

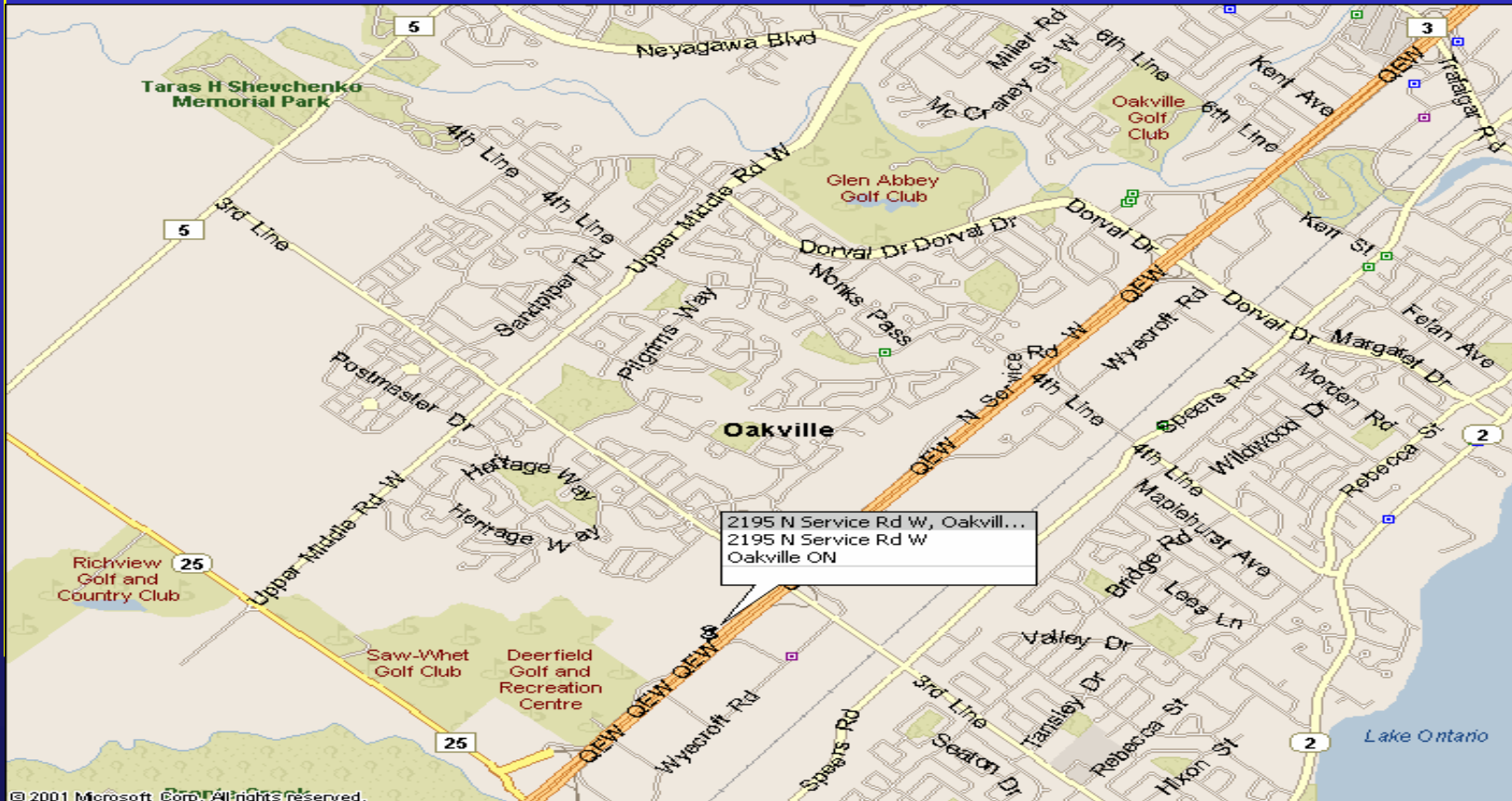
The Region of Halton

Biosolids Management and Waste Water Management into the Future What you should know!

Regional Municipality of Halton
Ontario, Canada



Location of Mid Halton Plant



Current Status

- Ability to remove solids from WWTP's "on demand" is critical to maintain effluent quality
- Production in 2001
 - 318,848 m³ liquid biosolids
 - 8,216 m³ dewatered cake
- Liquid biosolids applied to land within Halton
- Dewatered cake stored and applied to land within and outside Halton
- Program operations under contract by Terractec Environmental Ltd.

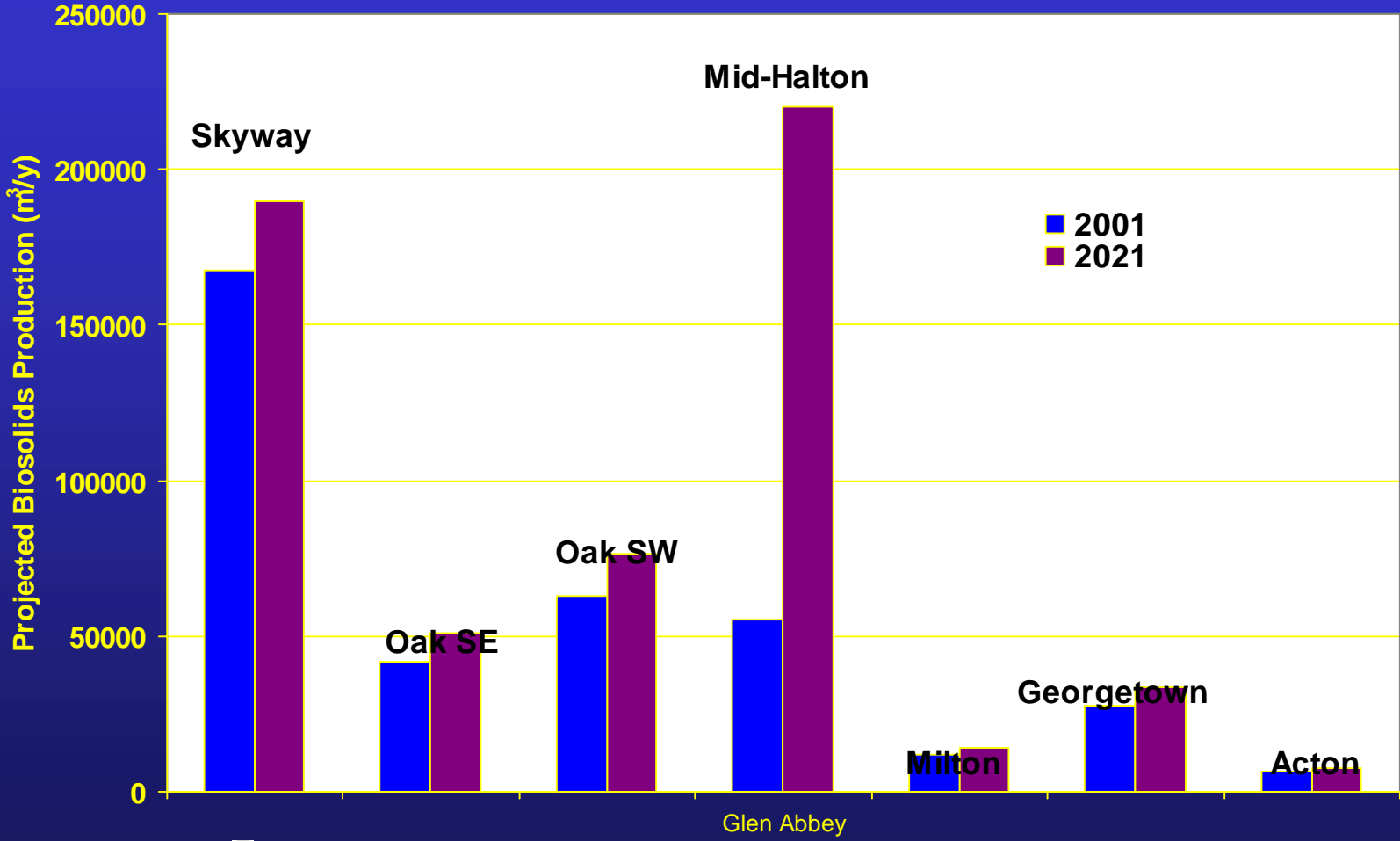


Limitations of Current Strategy

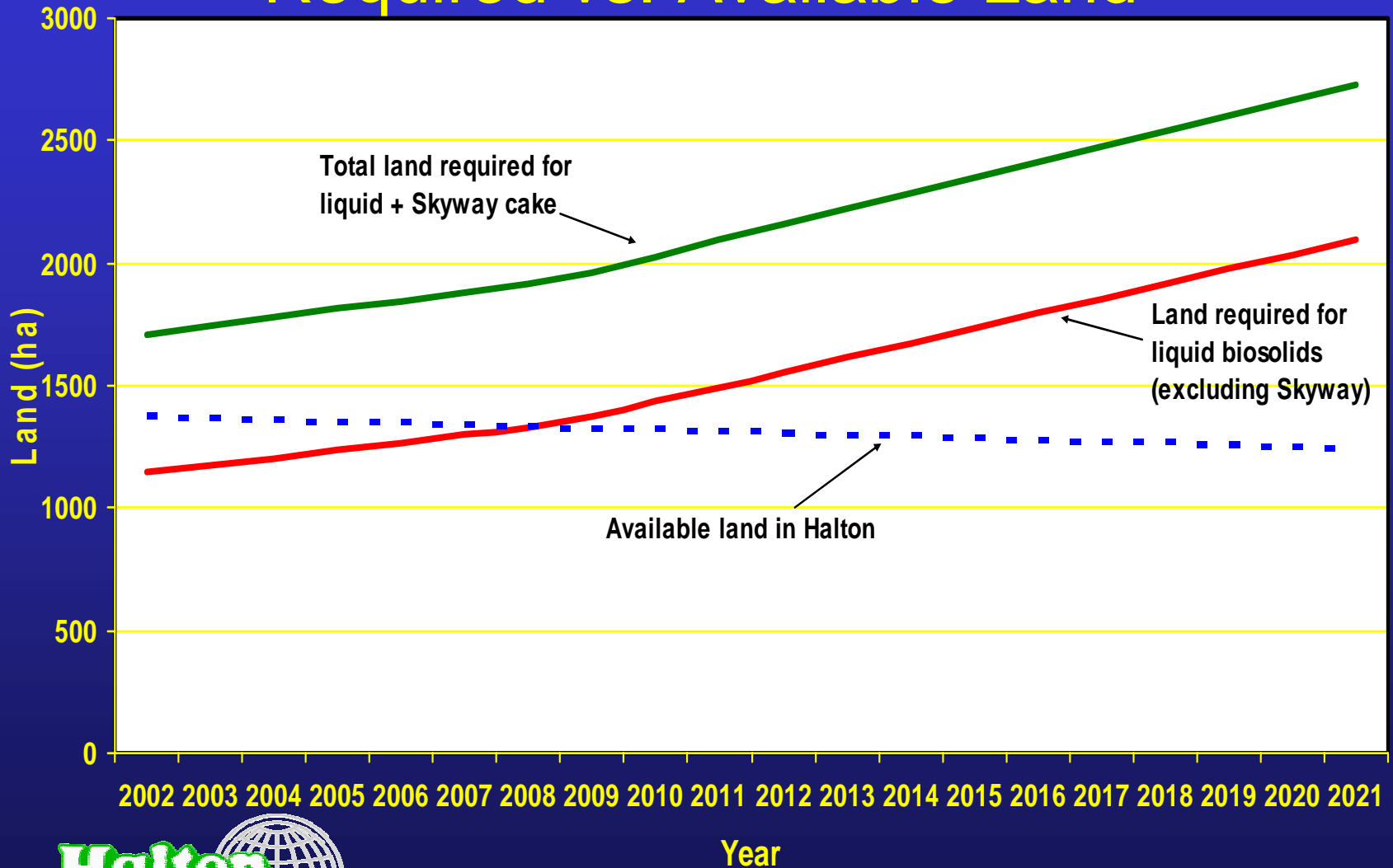
- Insufficient land within Halton to apply 100% of biosolids currently produced
- Available agricultural land expected to decrease marginally in the future
- Biosolids quantities estimated to increase by 60% over next 20 years
- Storage time at BMC estimated to decrease to less than regulation minimum 6 months by 2008
- Inability to access farmland during wet weather can result in inadequate storage at the BMC



Biosolids Projections



Required vs. Available Land



Existing Wastewater System

Four lake based plants:

- Burlington Skyway WWTP - site capacity available to double expanded plant
- Oakville SW WWTP - potential to restore unusable capacity
- Oakville SE WWTP - opportunity exists to maximize use of existing capacity and limited expansion
- Mid Halton WWTP - site capacity available for 400 ML/d (8 times expanded capacity)

Milton stream based system – some opportunity for additional capacity

Wastewater Issues

Existing capacity of plants is less than total required to service growth

Significant expansion capacity is available at the Mid Halton WWTP and Skyway WWTP within existing sites

Limited expansion capacity is available at the Oakville South West and South East WWTPs

Oakville Servicing – Preferred Strategy

Recommended Servicing Alternative:

- All North Oakville development to be treated at Mid Halton WWTP(Glen Abbey)
- Trunk sewers, pumping stations & forcemains along Dundas, crossing 16 Mile Creek to Mid-Halton WWTP
- Early servicing potential by construction of pumping station forcemain along Neyagawa Blvd.
- New forcemain for Winston Park W. Ind. to bring flow to South East WWTP service area – no expansion of South East WWTP required

Oakville Servicing – Preferred Strategy

Halton only solution – no dependence on interregional servicing

Minimizes treatment plant expansion projects – only Mid Halton WWTP expansion, within existing site and outfall capacity

Potential for early servicing of portion of North Oakville along Neyagawa – takes advantage of Sixteen Mile Creek PS capacity

Leaves expansion potential at South East WWTP if capacity required in future due to changes in industrial flows

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Capital Cost of Preferred Alternative

Item	Capital Cost (Master Plan for Urban Buildout Scenario)
Mid Halton WWTP Expansion	\$112 million
Skyway WWTP Expansion	\$26 million
Pumping stations, forcemains and wastewater collection mains	\$106 million
Total for Urban Buildout Scenario	\$244 million