
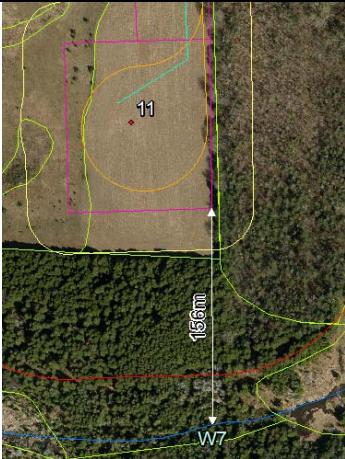
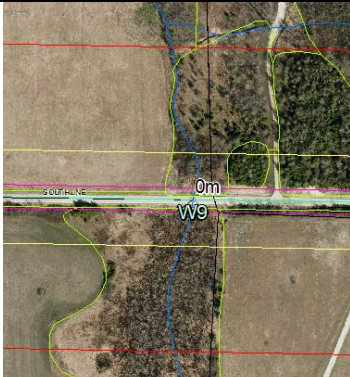









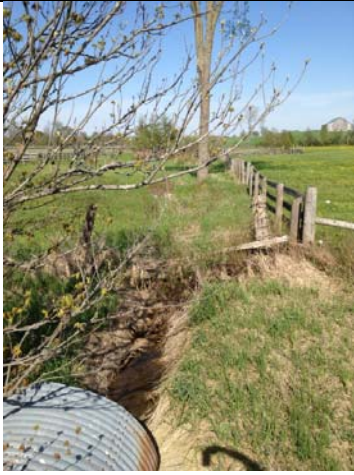



Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
					
			<p>W8 – feature dominated by wetland vegetation(photo: May 15, 2012)</p>		





Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W7(NRVIS data layer (MNR), aerial photography)				
	<p>This feature was identified in Records Review and investigated; however, a change to the project layout in June 2012 meant the feature was no longer within 120m of the project location.</p>	<p>May 16, 2012</p>	<p>n/a</p>		<p>W7 removed from list of water bodies because >120m from Project Location.</p>





Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W9 (NRVIS data layer (MNR), aerial photography)				
 <p>W9 - 0m from underground collection line in existing road right of way.</p>	<p>Property access was not provided for the property where this feature was located and for that reason a roadside survey was conducted. Water in channel was pooling close to the road such that the bankfull width was approximately 1m, and bankfull depth approximately 0.5m. Upstream of the road crossing the channel was much narrower (20-30cm) with a grassy riparian edge. Abundant algal mats were present in May. Feature conveys water between two red maple deciduous swamps (ELC units 256 and 400). The riparian edge is predominantly Lake-bank sedge (<i>Carex lacustris</i>) with occasional red-osier dogwood, narrow-leaved cattail, and white cedar. Little in the way of instream or riparian cover available. No fish observed in channel. Substrate predominantly gravel. Water temperature = 20C on May 15, 2012</p>	<p>May 15, 2012 August 1, 2012</p>	 <p>W9- South side of Southline Rd (photo: May 15, 2012)</p>	 <p>W9 - North side of Southline Rd - (photo: May 15, 2012)</p>	<p>W9 – permanent stream</p>


Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source)	W10 (NRVIS data layer (MNR), aerial photography)				
 <p>W10 - 0m from underground collection line in existing road right of way.</p>	<p>Property access was not provided for the property where this feature was located and for that reason a roadside survey was conducted. Feature is characterized as part of red maple deciduous swamp (ELC units 258/411/413) comprised of slender willow, chokeberry, and narrow-leaved cattail as understory and common milkweed, spotted joe-pye weed, timothy grass, water parsnip and reed-canary grass as the dominant species within the groundcover; and coniferous forest (ELC unit 259) dominated by eastern white cedar. Hydrophytic vegetation was dominant within the feature; therefore it was treated as a wetland and addressed within the NHA. Parts of W10 are within the boundary of Beaver Meadow PSW and the remainder of the feature was treated as a significant wetland.</p> <p>W10 was determined not to meet the definition of a 'water body' as outlined in O. Reg. 359/09.</p>	<p>May 15, 2012 August 1, 2012</p>	 <p>Pooling of water on upstream (south) side of Southline Road on May 15, 2012.</p>  <p>Same area as above(Aug 1/12)</p>  <p>W10 on east side of Boot Jack Ranch Road (photo: May 15, 2012)</p>	 <p>W10 on west side of Boot Jack Ranch Road (photo: May 15, 2012)</p>  <p>W10 on west side of Boot Jack Ranch Road (photo: August 1, 2012)</p>	<p>W10 - not carried forward as a water body</p>




Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W11 W45, W51 (NRVIS data layer (MNR), aerial photography)				
 <p>W11 - 0m from underground collection line in existing road right of way. W45 - 4m from underground collection line in existing road right of way. W51 - 72m from underground collection line in existing road right of way.</p>	<p>Property access was not provided for the property where these features were located and for that reason a roadside survey was conducted.</p> <p>W11 provides seasonal conveyance of water through an intermittent channel from upstream agricultural fields and dugout pond (W51) to a meadow marsh (ELC unit 260) on the downstream side of Boot Jack Ranch Road. At the time of survey less than 5 cm of standing water was documented on the upstream side of the road and no water was observed in the channel downstream of the culvert.</p> <p>No fish were observed.</p> <p>Bankfull width= 0.5m (approx.) Water temperature=24C (May 15, 2012).</p> <p>No open water feature was found at W45. This feature was determined during ELC surveys to be part of ELC unit 413 (red maple deciduous swamp). Parts of W45 are within the boundary of Beaver Meadow PSW and was addressed as a significant wetland in the NHA for the project. W45 was dominated by hydrophytic vegetation and determined not to conform to the definition of a 'water body' as outlined in O. Reg. 359/09.</p> <p>W51 was investigated through the</p>	May 15, 2012	 <p>May 15, 2012 - east side of Boot Jack Ranch Road. Conveys water seasonally from agricultural field and dugout pond on east side of the road to wetland on west side of road.</p>	 <p>May 15, 2012 - grassy channel downstream of road.</p>	<p>W11 – intermittent stream W45 - not carried forward as a water body W51 - not carried forward as a water body</p>




Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
	<p>use of aerial photography and determined to be a dugout pond within an agricultural field. Investigation at roadside for feature W11 suggests the hydrological connection from the pond is limited to providing seasonal conveyance of water to the wetland feature on the west side of Boot Jack Ranch Road.</p>				



Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W12 (NRVIS data layer (MNR), aerial photography)				
 <p>W12 - 0m from underground collection line in existing road right of way.</p>	<p>Property access was not provided for the property where this feature was located and for that reason a roadside survey was conducted.</p> <p>W12 provides seasonal pooling of water in a culvert crossing of Boot Jack Ranch Road between a deciduous swamp (ELC unit 266) on the east side of the road and a small area dominated by hydrophytic vegetation on the west side of the road. Standing water was documented in the channel during survey; no flow was detected through the culvert. This area was treated as a significant wetland feature in the NHA for the Project. W12 was determined to be a grassed channel on the upstream side of the road and dominated by emergent and hydrophytic vegetation on the downstream side. This feature did not conform to the definition of a 'water body' as outlined in O. Reg. 359/09.</p>	May 15, 2012	 <p>W12 - Culvert buried half way on upstream side – grassed channel suggests channel doesn't hold water on a regular basis (photo: May 15, 2012).</p>  <p>ELC unit 266 – balsam poplar and red maple deciduous swamp on the east side of the road. Water feature dominated by hydrophytic plants; treated as wetland.</p>	 <p>W12 on west side of Boot Jack Ranch Road where vegetation is predominantly hydrophytic in nature (photo: May 15, 2012)</p>	W12 - not carried forward as a water body




Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W13, W24, W40 (NRVIS data layer (MNR), aerial photography, site investigation)				
 <p>W13 – 0m from underground collection line in existing road right of way. W24 - 0m from underground collection line in existing road right of way. W40 – 218m from underground collection line in existing road right of way.</p>	<p>Two features along the same watercourse were identified through Records Review and investigated further: W13 (crossing of County Rd. 4) and W24 (within an agricultural field on the south side of County Rd. 4). W40, a pond feature in the vicinity of these water features was identified during Site Investigation, but later determined to be > 120m from the Project Location.</p> <p>Property access was not provided for the property on the north side of County Rd. 4 and for that reason a roadside survey was conducted of the downstream portion of W13.</p> <p>W13 – saturated soils suggest culvert holds water seasonally during spring melt from agricultural field on the south side of County Rd. 4 and the cattail marsh (ELC unit 88) on north side of the road. At the time of survey standing water was documented within the culvert; however, grassy roadside ditch on either side of culvert was free of water. No open water component was documented. W13 was determined not to meet the definition of a ‘water body’ as outlined in O. Reg. 359/09.</p>	May 16, 2012	 <p>Culvert on south side of County Rd. 4 drains into agricultural field. Standing water in culvert at time of survey – no detectable flow (photo: May 16, 2012).</p>	 <p>North side of County Rd. 4 – no surface water feature or flow in roadside ditch, some standing water in agricultural field below (photo: May 16, 2012).</p>  <p>Evidence of saturated soils in field; however, tilled through as part of agricultural field.</p>	<p>W13 - not carried forward as a water body W24 - not carried forward as a water body W40 >120m from project location and not studied further</p>



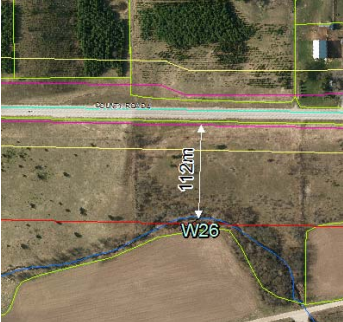


Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
	W24 – This area was determined to be under active agriculture and although there was evidence of saturated soils this field was fully tilled and planted throughout the season.		 <p>Looking north toward W13 and W24 – no swale evident tilled agricultural field (photo: May 16, 2012)</p>		


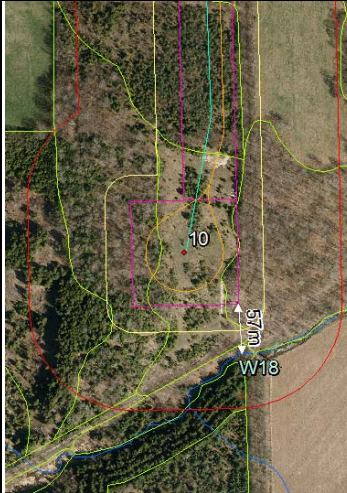


Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W14 (NRVIS data layer (MNR), aerial photography)				
 <p>W14 – 0m from underground collection line in existing road right of way.</p>	<p>Property access was not provided for the property on the south side of the road and for that reason a roadside survey was conducted of the upstream portion.</p> <p>W14 functions to provide seasonal conveyance of water from one wetland feature to another. ELC unit 85 (a tamarack coniferous swamp) is located on the south side of County Road 4, and ELC unit 62 (a white cedar coniferous swamp) is located on the north side of the road. Both of these features are dominated by wetland species and are within the boundary of Beaver Meadow PSW. These features were addressed as significant wetlands through the NHA and determined not to meet the definition of a 'water body' under O.Reg. 359/09.</p>		 <p>Culvert on south side of County Rd. 4 at ELC unit 85 (photo: August 1, 2012).</p>	 <p>Culvert on north side of County Rd. 4 at ELC unit 62 (photo: August 1, 2012).</p>	W14 - not carried forward as a water body






Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W15, W16, W18, W26, W28 (NRVIS data layer (MNR), aerial photography)				
 <p>W15 – 5m from underground electrical collection line in road right of way; W16 - underground electrical collection line in road right of way crosses the feature (0m);</p>	<p>Property access was not provided for the property where these features were located and for that reason a roadside survey was conducted.</p> <p>NRVIS data indicated a connection between W16 (furthest upstream) and flow continuing from there to W15, to W28, to W26, and to W18. Mapping obtained from SSWPC (2011) classifies these sites as a cold water stream.</p> <p>Description of feature at W16 : Pool at culvert = 0.37m deep Bankfull width = 1.5m; channel wider upstream (approximately 3m) with fast riffle (0.15m deep) Substrate was a mix of cobble/gravel/boulder. Instream cover was available in the form of willow. Banks were stable. No fish were observed at the time of survey. Water temperature = 16C (May 15, 2012), 18C (Aug. 1, 2012) Immediate riparian vegetation is mostly manicured lawn, with birch and cedar, adjacent land use is transportation and agricultural. Feature is highly altered as it passes under 2 structures within 20m; a metal culvert under County Rd. 4 and an old concrete bridge for rail line (no longer in use). Upstream</p>	<p>May 15, 2012 Aug. 1, 2012</p>	 <p>W16 as it passes under old railway line. Large boulder and cobble substrate. (photo: Aug. 1, 2012)</p>	 <p>W16 as it approaches culvert at County Rd. 4 (photo: May 15, 2012)</p>	<p>W16 – part of permanent stream</p>



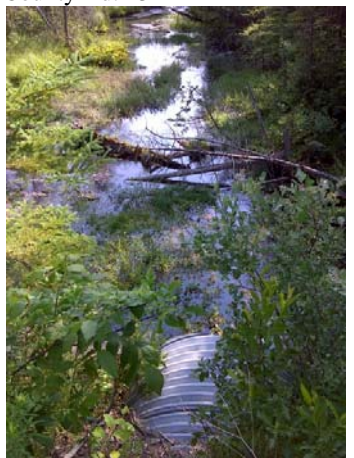


Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
	of this location the stream is in its natural form and part of a wetland feature treated as significant in the NHA for the project.				
	<p>Description of feature at W15 : This is an artificially straightened channel that runs along the north side of County Rd. 4. Substrate is predominantly boulder interspersed with cobble. Channel is riffle throughout most of the roadside portion. Pool depth at culvert = 0.20-0.25m. Bankfull width = 2.3m Water temperature = 18C (Aug. 1, 2012) Banks are stable. Lots of cover available in the form of overhanging vegetation and woody debris. No fish observed at time of survey Riparian vegetation limited to manicured roadside ditch and narrow dogwood thicket, adjacent landuse is agricultural and transportation.</p>	<p>May 15, 2012 August 1, 2012</p>	 <p>W15 as it begins at the culvert after crossing the road and continues along the north side of County 4Rd. (photo: August 1, 2012)</p>	 <p>W15 continues through a series of culverts along the roadside until it crosses back over to the south side of County Rd. 4 (photo: August 1, 2012)</p>	<p>W15 – part of permanent stream</p>





Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
 <p>W28 – 0m from underground electrical collection line in road right of way</p>	<p>Description of feature at W28: This feature passes under County Rd. 4 and under The Glen Road. No property access was provided, therefore survey was conducted from crossing at the Glen Road.</p> <p>Upstream of The Glen Road: Wetted depth at roadside = 0.43m Bankfull width = 1.5 – 2m Greater than 95% of substrate is fines/silt with random dispersal of cobble (<5%). Young of year fish and green frog observed.</p> <p>In stream cover provided by emergent vegetation. Overhanging vegetation upstream provides additional cover. Little cover available at roadside. Banks are stable. Narrow riparian (<5m) comprised of meadow plants, ash and maple; adjacent land use is agricultural.</p> <p>Downstream of The Glen Road: Bankfull width = 5m at roadside, 3m in channel Wetted width = 3m at roadside Wetted depth = 0.15m Substrate 80% cobble, 20% gravel. Large number of minnows observed. Perched culvert under low flow conditions obstructs fish movement. Narrow riparian (<10m) of meadow plants, ash and maple; adjacent land use is agricultural. Banks are stable. Water temperature = 20C (Aug 1, 2012)</p>	August 1, 2012	 <p>W28 - Channel on upstream side (north) of The Glen Road. With riparian vegetation primarily meadow species at roadside with ash and maple upstream (photo: August 1, 2012)</p>	 <p>W28 – 0.8m perched culvert has created a plunge pool on south (downstream) side of Glen Road. Channel in this area is 3m wide and 0.5-0.7m deep; beyond plunge pool watercourse becomes shallower and narrower (photo: August 1, 2012).</p>	W28 – part of permanent stream






Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
					
			W28 - Channel on upstream side (north) of The Glen Road. (photo: August 1, 2012)	W28 – downstream of The Glen Road, channel wide at roadside and narrow downstream (photo: August 1, 2012)	
 W26 – 112m from underground electrical collection line in road right of way;	Description of feature at W26: Upstream (south side of The Glen Road): Culvert buried Pool at roadside = 0.35m deep Wetted width = 2m Bankfull width = 6m Riparian comprised of cedar, ash, poplar and willow, (5-10m wide); adjacent landuse is agricultural. Young of year fish observed in channel. Banks are stable. Downstream (north side of The Glen Road): Bankfull width = 2.5m Substrate predominantly fines (80%), 10% boulder and 10%	August 1, 2012			W26 – part of permanent stream
			W26 on upstream side (south) of The Glen Road – riparian	W26 – facing downstream (north toward County Rd. 4).	



Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
	gravel. Perched culvert is barrier to fish movement under low flow condition. Green frog, tadpoles, young of year fish observed. Limited cover provided by overhanging vegetation. Water temperature = 20C (August 1, 2012)		vegetation is limited (photo: August 1, 2012).		
	Description of feature at W18: Located adjacent to an old railway line in a valley. Steep slope from north to access the stream below. Stream is crossed by an unmaintained road with double culverts. Upstream: No property access was provided to portion of W18 upstream of the road crossing such that data was collected from roadside. Large pool (10m wide) on upstream side of farm lane. Fine substrates. Immediately adjacent to agricultural field. Riparian edge is	May 16, 2012	 <p>Existing crossing of stream at W18 – unmaintained dirt road extends from Glen Road to Southline.</p>	 <p>W18 - Double culverts convey water under road crossing downstream to sugar maple forest and forb meadow marsh.</p>	W18 – part of permanent stream




Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
W18 – 57m from turbine 10 and associated access road and underground electrical collection	restricted to sedges and occasional mature trees. Instream cover limited - available in vicinity of the crossing as thickety vegetation overhanging culverts. No fish observed. Downstream: Riparian vegetation is primarily Norway spruce plantation on the south side and sugar maple deciduous forest to the north. Downstream of the farmlane immediate riparian is restricted primarily to sedge species. Instream cover available in immediate vicinity of crossing in the form of instream vegetation and woody debris; however, cover downstream is limited. Perched culvert is barrier to fish movement. Substrate is a mix of cobble and gravel. No fish observed at time of survey.		 <p>W18 - May 16/12 – upstream pool adjacent to agricultural field.</p>  <p>W18 - Thicket at roadside and edges of upstream portion of stream.</p>	 <p>W18- -Culverts are perched; plunge pool has formed.</p>  <p>W18 - Substrates are a mix of cobble and gravel in channel.</p>  <p>W18 - Channel narrows downstream of crossing and riparian vegetation and in-stream cover becomes more limited approaching marsh (photo: May 16, 2012).</p>	



Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W17 (NRVIS data layer (MNR), aerial photography)				
 <p>W17 - 0m from underground electrical collection line in road right of way</p>	<p>Property access was not provided for the property where this feature was located and for that reason a roadside survey was conducted.</p> <p>Description of feature at W17: This feature is part of Durham Creek and is a permanent cold water stream that conveys water through a Coniferous swamp (dominated by tamarack and balsam fir with occasional black ash and red maple). Watercress was observed in the channel as evidence of groundwater seepage.</p> <p>Substrate mix of cobble and boulder. Large (>1m wide), deep plunge pool on downstream side resulting from perched culvert. Visible portion of channel beyond pool is riffle. Upstream is predominantly riffle. Wide riparian buffer that functions as a wildlife corridor. Abundant in-stream cover in the form of emergent vegetation and woody debris. Banks stable. Water temperature= 11C (May15, 2012), 11C (July 5, 2012). MNR fisheries records document Central Mudminnow, Brook Trout and Slimy Sculpin. Wetted width = 8m (May 15) Bankfull width = 10m Wetted depth = 0.3m (approx.)</p>	<p>May 15, 2012 July 5, 2012</p>	 <p>May 15, 2012 – upstream of County Rd. 23</p>  <p>July 5, 2012 – upstream of County Rd. 23</p>	 <p>May 15, 2012 – downstream of County Rd. 23.</p>  <p>July 5, 2012 – downstream of County Rd. 23, plunge pool at roadside flowing into riffle.</p>	<p>W17 – permanent stream and seepage area</p>


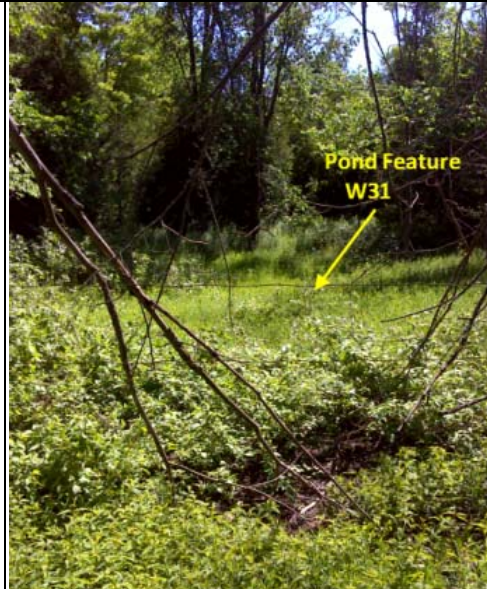
Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W19 (site investigation)				
 <p>W19 – 0m from underground electrical collection line in road right of way</p>	<p>Low spot in agricultural field with some cattail and other hydrophytic vegetation investigated during field surveys was determined not to meet the definition of a water body under O. Reg. 359/09.</p> <p>Water temperatures (9C) and vegetation suggest seepage on north side of road.</p>	<p>May 16, 2012</p>	 <p>W19 – on south side of road surrounded by cattail vegetation (photo: May 16, 2012).</p>	 <p>W19 – culvert ends at cattail vegetation on north side of Road with dugout pond beyond in agricultural field (photo: May 16, 2012).</p>  <p>W19 – evidence of seepage at culvert on north side of road in form of vegetation and water temperature of 9C (May 16, 2012).</p>	<p>W19 – seepage area</p>



Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W20 (NRVIS data layer (MNR), aerial photography)				
 <p>W20 – 41m from underground electrical collection line in road right of way</p>	<p>Property access was not provided for the property where this feature was located and for that reason a roadside survey was conducted.</p> <p>Features investigated at the corner of Boot Jack Ranch Rd. and County 4 Rd. indicated that no open water was contained in roadside ditches and seasonal conveyance of water through culverts between small groupings of cattail vegetation suggests soils are saturated. This feature was determined to be dominated by hydrophytic vegetation; and, as such not a 'water body as defined under O.Reg. 359/09.</p>	<p>May 16, 2012 August 1, 2012</p>	 <p>W20 - Cattail feature on north west corner of Boot Jack Rd and County Rd 4 (photo: May 16, 2012).</p>  <p>South side of County 4 Rd – Culvert and roadside ditch dry (photo: May 16, 2012)</p>	 <p>Drainage ditch on north side of County Rd. 4 dry (photo: May 16, 2012).</p>  <p>May 16, 2012 southeast corner Boot Jack Ranch and County Rd 4 water in cattail marsh at roadside.</p>	<p>W20 - not carried forward as a water body</p>



Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
			 <p>Culvert is buried and ends at cattail marsh. No water evident at time of survey (photo: Aug 1, 2012)</p>	 <p>Aug 1 southwest corner Boot Jack Ranch and County Rd 4 – cattails present, no open water.</p>	



Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W25 (NRVIS data layer (MNR), aerial photography)				
 <p>W25 - 71m from Turbine 8 and associated access road and underground electrical collection.</p>	<p>This large feature is dominated by un-vegetated open water. A few trees of red maple (and yellow birch and shrubs consisting of red-osier dogwood and pussy willow occur along the edge or on elevated mounds within the pond. Horsetail, broad-leaved cattail, and lesser duckweed were common ground species that colonized the fringe. Beaver activity was noted around the pond. Midland painted turtle, snapping turtle, green heron, Abystomid egg masses, Canada goose, gray treefrog, Eastern gartersnake, Northern leopard frog, mink frog, green frog and small minnows observed at time of surveys. Abundant in-stream cover in the form of woody debris and vegetation. This feature was identified as providing several types of significant wildlife habitat through the NHA process. This feature is also included within the boundary of Beaver Meadow PSW and was addressed as such within the NHA (see mapping in Appendix B).</p>	<p>May 16, 2012 July 24, 2012</p>	 <p>Pond condition on May 16, 2012. Photo taken facing northeast.</p>  <p>May 16, 2012 – evidence of beaver activity</p>	<p>W25 – pond</p>	




Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W27 (aerial photography, site investigation)				
 <p>W27 – 36m from Turbine 15 and associated access road and underground collection line.</p>	<p>This feature was identified as ELC unit 121 (a forb shallow marsh). This unit was dominated by marsh vegetation and was treated as a significant wetland feature and was addressed as such within the NHA (see mapping in Appendix B). W27 was determined not to conform to the definition of a ‘water body’ as outlined in O. Reg. 359/09.</p>	<p>May 15, 2012 June 15, 2012 July 5, 2012</p>	 <p>ELC unit 121 (W27) - willow thicket swamp – Connected to deciduous swamp feature (SWD3-1) and surrounding area is primarily deciduous forest (FOD5-7). Cattle have entered the feature and disturbed portions of the wetland.</p>	<p>W27 - not carried forward as a water body</p>	



Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W31 (NRVIS data layer (MNR), aerial photography)				
 <p>W31 - 0m from underground electrical collection line in existing road right of way.</p>	<p>This feature (W31) was identified through Records Review and investigated further. Property access was not provided for the property where this feature was located and for that reason a roadside survey was conducted. No surface water feature was found at W31. The area consisted of open meadow vegetation with dogwood at the edges. No channel was found to lead into or out of the area along the two edges (Sideroad 40 and Concession 4 Rd.) that were surveyed. This feature was determined not to be a water body as defined under the REA process.</p>	<p>June 14, 2012</p>		<p>June 14, 2012 – no open water feature found at W31.</p>	<p>W31 - not carried forward as a water body</p>



Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W32 (NRVIS data layer (MNR), aerial photography)				
	<p>Property access was not provided for the property where this feature was located and for that reason a roadside survey was conducted. This feature was determined during site investigation to be part of a balsam poplar and black ash deciduous swamp (ELC unit 293). Hydrophytic vegetation was dominant within the feature; therefore it was treated as a wetland and addressed within the NHA as a significant wetland (see mapping in Appendix B).</p> <p>W32 was determined not to meet the definition of a 'water body' as outlined in O. Reg. 359/09.</p>	June 14, 2012			W32 - not carried forward as a water body
			June 14, 2012 – no open water feature found at W32.		



Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W34 (NRVIS data layer (MNR), aerial photography)				
 <p>W34 – 0m from underground electrical collection in road right of way.</p>	<p>Property access was not provided for the property where this feature was located and for that reason a roadside survey was conducted.</p> <p>This feature was determined during site investigation to be part of a white cedar coniferous swamp (ELC unit 410). Hydrophytic vegetation was dominant within the feature; therefore it was treated as a wetland and addressed within the NHA as a significant wetland (see mapping in Appendix B).</p> <p>W34 was determined not to meet the definition of a ‘water body’ as outlined in O. Reg. 359/09.</p>	June 14, 2012		<p>June 14, 2012- no open water feature found at W34</p>	W34- not carried forward as a water body

Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W35 (site investigation)				
 <p>W35 - 121m from Turbine 8 and associated access road and underground electrical collection.</p>	<p>Feature was determined to be greater than 120m from the final project location and not investigated further.</p>	<p>May 16, 2012 July 24, 2012</p>	 <p>Vernal pool within ELC unit 55 (photo: July 24, 2012)</p>	<p>W48 > 120m from Project Location; not assessed further</p>	

Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W36 (site investigation, aerial photography)				
 <p>W36 - 57m from Turbine 8, access road and underground electrical collection.</p>	<p>This feature was classified through site investigation as ELC unit 56 - Small pond with surface area dominated by duckweed (Lemna minor) in summer with small clusters of water parsnip, jewel weed, and sensitive fern along the edges. Surrounded by sugar maple ash deciduous forest. No fish observed within the pond. Size much reduced in summer condition. Gray tree frog, spring peeper, Canada goose, wood duck, Northern leopard frog, green frog, wood frog, Midland painted turtle observed during surveys. No fish documented in pond.</p> <p>This feature is included within the boundary of Beaver Meadow PSW and was addressed as significant wetland within the NHA (see mapping in Appendix B).</p>	May 16, 2012	 <p>Pond condition on May 16, 2012</p>	 <p>Pond condition on July 24, 2012</p>	W36 - pond

Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W37 (site investigation, aerial photography)				
 <p>W37 - 42m from access road and underground electrical collection line to Turbine 13</p>	<p>This feature was determined during site investigation to be a dugout pond. It was considered further within the NHA for the Project. W37 was determined not to meet the definition of a 'water body' as outlined in O. Reg. 359/09.</p>	<p>May 15, 2012</p>	 <p>W37 – dugout pond adjacent to laneway (photo: May 15, 2012).</p>	<p>W37 - not carried forward as a water body</p>	

Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W38 (site investigation, aerial photography)				
 <p>W38 – 62m from underground electrical collection in road right of way.</p>	<p>This feature was determined during site investigation to be a dugout pond. It was considered further within the NHA for the Project and identified therein as significant wildlife habitat. W38 was determined not to meet the definition of a 'water body' as outlined in O. Reg. 359/09.</p>	<p>May 15, 2012</p>	 <p>Dugout pond used for recreational activity by landowner.</p>	<p>W38 - not carried forward as a water body</p>	

Feature ID & Distance to Project Component (refer to Figures 4-7 for location of each water feature)	Description of Water Feature (ELC units shown on Figures a-c in Appendix B)	Date of Field Investigation (field notes in Appendix C0)	Photographic Records from Field Investigation		Type of REA Water Body Feature (as defined by O. Reg. 359/09)
			Upstream	Downstream	
Feature ID (source of information)	W39 (site investigation, aerial photography)				
 <p>W39 – 99m from underground electrical collection in road right of way.</p>	<p>This feature was determined during site investigation to be a dugout pond. It was considered further within the NHA for the Project and identified therein as significant wildlife habitat. W39 was determined not to meet the definition of a 'water body' as outlined in O. Reg. 359/09.</p>	<p>May 15, 2012</p>	 <p>Dugout pond adjacent to laneway to landowner's house.</p>	<p>W39 - not carried forward as a water body</p>	