IRs, reply evidence and as committed to in the Hearing. Enbridge must also include in the EPP any additional mitigation for species at risk-as determined through ongoing consultation with ECCC as well as any permit conditions as determined by the MNRF and the Conservation Authorities for working in wetlands and woodlands. The EPP condition (**Section 58 Condition 8**) contains wording that reflects these additional requirements.

With the addition of **Section 58 Condition 8**, the Board is of the view that, should the Project interact with bat habitat, any impacts will be reduced to the greatest extent feasible. The Board also notes that the majority of the ROW is on agricultural lands and reminds Enbridge that pursuant to section 21 of the OPR, Enbridge is required to restore the ROW and temporary work areas to a condition similar to the surrounding environment and consistent with the current land use and land capability.

Evaluation of Significance of Residual Effects	Temporal Extent	Reversibility	Geographical Extent	Magnitude
	Short-term	Reversible	LSA	Low
	Adverse Effect			
	Not Likely to cause significant adverse environmental effects.			

8.9.5 Amphibian Species at Risk – Western Chorus Frog and Jefferson Salamander

Views of Enbridge

Enbridge indicated that during the site investigations, Turtle Overwintering Area, Turtle Nesting Area, Waterfowl Nesting Area as well as Marsh Breeding Bird Habitat were identified within the Project LSA and are associated with the Sheffield-Rockton PSW Complex. Further, several potential Amphibian Woodland Breeding Habitats located throughout the LSA were also identified.

The Replacement Line 10 Pipeline route crosses 13 wetland ecosystems (approximately 3.0 ha in total). However, Enbridge's field surveys did not find habitat for either Jefferson Salamander (Endangered on SARA schedule 1) or Western Chorus Frog (Threatened on SARA Schedule 1), where access was possible; it is, however, assumed that suitable habitat for Jefferson Salamander exists where access was restricted. Western Chorus Frog individuals are vulnerable at breeding and hibernation sites; breeding sites should be avoided between 15 March and 30 July and hibernation sites should be avoided between 1 September to 15 March. Individual frogs may, however, be present within suitable habitat year-round.

Potential effects to Jefferson Salamander and Western Chorus Frog include:

- loss or alteration of available habitat as a result of vegetation clearing (direct impacts) and habitat avoidance or reduced effectiveness due to sensory disturbance (indirect impacts); and

- decreased abundance and distribution, as a result of direct mortality due to site clearing activities, vehicles and heavy equipment use; or as a result of reduced survival and reproductive success due to sensory disturbance.

Enbridge has routed the pipeline to avoid and minimize potential interactions with wetlands. In addition, potential adverse effects on amphibian habitat will be avoided in all areas of the pipeline route where HDD trenchless construction methods will be employed. HDD will be used to install two sections of the Replacement Line 10 Pipeline through potential amphibian habitat: the Westover Wetland (572 m) and at the Copetown Woods Golf Club (750 m).

Additional pre-construction field surveys are proposed to confirm habitat for Jefferson Salamander where land access was not previously obtained. In the event that confirmed habitat for Jefferson Salamander is affected by the Project, Enbridge will continue to consult with the MNRF regarding mitigation. Further, Enbridge agreed in its reply evidence to ECCC, that prior to conducting future amphibian breeding surveys, Enbridge would consult with ECCC to discuss methods and survey locations.

For areas where the pipeline cannot avoid potential amphibian habitat, Enbridge proposed the following specific mitigation measures:

- construction and clean-up activities in amphibian habitat will occur outside of the breeding period for amphibian species;
- if individuals are encountered during construction, the Wildlife Species of Concern Discovery Contingency Plan will be implemented; and
- Enbridge will continue to engage with the conservation authorities regarding approvals.

Enbridge also stated that if trenched construction method is necessary, mitigation outlined in the EPP would reduce the residual effects on these species' habitat and movement and would avoid Project-related mortality risk. This includes protecting riparian areas by: limiting brushing in the vicinity of watercourse and wetland crossings to the removal of trees and shrubs along the trench line and workside area; keeping the low-lying understory vegetation; and reducing disturbance of soil adjacent to wetlands.

In addition, wetlands encountered along the ROW are anticipated to be reclaimed as soon as practical to restore pre-disturbance conditions and that post-construction environmental monitoring will be conducted and additional mitigation may be implemented, if needed.

Views of Participants

Environment and Climate Change Canada (ECCC)

ECCC's final Recovery Strategy for Jefferson Salamander, partially delineates critical habitat (i.e., habitat that is necessary for the survival or recovery of the species) within the Project footprint.

Critical habitat for the Western Chorus Frog (Great Lakes/St. Lawrence – Canadian Shield population), has not, however, been identified by ECCC within the Project footprint, although, according to the Ontario Herpetofaunal Atlas and ECCC data, the region in which the project is located is known to support this species.

ECCC provided that although Western Chorus Frog were not found during field surveys, it is possible that this species are present in the Project area. ECCC is in the process of finalizing a new survey protocol specific to Western Chorus Frog which ECCC recommends Enbridge use, should any future monitoring surveys be conducted.

In addition, the MNRF requested to meet with Enbridge to further discuss specific watercourse crossing methodologies and mitigation measures for species at risk. The MNRF also indicated that any additional mitigation measures developed should be documented in the Enbridge's EPP and referred to in the subsequent post-construction environmental monitoring reports. ECCC stated that the mitigation proposed by the MNRF is adequate and appropriate.

Ms. Louisette Lanteigne

Ms. Lanteigne observed that the Jefferson Salamander is listed as Endangered on the SARA Schedule 1 and noted that critical habitat mapping had not yet been completed for the entire Project.

Views of the Board

The Board notes that Enbridge has developed wetland mitigation measures in consultation with the Hamilton, the Grand River, and the Niagara Peninsula CAs. Further, ECCC indicated that the mitigation proposed by the MNRF, including constructing during frozen conditions and using HDD trenchless construction technique, is adequate and appropriate.

With the mitigation proposed by Enbridge, the Board's **Section 58 Conditions 3 (Environmental Protection)**, **8 (EPP)** and **30 (Post-Construction Environmental Monitoring Report)** as well as the oversight of the MNRF and ECCC, the Board is of the view that serious harm to Jefferson Salamander and Western Chorus Frog or their habitat is not likely to occur, and that any adverse effects are not likely to be significant.

Evaluation of Significance of Residual Effects	Temporal Extent	Reversibility	Geographical Extent	Magnitude
	Short-term	Reversible	LSA	Low
	Adverse Effect			
	Not Likely to cause significant adverse environmental effects.			

8.9.6 Heritage/Archaeological Resources

Views of Enbridge

The Project area is predominately privately-owned, developed land which is used for agricultural, residential or industrial purposes. Enbridge has completed a number of archaeological studies for the Project, all of which have followed provincial guidance and requirements. The archaeological potential within the Project area was assessed by Enbridge's contractor CH2M Engineering, and its subcontractor, Dillon Consulting, as well as the Toronto and Region Conservation Authority first through Stage 1 archaeological assessments and then through Stage 2 archaeological surveys. Enbridge stated that monitors from the MNCFN, Six Nations and HDI participated and continue to participate in archaeology assessment field work for the Project.

As of the close of record, archeological assessments are ongoing; however, 77 per cent of the Stage 2 area assessments, 90 per cent of Stage 3 assessments, and 27 per cent of Stage 4 assessments are complete.

Enbridge recognized the potential for previously unidentified archaeological as well as historical and palaeontological resources to be discovered during construction of the project. Enbridge submitted that the Heritage Resource Discovery Contingency Plan provides appropriate guidance in the unlikely event of a heritage resource discovery during construction. If new archaeological, palaeontological, historical or traditional land use sites or resources are discovered during construction, the sites will be assessed and appropriate mitigative measures will be determined through the measures in the Heritage Resource Discovery Contingency Plan.

On-site construction personnel will be provided an environmental orientation which includes discussion of heritage resources potential and the Heritage Resources Discovery Contingency Plan so that the construction personnel can recognize possible archaeological sites during construction. In addition, Enbridge's Environmental Inspectors that will be on-site during construction will have the training necessary to be able to identify potential archaeological sites and will be there to assist in the identification of potential archaeological resources.

Enbridge has been working with an independent, qualified archaeologist in accordance with provincial regulations, has followed archaeological recommendations, and has committed to continuing to do so in the future. The archaeological studies conducted in compliance with the MTCS standards and guidelines, in combination with Enbridge's Heritage Resource Discovery Contingency Plan, are reasonable and sufficient for identifying and protecting First Nation archaeological resources in Ontario.

Aboriginal monitors will continue to work on-site during archaeological surveying. Enbridge committed to having all archaeological assessments complete, as required through provincial regulation, before the start of construction.