

**Maple Lake Site Compared to Lagoons Treatment Option  
Municipal Class EA - Part C Municipal Wastewater Projects  
Typical Effects on the Environment caused by construction activities**

Source: 1993 Class EA for Municipal Water and Wastewater Projects

	Ponds and Lagoons	Maple Lake Site
<b>AESTHETICS</b>		
removal of vegetation or landscape features	*	negative impact - removal of vegetation
change of compatibility with landscape	*	negative impact - will work with existing landscape
residents, non-residents, recreationalists and tourists exposed to new view	*	negative - moderate - residents are far enough away that exposure would be minimal however, there is a hiking trail within the vicinity that maybe exposed to the view of lagoons
<b>CLIMATIC EFFECTS</b>		
vegetation removal or snow accumulation, wind screening and shade on adjacent buildings and activities	*	negative - minimal - will have to remove some vegetation which may cause snow accumulation however adjacent building and activities are far enough away there would be no impact on surrounding properties
change in air quality	*	negative - moderate - possible odours
<b>ECONOMIC AND SOCIAL EFFECTS</b>		
change to tax base	*	negative - potential increase in taxes. Low capital costs approx. \$ 200 K
change in employment opportunities	*	positive - possibility of an employment opportunity
change in tax rate or cost of service	*	negative - potential to increase taxes or to charge for service
<b>GROUNDWATER</b>		
change in quality	*	negative - effluent quality is only fair
interference with flows or levels		none - will not interfere with groundwater flows or levels
<b>PUBLIC HEALTH</b>		
effects on quality of life e.g. decreased sewage back-up	*	positive - peace of mind
<b>NOISE &amp; VIBRATION</b>		
changes in existing noise and vibration levels	*	negative - minimal during construction
<b>RECREATION</b>		
effects on quality of user experience due to environmental changes	*	negative - potential impact - users of the hiking trail located near the landfill may be able to see three tiered lagoons
<b>RESIDENTIAL, COMMERCIAL, INDUSTRIAL, INSTITUTIONAL</b>		
temporary disruption during construction	*	negative - minimal - possible industrial impact during construction i.e. impede traffic
nuisance odours	*	negative - potential for odours

	Ponds and Lagoons	Maple Lake Site
<b>SOIL AND GEOLOGY</b> erosion or compaction during construction contamination of soils mixing of topsoil with subsoil	* * *	negative - soil will be compacted during construction activities negative - possibility of soil contamination i.e. spills negative - possibility of mixing of soils
<b>SURFACE DRAINAGE</b> increased surface runoff  decreased surface water drainage	*  *	none - will not effect surface water runoff negative - surface water may settle in the lagoons instead of infiltrating into the ground
<b>TERRESTRIAL VEGETATION AND WILDLIFE</b>  mortality/stress of vegetation due to sediment deposition, construction equipment movement or changes in soil moisture conditions resulting in reduction and/or deterioration of wildlife habitat changes in vegetative composition as a result of environmental changes removal or disturbance of significant trees and/or ground flora  new or increased exposure of trees leading to increased loss of habitat for wildlife effect on wildlife habitat effect of contaminants on vegetation and wildlife	*  * * *  * * *	negative - high - vegetation will be impacted due to construction. minimal impact due to increased soil moisture negative - high - vegetation will be removed for both the treatment and disposal field resulting in the reduction of wildlife habitat negative - minimal - no significant changes in vegetation composition, maybe some wetland vegetation around the lagoons negative - high - a significant amount of trees and/or ground flora will have to be removed - 2.72 ha for lagoons and 2.81 for disposal  negative - high - new areas of trees will be exposed leading to loss of habitat negative - high - some habitat will be lost negative - minimal - contaminants may act as a fertilizer for vegetation