# Water/Sanitary Capacity/Allocation

Committee of the Whole May 11, 2004

## Background

#### Past Practice

- Markham over the past 6 years has been granting and monitoring water allocation as agreed to by the Region of York
- Markham was not required to grant and monitor sanitary allocation
- At last update (March 23 and 30, 2004) staff advised;
  - Of pending water allocation constraints in 2006/2007
  - Regional concerns regarding capacity constraints in the York Durham Sanitary Sewer
  - Potential future development/financial implications of development slowdown if servicing capacity is not available

### Council direction;

- Establishment of working group consisting of Mayors, Regional Councillors, Senior Staff from impacted municipalities and Region to review timing of actual infrastructure, and promote communication
- Establishment of technical working group consisting of Municipal/Regional representation to address technical aspects of delivering critical Regional infrastructure

## Water Update

- Region has advised that water supply is no longer the critical constraint but remains a concern (Figure 1)
- Markham has requested written details of additional supply provisions including supplier (Toronto, Peel), specific projects and completion dates
- Markham also requires specific dates and amounts of additional allocation Markham will receive
- Staff recommends we continue to monitor and grant water allocation based on Council endorsed policy
- Staff will report back with update upon receipt of written information from the Region

## Sanitary Update

### Region has recently advised:

- That due to delay of 16<sup>th</sup> Avenue Phase II and Southeast Collector sewers there is sanitary constraints in York Durham Sanitary System (YDSS);
- Sections of the YDSS in Markham are at risk of surcharging (Fig. 2a & 2b) under certain storm events if sewers are not in place by 2008;
- Interim storage in the YDSS required to accommodate most of development approved to-date and maintain a reasonable level of safety in the YDSS;
- There is sufficient capacity in YDSS for a Markham population of 279,290 to 2008; (fig. 3)
- Current Regional data suggests that there is sufficient capacity in YDSS for only 7270 units out of 9030 units draft plan/site plan approved but not registered to date in Markham. We are working with Regional staff to clarify assumptions and the accuracy of the data;
- Employment opportunities (ICI) will not be impacted by sanitary servicing constraints.

## Staff Comments

### Water

Markham requires a detailed implementation plan by the Region of the amount and date that additional water allocation will be available so Markham can stage growth accordingly.

### Staff Comments

#### Sanitary

- Region must ensure high risk areas of the YDSS in Markham will not surcharge into residential dwellings or the Rouge River
- Detailed review of the Region's sewer model, assumptions, impact in high risk areas is required
- Further discussion with Region and area municipalities is required as to the population and allowable development to 2008 noted in the Region's May 5, 2004 report
- Staff recommends Markham start monitoring and allocating development based on sewage allocation
- Policies in respect to draft plan/site plan residential development and sewage allocation to be developed
- Significant infrastructure delivery and development (i.e. Markham Centre, Box Grove, Cathedral, etc.) is dependent on available sanitary and water allocation
- Further draft plan/site plan approval for residential units in not recommended until sanitary servicing issues are resolved or Region confirms in writing to the satisfaction of the Town of Markham that sewage allocation is available.

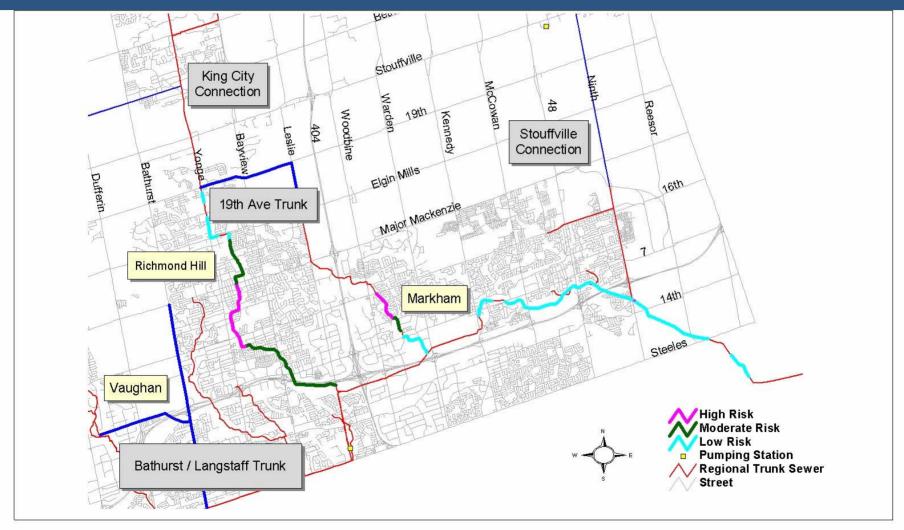
## Recommendations

- That the Region of York and Markham staff May 11, 2004 presentation be received
- And that staff report back on;
  - YDSS modeling assumptions and actual monitoring results
  - Potential impact of surcharging in the YDSS in Markham
  - Potential technical solutions to interim capacity constraints including but not limited to storage in the YDSS and municipal sewers, reduction of infiltration, etc
  - Sanitary allocation requirements and policies
  - Future water allocation assignment by Region, subsequent distribution by Markham to development and any related policies matters
  - Financial impact of potential residential development downturn
- And that no further residential draft plan/site plan be approved until staff report back on the above issues or the Region confirms in writing to the Town's satisfaction that sewage allocation is available
- And that staff be authorized to sole source and retain a consulting engineer to undertake a peer review of the Region's sewer model to be funded from the Engineering Department 2004 Operating Budget
- And that Regional Chair Bill Fisch and Mayor's of Regional Municipalities be advised accordingly

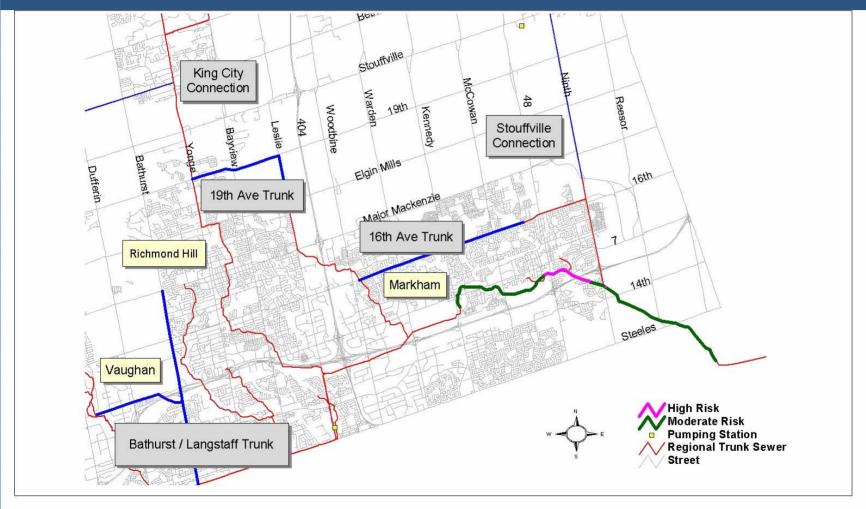
# Total York Water System Supply and Demand



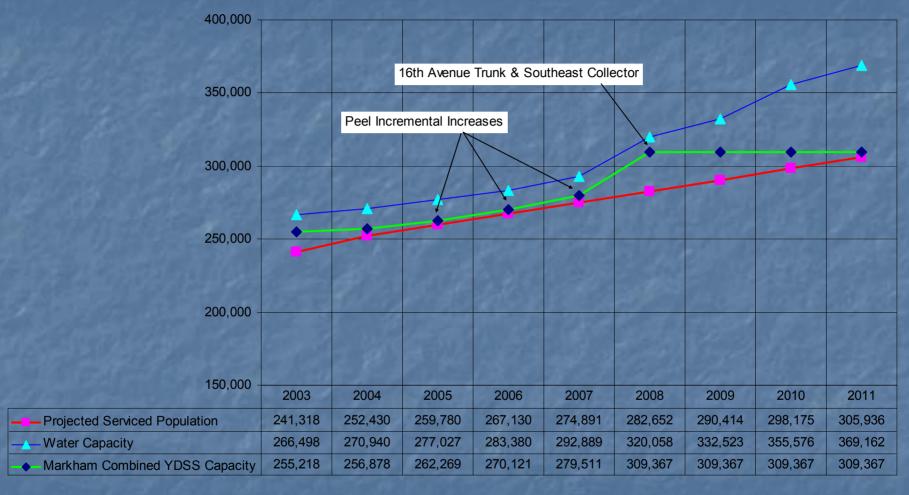
## 2007 YDSS Model Results Without 16<sup>th</sup> Ave. Trunk & SE Collector



# 2008 YDSS Model Results without SE Collector



## Town of Markham Proposed Servcing Capacity and Population



NOTE: Capacity available assuming milestones for critical projects met