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WATER AND WASTEWATER CAPACITY AND SERVICING ASSIGNMENT UPDATE ON UNIT MIX AND RELATED POPULATIONS

The Planning and Economic Development Committee recommends the adoption of the recommendation contained in the following report, March 8, 2006, from the Commissioner of Planning and Development Services:

1. RECOMMENDATION

It is recommended that this report be received for information.

2. PURPOSE

Regional staff were given direction to continue discussions regarding certain details of the Servicing Protocol with the area municipalities, in the June 15, 2005 report adopted by Council entitled “Water and Wastewater Capacity and Servicing Assignment Protocol”. The purpose of this report is to provide an update on the mix of unit types in the allocation, and the persons per unit (PPU) used in the calculations between population count and unit count.

3. BACKGROUND

At its meeting of June 23, 2005, Regional Council approved a distribution of servicing capacity to the local municipalities with a small reserve to an overall YDSS capacity of 970,000 people. This capacity is based on the current limits of the wastewater treatment provided primarily by the Duffin Creek Water Pollution Control Plant, with a smaller portion being treated by Peel. This capacity limit remains fixed until construction of planned improvements is underway. The next significant increase in YDSS capacity will be provided by the construction of the Duffin Creek Water Pollution Control Plan expansion and the Southeast Collector.

Further to the approved capacity and approval of the servicing assignment protocol, the June 2005 report also recommended further work, as follows:

1. Staff work with Local Area Municipalities and the development industry to further refine the conditions and triggers based on the specific pieces of infrastructure.
2. Staff be directed to continue discussions with the local municipalities with respect to the mix of unit types in the allocation and the persons per unit (PPU) used in the calculations between population count and unit count.

The first item was addressed through the report approved by Council on February 16, 2006 entitled “Water and Wastewater Servicing Protocol - Provision of Regional Conditions for Draft Approval.” The operational implementation details are currently being refined with each municipality.

With regard to the second item, the area municipalities have had the opportunity to report on developments that have received allocation of servicing capacity through the fall of 2005. As a result, a clearer picture of the mix of unit types that will utilize the allocation is available. This report provides information on how this mix of unit types was analyzed, and the results of that analysis.

4. ANALYSIS AND OPTIONS

The YDSS capacity is based upon population and an estimated sewage generation per person. The servicing capacity assigned to each municipality is based on that population capacity. The October 2004 and June 2005 assignment of servicing capacity was expressed in “units” based on the average person per unit (PPU) for each of the municipalities. This average PPU was divided into the population capacity to yield a total number of units available in each municipality. The average PPU was based on the Regional Official Plan forecast.

An analysis has now been undertaken that examines the unit mix that has been achieved in the existing development and will be achieved with the more recently approved and allocated development. In the three southern municipalities of Markham, Richmond Hill and Vaughan, a larger than expected portion of higher density development such as townhouses and apartments has been achieved. Townhouses and apartments contain less people in each unit than single and semi detached houses. A greater proportion of townhouses and apartments will lower the average PPU for these municipalities. A greater number of units can be accommodated within the assigned population when a higher proportion of the units are high density.

A larger proportion of higher density housing is a positive finding. It demonstrates that the Region is achieving more intensification and an increasingly broad housing mix. A broader range of housing types will better serve the Region’s diversifying population.

The 2006 Census will provide the Region with up to date person per unit data for the individual unit types by municipality and a further opportunity to confirm unit mix and occupancy in different housing types.

Further diversification of the housing mix and intensification are in keeping with the strategic directions set out in the Region’s Vision 2026, the Centres and Corridors Strategy and Regional Official Plan Amendment 43, as well as the Provincial initiatives including the revised Provincial Policy Statement and Places to Grow Act. To further the

Regional and Provincial strategic initiatives, a larger proportion of higher density units is encouraged.

4.1 Population Capacity by Municipality

As mentioned above, the population capacity of the YDSS is fixed. The Region wide capacity that was assigned in 2005 to area municipalities was approximately 965,000 people. However, to better illustrate how each municipality fits into this overall Regional capacity, *Table 1* summarizes the population capacity that was made available in 2005 to each municipality connected to the YDSS.

Table 1
YDSS Population Capacity by Municipality

Municipality	YDSS Capacity
Aurora	54,900
East Gwillimbury	3,300
King (King City)	5,800
Markham	307,500
Newmarket	85,300
Richmond Hill	197,900
Vaughan	290,200
Whitchurch-Stouffville (Stouffville)	20,100

Until further capacity is made available through the construction of critical water and wastewater infrastructure, these population figures cannot be exceeded.

4.2 Methodology

The analysis first involved gathering information from the municipalities connected to the YDSS in terms of capacity allocated to developments and the unit break down for each of these developments; a co-operative effort between Regional and local municipal staff.

The data on the 2004/2005 allocations was broken down by unit type (singles, semis, townhouses and apartments) and was combined with the data for the existing YDSS serviced units. The 2001 Census PPU for each unit type by individual municipality was applied to this data to determine the actual average PPU being achieved in the individual municipality. This “calculated” average was compared to the “assumed” average PPU that was applied in assigning the 2005 capacity to the local municipalities (as illustrated in *Table 2*).

Based on this exercise, the “assumed” average PPU was consistent with the new “calculated” average PPU in the northern area municipalities, however, in the three southern municipalities it was found that the average PPU assumed in the 2005 capacity assignment exercise was higher than the newly calculated average PPU.

Table 2
Assumed vs. New Calculated Person per Unit Average for YDSS Serviced Population

Municipality	Assumed* Persons per Unit Average	New Calculated** Persons per Unit Average
Aurora	3.13	No Change
East Gwillimbury	3.00	No Change
King (King City)	3.10	No Change
Markham	3.48	3.42
Newmarket	3.15	No Change
Richmond Hill	3.26	3.21
Vaughan	3.53	3.39
Whitchurch–Stouffville (Stouffville)	2.98	No Change

* based on June 2005 Approved Population/Units

** based on calculation of existing and allocated units & 2001 Census PPU for individual unit type

Note: The Census undercount (people who were missed by the Census survey, but do exist) population is included in the analysis to give as accurate a picture as possible.

The reduced average PPU means that there is the potential for additional units to be allocated servicing within the existing approved population capacity specifically in the municipalities of Markham, Richmond Hill and Vaughan.

5. FINANCIAL IMPLICATIONS

There are no financial implications resulting from this report.

6. LOCAL MUNICIPAL IMPACT

The change in average PPUs will require further examination by the affected area municipalities to determine what opportunities exist to fully utilize the approved serviced population outlined in *Table 1*. Prior to any further allocation beyond the unit distribution approved by Council on June 23, 2005, the individual municipalities should thoroughly examine their own local allocation policies, the impact of physical existing constraints for individual municipalities and identify any opportunities for further intensification. The Region will follow up with each area municipality to assist in the above.

7. CONCLUSION

The unit mix analysis undertaken shows a reduced average PPU in the municipalities of Markham, Richmond Hill and Vaughan which provides the potential for additional units

in those municipalities. Any additional capacity remains subject to the constraints set out in the June 15, 2005 Water & Wastewater Servicing Capacity and Assignment Protocol report adopted by Council. Regional staff together with the area municipal staff will continue to carefully monitor the servicing capacity, allocation and types of units to ensure optimal utilization of servicing capacity.

The Senior Management Group has reviewed this report.