

Water and Wastewater Capacity Assignment

Environmental Services
Committee

June 19, 2013

Providing YDSS Servicing Capacity

Overview

- ❑ Significant investment has been made in new infrastructure (over \$2 billion in past 5 years)
- ❑ Building our way out of a period of servicing constraints
- ❑ Forecast future servicing capacity to 2021 to provide a clear line of sight for long term growth
- ❑ Consultation with local municipalities

Objectives for Moving Forward

- A. Ample servicing capacity coming on line to support 2021 growth pursuant to Places to Grow
- B. Need to support unconstrained municipalities ready to forge ahead - in turn, they finance the infrastructure for those currently constrained
- c. Confirm to municipalities, a clear “line of sight” for servicing availability in the immediate and longer term

Review of past year...

- ❑ Last April, Region provided an additional 1 year of capacity to 2016
 - deferred consideration of 2nd year
- ❑ In October 2012, Council received an update that mapped the timing of servicing capacity availability across the Region
- ❑ Debt management Council workshop in January 2013 emphasized the critical linkage between DC revenues and ARL (annual repayment limit) debt capacity
- ❑ Dialogue continued with the local municipalities throughout 2012 on the servicing framework
- ❑ The Region continues to advance and build infrastructure to provide increased servicing capacity for growth

What we heard in our municipal dialogue

- A. There are continual challenges in balancing development pressures with available servicing capacity; each municipality manages the delivery of capacity somewhat differently
- B. Complex high-rise projects have allocation challenges - especially with multiple phases
- C. Local municipalities continue to prioritize Regional Centres and Corridors
- D. Principle of “use it or redistribute it” has been developed within each local management system

Each municipality has provided servicing data in a uniform template, as of January 1, 2013 – providing a consistent Region-wide database for analysis

Some municipalities growing faster than forecast especially Markham, Vaughan, and Newmarket

Proposed Current Capacity Assignment and Longer Term Outlook

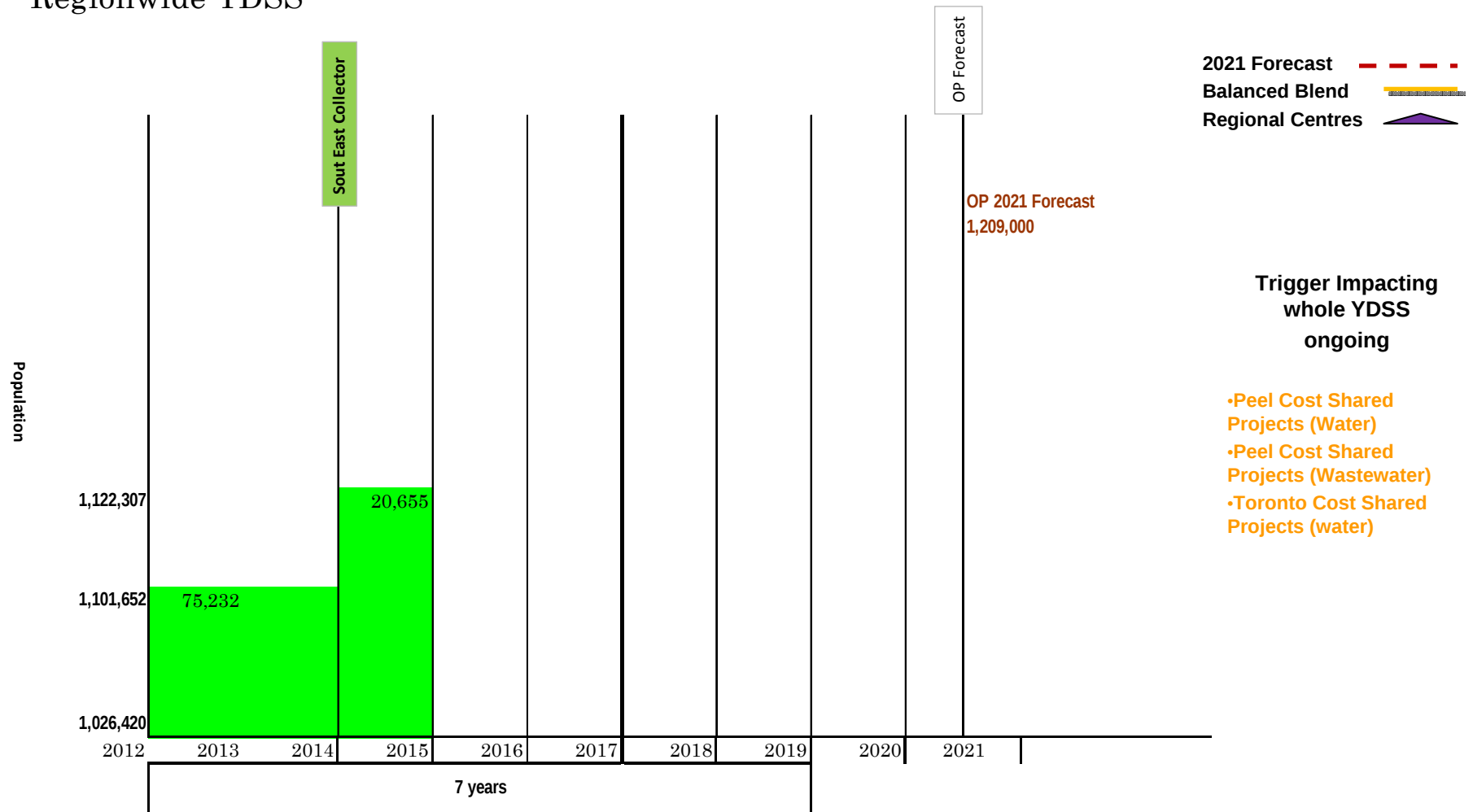
1. a) Additional capacity assignment of **35,971 persons in YDSS**, prior to Duffin Creek Outfall (prior to end of 2017) or UYSS in north (prior to end of 2018)
 - assignment contingent on new Southeast Collector and other trigger projects
- b) Separate assignment to further support Regional Centres and Corridors – **7,400 persons**
 - assignment contingent on new Southeast Collector and other trigger projects
 - requires higher standards for inflow and infiltration reduction and water conservation
2. Beyond this, there will be a forecast capacity outlook in the YDSS service area of **50,722** to meet the 2021 ROP forecasts for each municipality – provides longer “line of sight” for planning and development approvals process
 - assignment based on completion of the Duffin Creek Outfall / UYSS and other trigger projects

**Current
Assignment**
35,971
+
7,400
=
43,371
persons

**Forecast
Outlook**
50,722
persons

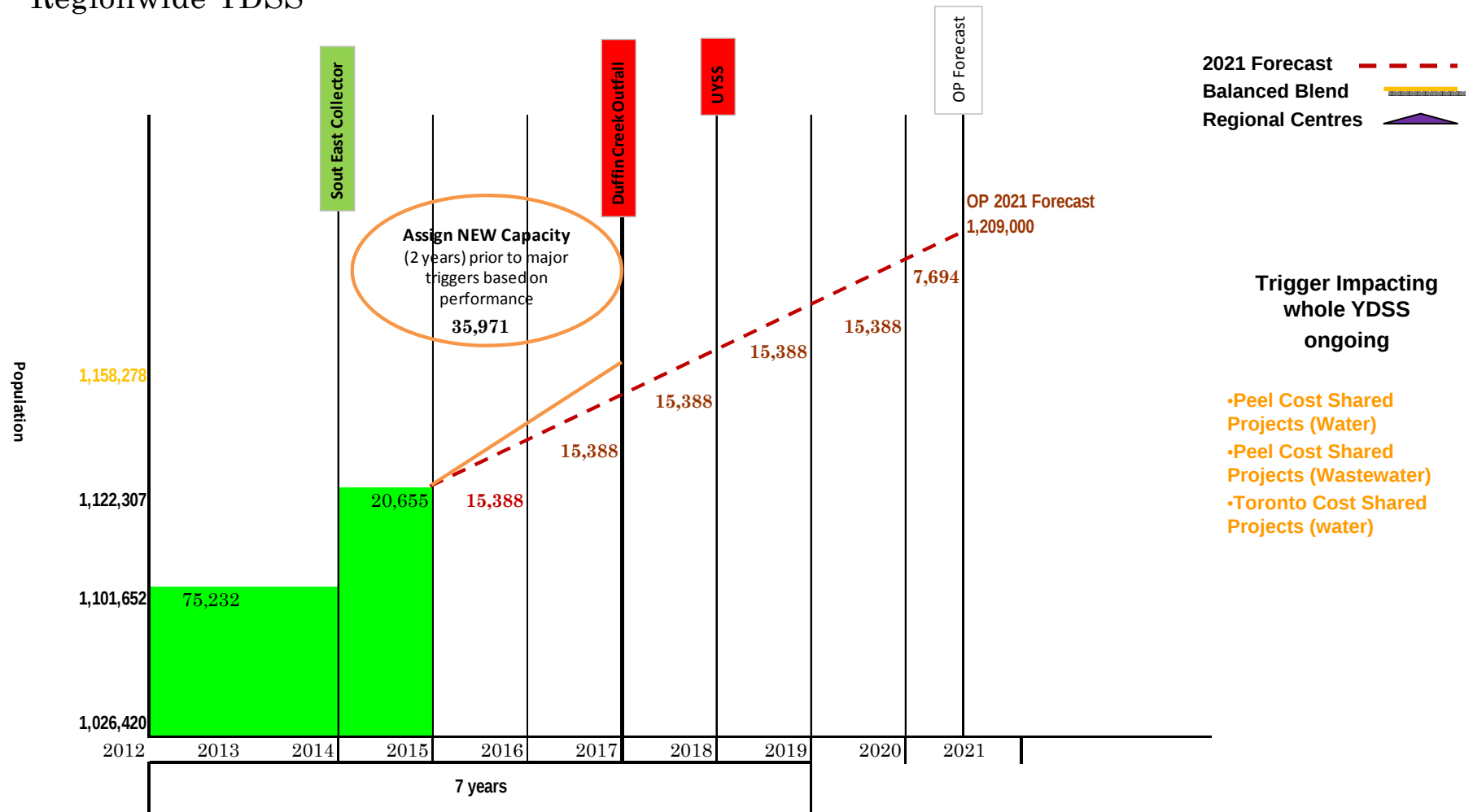
Regional YDSS Summary: Proposal for Providing Capacity

Regionwide YDSS



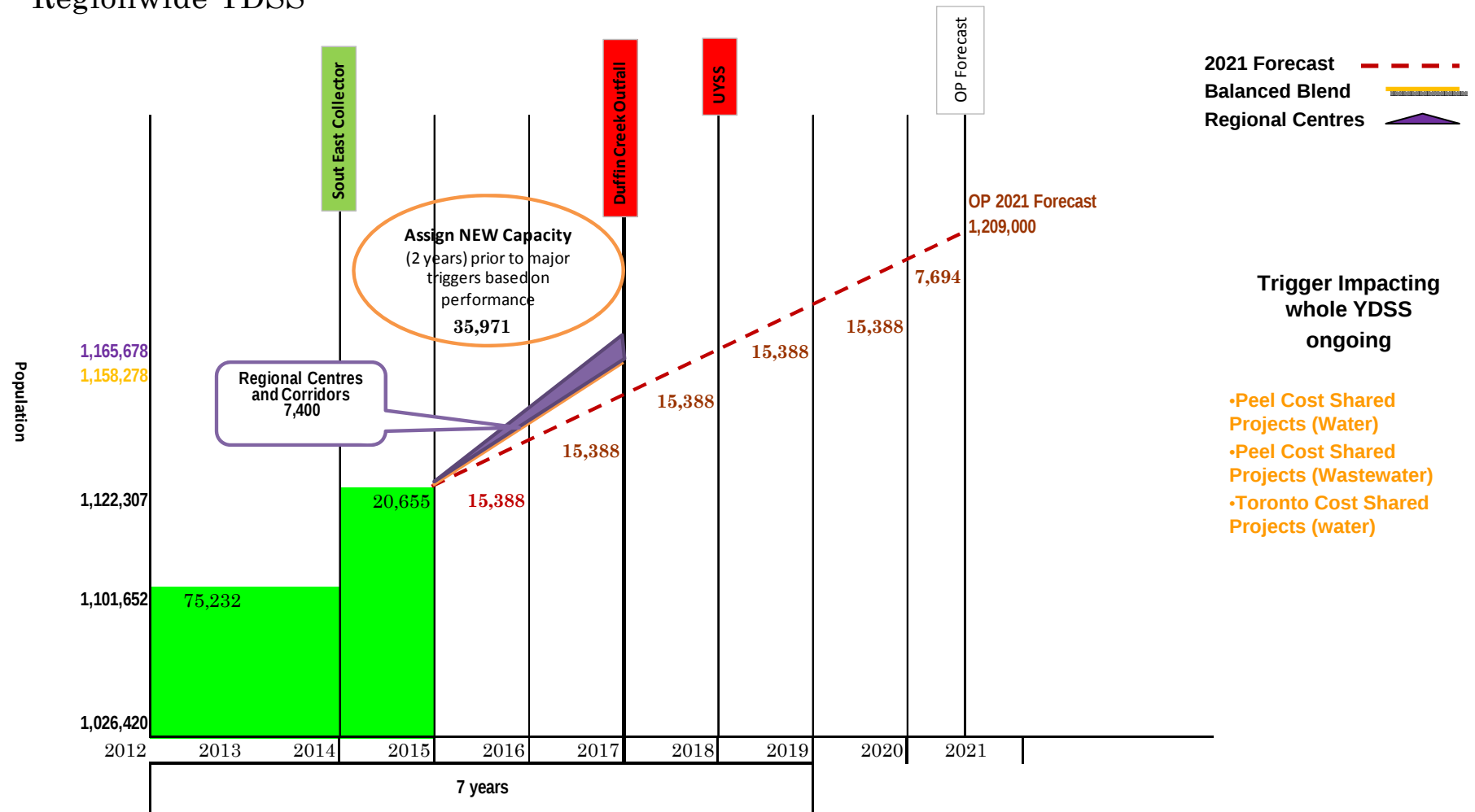
Regional YDSS Summary: Proposal for Providing Capacity

Regionwide YDSS



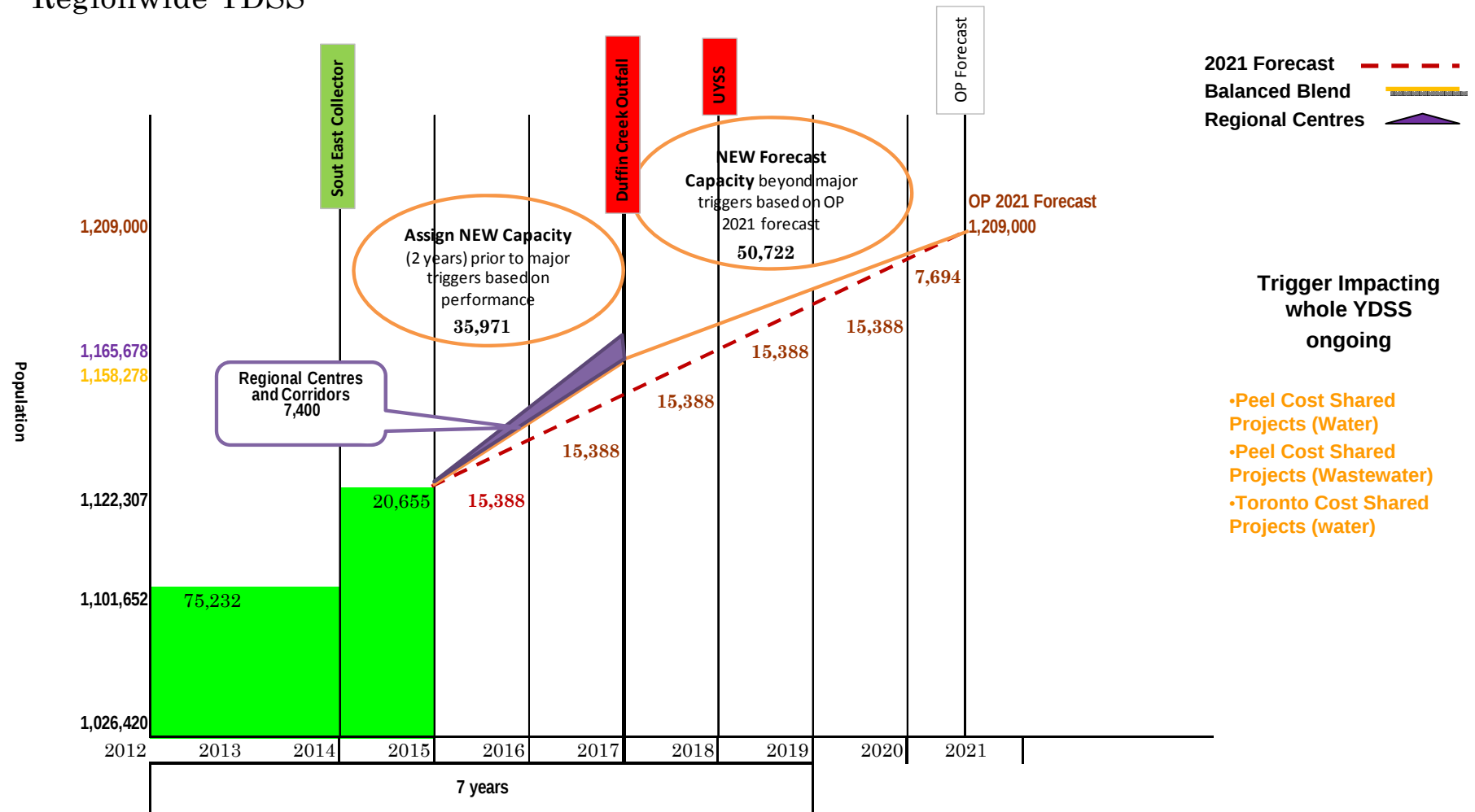
Regional YDSS Summary: Proposal for Providing Capacity

Regionwide YDSS



Regional YDSS Summary: Proposal for Providing Capacity

Regionwide YDSS



Proposed Current Capacity Assignment and Longer Term Outlook

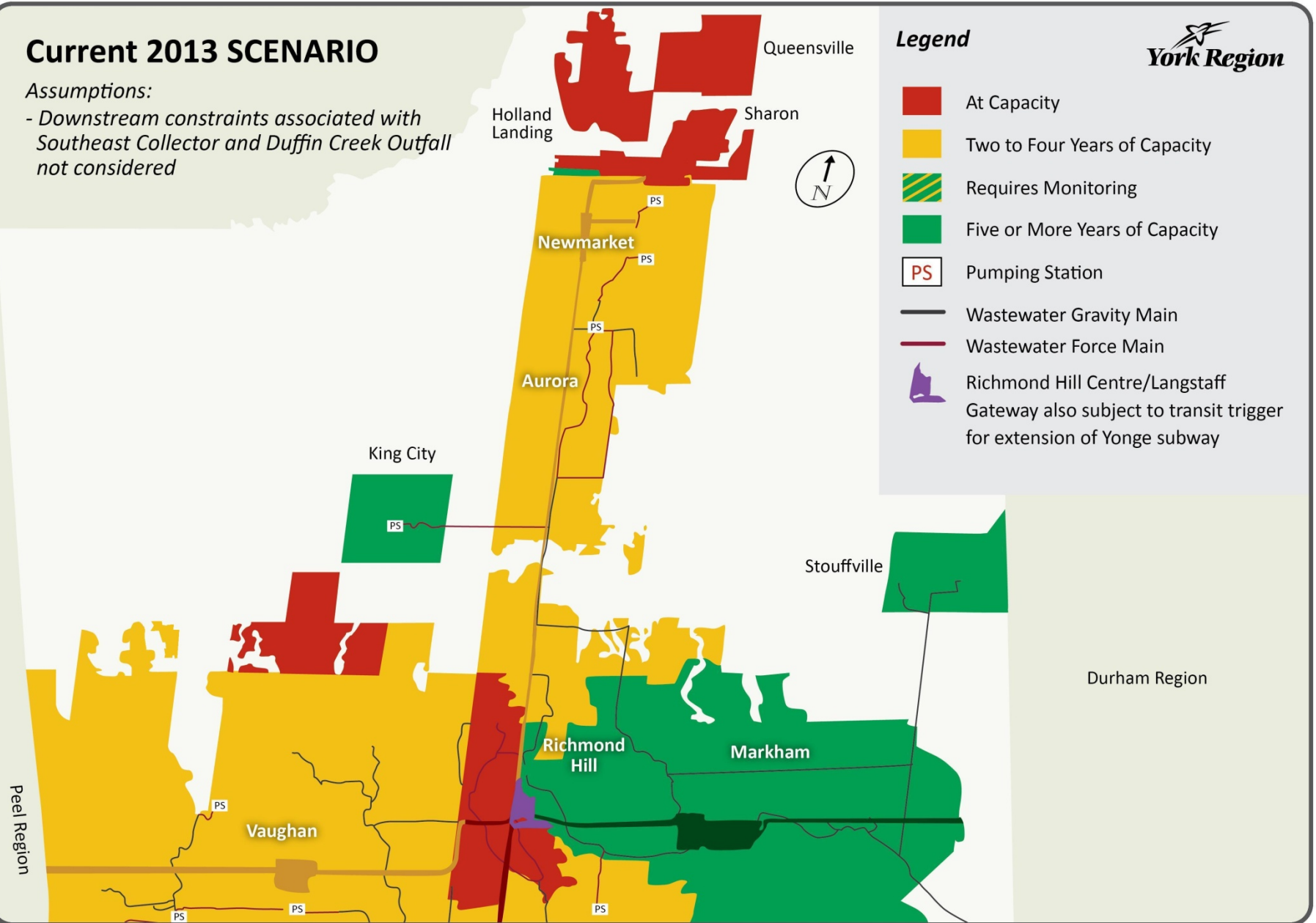
Municipality	Current Assignment	Forecast Outlook
Aurora + Regional Corridor	1,814 1,000	5,476
East Gwillimbury	As per front-end agreement	2,059
King City	1,385	3,538
Markham + Regional Centres and Corridors	14,058 1,800	11,628
Newmarket + Regional Centre and Corridors	2,561 1,000	349
Richmond Hill + Regional Centre and Corridors	5,527 1,800	14,133
Vaughan + Regional Centre and Corridors	8,744 1,800	10,022
Stouffville	1,882	3,517
YDSS Total	43,371	50,722

With current assignment, all municipalities have adequate supply to service growth to 2017 or beyond

Current 2013 SCENARIO

Assumptions:

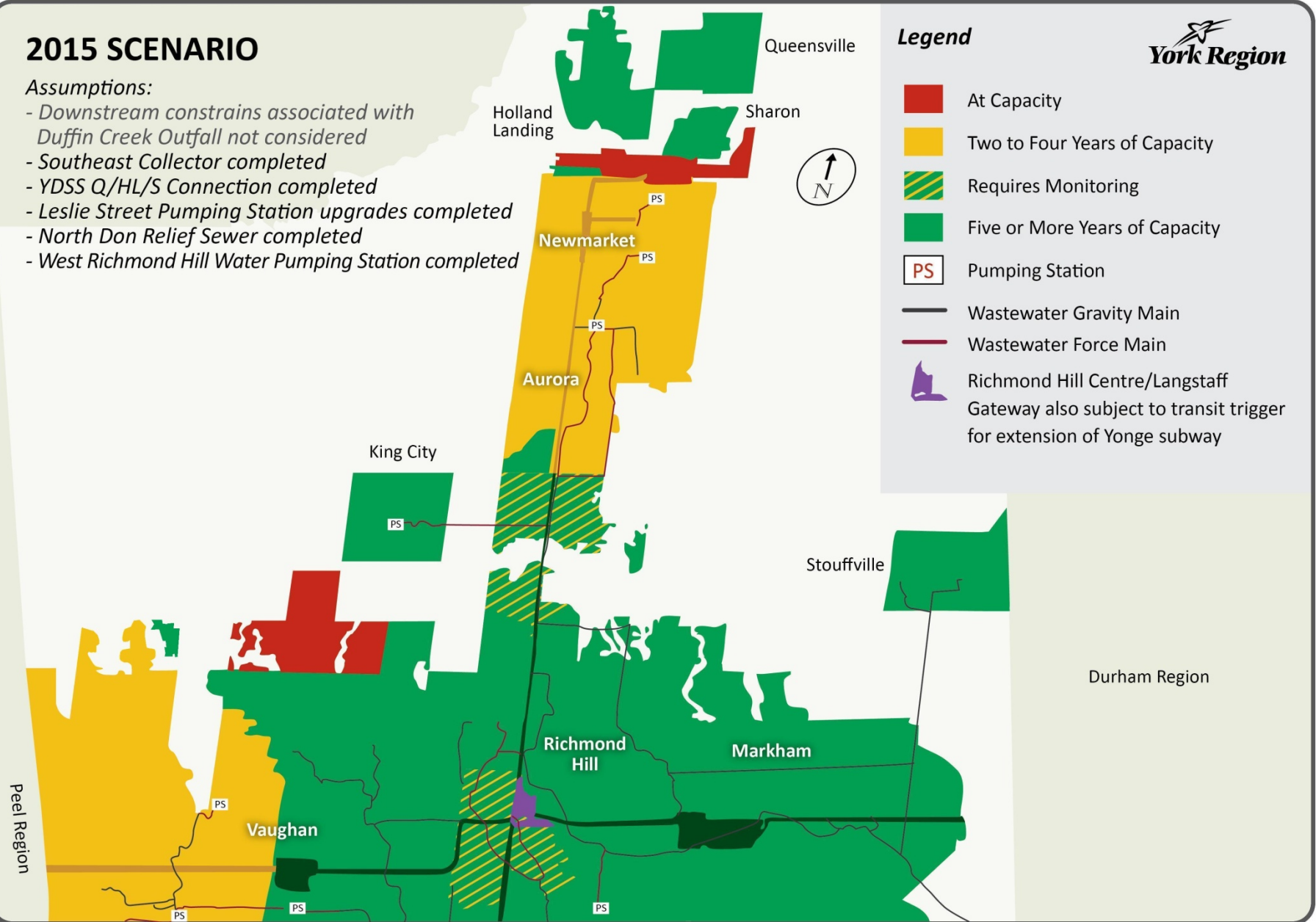
- Downstream constraints associated with Southeast Collector and Duffin Creek Outfall not considered



2015 SCENARIO

Assumptions:

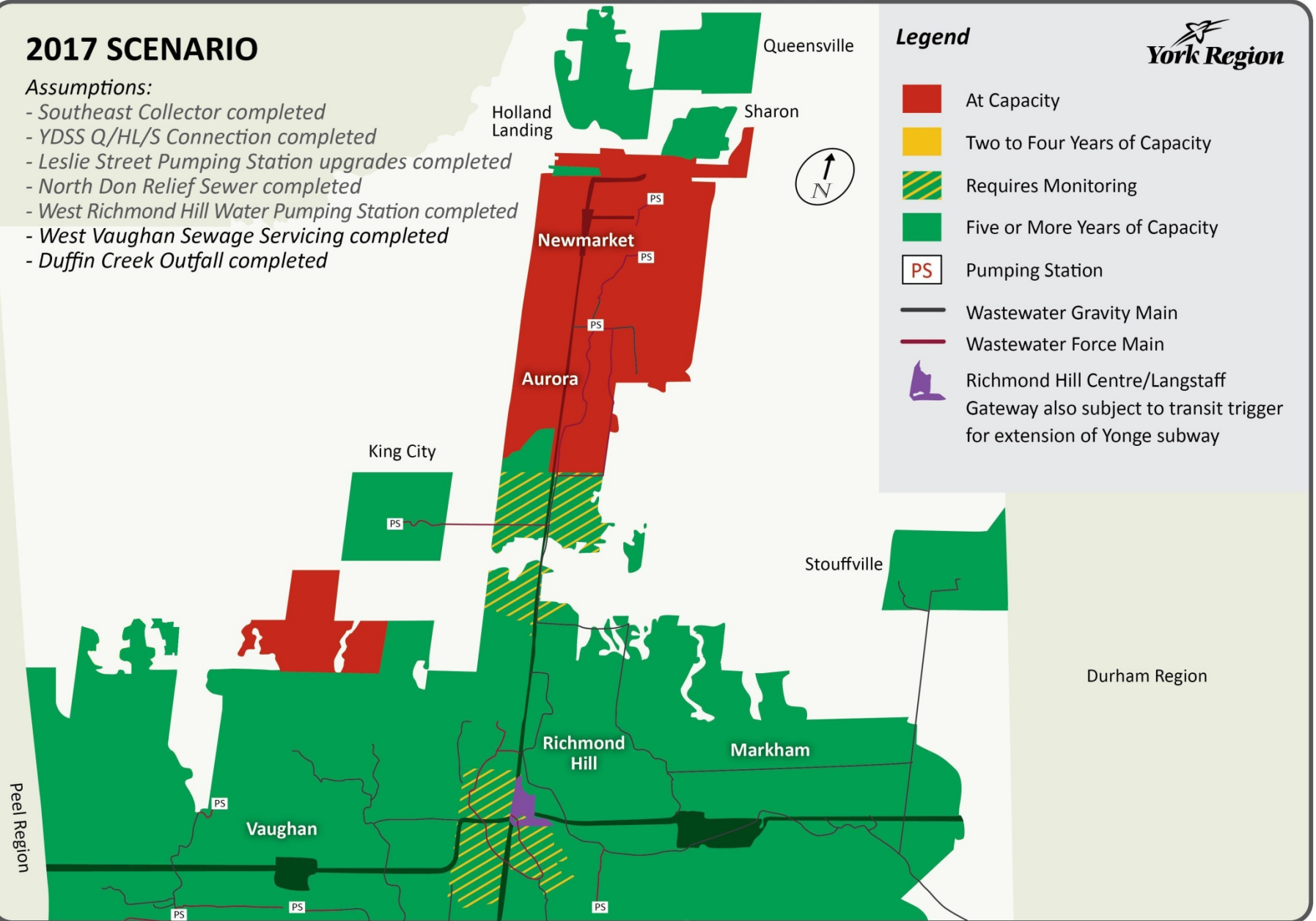
- Downstream constraints associated with Duffin Creek Outfall not considered
- Southeast Collector completed
- YDSS Q/HL/S Connection completed
- Leslie Street Pumping Station upgrades completed
- North Don Relief Sewer completed
- West Richmond Hill Water Pumping Station completed



2017 SCENARIO

Assumptions:

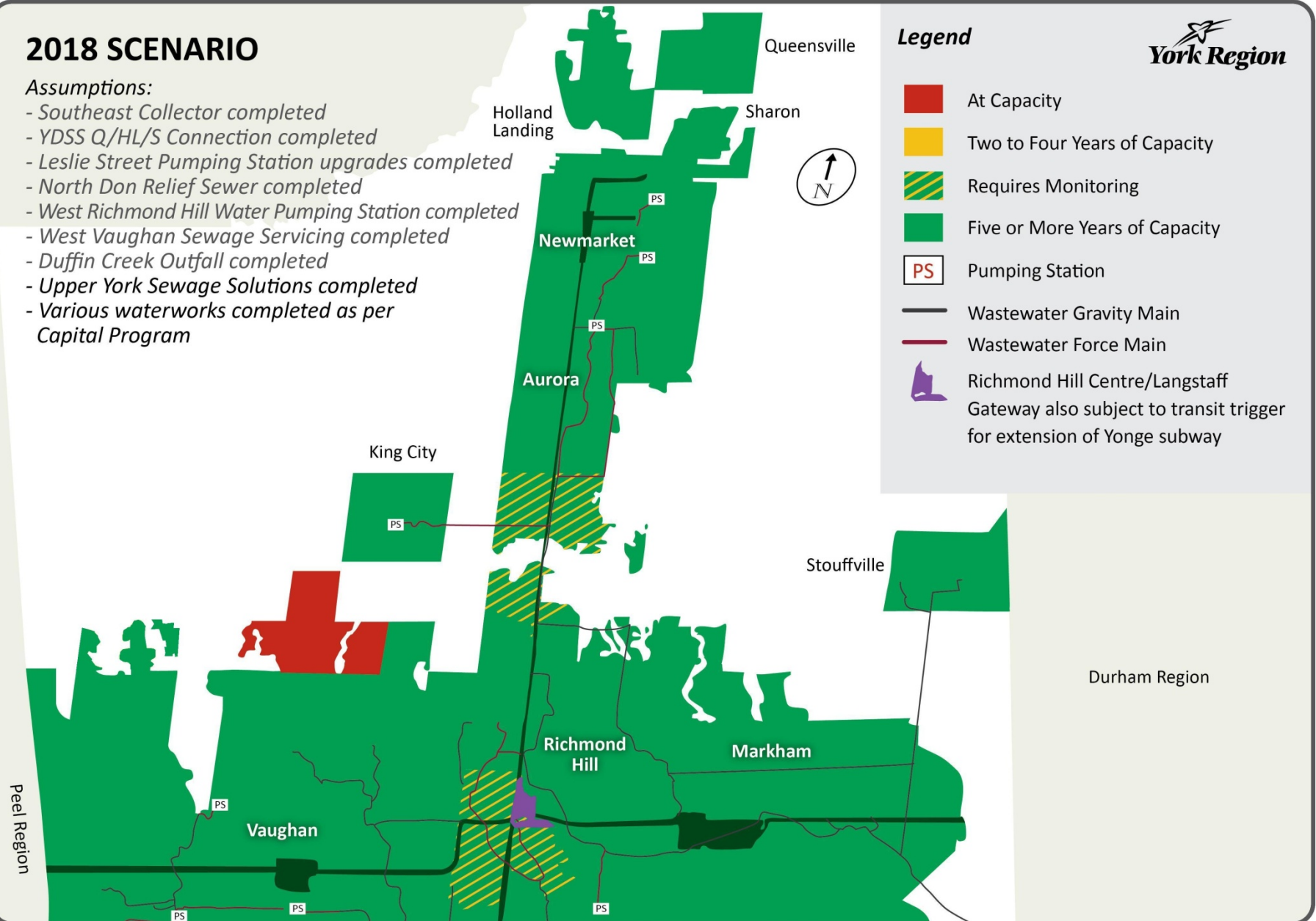
- Southeast Collector completed
- YDSS Q/HL/S Connection completed
- Leslie Street Pumping Station upgrades completed
- North Don Relief Sewer completed
- West Richmond Hill Water Pumping Station completed
- West Vaughan Sewage Servicing completed
- Duffin Creek Outfall completed



2018 SCENARIO

Assumptions:

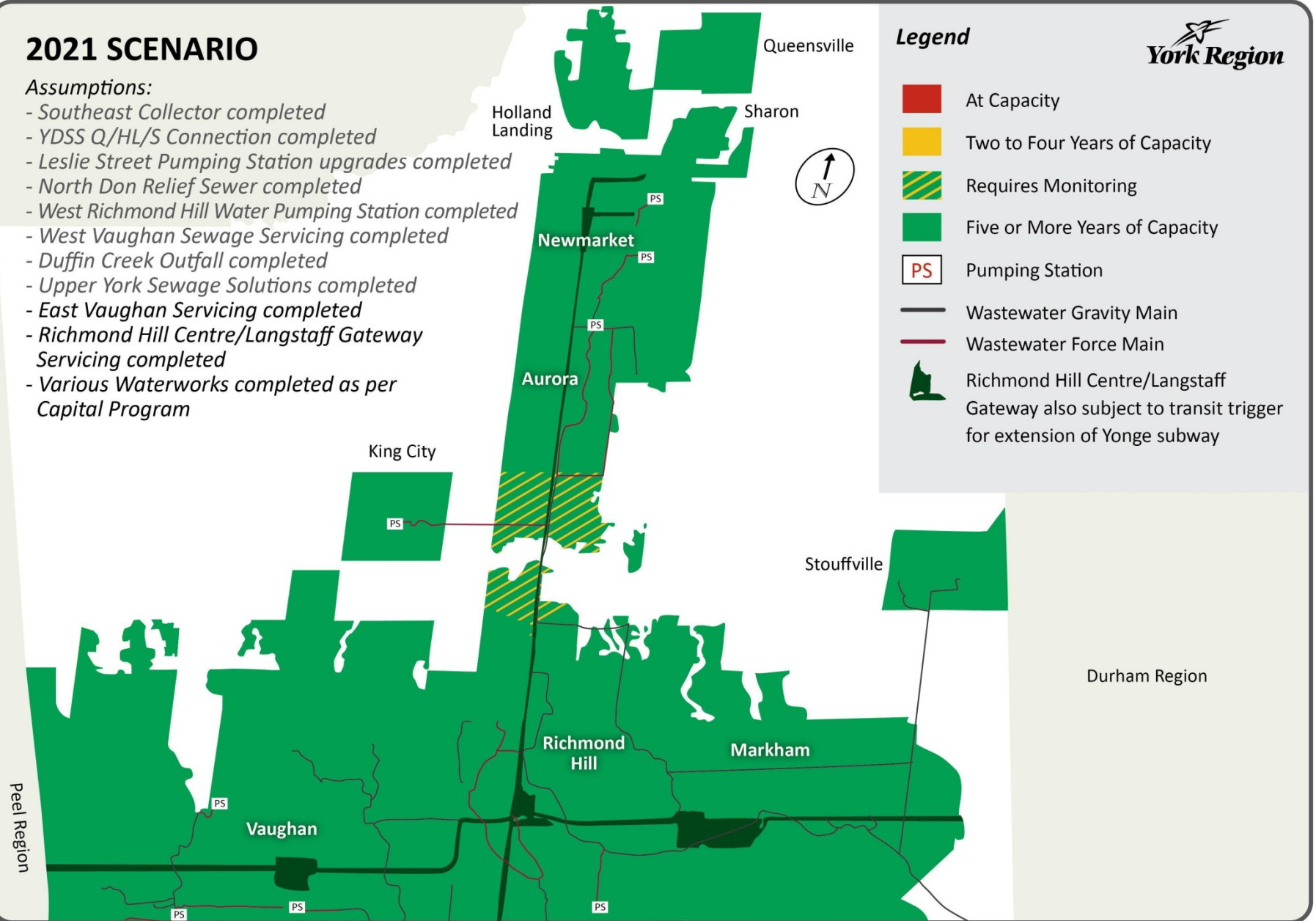
- Southeast Collector completed
- YDSS Q/HL/S Connection completed
- Leslie Street Pumping Station upgrades completed
- North Don Relief Sewer completed
- West Richmond Hill Water Pumping Station completed
- West Vaughan Sewage Servicing completed
- Duffin Creek Outfall completed
- Upper York Sewage Solutions completed
- Various waterworks completed as per Capital Program



2021 SCENARIO

Assumptions:

- Southeast Collector completed
- YDSS Q/HL/S Connection completed
- Leslie Street Pumping Station upgrades completed
- North Don Relief Sewer completed
- West Richmond Hill Water Pumping Station completed
- West Vaughan Sewage Servicing completed
- Duffin Creek Outfall completed
- Upper York Sewage Solutions completed
- East Vaughan Servicing completed
- Richmond Hill Centre/Langstaff Gateway Servicing completed
- Various Waterworks completed as per Capital Program



Trigger Projects and Risk Assessment

	Projects Required before 2021	HL/Q/S	Newmarket	Aurora	King City	Richmond Hill	Vaughan	Markham	Stouffville	Risk		
										Approval	Funding	Construction
										1	2	3
Trigger Projects Required for Post-2013 Capacity Assignment												
Ww	Southeast Collector	m	m	m	m	m	m	m	m			*
Ww	Peel Cost Shared Projects (Wastewater)	m	m	m	m	m	m	m	m		*	*
Ww	Leslie St. SPS Upgrades					a	m	a				*
Ww	Queensville/Holland Landing/Sharon Sewage Servicing	m										*
Ww	North Don Relief Sewer					a	a	a				*
W	Peel Cost Shared Projects (Water)	m	m	m	m	m	m	m	m		*	*
W	Toronto Cost Shared Projects (Water)	m	m	m	m	m	m	m	m		*	*
W	West Richmond Hill Water Pumping Station					a	a	a				*
Critical Projects Required for Future Capacity Assignment To Achieve 2021 OP Outlook												
Ww	Duffin Creek Outfall	m	m	m	m	m	m	m	m	*	*	*
Ww	Duffin Creek Stages 1 and 2 Upgrades	m	m	m	m	m	m	m	m			*
Ww	Upper York Sewage Solutions	m	m	a						*	*	*
W	Aurora East Water Elevated Tank			a								*
W	Phase 2 PD6 Nashville Road Watermain - Whisper Lane to Kleinburg Elevated Tank						a					*
W	Stouffville Water Elevated Tank								m	*	*	*
W	Queensville Water Elevated Tank #2	m								*	*	*
W	Leslie St. Watermain Extension (Mulock to Greenlane)	a	a							*	*	*
W	Aurora East Water Pumping Station Upgrade	a	a	a						*	*	*
Ww	West Vaughan Servicing						a			*	*	*
W/Ww	Richmond Hill/Langstaff Gateway Centre (works to be determined by EA)					a	a	a		*	*	*
W/Ww	East Vaughan Servicing						a			*	*	*

m - required for all areas in the municipality

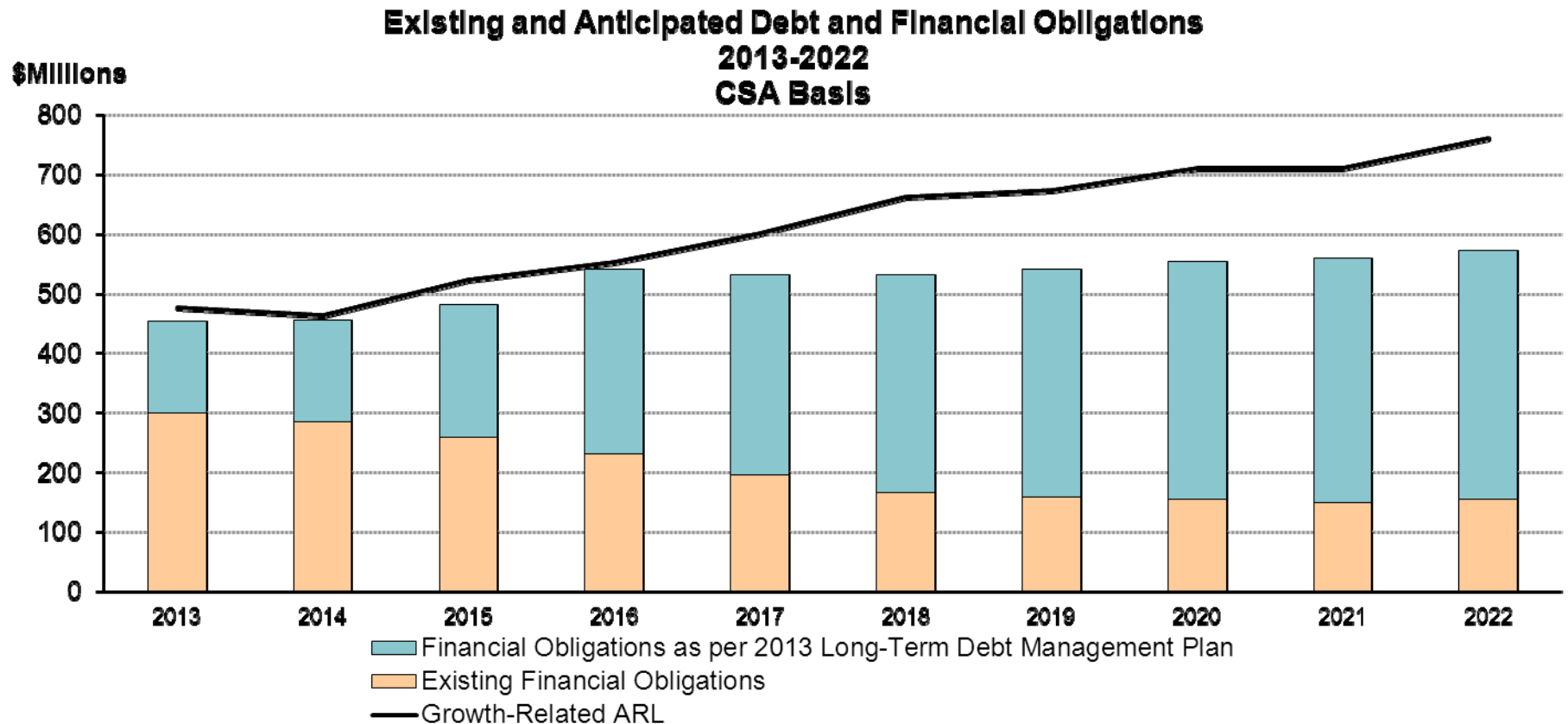
a - area specific only

¹ - EA approval not secured yet

² - Additional Council Spending Authority required

³ - Potential construction risks

Growth-Related ARL and Annual Debt Servicing



Note: Growth Cost Supplement is calculated at 80% of the 3-year rolling average of DC collections for 2013 and 70% for 2014-2022

The Region will remain near its Annual Repayment Limit for at least the next four years

Conclusion and Next Steps

- ❑ Significant progress continues in delivering key infrastructure projects such as Duffin Creek and Southeast Collector (subject to continued CSA approval within ARL)
- ❑ Adequate capacity assigned to service growth to 2017 and beyond
- ❑ Forecast capacity outlook provides longer “line of sight”
- ❑ Update to SHIP and LEED Programs in conjunction with setting new standards for high-rise buildings in Regional Centres and Corridors
- ❑ Continued collaboration with local municipalities
 - annual formal reporting on allocation/development tracking
 - Inflow and Infiltration reduction
 - infrastructure delivery updates will continue to be provided quarterly on status of trigger projects

Thank you