








Appendix R



Erosion Hazard Sites



Outfall #	Reach	TW Asset ID	Diameter (mm)	Condition	Condition Outfall Risk Score	Offset from Main Branch (m)	Offset from Main Branch Risk Score	Erosion Protection Works	Erosion Protection Works Condition Risk Score	Storm Sewer Outfall Risk Score	Photo
1	N1	N/A	Not Assessed	Poor	4	0	5	Undermined trail culvert with no bank protection	5	14	
2	N1	OF4854814349	Medium	Poor	4	0	5	Corrugated metal pipe embedded into sheet metal wingwall. Pipe has rusted out of alignment.	3	12	




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3	N1	OF4854214333	Medium	Failed	5	7	2	Armourstone headwall and Outlet Channel in poor condition.	4	11	
4	N2	N/A	Small	Poor	4	0	5	Trail Culvert creating small discharge channel. Does not appear on City of Toronto Basemapping.	5	14	
5	N2	OF4865514045	N/A	Poor	4	11	2	Armourstone outfall channel with no headwall in fair condition.	3	9	Photo Not Available




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6	N2	OF4873613982	Medium	Poor	4	11	2	Concrete channel bed is beginning to show signs of erosion and failure, and is in poor condition.	4	10	
7	N2	OF4884313907	Medium	Failed	5	5	3	Concrete headwall has completed detached. Outfall channel riprap bed has completely washed out. Erosion protection has failed.	5	13	
8	N2	N/A	Small	Good	2	0	5	Trail culvert. Perched above lateral sanitary sewer risk. Exposed cut bank and hanging tree roots. Boulder bed protection here has washed out. RGA indicates channel is widening here.	5	12	Photo Not Available




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9	N2	N/A	Small	Good	2	0	5	Trail culvert perched above channel. Bank is stabilized at the toe of slope by boulders. Bank protection is beginning to wash out, possibly posing a risk to buried sanitary sewer infrastructure.	5	12	Photo Not Available
10	N2	OF4902413782	Small	Poor	4	37	2	The rip rap lining the outfall channel has been washed out and accumulated at the mouth of the outfall channel. Outfall channel has scoured a deep gully into high erodible topsoil. No headwall is present.	5	11	
11	N2	OF4907413839	Medium	Moderate	3	36	2	Concrete apron is slightly degraded with significant root growth. Riprap lined channel is in good condition.	2	7	

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12	N2	OF4901113668	N/A	Not Assessed. Assumed to be in Fair Condition.	3	85	1	Could not be located in field. Assumed to be in Fair Condition.	3	7	Photo Not Available
13	N2	N/A	Small	Poor	4	12	2	Flooded outfall with gabion basket protection behind headwall. Outfall channel is silted and muddy. Structures in good condition.	2	8	
14	N2	OF4920313498	Not Assessed	Moderate	2	0	5	This outfall is part of the culvert crossing the intersection of Bayview Ave. and Finch Ave. Concrete is degrading but culvert is in good condition.	2	9	


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15	N3	N/A	Medium	Poor	4	1	4	Outfall found in field but not available in DCAD. Main channel contains bank protection on both sides in riprap and boulder treatments. Bed contains multiple cascaded drop structures.	5	13	Photo Not Available
16	N3	OF4940713236	Medium	Moderate	3	13	2	Main channel is well protected with gabion baskets on both sides in good condition.	1	6	
17	N3	OF4950913010	Medium	Good	2	2	4	Outfall is embedded into gabion basket bank protection. Channel bed consists of gabion basket. Gabion basket by outfall in good condition.	2	8	

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18	N3	OF4964012829	Large	Excellent	1	89	1	Channel is rip-rap lined upstream and gabion lined downstream. Channel bank protection consists of armoustone and gabion baskets, with the former experiencing some degradation closer to the confluence with main channel.	2	4	
19	N3	OF4943712842	Large	Good	2	0	5	Outfall recessed into road culvert. Some degradation to concrete evident but erosion control in good condition.	2	9	
20	N4	N/A	Medium	Poor	4	0	5	Assessed in field but not mapped on DCAD. Perched outfall of known origin above boulder revetment. Pipe is protruding ~1 m out of bank, and about 2 m above the channel bed.	2	11	

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21	N4	OF4927712537	Large	Poor	4	34	1	Outfall channel contains no observable bed protection. Concrete headwall is beginning to outflank.	2	7	
22	N4	OF4937712339	Small	Excellent	1	20	1	Outfall with no defined or constructed channel. Concrete wingwall and headwall concrete apron slightly degraded.	3	5	
23	N4	Unknown	Small	Good	1	3	3	Loose rip rap outfall channel and gabion stone in poor condition but still acting as sufficient bank protection.	3	7	

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24	N4	OF4941912085	Large	Moderate	3	0	5	Most upstream culvert for Newtonbrook Creek at Maxome Avenue. Culvert is in moderate shape with little bank protection.	3	11	
25	BR1	OF4830215159	Medium	Failed	5	35	1	. Concrete wingwalls and headwall degraded with cracks and detachment. Concrete pad is degrading from runoff bypassing CMP.	5	11	
26	BR1	OF4824214956	CMP	Failed	5	3	4	Concrete headwall has completely detached and fallen. Outlet has degraded to the point where original design and outlet location are unknown.	5	14	

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27	BR3	OF4807414830	Medium	Excellent	1	10	2	Rip rap in good condition.	1	4	
28	BR3	OF4811614623	Large	Moderate	3	0	5	Road culvert for Burbank Drive, discharging into Blue Ridge Creek. Found culvert in field but location of outfall is unknown. Upstream is private property.	3	11	
29	BR3	OF4800014319	N/A	Not Assessed. Assumed to be in Fair Condition.	3	0	5	Location of outfall is upstream culvert of Bayberry Crescent. Located on private property. Not-accessible and not verified in field.	4	12	Photo Not Available

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30	BR3	OF4798014273	N/A	Moderate	3	0	5	Road culvert for Bayberry Cr.	3	11	
31	BR3	OF4798813684	Large	Moderate	3	0	5	Armourstone bank protection and drop structure in good condition.	2	10	
32	BR4	OF4794514800	Medium	Poor	4	0	5	Headwall is cracked and elevated. Concrete apron is undermined. Rip-rap lining channel bed downstream is washed out. Bank protection along channel downstream is slumped and failing.	3	12	