



- b) The wetland associated with the water body is determined to be non-provincially significant therefore an overhead line will be installed for the 230 kV line.

These alternative options are outlined in Table 8 and Table 9 for each of the 10 water bodies. Both installation alternatives will only have the potential for indirect effects on the water bodies as poles for overhead lines will remain outside of water bodies and will be spaced approximately 200 metres apart.

11. ENVIRONMENTAL EFFECTS MONITORING PLAN

The Environmental Effects Monitoring Plan (EEMP) prepared for the project is targeted towards environmental effects that have potential to occur during the construction, design and operation, and decommissioning of the facility. The potential negative environmental effects outlined in Table 8 are specific to the water bodies identified within 120 metres of the Project Location and form part of the overall EEMP for the project in the Design and Operations Report and the Construction Plan Report, as applicable.

12. NEGATIVE ENVIRONMENTAL EFFECTS, DESIGN AND OPERATIONS

As required, an environmental effects monitoring plan (EEMP) has been prepared for inclusion in the Design and Operations Report. The potential negative environmental effects to water bodies within 120 metres of the project location, as outlined in Table 8, will be negligible after mitigation measures are implemented. Upon the completion of construction, the exposed soil in the project location will be vegetated with a mix of native grasses. This conversion of exposed agriculture land to vegetated wind farm will result in a marginally lower overall runoff coefficient for the project location (see the Stormwater Management Report or the Construction Plan Report).

Table 9 summarizes the monitoring plan and monitoring frequency during the design and operation of the facility until the vegetation surrounding the project components is established. Contingency measures that will be undertaken if performance objectives are not achieved are also included. Additional mitigation measures proposed to minimize impacts of the facility and not related to water bodies are summarized in the Design and Operations Report.

Table 8: Potential Environmental Effects of the Project on Water Bodies within 120 metres

Activity	Water Body With Potential to be Affected by Activity	Minimum Separation Distance Between Activity and Water Body	Potential Negative Effect(s)		Magnitude of Effect	Frequency of Effect	Duration of Effect	Summary of Mitigation Measures	Residual Effect
			Physical	Functional					
Site Preparation, Servicing and Construction Phase									
Land Clearing, Soil Stripping, Grubbing and Grading	All observed water bodies	Water bodies 1, 3 to 5, 8 to 12, 14, 20, 22 to 36, 38 to 45, 48 to 52 and 230 kV Private Easement Study Area are within the project location Water body 2 = 61 m Water body 6 = 38 m Water body 7 = 84 m Water body 19 = 20 m Water body 21 = 80 m	<ul style="list-style-type: none"> Loss of shade Reduced input of leaves, twigs and insects to water body Reduced bank stability and ability to trap sediment from upland areas increase erosion, sedimentation and turbidity Potential for runoff and contaminants into water body 	<ul style="list-style-type: none"> Increase in water temperatures Drying up of refugia due to increased evaporation Reduced food supply for aquatic life Decreased photosynthesis, loss of productivity Increased nutrients promoting algae growth 	<ul style="list-style-type: none"> 200 metres by 200 metres turbine staging area Clearing of horizontal directional drilling access/exit pits Topsoil will be removed at all construction areas along with roots and slash generated during site clearing 	<ul style="list-style-type: none"> Once during construction Site preparation stage 	1 to 2 months in Spring 2013	<ul style="list-style-type: none"> Develop and implement an erosion and sediment control plan prior to site preparation activities Minimize removal /disturbance of vegetation adjacent to the water body between the buildable area and water body boundary Maximize the distance of all construction equipment used from the water body edge; operate machinery in the project location areas only Develop and implement a stormwater management plan which maintains pre-construction surface water flows to adjacent lands (quantity, quality, infiltrations, conveyance patterns and seasonality of water flow) Erosion and sediment control structures should be monitored regularly to ensure that they are fully functional Construction area adjacent to sensitive natural features should be clearly delineated by sediment or erosion control fencing, or other similar boundary, to avoid impacting the adjacent feature(s) 	No Residual Effect
Development of Access Roads	6 and 12	Water body 6 = 85 m Water body 12 = within project location	<ul style="list-style-type: none"> Loss of native substrate and potential for imported gravel material to enter into immediately adjacent habitat as a result of increase in surface water runoff Disruption or impediment of flow Disruption or alteration of water body substrates 	<ul style="list-style-type: none"> Loss of plant diversity in localized area adjacent to the access road Imported soil has the potential to support the growth of non-native species which may indirectly effect riparian areas of water bodies Decrease in water quality 	<p>6 m wide road.</p> <p>Low magnitude at water body 12.</p> <p>Indirect effects for water body 6</p>	<ul style="list-style-type: none"> During and immediately after construction as well as storm events 	Project lifespan or permanently depending on landowner request.	<ul style="list-style-type: none"> Design roads to promote infiltration Maintain or provide vegetative buffers Maintain flow conveyance throughout construction Culvert at Crossing 12 to be sized appropriately and installed during fisheries timing windows. Culvert installation used to minimize impacts to substrate and flow at Crossing 12 Develop and implement an erosion and sediment control plan prior to site preparation activities 	Minimal Residual Effect. Road area is small therefore a marginal decrease in localized infiltration is expected; negligible change to surface water runoff expected from pre-development conditions

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Activity	Water Body With Potential to be Affected by Activity	Minimum Separation Distance Between Activity and Water Body	Potential Negative Effect(s)		Magnitude of Effect	Frequency of Effect	Duration of Effect	Summary of Mitigation Measures	Residual Effect
			Physical	Functional					
Underground Collector Circuit Installation	Direct impacts to sections of Water body 10 and Water body 28 Indirect effects to Water body 2	Water body 10 and 28 are located within the project location Water body 2 = 61 m	<ul style="list-style-type: none"> High potential for increased erosion and sedimentation to enter water bodies 	<ul style="list-style-type: none"> Decreased photosynthesis, loss of productivity Increased nutrients promoting algae growth Decrease in water quality 	Open cut across width of water bodies.	<ul style="list-style-type: none"> Once during construction Component installation and connection phase 	2 to 3 months in Summer 2013	<ul style="list-style-type: none"> Minimize duration of in-stream work and time crossings to prevent sensitive life fish stages (fish timing windows) Use portable dams, pea gravel bags, concrete blocks, steel or wood walls, clean rock, sheet pile or other appropriate designs to separate the dewatered work site from flowing water Before dewatering, rescue any fish from within the isolate and release them downstream Divert water around the isolate area to maintain natural downstream flows and prevent upstream ponding Avoid construction during wet, rainy or winter thaw conditions Construction area adjacent to sensitive natural features should be clearly delineated by sediment or erosion control fencing, or other similar boundary, to avoid impacting the adjacent feature(s) Restore and stabilize the streambed, substrate and banks to their original shape and condition Follow DFO Operational Statement for Isolated or Dry Open-Cut Stream Crossings (Appendix A) 	No Residual Effect
Horizontal Directional Drilling for Underground Collector Circuit Installation and Power Line – 230 kV Option	Underground Collector Line: 1, 3, 4, 5, 8, 9, section of 10, 12 230kV Line: 21, 23a, 25a, 27, 29a, 31a, 32a, 34a, 35a, 38, 39, 40, 41, 42a, 44a, 45a, and 50	Directional Drilling occurs under all listed water bodies except for 23 and 38 which have potential for indirect effects. Exit/access pit minimum distances within 120 m are as follows: Water body 1 = 118 m Water body 3 = 108 m and 115 m Water body 4 = 30 m and 60 m Water body 5 = 22 m and 41 m	<ul style="list-style-type: none"> Limited potential for “frac-out” as a result of a spill, tunnel collapse or rupture of drilling mud to the surface during directional drilling 	<ul style="list-style-type: none"> Runoff of contaminated soil or drilling mud and/or surface runoff may impact water quality in downstream receiving waters 	Electrical lines will be buried to a minimum depth of 1 m installed by an excavator or will be hand dug.	<ul style="list-style-type: none"> Once during construction Component installation and connection phase 	2 months in Summer 2013	<ul style="list-style-type: none"> All construction equipment and materials should be stored in areas of the project location that maximize distance between water bodies and construction laydown areas Existing vegetation in the project location should be maintained to act as a natural buffer Proper geotechnical assessment practices, drilling planning and execution Extent of frac-out can be limited by careful monitoring, having appropriate equipment and response plans ready Follow DFO Operational Statement for High-Pressure Directional Drilling (Appendix A) 	No Residual Effect. If frac-out does occur a response plan will remediate drilling mud exposure to the surrounding area

Table 8: Potential Environmental Effects of the Project on Water Bodies within 120 metres

Activity	Water Body With Potential to be Affected by Activity	Minimum Separation Distance Between Activity and Water Body	Potential Negative Effect(s)		Magnitude of Effect	Frequency of Effect	Duration of Effect	Summary of Mitigation Measures	Residual Effect
			Physical	Functional					
		<p>Water body 8 = 34 m and 81 m</p> <p>Water body 9 = 62 m</p> <p>Water body 10 = 14 m and 34 m</p> <p>Water body 12 = 48 m and 50 m (after realignment)</p> <p>Water body 21 = 99 m</p> <p>Water body 23 = 4 m</p> <p>Water body 38 = 50 m</p>							
Overhead Power Line Installation – 230 kV Option	10, 20, 22, 23b, 24, 25b, 26, 27b, 28, 29b, 30, 31b, 32b, 33, 34b, 35b, 36, 37, 42b, 43, 44b, 45b, 46b, 47, 48, 49, 51, 52 and 230 kV Private Easement Study Area	Water bodies 10, 20, 22, 23, 24, 25, 26, 29, 30, 31, 32, 33, 34, 35, 36, 37, 42, 43, 44, 45, 46, 47, 48, 49, 51, 52 and 230 kV Private Easement Study Area are within the project location	<ul style="list-style-type: none"> Excessive loss of riparian vegetation Erosion and sedimentation resulting from bank disturbance, loss of root systems, rutting and compaction of stream substrates 	<ul style="list-style-type: none"> Loss of aquatic habitat and/or species Decrease in water quality 	Detailed design has not been finalized. Based on 69 kV Line design, poles are installed to a depth of 2.5 metres and are spaced 50 metres to 55 metres apart.	Once during construction.	3 months during Summer 2013.	<ul style="list-style-type: none"> Design construction approaches to be perpendicular to water bodies to minimize disturbance to riparian vegetation Avoid placing poles on meander bends, braided streams, active floodplains or other unstable areas that may result in erosion and scouring of the stream bed or overhead line. Locate poles sufficiently above the high water mark where possible. Operate machinery on land and minimize disturbance to the banks of adjacent water bodies Install effective sediment and erosion control measures to prevent entry of sediment into the water bodies. Avoid work during wet, rainy conditions. Stabilize waste materials removed from the work site to prevent them from entering water bodies Vegetate any disturbed areas by planting native trees, shrubs, grasses and cover to prevent erosion Follow DFO Operational Statement for Overhead Line Construction (Appendix A) 	No Residual Effect. Emergency spill kit will be kept on site in case of leaks from machinery. Regular inspections of erosion and sediment control measures will minimize impacts.

Table 8: Potential Environmental Effects of the Project on Water Bodies within 120 metres

Activity	Water Body With Potential to be Affected by Activity	Minimum Separation Distance Between Activity and Water Body	Potential Negative Effect(s)		Magnitude of Effect	Frequency of Effect	Duration of Effect	Summary of Mitigation Measures	Residual Effect
			Physical	Functional					
Installation of Turbine Foundations	Indirect potential for water body 12 to be affected by disruption of base flow	Water body 12 = 50 m	<ul style="list-style-type: none"> Overland disposal of water required by dewatering activities Limited potential for disruption of nearby stream or wetland base flow 	<ul style="list-style-type: none"> Increased erosion, sedimentation and potential for flooding of nearby water bodies or intolerant vegetation Potential for loss of aquatic habitat and/or species 	Excavation for turbine tower will be approximately 2.5 m to 3.5 m deep and 20 m wide.	Single event; Temporary.	2 months in Summer 2013	<ul style="list-style-type: none"> Pump all water encountered during installation of wind turbine foundations to acceptable receiving areas Vegetated areas can be used for natural infiltration and avoidance of soil mobilization or use of a temporary storage basin in a disturbed area of the project location Control rate and timing of water pumping. If possible, restrict groundwater taking to low flow time periods 	No Residual Effect. Existing vegetation in the riparian zone of water bodies will be maintained as a natural buffer.
Storage and Use of Construction Materials and Equipment	All observed water bodies	Water bodies 1, 3 - 5, 8 - 12, 14, 20, 22 to 36, 38 to 45, 48 to 52 and 230 kV Private Easement Study Area are within the project location Water body 2 = 61 m Water body 6 = 38 m Water body 7 = 84 m Water body 19 = 20 m Water body 21 = 80 m	<ul style="list-style-type: none"> Limited potential for accidental spills or contamination of soil and/or surface runoff 	<ul style="list-style-type: none"> Runoff of contaminated soil and/or surface runoff may impact water quality in downstream receiving waters 	Indirect effects.	Once during construction when materials and equipment are on site	Spring 2013 – Fall 2013	<ul style="list-style-type: none"> All construction equipment and materials should be stored in areas of the project location that maximize distance between water bodies and construction laydown areas Existing vegetation in the project location should be maintained to act as a natural buffer 	No Residual Effect. A spill response plan will remediate exposure to the surrounding area.
Operations Phase									
Accidental Spills from Inverters	Indirect potential for water body 12	Water body 12 = 50 m from Turbine 35	<ul style="list-style-type: none"> Limited potential for accidental spills or contamination of soil and/or surface runoff 	<ul style="list-style-type: none"> Runoff of contaminated soil and/or surface runoff may impact water quality in downstream receiving waters 	Indirect effects.	During operations phase.	Potential throughout project lifespan.	<ul style="list-style-type: none"> Design an Emergency Response and Communication Plan Notify MOE (Spills Action Centre) immediately in the event of a spill 	No Residual Effect. In the event of a spill from an inverter, the area of the spill will be remediated.
Decommissioning Phase									
Removal of Above-ground Power Lines	10, 20, 22, 23b, 24, 25b, 26, 29b, 30, 31b, 32b, 33, 34b, 35b, 36, 37, 42b, 43, 44b, 45b, 46b, 47, 48, 49, 51, 52 and 230 kV Private Easement Study Area	Water bodies 10, 20, 22, 23, 24, 25, 26, 29, 30, 31, 32, 33, 34, 35, 36, 37, 42, 43, 44, 45, 46, 47, 48, 49, 51, 52 and 230 kV Private Easement Study Area are within the project location	<ul style="list-style-type: none"> Loss of riparian vegetation Erosion and sedimentation resulting from bank disturbance, loss of root systems, rutting and compaction of stream substrates 	<ul style="list-style-type: none"> Loss of aquatic habitat and/or species Decrease in water quality 	Detailed design has not been finalized. Based on 69 kV Line design, poles will be removed from a depth of 2.5 metres, spaced 50 metres to 55 metres apart.	Once during construction.	3 months during Summer 2013.	<ul style="list-style-type: none"> Design construction approaches to be perpendicular to water bodies to minimize disturbance to riparian vegetation Operate machinery on land and minimize disturbance to the banks of adjacent water bodies Install effective sediment and erosion control measures to prevent entry of sediment into the water bodies. Avoid work during wet, rainy conditions. Stabilize waste materials removed from the work site to prevent them from entering water bodies 	No Residual Effect. Emergency spill kit will be kept on site in case of leaks from machinery. Regular inspections of erosion and sediment control measures will minimize impacts.

Table 8: Potential Environmental Effects of the Project on Water Bodies within 120 metres

Activity	Water Body With Potential to be Affected by Activity	Minimum Separation Distance Between Activity and Water Body	Potential Negative Effect(s)		Magnitude of Effect	Frequency of Effect	Duration of Effect	Summary of Mitigation Measures	Residual Effect
			Physical	Functional					
								<ul style="list-style-type: none"> Vegetate any disturbed areas by planting native trees, shrubs, grasses and cover to prevent erosion 	
Removal of Access Roads (if requested by the Landowner during consultation)	6 and 12	Water body 6 = 85 metres Water body 12 = within project location	<ul style="list-style-type: none"> Potential for imported gravel material to enter into immediately adjacent habitat Disruption or alteration of water body substrates Increased erosion, sedimentation and turbidity Potential for runoff and contaminants into water bodies 	<ul style="list-style-type: none"> Decrease in water quality and productivity Increased nutrients promoting algae growth 	Low magnitude at water body 12. Indirect effects for water body 6 and 7.	Once if requested.	One growing season until vegetation is re-established.	<ul style="list-style-type: none"> Vegetate any disturbed areas by planting native trees, shrubs, grasses and cover to prevent erosion Re-contour and re-vegetate land to maintain drainage patterns using native soils and seeding to restore original condition Develop and implement an erosion and sediment control plan Ensure that local water levels are not negatively affected or contaminated through stormwater management. If culvert at crossing 12 is to be removed, in-water work will take place during appropriate timing windows and flow conveyance will be maintained throughout construction 	No Residual Effect.
Site Restoration: Removal and Dismantling of Turbines, Removal of Turbine Foundations and Crane Pads	Indirect potential for water bodies 2, 5, 10, 12 and 14	Water body 2 = 61 metres Water body 5 = 9 metres Water body 10 = 19 metres Water body 12 = 32 metres and 36 metres Water body 14 = 44 metres and 63 metres	<ul style="list-style-type: none"> Potential for runoff and contaminants into water bodies Increased erosion, sedimentation and turbidity Disruption and alteration of water body substrates 	<ul style="list-style-type: none"> Loss of plant diversity in localized area Imported soil has the potential to support the growth of non-native species which may indirectly effect riparian areas of water bodies Decrease in water quality and productivity Increased nutrients promoting algae growth 	Top 1 metre of overburden will be removed around the turbine foundation along with concrete and rebar. Crane pad aggregate will be removed and salvaged if requested by the landowner	Once during decommissioning.	One growing season until vegetation is re-established.	<ul style="list-style-type: none"> Develop and implement an erosion and sediment control plan Materials will be transported off-site and disposed at a licensed facility Removal of non-native materials and in-filling using stockpiled or imported soils Seed and re-vegetate disturbed areas to mitigate soil erosion Restore soil nutrient content 	No Residual Effect.

Table 9: Water Body Environmental Effects Monitoring Plan for the Construction, Operation and Decommissioning of the Dufferin Wind Power Project

Potential Environmental Effect	Affected Water Body	Mitigation Strategy	Residual Effects	Performance Objective(s)	Monitoring Plan				Contingency Measures
					Methodology	Monitoring Locations	Frequency/Duration	Reporting Requirements	
Construction Phase									
Erosion and Sediment Control (ESC): Surface runoff and soil mobilization may impact any receiving water bodies	Water bodies 1, 3 - 5, 8 – 12, 14, 20, 22 – 36, 38 – 45, 48 – 52 are within the project location Indirectly affected: 2, 6, 7, 19 and 21	An erosion and sediment control plan has been developed for the site and is outlined in the <i>Construction Plan Report</i> . This plan will be implemented before vegetation removal. Fencing will be placed between water bodies and the areas to be cleared. Riparian vegetation will be maintained to maximize shading and appropriate native species will be planted.	No Residual Effects. Re-vegetation will establish suitable shade conditions and maintain stability of soil	All ESC measures are implemented prior to and during construction and will be maintained during the construction phase.	Routine checks of all ESC control measures. Ensure appropriate grasses and vegetation are grown once re-planted	All areas where ESC controls are constructed and implemented.	Checks to occur weekly.	Site records/paperwork to include record of ESC weekly controls monitoring during the construction phase. Logs to be provided to the MNR/MOE if requested.	Soil stabilization treatment and replacement plantings to be provided in significantly disturbed areas with repeated erosion and sedimentation control measure failures
Loss of native substrate and potential for imported gravel/fill material to enter water bodies. Disruption or alteration of water body substrates.	Water body 12 Indirect potential for water bodies 6, 7 and 10	Design access roads and crane paths to promote infiltration. Maintain or provide vegetative buffers. In-water works to take place during appropriate timing windows. Maintain flow conveyance throughout construction.	Minimal Residual Effect. Access roads may result in a marginal decrease in localized infiltration. Negligible change to surface water runoff volumes is expected. Box or CSP culvert at crossing 12 will minimize impacts to substrates and flow.	Maintain natural substrates and habitats in all water bodies. Maintain continual flow.	Visual assessment of vegetation communities for disturbance. Monitor flow conveyance during installation of the culvert.	Monitor water crossings in proximity of an access road.	During construction and then biweekly until area is restored.	Site records/paperwork to be submitted at the end of the construction phase and once the area is restored.	Consultation with the MNR/DFO.
Potential for accidental spills/contamination of soil and/or surface runoff. Limited potential for "frac-out" as a result of a spill, tunnel collapse or rupture of drilling mud to the surface during directional drilling.	Water bodies 1, 3 - 5, 8 - 12, 14, 20, 22 - 36, 38 - 45, 48 - 52 are within the project location Indirectly affected: 2, 6, 7, 19 and 21	All construction equipment and materials should be stored in areas of the project location that maximize distance between water bodies and construction areas. Existing vegetation in the project location should be maintained to act as a natural buffer. Proper geotechnical assessment practices, drill planning and execution. Extent of frac-out can be limited by careful monitoring, having appropriate equipment and response plans ready. Design an Emergency Response and Communication Plan. Notify MOE (Spills Action Centre) in the event of a spill.	No Residual Effects. If frac-out does occur, a response plan will remediate drilling mud exposure to the surrounding area. HDD access/exit pits are located greater than 30 m from any water body except for 8 and 38 (13 and 16 metres respectively).	Ensure that a response plan is prepared before construction activities in case of frac-out. Prevent drilling mud from entering adjacent water bodies. Prevent construction equipment and materials from being stored in proximity to water bodies where possible. Prevent spills.	Visual inspection of access/exit pits and directional drill line for frac-out. Inspection of equipment and materials for spills/leaks.	Entire lines where directional drilling takes place. Areas where construction equipment is used or stored. No monitoring plan is required for spills unless one is put forth by the MOE after an incident.	Once during directional drilling of underground collector circuit and 230 kV Line. Ongoing inspections while construction equipment and materials are in use.	Notification of any incident to the appropriate onsite personnel. Identification of results, issues and resolutions in an annual report which is to be submitted to the MNR.	Emergency Response and Communication Plan to be implemented if a spill or frac-out occurs.

Table 9: Water Body Environmental Effects Monitoring Plan for the Construction, Operation and Decommissioning of the Dufferin Wind Power Project

Potential Environmental Effect	Affected Water Body	Mitigation Strategy	Residual Effects	Performance Objective(s)	Monitoring Plan				Contingency Measures
					Methodology	Monitoring Locations	Frequency/Duration	Reporting Requirements	
Dewatering of Turbine Foundation Installations may affect local hydrological regime. Overland dispersal of water during dewatering may increase surface runoff.	Water bodies 2, 5, 10, 12 and 14	Control the rate and timing of pumping. Pump water onto vegetated surfaces if possible or into a temporary retention basin. Restrict groundwater taking to low flow time periods if possible. Implement ESC Measures and monitor/report as indicated above.	No Residual Effects. ESC measures will mitigate excess overland runoff from dewatering activities. No permanent impacts to the water table are anticipated. Water takings are expected to be <50,000 L/day.	Dewatering activities required during turbine foundation installation will be controlled to ensure pumped water re-infiltrates the ground without causing increased run-off. See the <i>Construction Plan Report</i> for more details	Visual inspection and routine checks of dewatering and vegetation areas/retention basin.	At all turbines that require dewatering – predicted to be T01, T26, T31, T32, T34, T36, T37, T38, T39, T43, T47, T48, T22.	Once during installation of turbine foundations in Fall 2013 (2 – 3 months).	Site records/paperwork to include record of locations that required dewatering and the volume of water taken.	If dewatering causes increased soil mobilization or surface run-off in areas of exposed soil, dewatering activities will be stopped until a solution can be implemented. If water taking needs exceed 50,000 L/day the MOE will be consulted.
Operations Phase									
Limited potential for accidental spills or contamination of soil and/or surface runoff from turbine inverter	Water body 12	Design an Emergency Response and Communication Plan. Notify MOE (Spills Action Centre) immediately in the event of a spill.	No Residual Effects. In the event of a spill from an inverter, the area of the spill will be remediated. Turbines are located greater than 30 m from water bodies.	To contain any spills and prevent contamination of adjacent features.	Visual inspection of inverters.	Each turbine inverter in proximity to a water body.	No monitoring plan is required unless one is put forth by the MOE after a spill.	n/a	n/a
Decommissioning Phase									
Erosion and Sediment Control (ESC): Surface runoff and soil mobilization may impact any receiving water bodies	Water bodies 1, 3 - 5, 8 – 12, 14, 20, 22 – 36, 38 – 45, 48 – 52 are within the project location Indirectly affected: 2, 6, 7, 19 and 21	An erosion and sediment control plan has been developed for the site and is outlined in the <i>Construction Plan Report</i> . This plan will be implemented before vegetation removal and site remediation. Fencing will be placed between water bodies and the areas to be remediated. Riparian vegetation will be maintained to maximize shading and appropriate native species will be planted.	No Residual Effects. Re-vegetation will establish suitable shade conditions and maintain stability of soil	ESC measures will be implemented prior to decommissioning activities and will be maintained throughout.	Routine checks of ESC control measures. Ensure appropriate grasses and vegetation are grown once re-planted	Areas where ESC controls are constructed and implemented.	Checks to occur weekly.	Site records/paperwork to include record of ESC weekly controls monitoring during the decommissioning phase. Logs to be provided to the MNR/MOE if requested.	Soil stabilization treatment and replacement plantings to be provided in significantly disturbed areas with repeated erosion and sedimentation control measure failures
Loss of native substrate and potential for imported gravel/fill material to enter water bodies. Disruption or alteration of water body substrates.	Water body 12 Indirect potential for water bodies 6, 7 and 10	Maintain or provide vegetative buffers. Store aggregate and fill from access roads, crane paths and crane pads away from water bodies. In-water works to take place during appropriate timing windows if culvert is to be removed. Maintain flow conveyance throughout construction.	Minimal Residual Effect. If access roads, a culvert and crane pad/path aggregate are to be removed, site remediation will restore areas back to their original condition.	Maintain natural substrates and habitats in all water bodies. Maintain continual flow.	Visual assessment of site remediation and aggregate storage in relation to water bodies. Monitor flow conveyance during removal of the culvert, if required.	Monitor water crossings in proximity of an access road, crane pad and crane path where site remediation is to take place.	During decommissioning and site remediation and then biweekly until area is restored.	Site records/paperwork to be submitted at the end of the decommissioning phase and once the area is restored.	Consultation with the MNR/DFO.