Welcome to the Public Information Centre for

The City of Kingston Water and Wastewater Master Plan Updates

PLEASE COMPLETE THE SIGN-IN SHEET AND COMMENT FORM.
THE PROJECT TEAM IS AVAILABLE TO ANSWER YOUR QUESTIONS AND ADDRESS ANY CONCERNS.
Y O U R I N P U T I S V A L U E D !

PROJECT BACKGROUND

Utilities Kingston finalized a Master Plan for Water Supply in 2007 and a Sewage Infrastructure Master Plan in 2010.

To account for current population growth plans and any changes to the servicing systems, Utilities Kingston is undertaking updates to both plans.

The Study is using the Master Planning Process as defined in the Municipal Engineer's Association's (MEA) Class Environmental Assessment (EA) Process

The updates will identify infrastructure strategies for water and wastewater servicing within the City of Kingston's urban area and within the satellite community of Cana, based on planned growth to 2036 and Beyond.

PROJECT OBJECTIVES

- Producing an infrastructure implementation ‘roadmap’ to satisfy the existing and future servicing needs
- Optimizing the use of the existing infrastructure
- Identifying efficient approaches for servicing existing and new development
- Evaluating the servicing alternatives to prioritize the recommended capital works
- Updating the Pollution Prevention Control Plan
- Completing facility condition and risk assessments to complement the alternatives evaluation process

CLASS ENVIRONMENTAL ASSESSMENT (CLASS EA) PROCESS

The Ontario Environmental Assessment Act, R.S.O., 1990 (the EA Act) requires that projects corresponding to a given class of undertakings (e.g. municipal road, transit, water and wastewater projects) follow an approved Class EA process.

The Class EA planning process as documented in the MEA Municipal Class EA document includes the following five phases:

Phase 1
- Problem or Opportunity

Phase 2
- Alternative Solutions

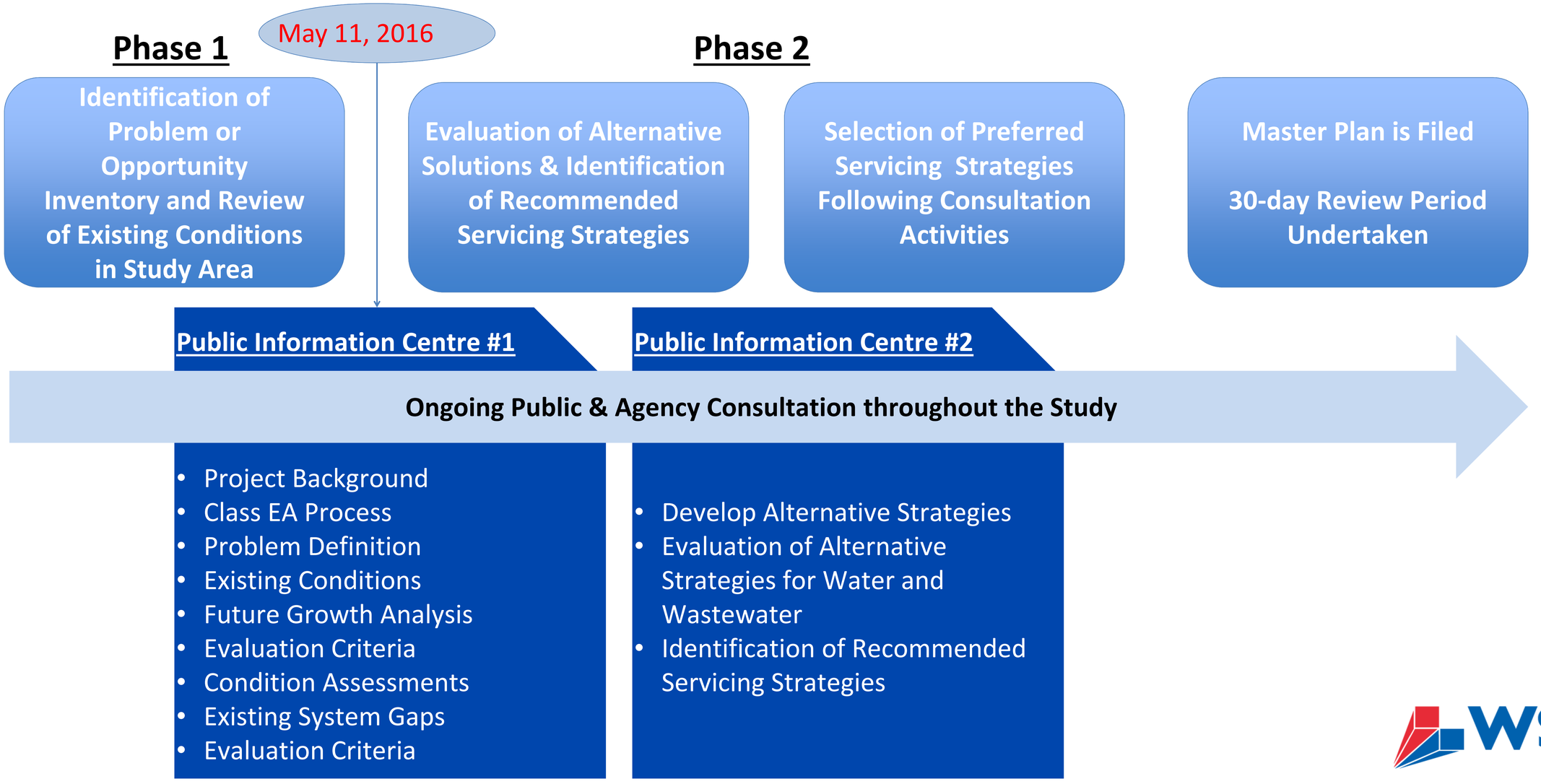
Phase 3
- Alternative Design Concepts for Preferred Solutions

Phase 4
- Environmental Study Report

Phase 5
- Implementation

MUNICIPAL CLASS EA FLOW CHART

Master Plans are conducted under the framework of the MEA Municipal Class EA process. The Master Plan Updates will complete Phases 1 and 2. All Schedule A and A+ projects identified in the Master Plan Updates can be implemented upon the finalization of the study. For projects identified through the Master Plans Updates requiring Schedules B and C Municipal Class EA's, additional project specific Class EA's will need to be undertaken.



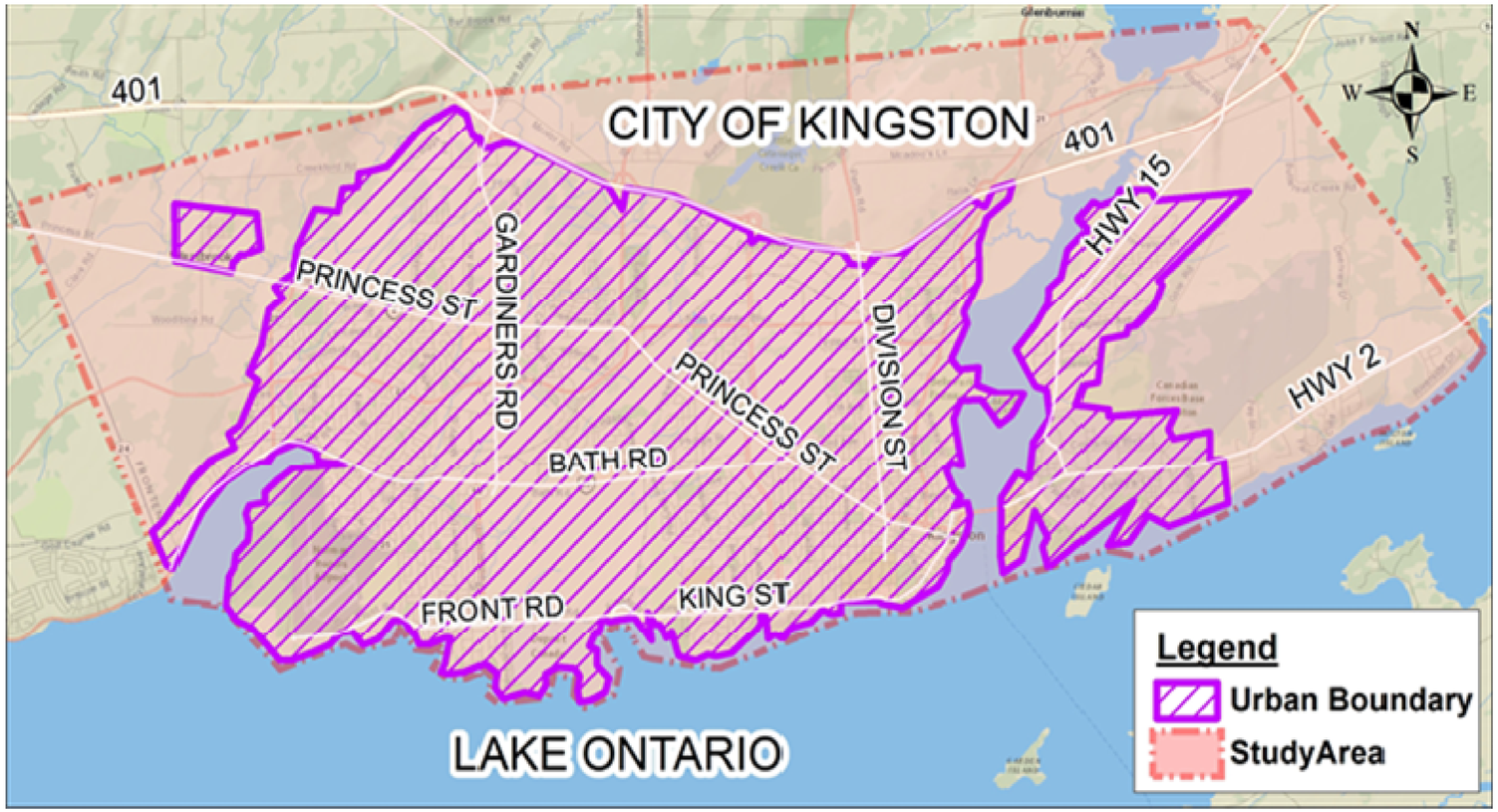
BACKGROUND

Challenge

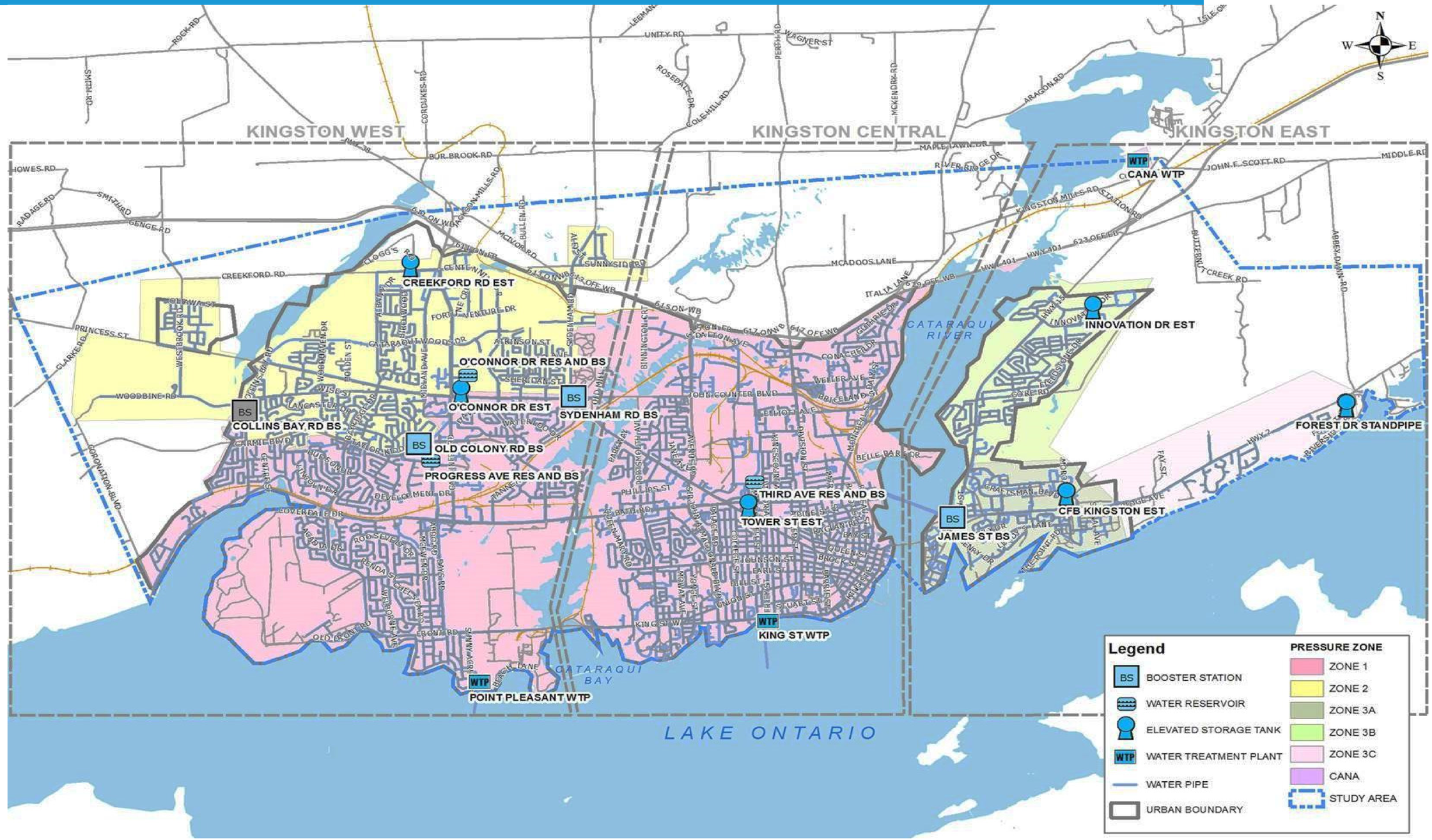
To plan for water and wastewater infrastructure and pollution control to safely and effectively service the existing and projected residential and employment population to the year 2036, while minimizing impacts on the natural, cultural and social features in the study area.

Study Area

The Study Area being considered for these Master Plan Updates includes the water and wastewater servicing within the City of Kingston's urban area and within the satellite community of Cana.

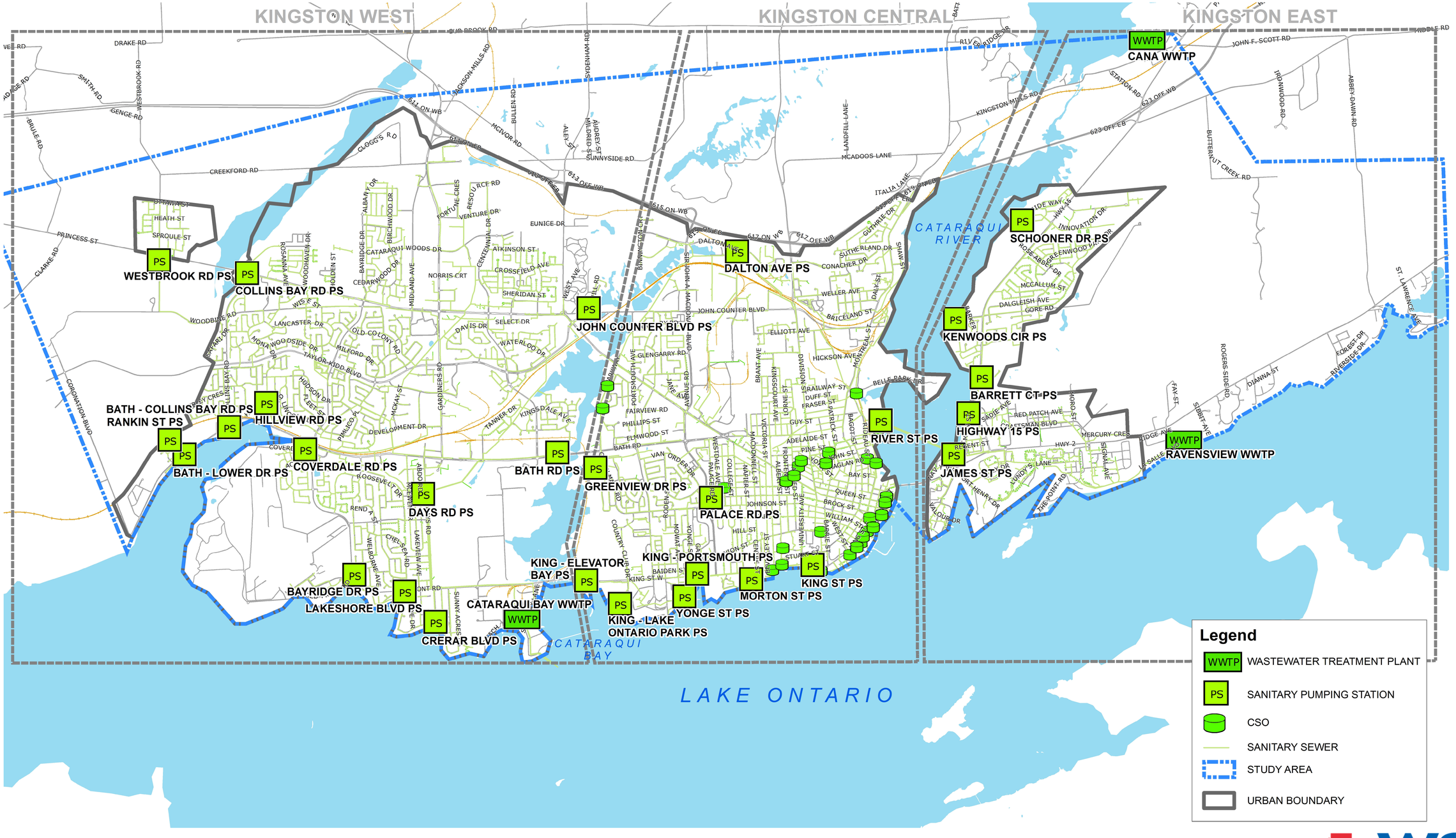


EXISTING WATER SYSTEM



The Map Illustrates how the Existing Water System is Configured (i.e. Pressure Zones) and the Location of the Facilities

EXISTING WASTEWATER SYSTEM



The Map Illustrates How the Existing Wastewater System is Configured and the Location of the Facilities

GROWTH STEPS

- Based on discussion with Utilities Kingston, the City of Kingston Planning Department, previous Master Plans and available reports, one (1) existing condition scenario and five (5) growth scenarios were developed.

- Primary Purpose of the 2021-2036 Scenarios is to Evaluate the Impacts on Infrastructure and Plan Future Upgrades. Full Build Out and Ultimate Scenarios Serve to Provide a Check and Balance for the Recommended Upgrades in the 2021-2036 Scenarios

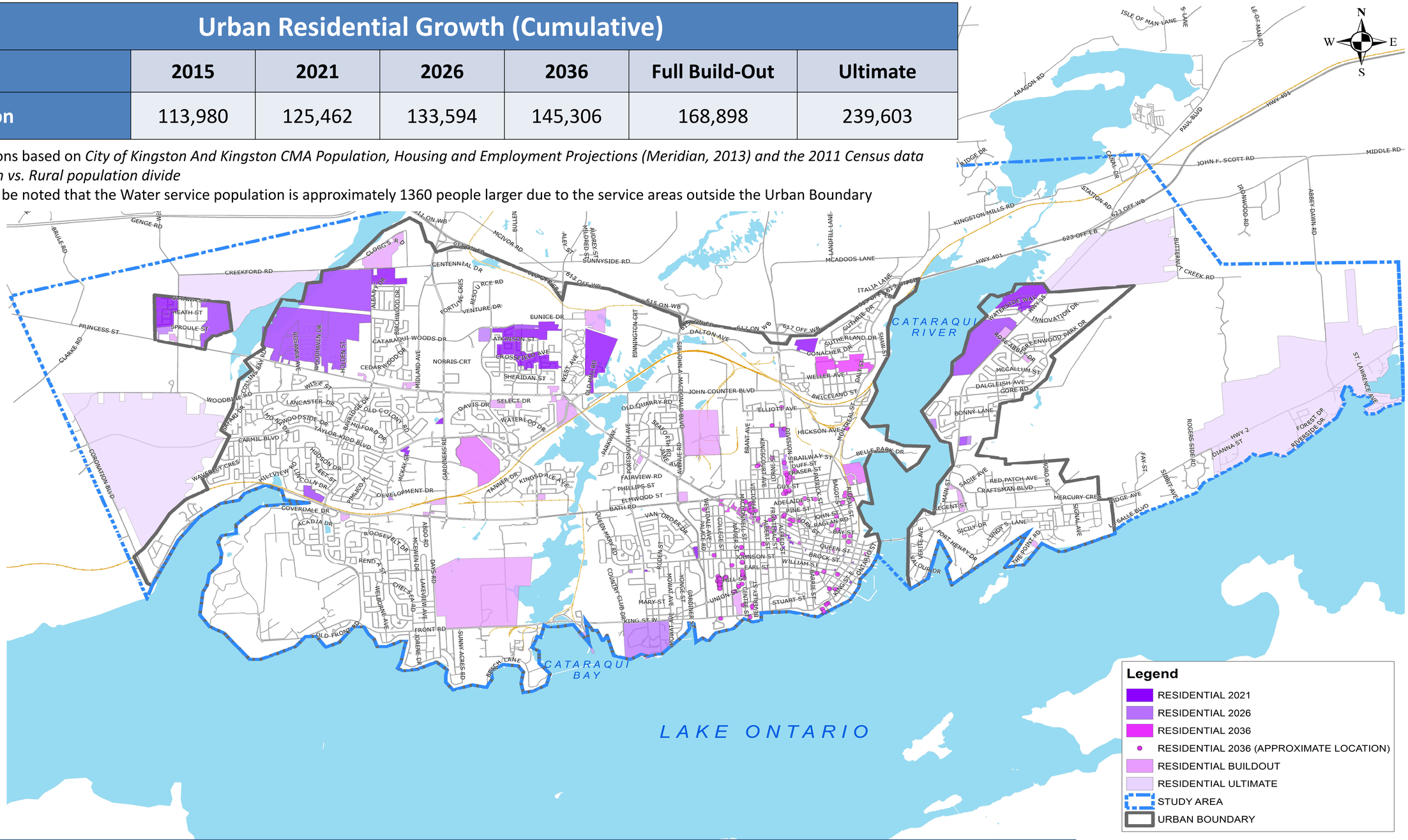
- 2036 will be used as the primary scenario for planned improvements and the other scenario's will provide timing and urgency requirements

Scenario	Description
Existing (2014)	→Existing Conditions
2021	→Based on Committed and Pending Development Applications
2026	→Based on Remaining Committed and Pending Development Applications ("Committed Condition")
2036	→Based on Future known potential developments
Full Build-Out	→Based on undeveloped and under developed land as of 2036 with their anticipated development density (based on Official Plan)
Ultimate	→Full Build-Out Plus specific Urban Boundary Extensions

PLANNING PROJECTIONS AND FUTURE DEVELOPMENT - RESIDENTIAL

Urban Residential Growth (Cumulative)						
Year	**2015**	**2021**	**2026**	**2036**	**Full Build-Out**	**Ultimate**
Population	113,980	125,462	133,594	145,306	168,898	239,603

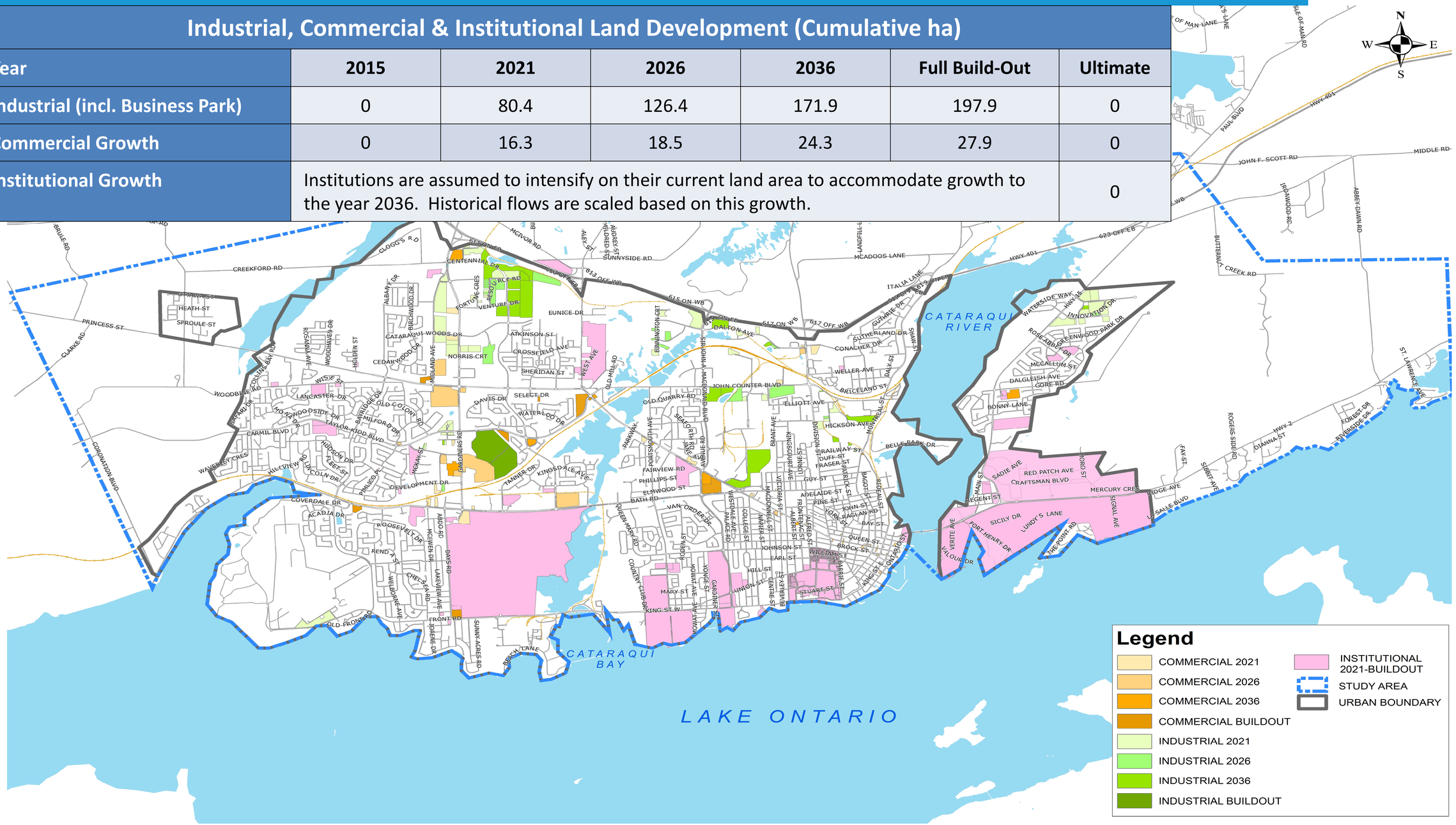
- Populations based on *City of Kingston And Kingston CMA Population, Housing and Employment Projections (Meridian, 2013) and the 2011 Census data for Urban vs. Rural population divide*
- It should be noted that the Water service population is approximately 1360 people larger due to the service areas outside the Urban Boundary



The Map Illustrates the Locations of the Projected Residential Growth within the City of Kingston between 2021 to 2036, Full Build Out and Ultimate

PLANNING PROJECTIONS AND FUTURE DEVELOPMENT: INDUSTRIAL, COMMERCIAL & INSTITUTIONAL

Industrial, Commercial & Institutional Land Development (Cumulative ha)						
Year	**2015**	**2021**	**2026**	**2036**	**Full Build-Out**	**Ultimate**
Industrial (incl. Business Park)	0	80.4	126.4	171.9	197.9	0
Commercial Growth	0	16.3	18.5	24.3	27.9	0
Institutional Growth	Institutions are assumed to intensify on their current land area to accommodate growth to the year 2036. Historical flows are scaled based on this growth.					0



The Map Illustrates the Locations of the Projected Industrial, Commercial & Institutional Growth within the City of Kingston between 2021 to 2036, Full Build Out and Ultimate

WATER & WASTEWATER DEMAND CRITERIA

Water Demand Design Criteria				
Land Use	**Average Daily Flow**	**Maximum Day Factor**	**Peak Hour Factor**	**Fire Flows - Duration (@ 139 kPa)**
Residential	350 L/cap/day	1.50	2.25 (1.5 times diurnal peak)	110 L/s
Medium Density Residential				245 L/s
Industrial	35 m^3/ha/day			270 L/s
Commercial	28 m^3/ha/day			240 L/s
Institutional	Varying scaling based on growth			175 L/s

Wastewater Demand Design Criteria		
Land Use	**Average Daily Flow**	**Peaking Factor**
Residential	350 l/cap/day	Adjusted during model validation and calibration to match observed field data
Industrial	35 m^3/ha/day	
Business Park Industrial	49 L/employee/day	
Commercial	28 m^3/ha/day	
Institutional	Case by Case	

WATER SYSTEM CONDITION ASSESSMENTS

Condition assessments were performed on the following Utilities Kingston facilities:

Facility	Overall Rating
Innovation Drive EST	B
O'Connor Drive Res/BS	B
Forest Drive Standpipe	B
Creekford Rd EST	B
Progress Avenue Res/BS	C
Old Colony Rd BS	C
Purdy's BS (Sydenham Rd)	C
O'Connor Drive EST	C
James St BS	C
Third Avenue Res/BS	C
Tower Street EST	C
Collins Bay Road BS	BS currently not in use
King St WTP	B
Point Pleasant WTP	A
Cana WTP	B

EST = Elevated Storage Tank, BS = Booster Station, WTP = Water Treatment Plant

The Overall Rating is Calculated Based on 3 Categories:

- Facility Risk = Importance of the Facility to the System
- Equipment Risk = Risk of Failure of the Equipment
- Condition Rating = Condition of Each Facility

Overall Rating	Description
A	No action required
B	Minor Repairs Needed to Non-Critical Items
C	May Need Replacing in the Future
D	May Need Replacing in the Immediate Future
E	Immediate Action Required to Prevent Failure

The condition assessment results will be used to prioritise infrastructure phasing in the Master Plan Updates.

WASTEWATER SYSTEM CONDITION ASSESSMENTS

Condition assessments were performed on the following Utilities Kingston facilities:

Facility	Overall Rating
King-Lake Ontario Park PS	A
John Counter Boulevard PS	A
Hatter Street PS	A
Notch Hill Road PS	A
Morton Street PS	A
Coverdale PS	B
Bath Road PS	B
Yonge Street PS	B
King-Elevator Bay PS	B
Crerar Boulevard PS	B
King-Portsmouth PS	B
Kenwoods Circle PS	B
Bath-Lower PS	B
Westbrook PS	B
Palace Road PS	B
Rankin Crescent PS	B

Facility	Overall Rating
Schooner Drive PS	B
Lakeshore Blvd PS	B
Collins Bay PS	B
Bayridge PS	B
River Street PS	B
Highway 15	B
James Street PS	B
Bath-Collins Bay PS	B
Hillview Road PS	C
King Street PS	C
Dalton Avenue PS	C
Barrett Court PS	C
Days Road PS	D
Greenview Drive PS[1]	D
Ravensview WWTP	B
Cataraqui Bay WWTP[1]	D
Cana WWTP [1]	D

PS = Pumping Station, WWTP = Wastewater Treatment Plant
1 = Design & Construction of Upgrades Currently Underway

Overall Rating	Description
A	No action required
B	Minor Repairs Needed to Non-Critical Items
C	May Need Replacing in the Future
D	May Need Replacing in the Immediate Future
E	Immediate Action Required to Prevent Failure

The condition assessment results will be used to prioritise infrastructure phasing in the Master Plan Updates.

WATER LEVEL OF SERVICE (LOS)

Water Treatment

Water Treatment Plants Capacity ≥ Maximum Day Demand (MDD)

Booster Stations

Booster Stations Capacity, for Each Pressure District, must be ≥ the following:

- Maximum Day Demand (MDD) under Normal Conditions.
- Average Day Demand (ADD) under Back-up Power Conditions

Water Storage

Water Storage Capacity ≥ Calculated Storage for Fire (A) + Equalization (B) + Emergency (C)

Distribution

Watermains must be able to provide the following:

- 40 psi (275kPa) to 100 psi (690kPa) under Normal Conditions (Average to Peak Hour Flows)
- 20 psi (140kPa) during Fire Flow Conditions

Minimize High Energy Losses in the Pipes System

Fire Flows

A Land-use based Approach was used for Distribution. The following Fire Flow targets were used:

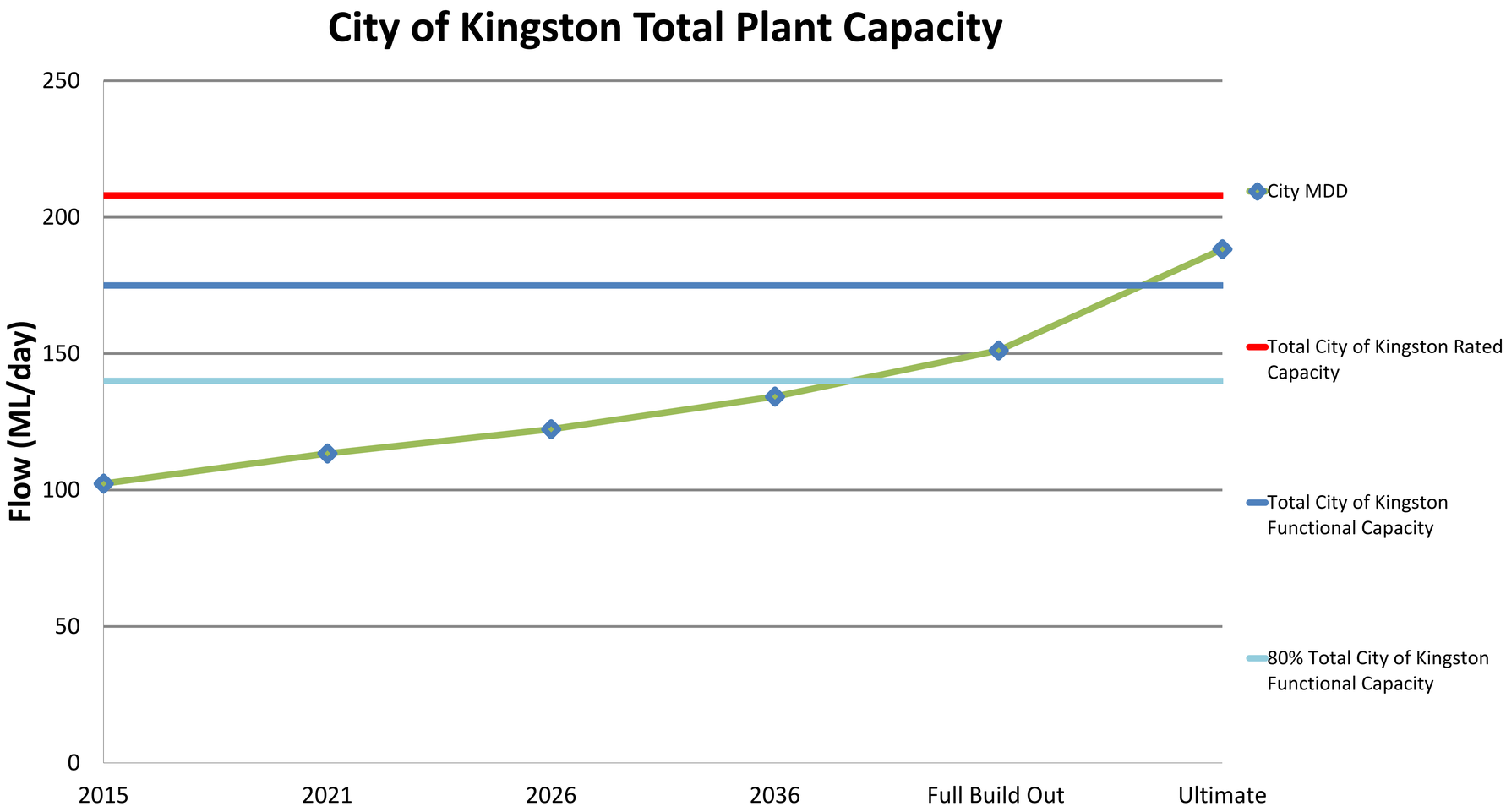
LAND USE TYPE	Fire Flow @ 139kPa (20psi)	
	L/min	L/s
Industrial	16,300	270
Institutional	10,600	175
Med/High Density Residential	14,600	245
Commercial	14,400	240
Residential	6,500	110

It should be noted that the targets may not be achieved due to limitation of the existing system

WATER SYSTEM GAPS – PRODUCTION

Capacity of the City Treatment Plants vs. the Projected Maximum Daily Demand

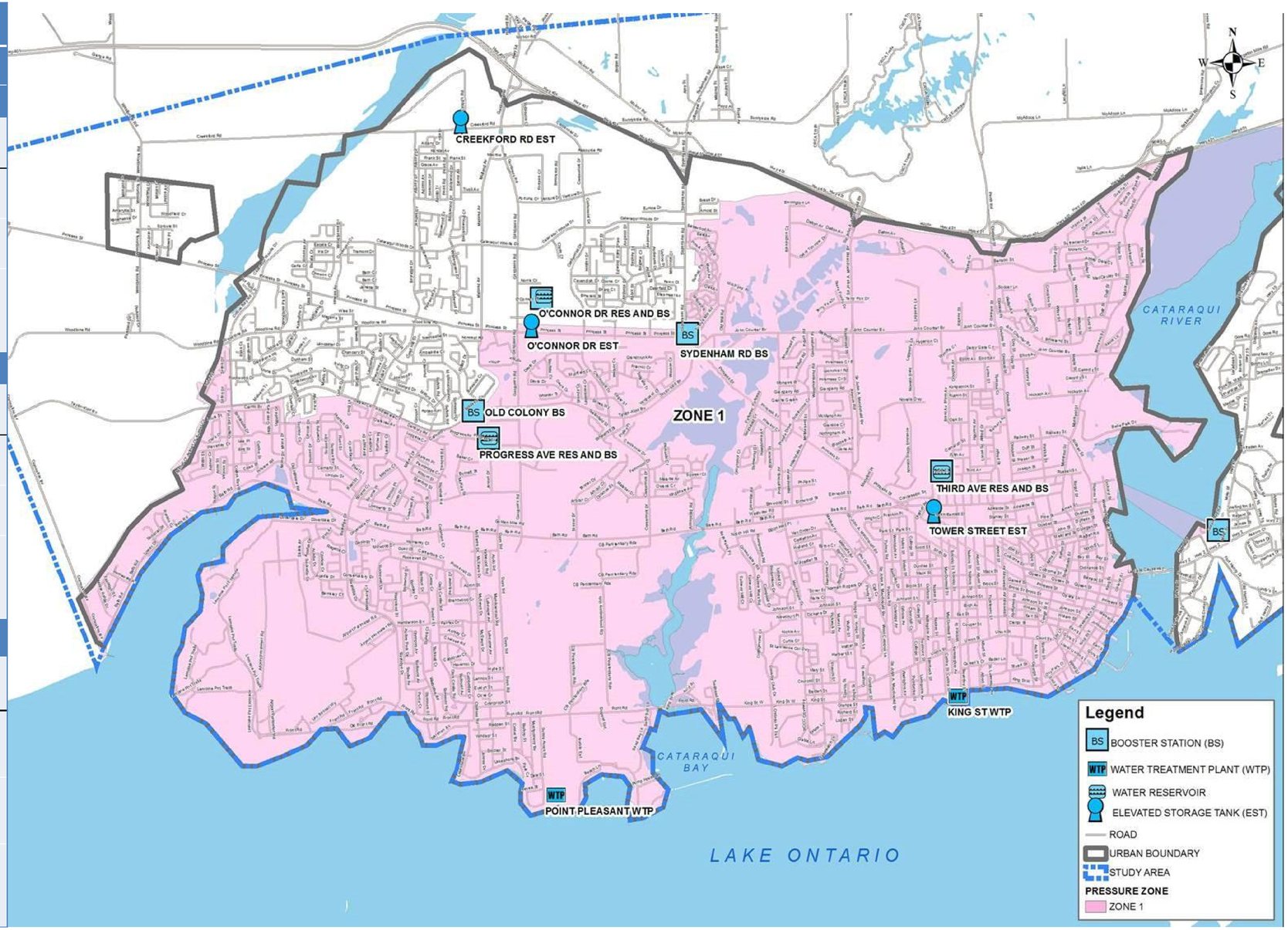
- ✓ The Kingston Water System has Sufficient Maximum Day Capacity to Service Planned Population Growth Beyond 2036
- ○ Generally capacity Upgrades are Triggered when a System Reaches Approximately 80% of Current Functional Capacity as there is Typically a Timing issue Between the Identification of the Need and the Implementation of the Upgrades
- ○ Water Treatment Plants Should be Design for a 20 year Projection.



Note: Capacity of Treatment Plants indicated includes Point Pleasant Upgrades

WATER SYSTEM GAPS – FACILITIES

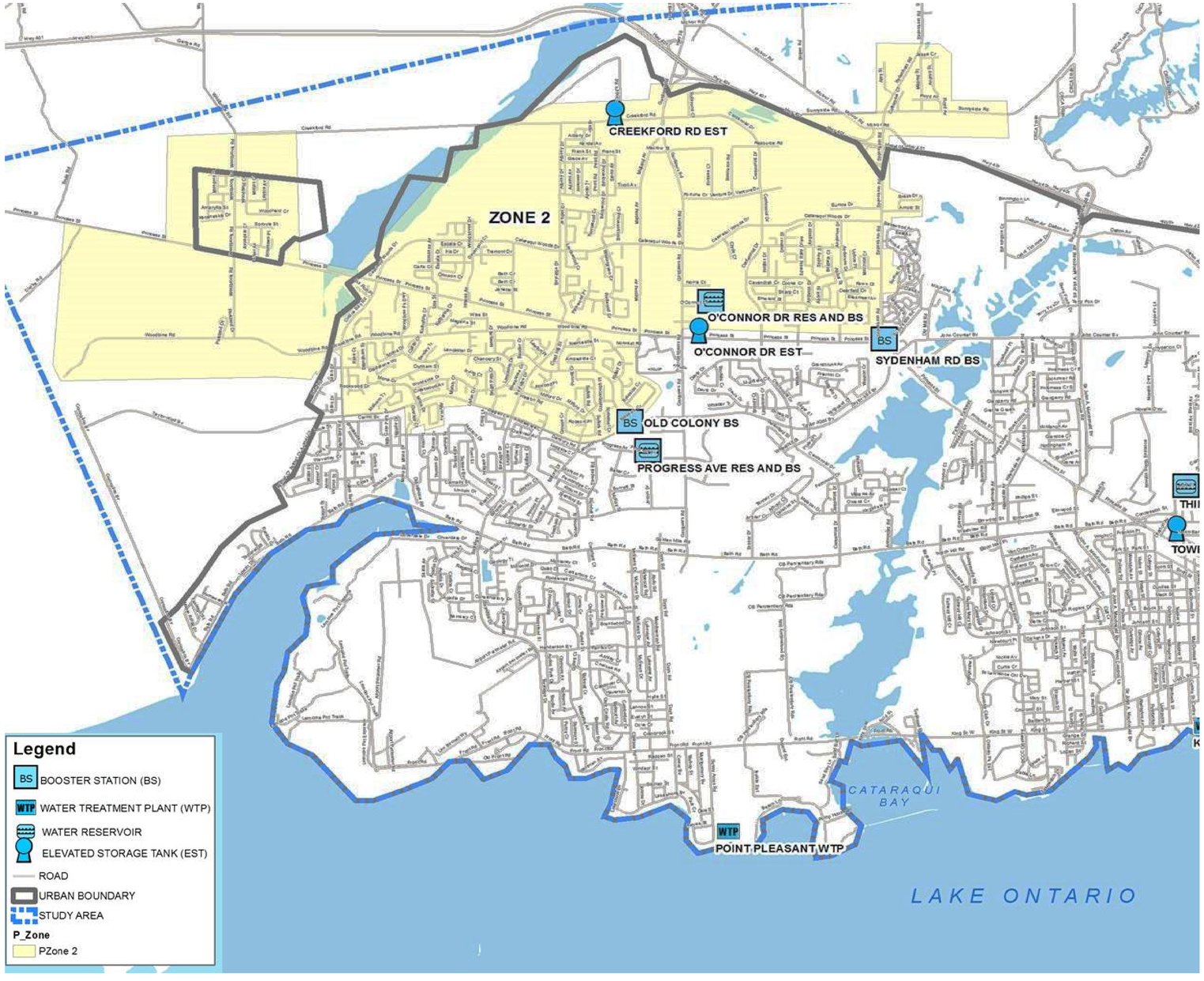
Zone 1		
BOOSTING CAPACITY		
Firm Capacity		
Available	**217ML/D**	**LOS**
2015 Required	82.5ML/D	☑
2036 Required	103ML/D	☑
Full Build Out Required	117ML/D	☑
Back-up		
Available	**211ML/D**	**LOS**
2015 Required	55ML/D	☑
2036 Required	68ML/D	☑
Full Build Out Required	78ML/D	☑
STORAGE		
Available	**47,300m3**	**LOS**
2015 Total Required	25,800m3	☑
2036 Total Required	32,200m3	☑
Full Build Out Required	36,700m3	☑



Zone 1 Meets the Minimum LOS for Boosting, Both Firm, Back-up, and Storage Capacity

WATER SYSTEM GAPS – FACILITIES

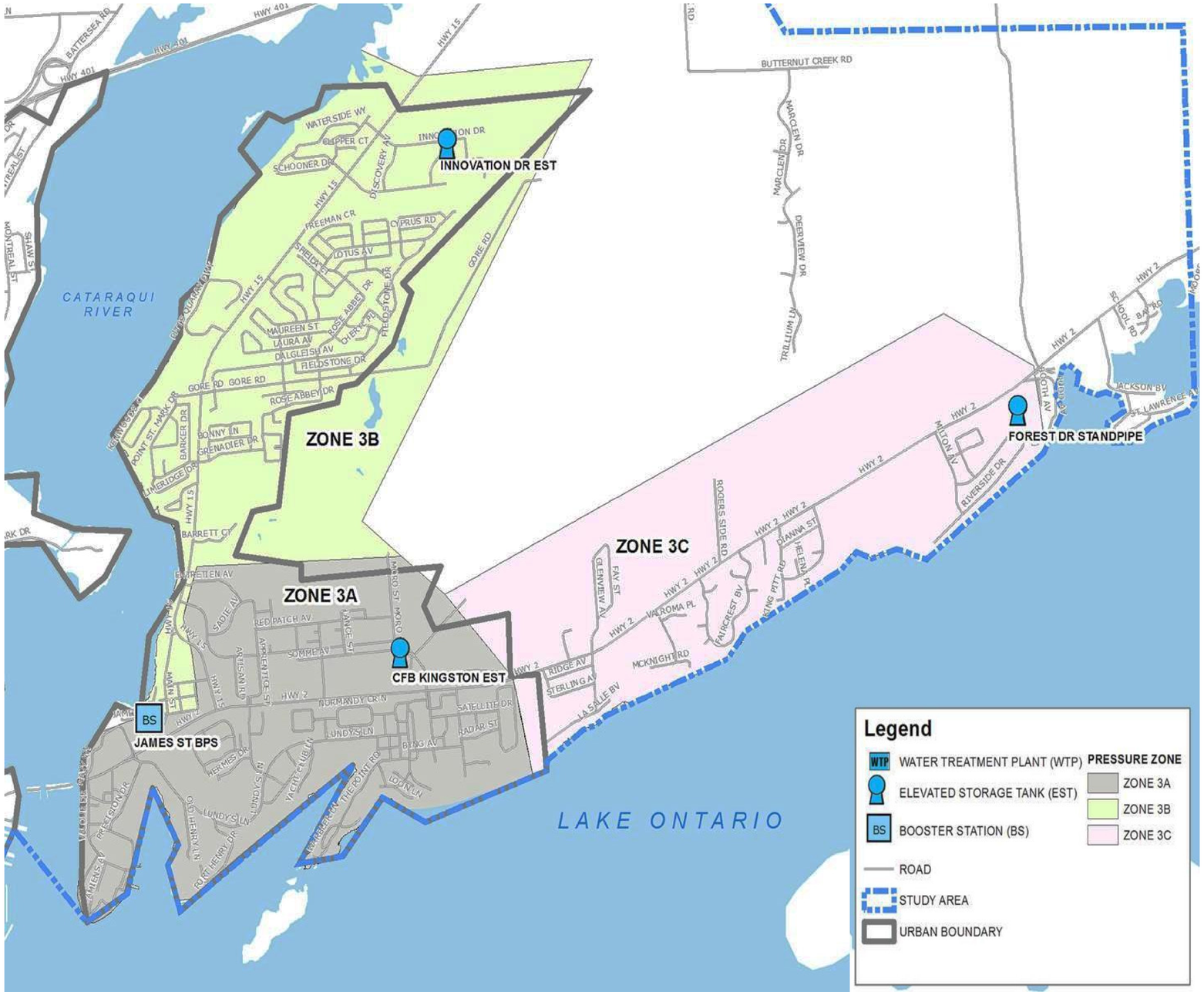
Zone 2			
BOOSTING CAPACITY			
Firm Capacity			
	Available	**39ML/D**	**LOS**
	2015 Required	12ML/D	☑
	2036 Required	20ML/D	☑
	Full Build Out Required	22ML/D	☑
Back-up			
	Available	**35ML/D**	**LOS**
	2015 Required	8ML/D	☑
	2036 Required	13.5ML/D	☑
	Full Build Out Required	14.5ML/D	☑
STORAGE			
	Available	**15,000m3**	**LOS**
	2015 Total Required	3,900m3	☑
	2036 Total Required	8,500m3	☑
	Full Build Out Required	10,200m3	☑



Zone 2 Meets the Minimum LOS for Boosting, Both Firm and Back-up, and Storage Capacity

WATER SYSTEM GAPS – FACILITIES

Zone 3			
BOOSTING CAPACITY			
Firm Capacity			
	Available	**33ML/D**	**LOS**
	2015 Required	8ML/D	☑
	Available	**15ML/D**	**LOS**
	2036 Required	11ML/D	☑
	Full Build Out Required	12ML/D	☑
Back-up			
	Available	**33ML/D**	**LOS**
	2015 Required	5ML/D	☑
	Available	**15ML/D**	**LOS**
	2036 Required	7.5ML/D	☑
	Full Build Out Required	8ML/D	☑
STORAGE			
	Available	**10,400m3**	**LOS**
	2015 Total Required	2,500m3	☑
	Available (2021 and Beyond)*	**8,200m3**	**LOS**
	2036 Total Required	5,800m3	☑
	Full Build Out Required	6,800m3	☑



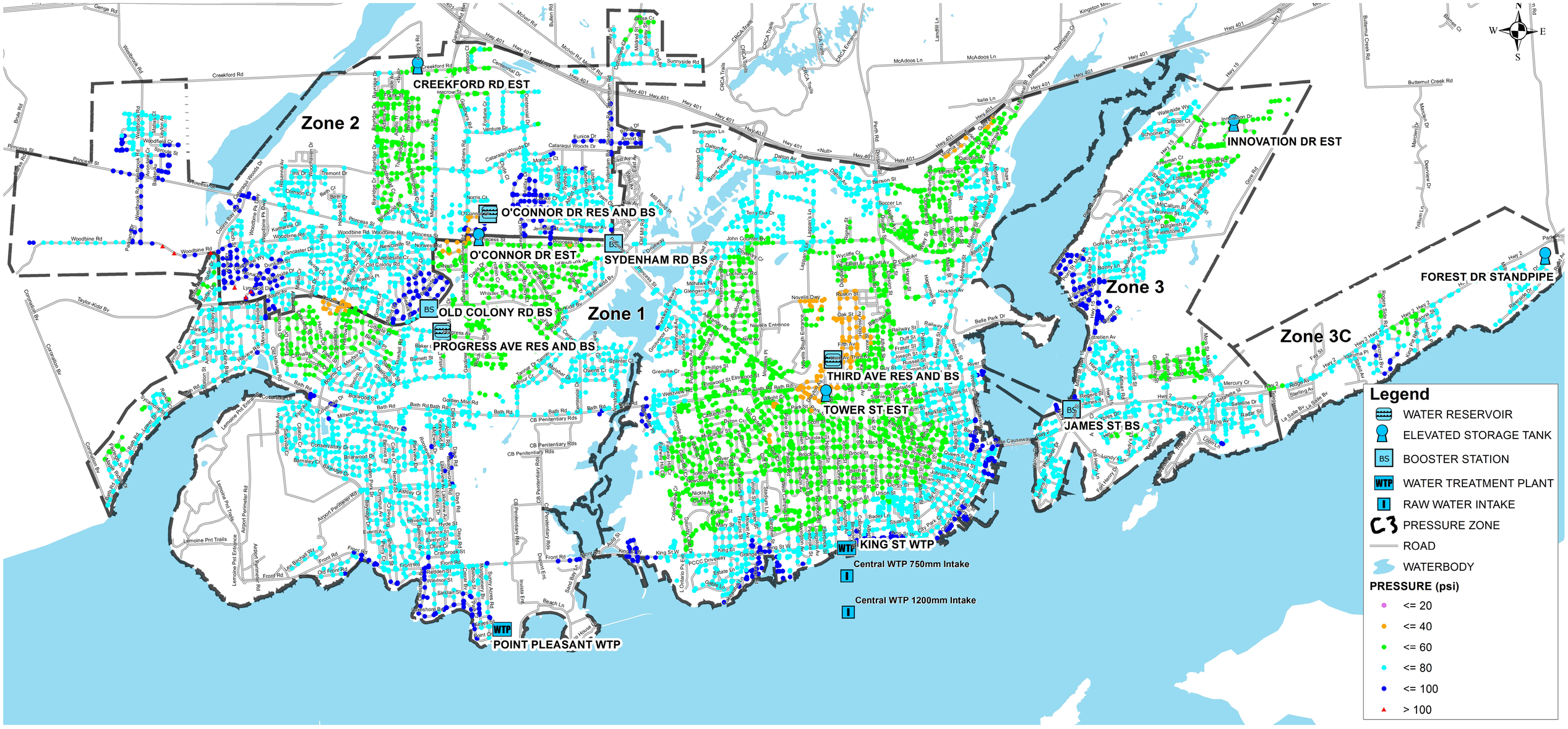
Note:

- Revised Boosting Capacity based on Upgrade to James St Booster Station by 2021
- Revised Storage Capacity based on CFB Kingston EST being Decommissioned by 2021

Zone 3 Meets the Minimum LOS for Boosting, Both Firm and Back-up, and Storage Capacity

WATER SYSTEM GAPS – DISTRIBUTION

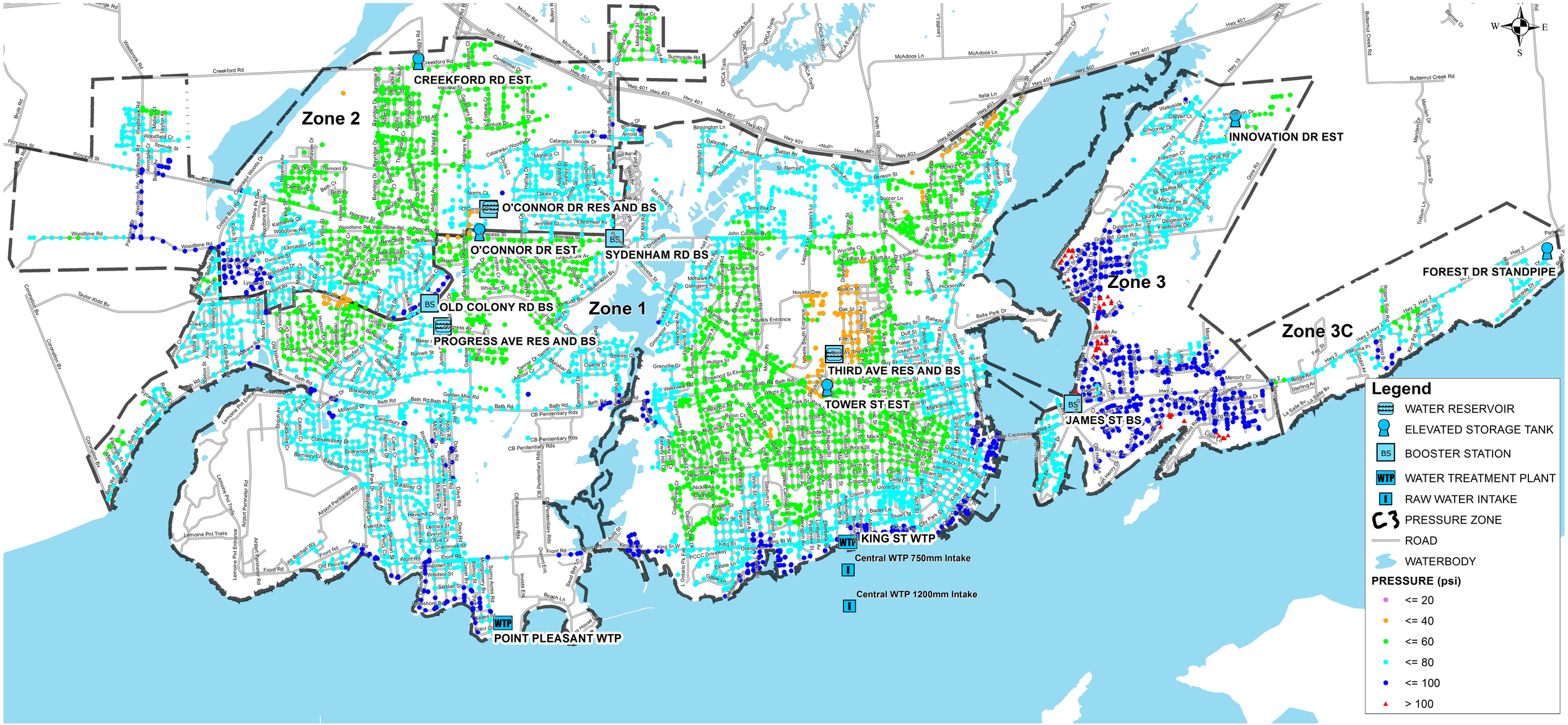
Water Distribution System Gap 2015 (Peak Hours Demand)



Pressures Below 40psi (Yellow) and Above 100psi will be Analyzed in Detail to Determine Alternatives to Improve Pressures

WATER SYSTEM GAPS – DISTRIBUTION

Water Distribution System Gap 2036 (Peak Hour Demand)



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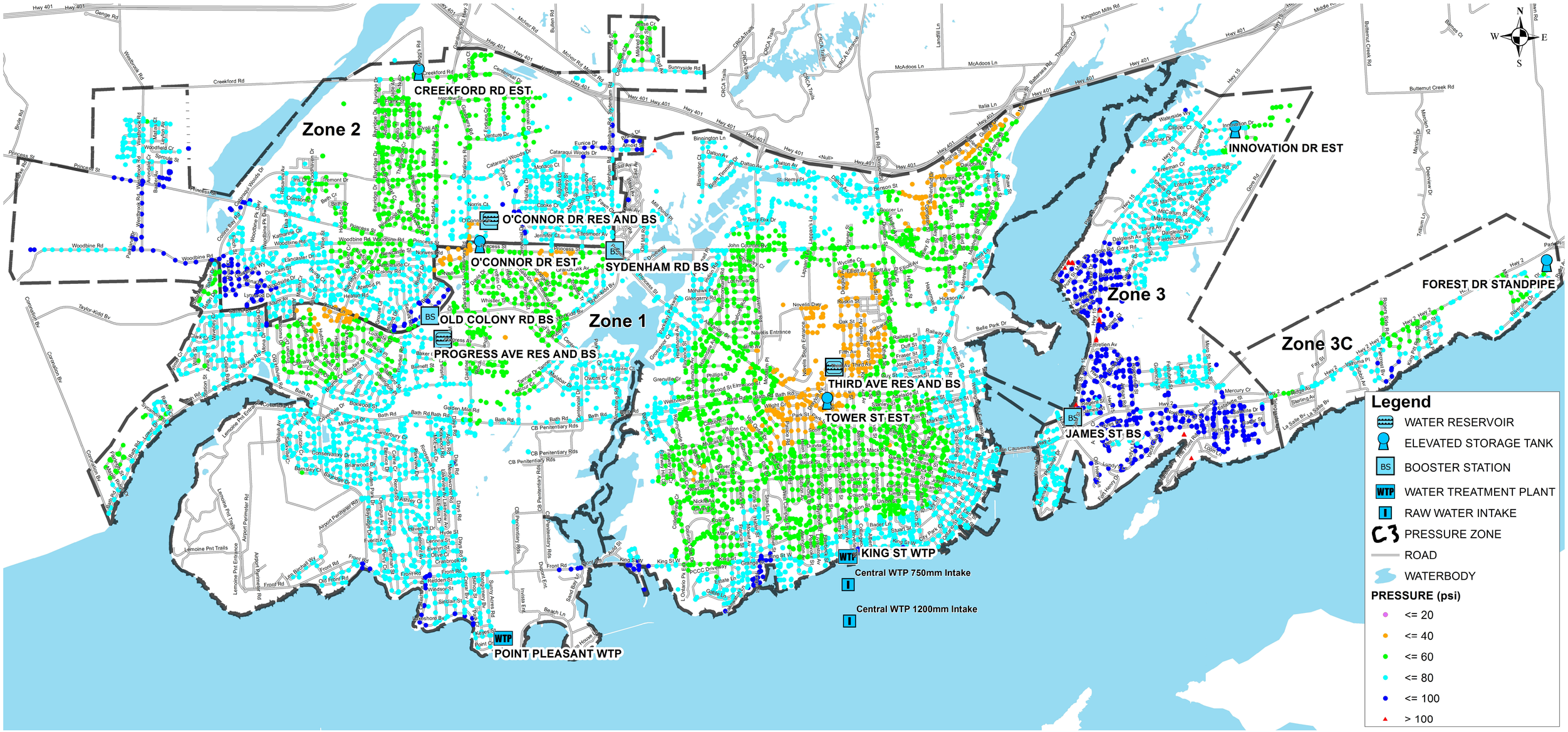
WATER SYSTEM GAPS – DISTRICTUTION

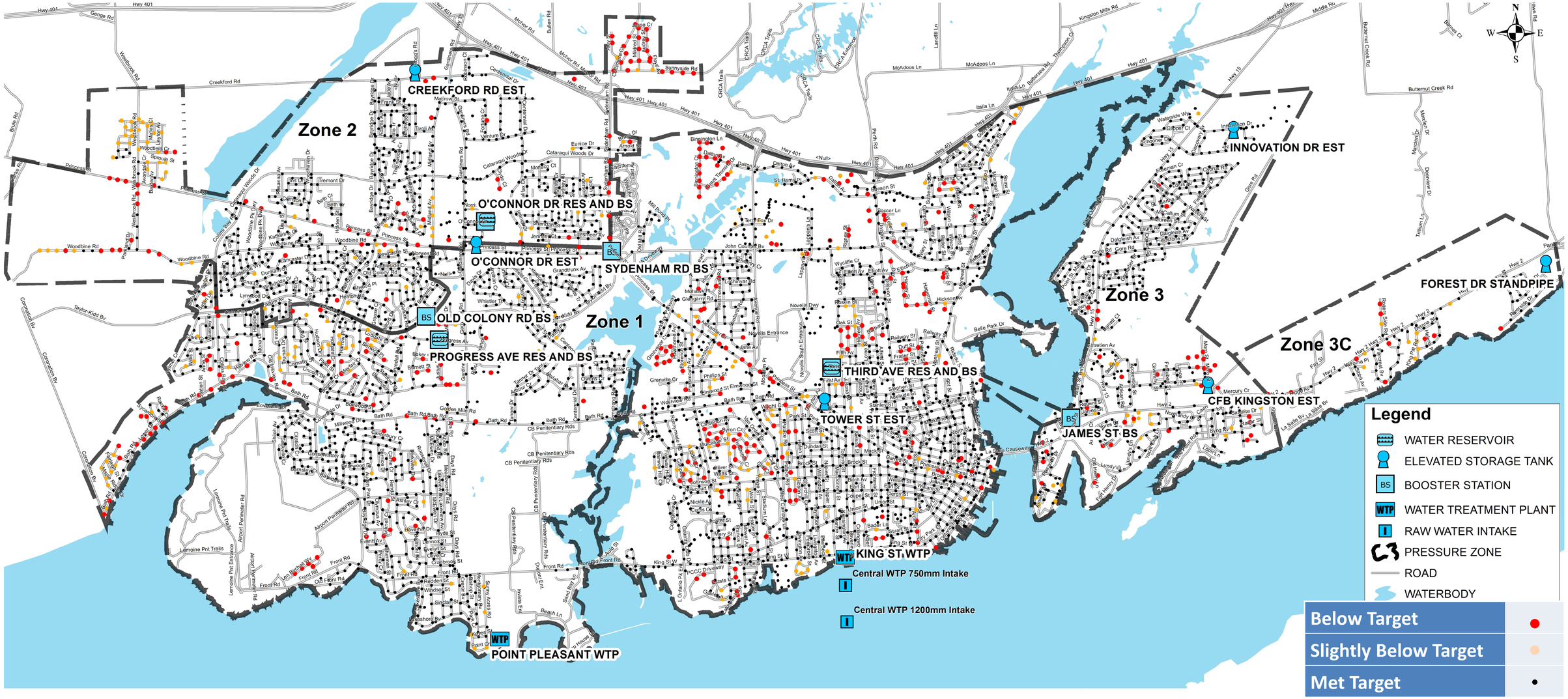
Water Distribution System Gap Full Build-Out



Pressures Below 40psi (Yellow) and Above 100psi will be Analyzed in Detail to Determine Alternatives to Improve Pressures

WATER SYSTEM GAPS – FIRE FLOWS

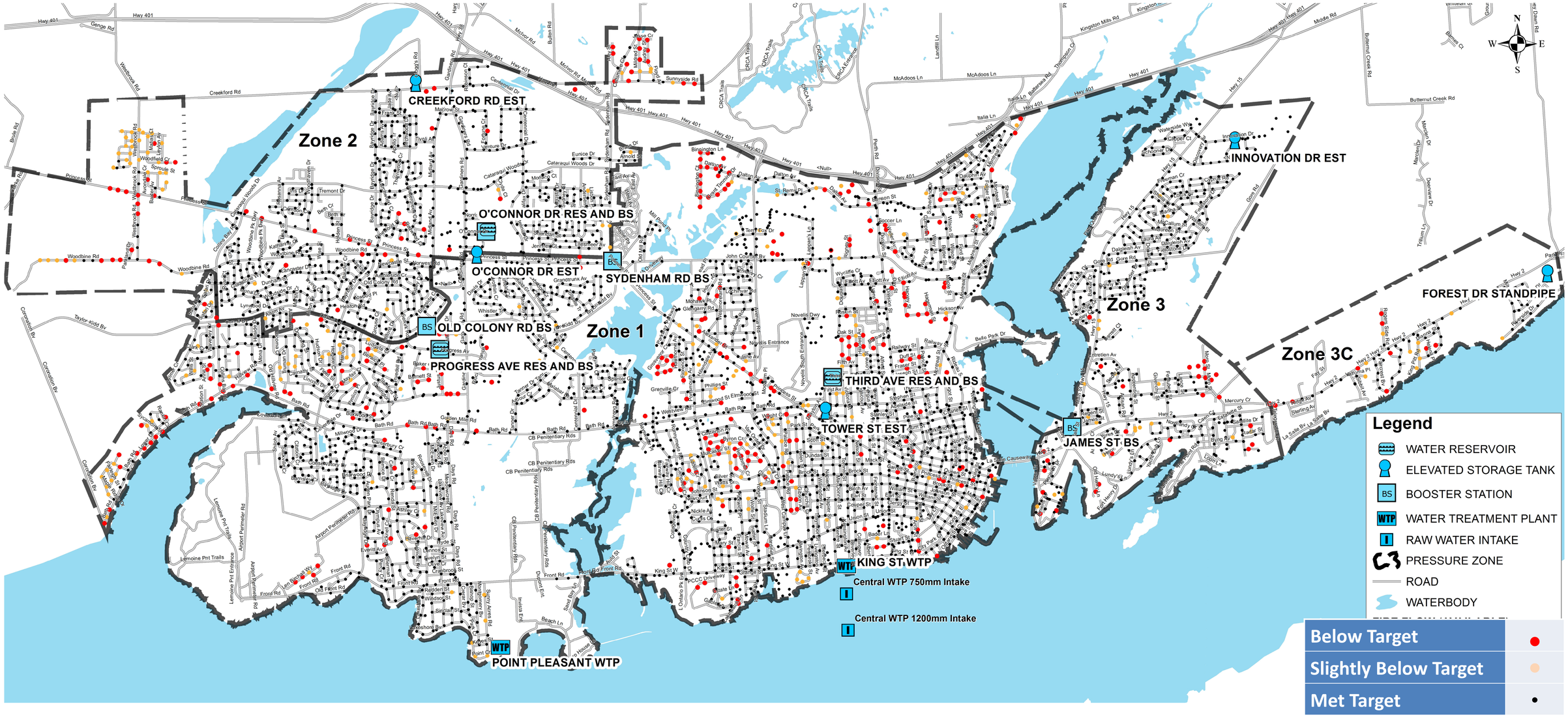
Water Distribution System Gap 2015 Fire Flows



- ✓ Generally, Current Fire Flow Targets were Met in Most Areas, Except along Some Small Diameter Watermains (whose capacity is limited) or in Poorly Looped Areas
- ✓ A Reasonable and Realistic Plan will be Developed to Improve System Capacity and "Close the Gap" Between the Available Capacity Indicated and the Target Capacities

WATER SYSTEM GAPS – FIRE FLOWS

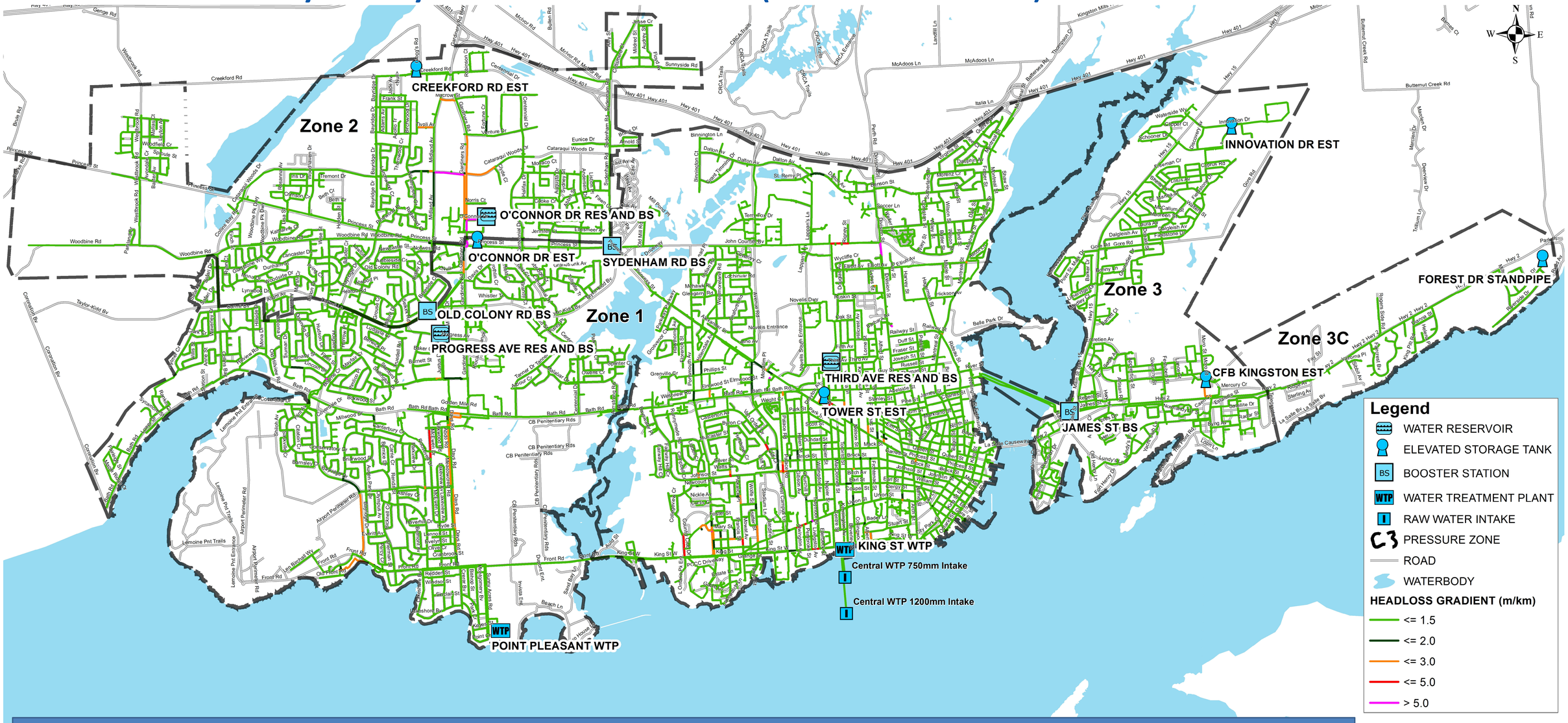
Water Distribution System Gap 2036 Fire Flows



- ✓ Generally, Current Fire Flow Targets were Met in Most Areas, Except along Some Small Diameter Watermains (whose capacity is limited) or in Poorly Looped Areas
- ✓ A Reasonable and Realistic Plan will be Developed to Improve System Capacity and "Close the Gap" Between the Available Capacity Indicated and the Target Capacities

WATER SYSTEM GAPS – ENERGY

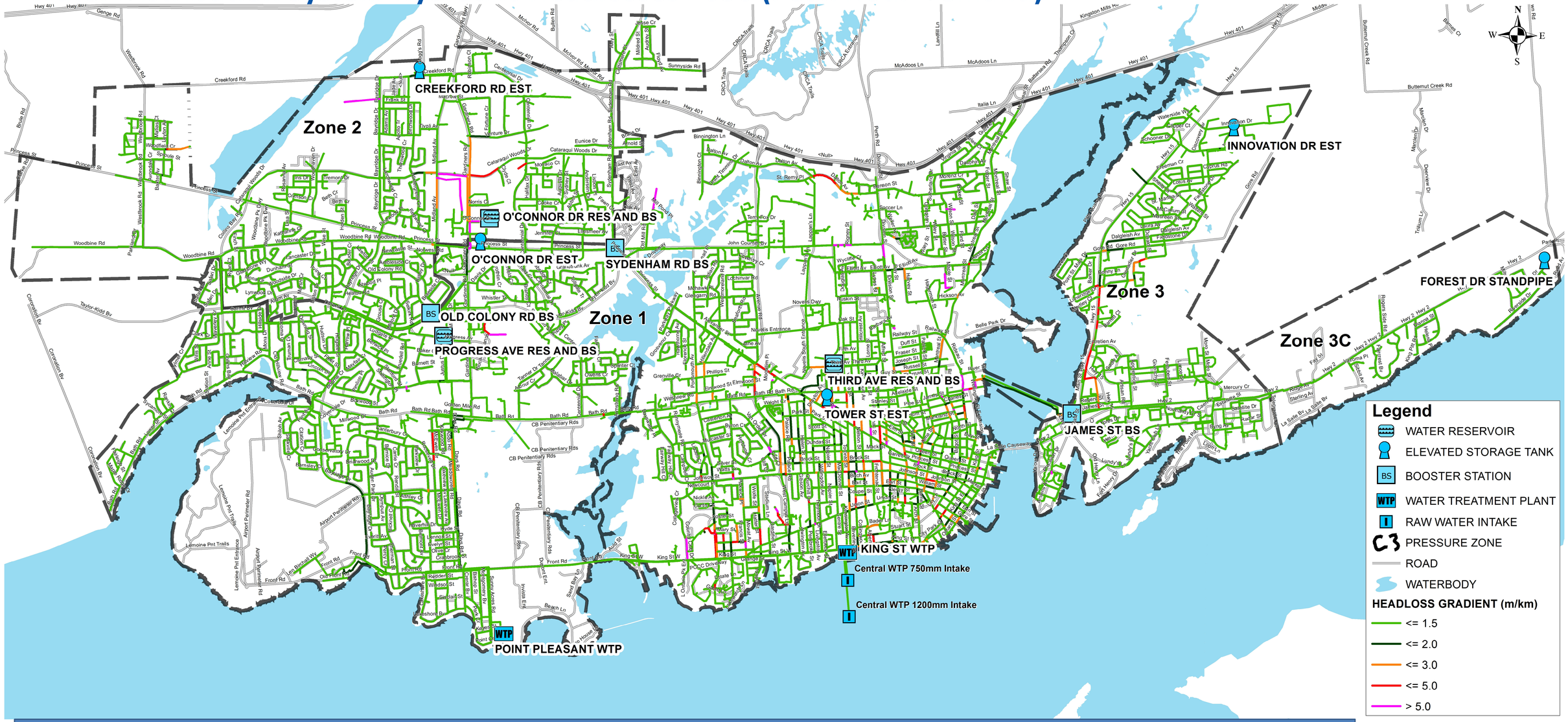
Water Distribution System Hydraulic Headlosses 2015 (Peak Hour Demand)



- Hydraulic headloss gradients are used to identify section of the distribution system that have higher energy loss.
- These Losses are caused by may different factors include pipe size, age, material and flow.
- The higher headloss gradients will be analyzed to determine section of the distribution system that require upgrade or replacement.

WATER SYSTEM GAPS – ENERGY

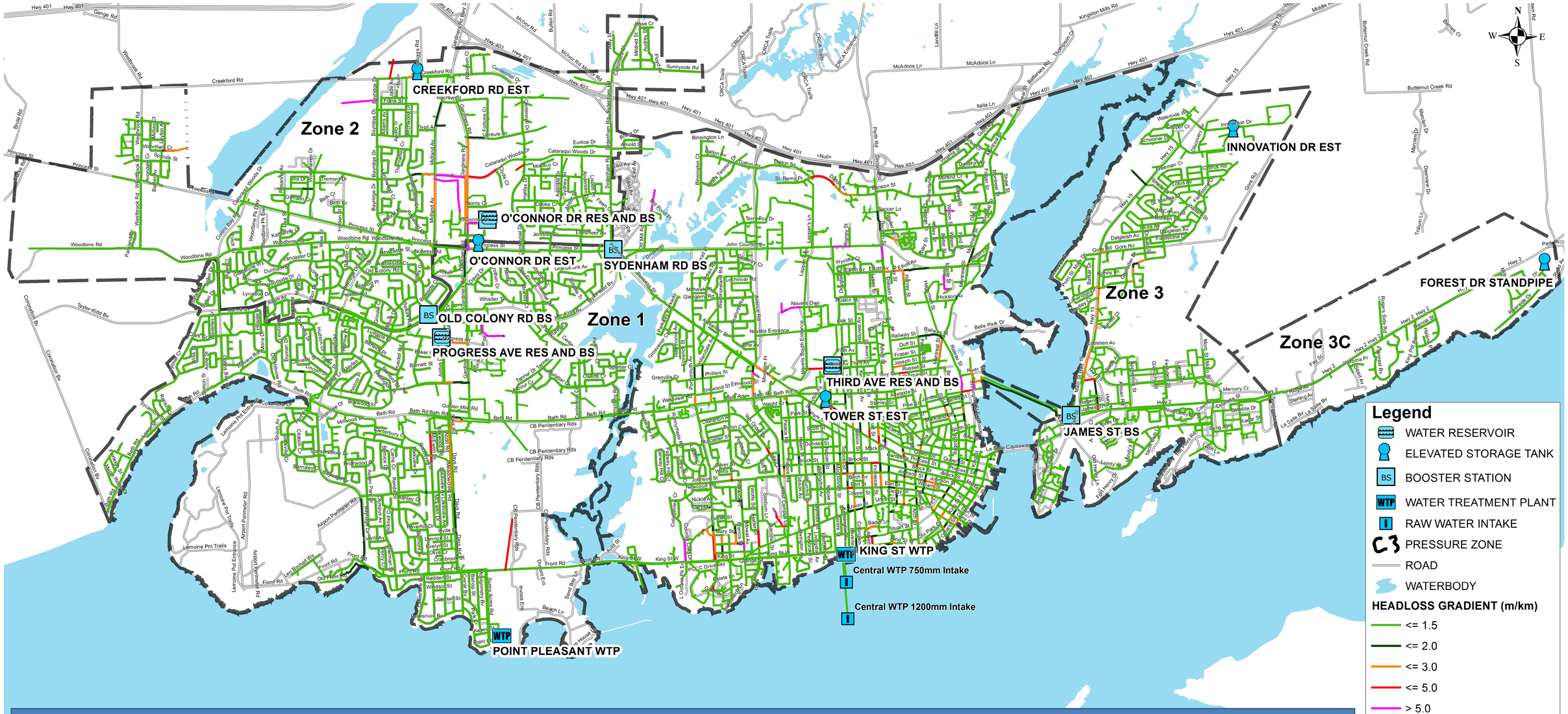
Water Distribution System Hydraulic Headlosses 2036 (Peak Hour Demand)



- Hydraulic headloss gradients are used to identify section of the distribution system that have higher energy loss.
- These Losses are caused by may different factors include pipe size, age, material and flow.
- The higher headloss gradients will be analyzed to determine section of the distribution system that require upgrade or replacement.

WATER SYSTEM GAPS – ENERGY

Water Distribution System Hydraulic Headlosses Full Build Out (Peak Hour Demand)



- Hydraulic headloss gradients are used to identify section of the distribution system that have higher energy loss.
- These Losses are caused by may different factors include pipe size, age, material and flow.
- The higher headloss gradients will be analyzed to determine section of the distribution system that require upgrade or replacement.

WATER SYSTEM GAPS

Reliability & Resiliency

Reliability Refers to the System's Ability to Handle Routine Upsets such as Pipe Breaks or Planned Maintenance. Resiliency Refers to the System's Ability to Recover from a Major Upsets such as the Loss of a Major or Upset of a Complex Process. Detailed Analysis and Alternatives will be reviewed to provide better system Reliability and Resiliency. Some Examples include:

- Potential Second Feed to Westbrook Area
- Additional Feed to East Pressure Zone
- Additional Watermain Looping

WASTEWATER LEVEL OF SERVICE (LOS)

Wastewater Treatment

Good: WWTP Wastewater Treatment Plants Rated Average Daily Flow Capacity ≥ Average Daily Flows
Wastewater Treatment Plants Rated Peak Flow Capacity ≥ 10yr Storm Flows

Gap: WWTP The Average Daily Flow Capacity or Peak Flow Capacity is Exceeded

Pumping Stations

Good: PS Dry Weather Flows & 10yr Storm Flows are Less Than the Pumping Stations Firm Capacity

Review: PS 10yr Storm Flows are Greater Than the Firm but Less Than the Peak Capacity

Gap: PS 10yr Storm Flows are Greater Than the Pumping Station Peak Capacity

(Firm Capacity = Largest Pump Out of Service) (Peak Capacity = All Pumps in Operation)

Gravity Sanitary Sewers

Good: Hydraulic Grade Line (HGL) from the 100yr Storm is More Than 2m Below the Finished Ground
Dry Weather Flow is Less Than the Sewer Capacity

Review: Hydraulic Grade Line (HGL) from the 25yr Storm Flows and Larger, is within 2m of the Finished Ground
HGL from the 10yrs Storm Flows and Larger, is between 0.3m of the Obvert of the Pipe and 2m of the Finished Ground
Dry Weather Flows > 85% of the Sewer Capacity but < 99% of the Sewer Capacity

Gap: HGL from the 10yrs Storm Flows and smaller, is within 2m of the Finished Ground
Cannot Convey the Dry Weather Flows Without Surcharging.

Forcemain

Good: Velocity in Pipe is Less Than 2m/s

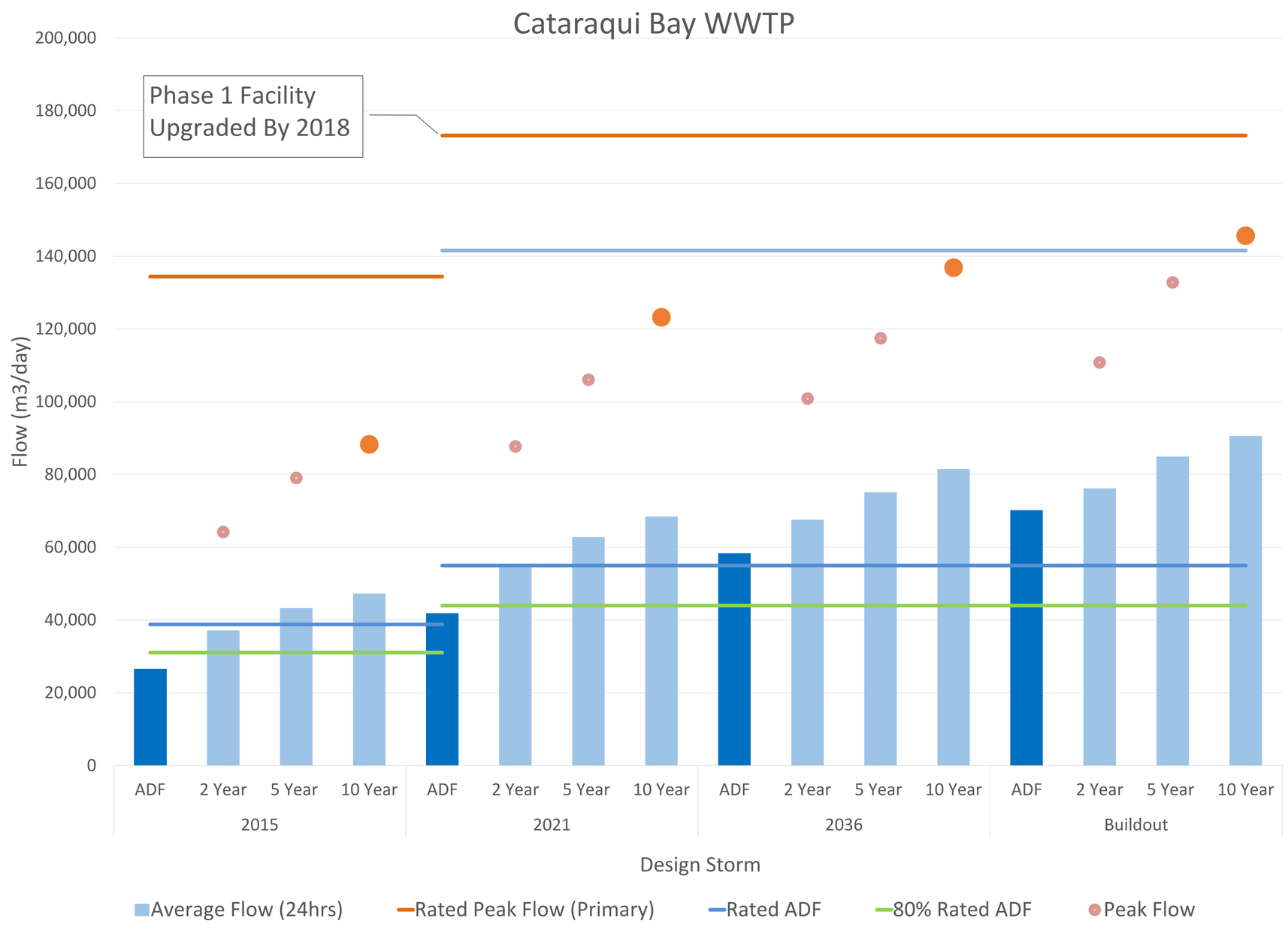
Review: Velocity in Pipe is Greater Than 2m/s and Less Than 3m/s

Gap: Velocity in Pipe is Greater Than 3m/s

WASTEWATER TREATMENT SYSTEM

- Kingston West Wastewater Treatment System at its Current Capacity has Sufficient Capacity Today but Reaches its Current Rated Average Daily Flow and Just About Reaches its Peak Flow (Primary) by 2021 for the desired LOS (10yr). The Facility Upgrades by 2018 Provide Sufficient Capacity Up to Approximately 2036. Phase 2 of the Updates is Currently Schedule 2036.

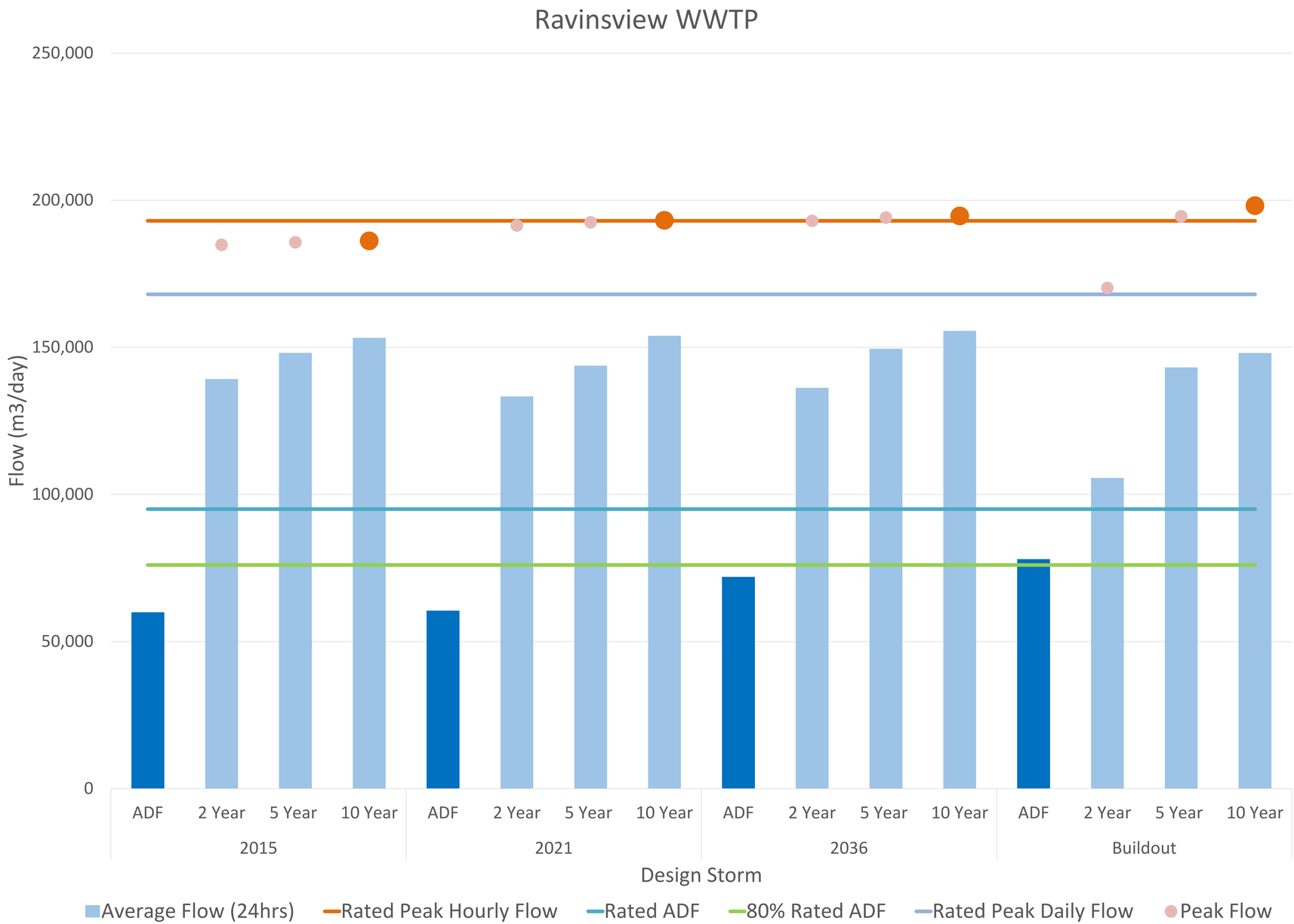
- Generally capacity upgrades are triggered when a system reaches approximately 80% of current functional capacity as there is typically a timing issue between the identification of the need and the implementation of the upgrades



WASTEWATER SYSTEM TREATMENT SYSTEM

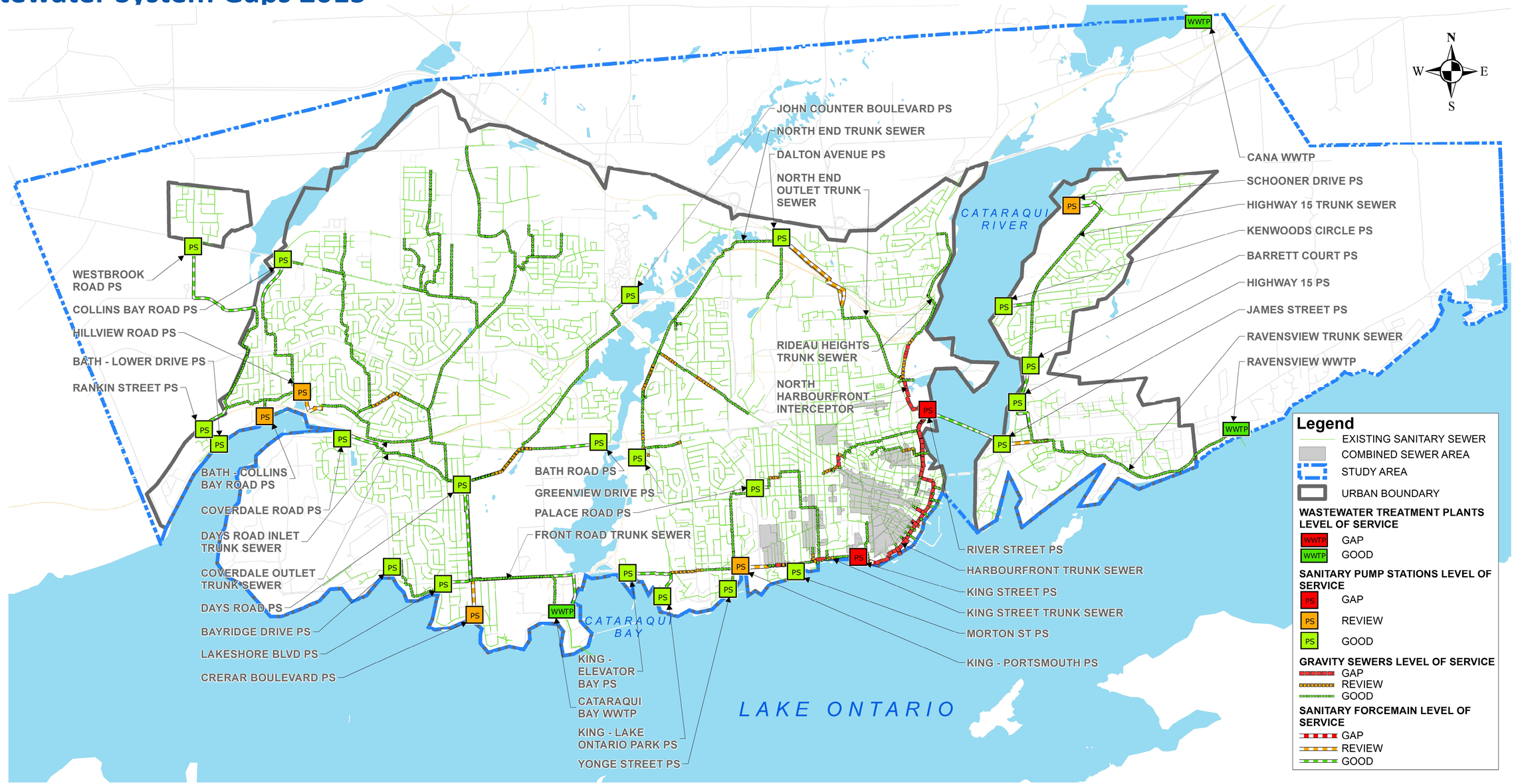
- Kingston East Wastewater Treatment System has Sufficient Capacity for Average Daily Flow and Peak Flow Capacity up to 2036 for the Desired LOS (10yr). However, by Build Out Condition Slightly Exceeds its Peak Capacity.

- Generally capacity upgrades are triggered when a system reaches approximately 80% of current functional capacity as there is typically a timing issue between the identification of the need and the implementation of the upgrades



WASTEWATER SYSTEM GAPS

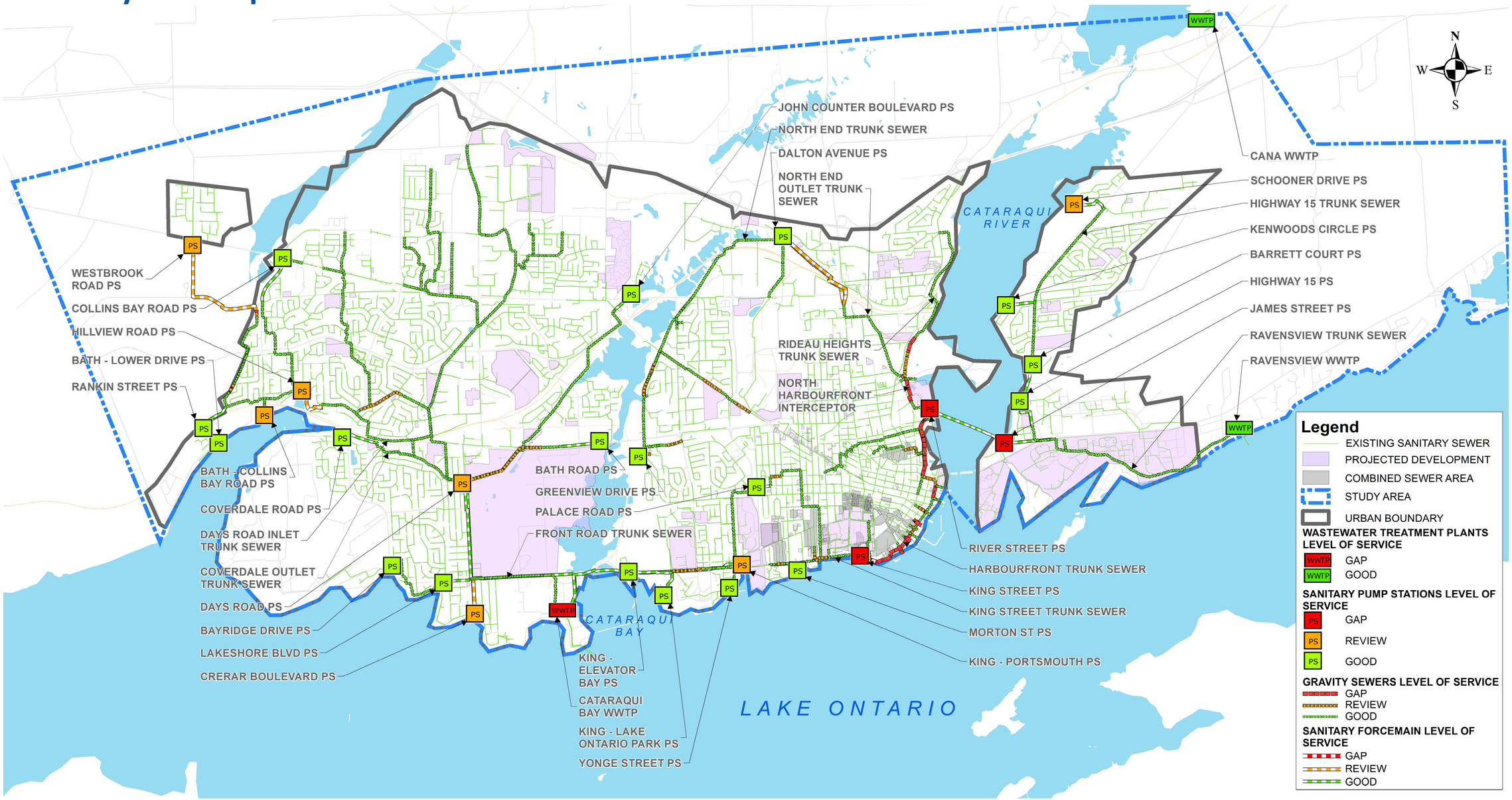
Wastewater System Gaps 2015



Identified Issues in the LOS indicate that additional analysis is required. The LOS indicated is based on Existing Capacities and is Subject to Change Based on Alternatives (i.e. Increase in Upstream Capacity may Result in Downstream Gap)

WASTEWATER SYSTEM GAPS

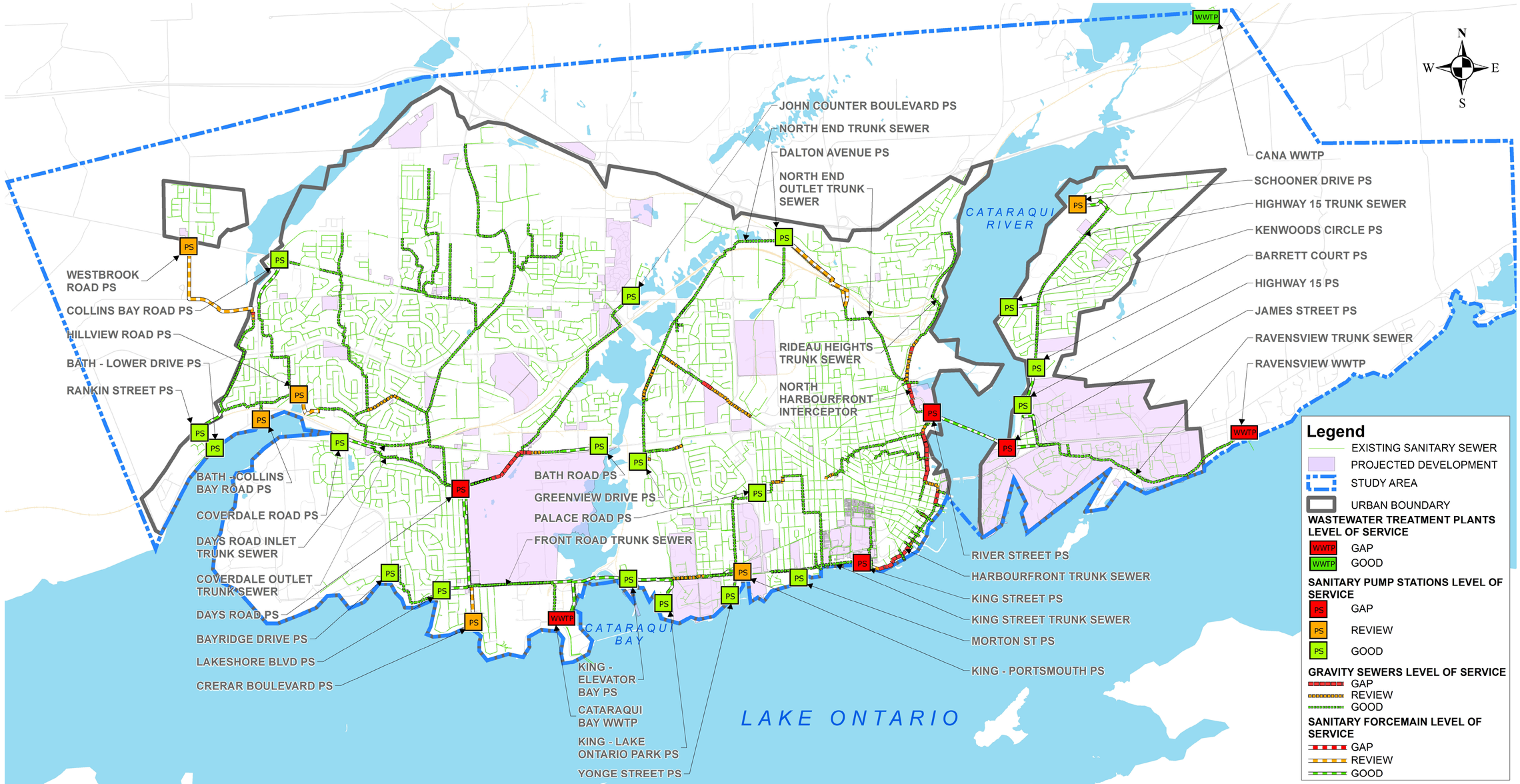
Wastewater System Gaps 2036



Identified Issues in the LOS indicate that additional analysis is required. The LOS indicated is based on Existing Capacities and is Subject to Change Based on Alternatives (i.e. Increase in Upstream Capacity may Result in Downstream Gap)

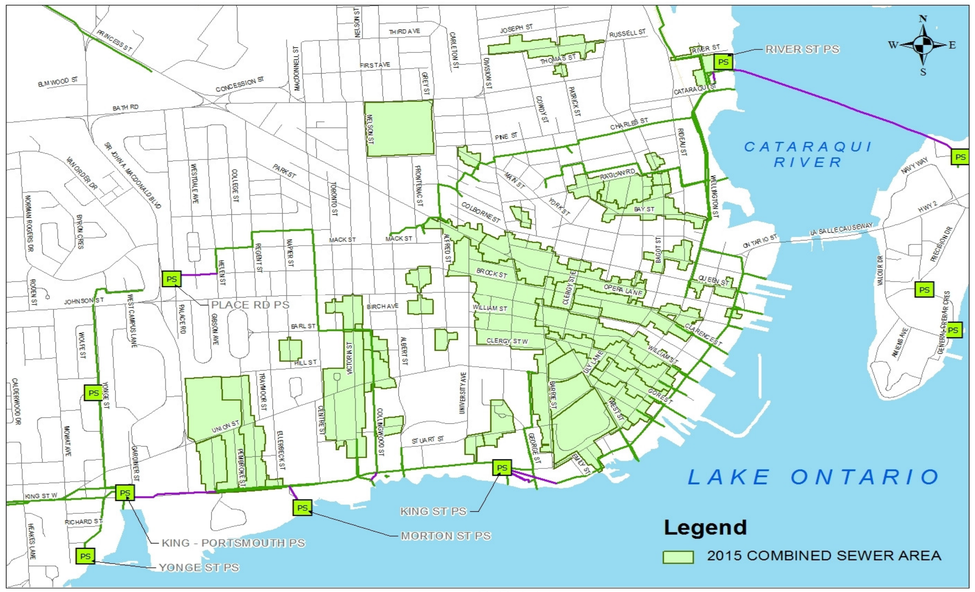
WASTEWATER SYSTEM GAPS

Wastewater System Gaps Full Build Out



Identified Issues in the LOS indicate that additional analysis is required. The LOS indicated is based on Existing Capacities and is Subject to Change Based on Alternatives (i.e. Increase in Upstream Capacity may Result in Downstream Gap)

COMBINED SEWER AREAS



2015

2021

2026

2036

The Maps Illustrate the Projected Reduction in Combine Sewer Areas between the Different Time Steps. Full Build Out and Ultimate are Assumed to be Full Separated.

WASTEWATER SYSTEM GAPS – COMBINED SEWER OVERFLOWS

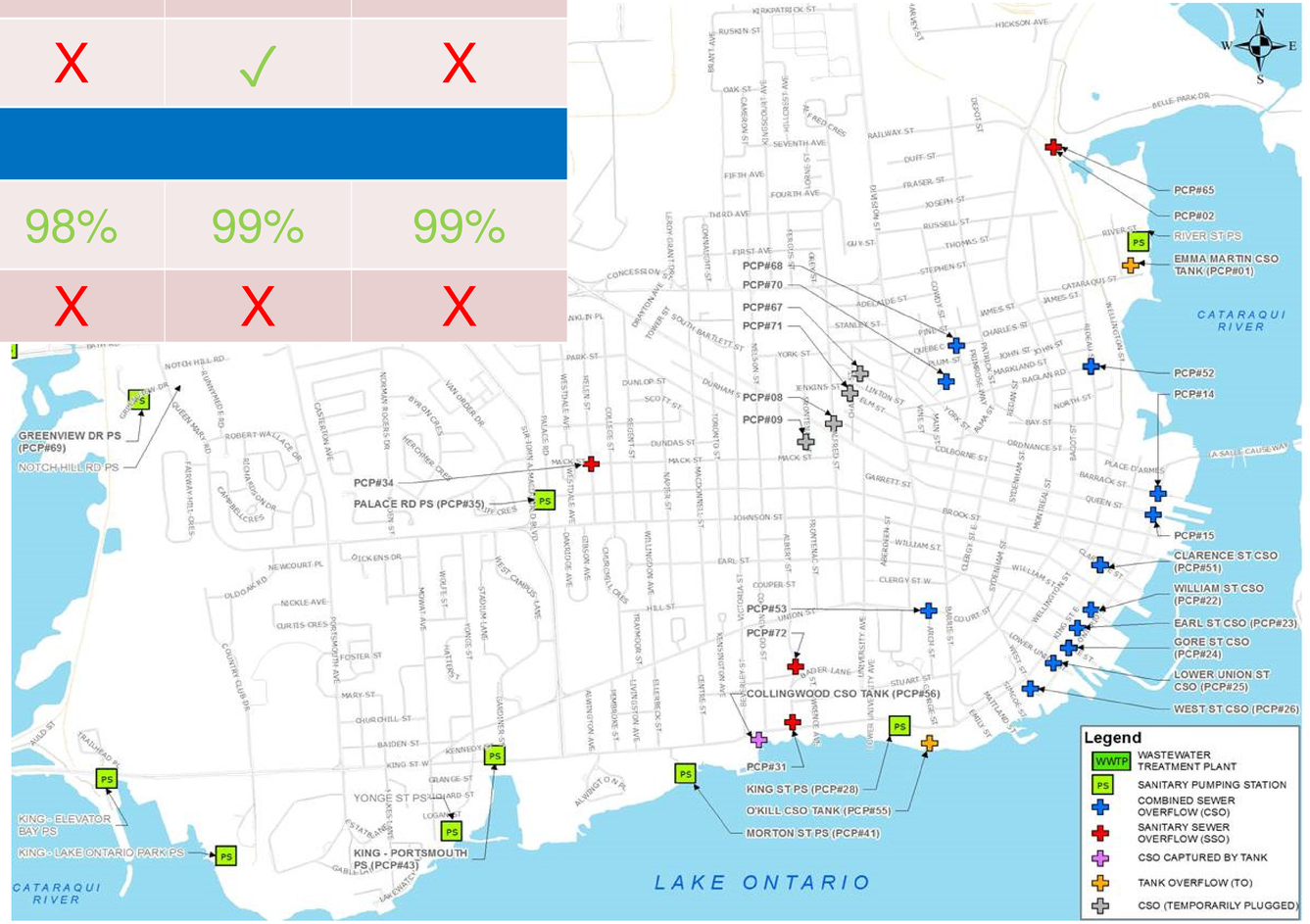
CRITERIA	Historic (2014)	2015	2021	2026	2036	Buildout	Ultimate
MOE F-5-5 CRITERIA							
WET WEATHER VOLUME TREATED	90%	96%	97%	98%	99%	100%	100%
MEETS DURATION REQUIREMENTS	X	X	X	X	✓	✓	X
MEETS FREQUENCY REQUIREMENTS	X	X	X	X	X	✓	X
LONG TERM GOAL							
WET WEATHER VOLUME TREATED	N/A	92%	96%	97%	98%	99%	99%
VIRTUAL ELIMINATION	X	X	X	X	X	X	X

MOECC F-5-5 CRITERIA (BASED ON AVG. WEATHER YEAR**)**

- Treat 90% Wet Weather Volume (for an Average Year) above the Dry Weather Flow.
- Combined Total Duration of CSO Events at Any One CSO Location Shall Not Exceed 48hrs.
- Controlling Overflow to Not More than 2 Events Per Season
- An Additional Overflow Event May be Permitted Provided that the PWQO for E.coli Based on a Geometric Mean at Beaches are Not Exceeded for 95% of the Season.

LONG TERM GOALS (BASED ON WETTER-THAN-AVG. YEAR**)**

- Continue to Reduce Overflow Volumes and “Virtually Eliminate” Combined Sewer Overflows

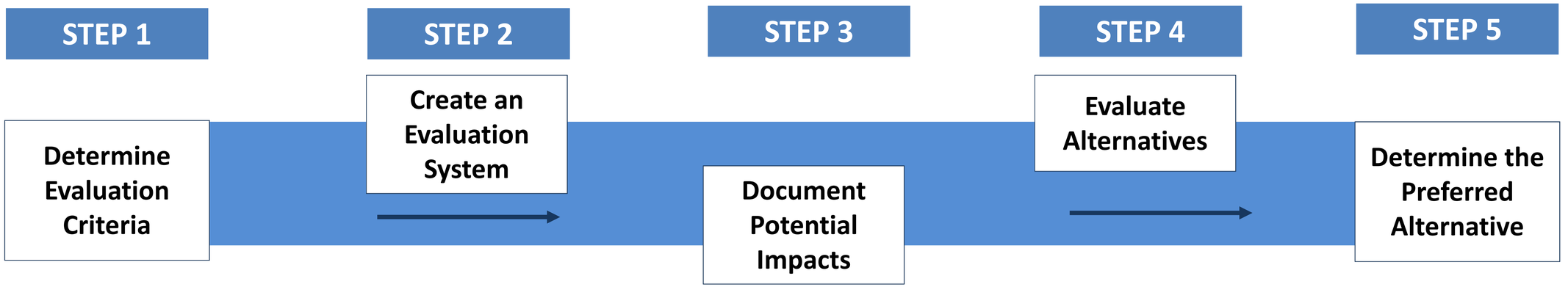


“Virtually Eliminate”=Containment of all Combined Sewer Flows under a Wet Year Conditions, with Overflows Occurring only Under Less Frequent Storm Events

NEXT STEPS

- Finalize Infrastructure Gaps with Existing System Reports and Operations
- Develop and Finalize Alternative Servicing Strategies for Infrastructure that has been Identified below the LOS
- Evaluate Alternative servicing strategies and Recommend Servicing Solutions
- Hold Public information Centre #2 to present Alternative strategies, Evaluation and Recommended Servicing Solutions
- Update the Pollution Control Plans
- Finalize Master Plan Document & Make Available to the Public for Review

EVALUATION METHODOLOGY



Criteria developed upon which the alternatives are evaluated against.

Each alternatives is assigned a colour rating:

- green for “most preferred”
- yellow for “less preferred”
- orange for “least preferred”

An overall impact rating for each is based on an assessment of the ratings assigned to each

The four evaluation criteria categories were assigned equal weighting as they all have equal importance

The individual impacts associated with each alternative were determined and documented in a matrix

Each of the alternatives is assigned a rating for each of the criteria.

The comparative evaluation is based on a qualitative assessment of the individual impacts

Professional judgement is factored into the evaluation as part of the qualitative assessment

The alternative with the least overall impact is recommended

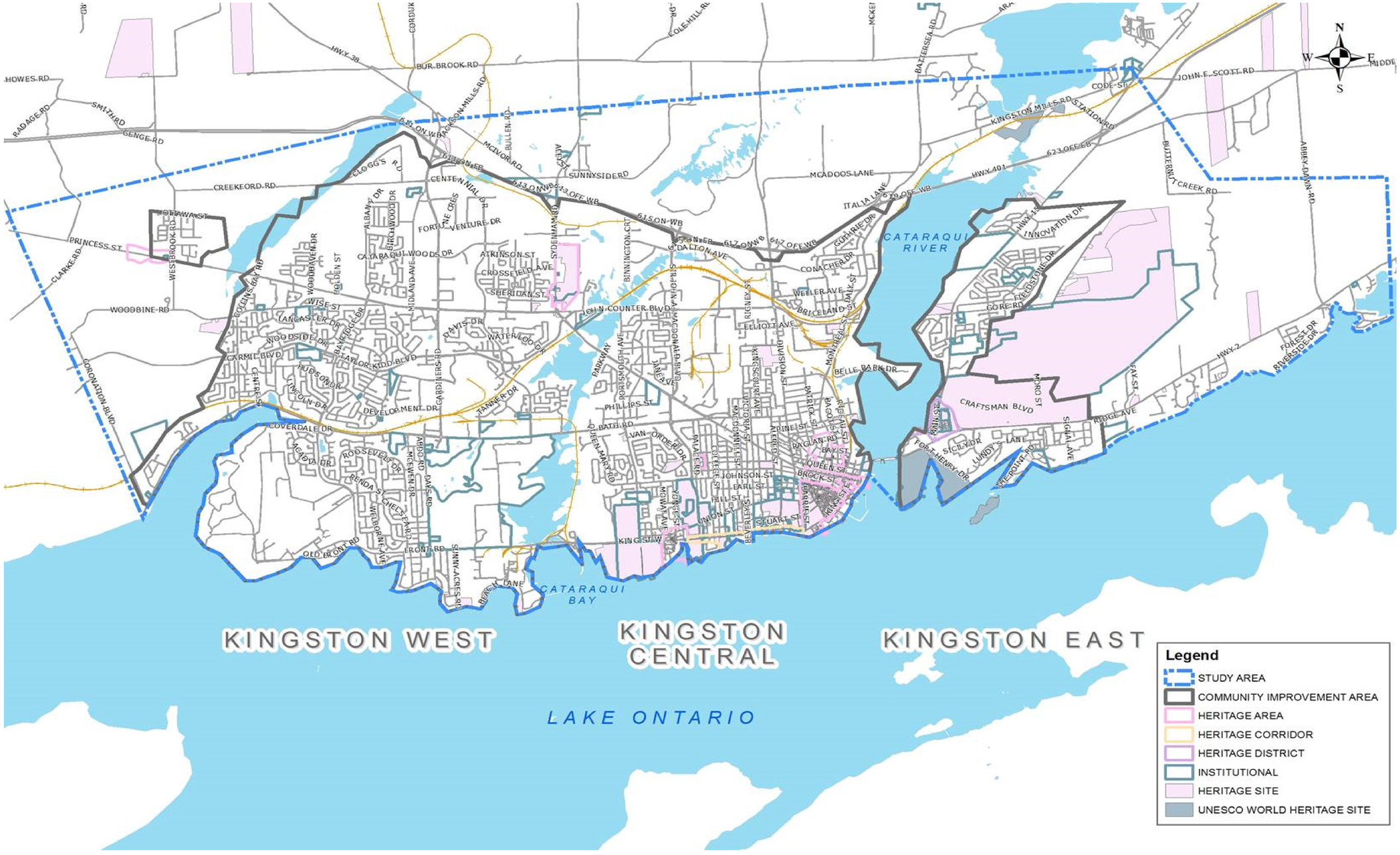
EVALUATION CRITERIA

NATURAL ENVIRONMENT (Illustrated on subsequent slide)	Wildlife and Vegetative Features Watercourses and Aquatic Habitat Watercourse Crossings Natural Heritage Areas Groundwater Impacts (.e.g., dewatering)
SOCIAL AND CULTURAL ENVIRONMENT CONSIDERATIONS (Illustrated on subsequent slide)	Disruption to Residences, Businesses and Institutions Traffic Disruptions Cultural Heritage Features Wells or Wellhead Protection Areas Future Planning Initiatives
TECHNICAL SUITABILITY AND OPERATIONAL SUITABILITY (Illustrated on previous slides)	Design and Constructability Capacities of linear infrastructure and facilities Security of System Compatibility with Existing Infrastructure Operations and Maintenance Requirements
FINANCIAL CONSIDERATIONS	Operations and Maintenance Costs Total Capital Costs (estimated)

EXISTING NATURAL FEATURES

The Map Illustrates the Existing Natural Features in the Study Area that will be Considered in the Evaluation Described

EXISTING SOCIO-CULTURAL ENVIRONMENT



The Map Illustrates some of the Existing Socio – Cultural Features in the Study Area that will be Considered in the Evaluation Described

PROJECT CONTACTS

THANK YOU FOR ATTENDING THIS PUBLIC INFORMATION CENTRE
PLEASE COMPLETE A COMMENT SHEET BEFORE YOU LEAVE

If you have any additional comments or questions, please contact one or all of the following:

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