			Ī		Т	ime Fram	e			Project Status		
	ACTION	LEAD/ CO- LEADS	SUPPORT(S)	2015	2016	2017	2018	2019	Ongoing Action	Initiated/ Underway	Complete	Milestone Achievements
	AIR											
	Sustainable Energy Goals											
E1	Investigate the opportunities and feasibility of implementing district heating or cooling systems in the Secondary Plan areas, in conjunction with the Town wide Community Energy Plan identified in action E2.	ES, AM, PP, DE	DP,PWO, DC, FS, Developers					~				N/A
E2	Initiate a Town wide Community Energy Plan based on the recommendations of the Urban Master Environmental Servicing Plan (Urban MESP) and in keeping with the Town's commitments under the Partners for Climate Protection program (Federation of Canadian Municipalities).	ES	PP,DP, DE, FS, CS, CAO, Chamber, Utilities, York Region, Metrolinx, IC & I					~				N/A
E3	Develop a Community Energy Plan for the Richmond Hill Centre.	ES, PP, DP, DE	Utilities, York Region, Metrolinx, IC & I					~				N/A
E4	Develop and implement an Energy Conservation and Demand Management Plan (CDM) for Town facilities, updated every five years. Report energy consumption and GHG emissions annually.	ES	AM, RC, Utilities	✓	~	✓	~	~		(Implementati on)	(CDM Plan)	CDM Plan complete and implementation underway. Energy conservation measures prioritized based on energy audits completed for top 13 energy consuming facilities. Capital business case approved in 2018 budget for implementation to 2020. Training and data sharing to be initated in 2018.
E5	Report corporate (and community) greenhouse gas emissions in partnership with the Partners for Climate Protection (PCP) every five years in conjunction with CDM reporting.	ES	PWO, FS, AM, FCM, York Region, Utilities	✓	~						\checkmark	Corporate GHG emissions report completed.
E7	Actively research, promote, and pilot sustainable energy opportunities through demonstration projects and technological innovations.	ES, AM	FS, Utilities, IC & I	✓	V	✓	V	~	U			Conversion of Outdoor Lighting Network to LED underway. Expected completion in spring 2018. Energy conservation pilot projects initiated for Town pools: liquid pool cover and makeup water technology. Feasibility of FIT projects for Town facilities determined through detailed energy audits. FIT projects deemed economically unfeasible at this time.
	Sustainable Transportation Goals											
РСМР	Implementation of Pedestrian & Cycling Master Plan (PCMP) and prep work for future update.			✓	~	✓	~	~	U			Construction of 2.26 km Phase 1 Lake-to-Lake trail complete. Phase 2 funding applications and design initiated. Cycling & Pedestrian monitoring program underway.
T1	Advocate to the Region and Province for public transit as a primary mode of transportation available to residents and commuters.	ES, GA, Council	PP, FS, York Region, Province, NGOs	√	~	√	~	~	J			Advocacy for the extension of the Yonge Subway to Richmond Hill Centre continues (e.g. transit advocacy working group established, centralized database and information/communications package developed, issues note finalized).
Т3	Develop and/or update pedestrian and cycling facility design standards as needed to provide for convenient and safe active transportation	ES, DC	DE, PWO, York Region, Province	~	~							Pedestrian and Cycling Facilities Requirements complete (approved by Standards and Specifications Executive Committee in February 2016).
Τ4	Implement pedestrian and cycling facility design standards through the planning approval process.	DE	ES, DP, PP		V	√				Ŷ		Objectives of the standards (e.g. appropriate coverage that complements the road network, facility types that appeal to a wide range of users, and equitable and convenient access to the pedestrian and cycling network) are being considered on an application by application basis. Implementation in 2017 includes the RH portions of the Lake to Lake Trail. Future updates to PCMP and/or TDM strategy will reference new standards.

					Time Frame Project Status							
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Т6	Continue to provide education and outreach to promote and encourage active and healthy transportation options.	ES	DE, Metrolinx, York Region, Area Municipalities, NGOs	~	~	~	~	√	J			Education and outreach programs implemented (e.g. Smart Commute workplace program events and promotion, Bike Valet program continued thorough partnership with Blue Dot Richmond Hill volunteers).
Τ7	Actively research, promote, and pilot sustainable and active transportation opportunities through demonstration projects/programs and technological innovations.	ES	Metrolinx, York Region, Local Municipalities	~	~	~	~	~	U			EV charge stations continue to be available to the public free of charge and are identified on an online community network to promote and support electric vehicle usage.
	WATER RESOURCES											
	Watershed Management Goals											
WM3	Pursue a variety of funding strategies and partnerships to preserve municipal resources for implementation of water resources stream and river rehabilitation projects.	ES, SI, FS	DC	~	~	~	~	~	U			Ongoing annual monitoring of reserve funds, available grants, and opportunities for funding partnerships.
WM4	Develop and implement a Watercourse (Valleyland) Restoration Plan to address priority areas of erosion, restoration and required capital work throughout the valleyland system.	ES	DC, PWO, PP, TRCA, York Region	~	~	~	~	~		(Implementati on)	(Valleyland Plan)	Implementing recommendations - Elgin Mills Greenway Valleyland Restoration underway (detailed design complete); Morgan Boyle Park/Pomona Creek Valleyland Restoration study completed and detailed design initiated in 2017; Richvale Greenway and Mill Pond Park projects initiated in 2017.
WM5	Continue to work with existing partners on stream restoration projects and seek additional new partners for future projects through the Community Stewardship Program.	ES	York Region, Province, Ontario	~	~	~	~	\checkmark	U			Existing partnerships continued in 2017. Valleyland Study used to prioritize new restoration project locations.
	Surface and Stormwater Quality and Quantity Goals:											
SWM2	Implement Stormwater Management Rate Program.	ES, FS	сом	~	~	~	~	~	U			Stormwater rate increased 9% in 2017. Finance is conducting a rate study (including stormwater management rate) in 2017 and 2018 to inform future increases.
SWM3	Implement Richmond Hill's Stormwater Management 10 Year Capital Plan to rehabilitate existing stormwater facilities; re-prioritize needs and re-establish the 10 Year Plan as required.	ES, DC		~	~	~	~	~	U			SWM 10 Year Capital Plan implemented. Projects completed include: Ashfield Drive Pond construction, Elgin Mills Greenway design.
SWM4	Develop and implement a stormwater infrastructure maintenance program.	ES, PWO	DC	~	~	~				(Implementati on)	(Program)	Program development complete. Implementation underway.
SWM5	Continue to deliver stormwater facility monitoring and inspection program; update program and define roles/responsibilities to ensure Richmond Hill operates stormwater facilities in compliance with Environmental Compliance Approvals.	ES, PWO		✓	~	~	~	~	U			Monitoring program currently under review.
SWM6	Update Richmond Hill's Stormwater Management Design Standards.	ES, DE	PWO, DC, TRCA					~		Ð		N/A
SWM7	Implement the Lake Wilcox Remediation Strategy; monitor measure and report results of implementation.	ES	DE, DP	~	~	~	~	~	U			Continued implementation of Lake Wilcox Remediation Strategy recommendations based on priorities identified.
SWM8	Continue to implement the watercourse monitoring program and reassess the program with assistance from outside agencies.	ES	TRCA	~	✓	✓	✓	✓	U			Continued implementation of watercourse monitoring program.
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	Groundwater Protection, Recharge and Discharge Goals											
GW1	Identify strategic actions in the Credit Valley, Toronto and Regional and Central Lake Ontario (CTC) Source Protection Plan that, once approved, are the responsibility of Richmond Hill in partnership with York Region and implement accordingly.	ES, PP, PWO	York Region, TRCA	✓	~		~			¢		Ongoing discussions with TRCA on potential groundwater recharge compensation process/tool. Targeting Official Plan Amendment in 2018 to conform to Source Water Protection Plan (provided York Region has begun their Regional OPA by then)
GW2	Update the Town Salt Management Plan; in addition assess non-salt alternatives for Lake Wilcox area; monitor performance; work with York Region to share and adopt best salt management practices and non-salt alternatives.	PWO, ES	ES, York Region	✓	~	√	✓	~		(Implementati on)	(Plan)	Update to Salt Management Plan approved by Council in 2016. Implementation of Plan continued through 2017 with monitoring in place to optimize salt use. Work related to best management practices and non-salt alternatives to be explored for Town-wide Salt Vulnerability Assessment planned for 2020.
	LAND RESOURCES											
	Sustainable Land Development Goals											
LD1	Create and/or update Town-wide standards and specifications such as the Materials, Standards and Specifications Manual, and sustainable parks, trails, and open space standards, etc. to reflect the policies of the Official Plan.	ES, DC, PP	DE, PWO,POP,TRCA	✓	~	✓	✓	~		⋫		Priority standard updates were identified based on Sustainability Metrics & Envt Strategy actions with similar objectives. Updates completed for Cycling facilities (T3) and for Street, Park and Parking Lot Lighting (E7) Updates underway: three-stream waste in multi-residential buildings (SW1) Upcoming update: soil volume for tree health (NE3); stormwater management (SWM6)
LD2	Develop a monitoring tool for the Sustainability Metrics to help measure performance.	РР	ES, DE	✓	~	✓	✓	~		(monitoring)	(uptake tool)	Monitoring underway of site plan and draft plan applications received since March 2014. Sustainability Metrics Monitoring and Incentives update project approved in Nov. 2017; expected initiation in 2018 and completion in 2019 (2 year timeline).
LD4	Link the findings of the Urban MESP to valleyland studies and restoration plans.	ES	POP, DC, PP, DE, TRCA	\checkmark	~	\checkmark	~			$\not \!$	(Valleyland)	Linkage review undertaken as part of background research for the Urban Forest Management Plan.
LD11	Play an advocacy role with the Federal and Provincial Governments along with agencies such as Association of Municipalities Ontario (AMO) to provide funding for green infrastructure.	Council, GA	es, si, com, amo	√	~	√	~	✓	U			Advocacy continues for green infrastructure to be eligible for infrastructure grant funding. Green infrastructure was included in Richmond Hill's first Corporate Asset Management Plan approved by Council in December 2016.
LD12	Ensure that flood conveyance remediation projects incorporate ecological improvements to associated valleylands.	ES, DC		\checkmark	~	✓	~	~	J			Mill Pond Park working group established to provide ongoing support to ensure ecological improvements are incorporated throughout the project.
LD14	Support TRCA's existing pilot Sustainable Neighbourhood Action Plan at Lake Wilcox, and investigate working with partners to expand the program to include other Richmond Hill neighbourhoods.	ES	PWO, DE, TRCA, York Region	\checkmark	✓	\checkmark	\checkmark	✓	U			No progress to report

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	Natural Environment Management Goals											
NE2	Develop an Urban Forest Management Plan (UFMP) to protect, maintain and enhance the urban forest. (Note: this initiative will be of particular importance in the wake of EAB; it could be combined with the restoration planning and implementation efforts for EAB already underway).	ES, POP	PP, TRCA, York Region		~	~	~	~		Ð		Terms of Reference drafted. Procurement completed and project initiated by staff and consultant in Q4 2017.
NE3	Update standards and specifications to better protect mature tree health and growth, giving consideration to soils standards.	ES, DC	POP, PP, DE					✓				This project will be informed by the UFMP and will be initiated once it is approved.
NEG	Develop a biological indicator species monitoring and inventory program that will provide information to assist in the planning and prioritization of restoration projects, the management of invasive species and wildlife, and the maintenance of natural heritage features. Make best use of data provided through developers.	ES	TRCA, PP	~	~	~	~	~		Ð		Biological indicator species monitoring and inventory program developed based on the 2014 Natural Area Inventory (consists of the flora fauna inventory every five years and flora fauna/ecological land classification (ELC) every 10 years). Data is supplemented through annual amphibian monitoring. Access to development application data currently being explored through the PRM software review .
NE7	Develop a single database/application for street trees and open spaces trees for use by multiple departments.	ES, IT, POP		~	~			~		¢	(Single tree database)	Phase 1 of single tree asset database development complete. Protocol established to ensure roles and responsibilities. Phase 2 expected to be initiated in 2019.
NE9	Continue to provide the Community Stewardship Program as a means to undertake restoration activities on Town land by strengthening existing partnerships and developing ways to encourage new restoration, enhancement and education partnerships.	ES	POP, RC	~	~	~	~	~	U			2017 Community Stewardship Program: over 10,000 trees and shrubs planted, over 60 partner-led events, 3 partner-led workshops, 3 Town-led community tree planting events, 12 outreach events attended and 1 new partnership established (TRCA Education & Community Engagement).
NE10	Continue to offer the Healthy Yards Program as a means to improve biodiversity and increase tree cover on private lands.	ES	PWO, POP, Local Environmental Groups	✓	~	~	✓	~	J			Continued implementation of Healthy Yards program (e.g. 5782 wildflowers, 1718 trees and shrubs, 269 rain barrels, and 195 composters sold). New partnership and funding provided through York Region.
	Invasive Species Management Goals											
IS5	Continue to implement the Emerald Ash Borer (EAB) Management Strategy.	ES, POP	PP, FS	~	~	~	~	~	U			Woodlot management plan underway for Beaver Woodland as part of implementation of the Long-term Woodlot Restoration Program.
IS6	Continue to promote and implement the use of a diversity of native plant species on Town land.	ES	POP, DC, TRCA	~	~	~	~	~	Ċ			Benefits of native plant species promoted through outreach (e.g. Healthy Yards and other Town events; information in Waste Calendar and Recreation Guide)
IS7	Collaborate and partner with York Region, neighboring municipalities, Conservation Authorities and other crossboundary stakeholders to manage invasive species.	ES	POP, York Region, local municipalities, TRCA	~	~	~	~	~	U			Continued participation in cross-jurisdictional work on invasive species management with York Region and the Ontario Invasive Plant Council.
IS8	Develop Community Education and Outreach programs for invasive species and native plant species.	ES	NGOs, York Region, TRCA		~	~	*	~	G			Educated residents on how to increase monarch butterfly habitat through participation in the National Wildlife Federation's 'Mayor's Monarch Pledge' and through Council's Pollinator Week proclamation.
	Wildlife Management Goals											
W2	Re-evaluate existing by-laws that address wildlife feeding.	ES, RS	РОР					\checkmark				N/A
W5	Continue to support and implement the Canada Goose Management Strategy and Beaver Management Policy.	ES	POP	\checkmark	~	✓	\checkmark	✓	J			Ongoing Canada Goose/Beaver monitoring and management.

			ſ	Time Frame						Project Status		
	ACTION		SUPPORT(S)	2015	2016	2017	2018	2019	Ongoing Action	Initiated/ Underway	Complete	Milestone Achievements
W6	Define the Town response to, as well as roles and responsibilities for individual species that significantly impact the Town.	ES, RS	РОР					✓				N/A
W7	Develop education methods to improve the public's understanding of wildlife interactions and the benefits of living in a biodiverse community. Provide this information through various channels (Environment, By-law, Communications)	ES, RS	COM, OSPCA, MNR		~		~	~	U			
	Sustainable Urban Agriculture and Local Food Production Goals											
Community Garden	Community Garden policy as per Parks Plan	ES		✓	~	✓	✓				V	Policy approved in 2017 and implementation initiated in 2017 and continuing in 2018.
LF5	Evaluate the feasibility of developing an urban food kit as part of the Healthy Yards Program.	ES	Local Food Security Groups	✓	~						V	Edible plants are now incorporated into Healthy Yards Program in 2015 and 2016. Survey conducted to evaluate future direction (TD Friends of the Environment grant used to support survey facilitation). Edible plant pilot project is complete; edible plants will now be incorporated as an on- going plant option moving forward.
	Solid Waste Management Goals											
SW1	Develop building design criteria requiring new multi-unit residential, IC&I, and mixed- use developments to incorporate source-separated waste collection in building design, and to participate in source-separation programs.	ES	DP, DE, York Region, BILD	~	~	~	~			\$		Completed benchmarking of waste development standards and drafting process and engineering studies underway.
SW3	Develop and implement a Town sustainable procurement policy.	FS	All Town departments									[Action item to be revised during 5-year update of Environment Strategy for inclusion in Phase 2 of strategy implementation]
SW4	Conduct annual waste audits of municipal facilities greater than 10,000 square meters and implement waste reduction work plans and source separation programs for these facilities.	ES	AM, RC	~	~	~	~	~	U			2017 waste audit completed and Ministry of Environment and Climate Change (MOECC) waste reduction workplan developed.
SW5	Establish and implement service levels for diversion programs in public areas.	ES, POP	AM, RC, EVS	✓	~	~	~	~		Ŕ		Waste service levels (recycling in parks, at super mailboxes and in the downtown core) approved by Council in 2016. Pilot programs (under SW7) to test methods and equipment completed and presented to Council. Purchase and installation of containers by Parks is underway in 2017, continuing to 2018.
SW6	Collaborate with York Region and local municipalities to share innovations and achieve region-wide waste reduction and diversion goals.	ES	York Region, IC & I, Schools	~	\checkmark	~	~	~	U			Multi-residential waste audits conducted in 11 buildings, representing 1,591 units, to help inform waste diversion programs and education.
SW7	Actively research, promote, and pilot waste management opportunities through demonstration projects and technological innovations.	ES	PWO, POP, York Region, IC & I	✓	~	~	~	~	J			Pilot summaries for recycling bin lid, parks recycling, and super mailboxes presented to Council and direction received to implement recycling in parks, at super mailboxes and in the downtown core. Installation of recycling for supermailboxes and downtown core to be completed in 2018/2019, and is underway for parks and continuing into 2018 through SW5.
SW10	Develop and implement approaches for three-stream waste separation at large community events, starting with Town sponsored events and progressing to private events held at Town facilities.									M.		Three-stream waste diversion with new bins provided at Richmond Hill's 2017 Ribfest event. 'Community Festivals and Events Manual' (2017) requires
		EVS (Lead)	ES, RC, POP	~	V	~				Ŕ		event organizers to prepare a Waste Management Plan and encourages waste diversion & minimization.