

Item 8.1

Halifax Water LoWSCA: Local Centre Wastewater Servicing Capacity Analysis







- Capacity analysis of the local pipe infrastructure between the potential intensification areas and the nearest regional infrastructure.
- The analysis will provide:
 - Options and cost estimates for required upgrades
 - Determine the population that would trigger the upgrades



Project Scope





Status Overview

- All pipe models built for 6 pockets;
- Developed a combined model for Halifax;
- Developed a combined model for Dartmouth;
- Flow survey and rainfall data reviewed ;
- Dry weather flow calibration complete;
- Wet weather calibration complete.
- Planning Data Analyzed and Growth Modelling
- Preliminary existing system capacity results;
- Preliminary growth system capacity results.



Halifax Model





Dartmouth Model





Flow and Rainfall Survey



Total Flow Monitors Installed : 33 Rain Gauges Installed : 1 Rain Gauges used for Analysis : 3 Flow Monitors in Halifax West :27 Flow Monitors in Dartmouth: 4 Flow Monitors in Mill Cover: 2



Dry Weather Diurnal Curve and Base Sewage Flow Hourly Factors



Blue Plan

Wet Weather Flow Calibration

FM102-Event -3





Objectives of the Development Capacity Tracking Tool

- 1. Track development
 - a) Proposed but not approved
 - b) Approved but not built
 - c) Built but not included in baseline flows
 - d) Included in baseline flows since last master plan
 - e) How much growth approved in comparison to planned growth
- 2. Identify potential capacity constraints and trigger points for capital projects
 - Used as a preliminary check (yes, no, not sure)
 - Not used to replace modelling
 - Not used to make decisions
- 3. 'What if' scenarios



Outputs from the Development Capacity Tracking Tool

- 1. How close to full capacity
- 2. How much more growth can be accommodated before full capacity
 - a) Intensification
 - How many more people
 - How many more units
 - b) Greenfield
 - How many more hectares (depending on development type, i.e. units per hectare and people per unit)
- 3. Development summary report
 - To track growth trends against Master Plan projections
 - Updatable/repeatable/comparable
 - Mapping



Capacity Assessment Process



Blue Plan Schedule & Next Steps

