Construction of Habitat Enhancement Features
To address the low biodiversity in the Cooper Marsh wetlands along the shoreline of Lake St. Francis and outside of the managed impoundments, it was proposed to excavate a series of serpentine channels and associated ponds. This would create openings and an increase in edge habitat in the dense cattail monoculture.

Cooper Marsh
Nestled on the picturesque north shore of Lake St. Francis, the Cooper Marsh Conservation Area is part of the larger Charlottenburgh Marsh, one of the most significant wetlands in all of Ontario.

This coastal wetland depends almost entirely on the St. Lawrence River for its water source. The water levels in the Lake St. Francis portion of the St. Lawrence River are controlled year round by the Beauharnois Hydroelectric Dam located 28 km downstream at Valleyfield Quebec. Water levels on the lake are kept relatively constant throughout the year.

These narrowly fluctuating water levels impact the quality of coastal wetlands and Cooper Marsh in particular. Without the periodic flooding found in unregulated systems, monotopic vegetative conditions are encouraged which are not optimal for fish and wildlife.

In 1985, the construction of several impoundments and associated water control structures was initiated that permitted better management of water levels in portions of the marsh.

By constructing the works in the winter, disturbances to wildlife are minimized and working conditions on frozen ground and cost efficiencies are improved.
Utilization of the marsh by species at risk indicate the high habitat values available to wildlife.

**Fish**
Using a variety of sampling techniques, the response of the fisheries community continues to be monitored. The fish diversity has been increasing to include locally important species such as Yellow Perch, Largemouth Bass, Smallmouth Bass, Muskellunge, Northern Pike and Black Crappie.

**Birds**
Using standard protocols developed by Bird Studies Canada, 53 species of birds have been detected in the project area including species at risk such as Least bittern and Black tern.

Additional habitat enhancements have been installed at Cooper Marsh including floating nesting platforms for Black Terns, nesting and basking structures for turtles, nest boxes for waterfowl and a nesting platform for Ospreys.

**Useful References**
