Habitat Under the Fisheries Act*, dated March 2025. Once received, DFO may draw upon funds available to DFO as the beneficiary of the financial security provided to DFO as part of the application for this authorization, 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.
 - 4.1.1 The monetary value and draft of the financial guarantee shall be agreed to in writing by DFO.
- 4.2 Scale and description of offsetting measures: The Proponent shall develop and submit an offsetting plan to DFO for approval **no later than April 30, 2026 September 30, 2026**, that details offsetting measures that will be undertaken to counterbalance the unavoidable impacts to fish and fish habitat resulting from the work(s), undertaking(s), or activity(ies) covered by this authorization in consultation with DFO. The offsetting plan must:
 - 4.2.1 Be developed in accordance with the *Policy for Applying Measures to Offset Adverse Effects on Fish and Fish Habitat Under the Fisheries Act*, dated March 2025.
 - 4.2.2 Include an as-built survey, detailed pre-and post- construction photographs, and plans that demonstrate the footprint (in square metres) of authorized work(s), undertaking(s), or activity(ies) that occurred below the high water mark.
 - 4.2.3 Include an analysis of the death of fish; harmful alteration, disruption, or destruction of fish habitat; impacts to aquatic species at risk, their critical habitat and/or the residences of their individuals; and how the offsetting measures counterbalance these effects, to the satisfaction of DFO.

- 4.2.4 Include a detailed offsetting monitoring plan to assess the implementation and effectiveness of the offsetting measures.
- 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 contained in the approved offsetting plan referenced in condition 4.2. Specific criteria to determine the effectiveness of offsetting shall be described in the offsetting plan and reviewed once the offsetting plan has been submitted.
- 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 4.2, 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 (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, undertaking 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: The Proponent shall implement monitoring measures to the satisfaction of DFO to ensure the offsetting contingency measures are completed and/or functioning as required by this authorization.
- 4.4.2.1 Should the offsetting measures be deemed unstable or deficient, a minimum of one (1) additional year of inspection, monitoring and reporting shall be required by DFO to ensure the intended functioning of the offsetting measures as required by this authorization.
- 4.5 The Proponent shall not carry on any work, undertaking or activity that will adversely impact the offsetting measures.
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 outlined in the offsetting plan referenced in section 4.2.
- 5.2 List of reports to be provided to DFO: The Proponent shall report to DFO on whether the project works and offsetting measures were conducted according to the conditions of this authorization by providing the reports as stipulated in the offsetting plan referenced in section 4.2.
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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 Paragraphs 34.4(2)(b) and 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 impacts to fish and fish habitat 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 harm, harass, capture or take individuals of Mapleleaf mussel (*Quadrula quadrula*), Saskatchewan – Nelson Rivers population, listed as Threatened under Schedule 1 of the *Species at Risk Act*, as well as the destruction of the critical habitat of of Mapleleaf mussel (*Quadrula quadrula*), Saskatchewan – Nelson Rivers population, 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 Proponent from any obligation to obtain permission from any private landowner 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 damage or destruction of residence of individuals of such species (s. 33 of the SARA).

It is also your *Duty to Notify* DFO if you have caused, or are about to cause, the unauthorized death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to <http://www.dfo-mpo.gc.ca/pnw-ppe/CONTACT-eng.html>.

The failure to comply with any condition of this authorization constitutes an offence under Paragraph(s) 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.

A copy of this authorization will be kept on site while the work is in progress and upon request be provided to relevant federal or provincial officials. The authorization holder is responsible for ensuring work crews are familiar with, and able to adhere to, the conditions.

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: June 4, 2026

Approved by: _____

Stephanie Jerred
Regulatory Review Manager
Ontario & Prairie Region
Fisheries and Oceans Canada