

Maple Lake Site Compared to Treatment Options

Municipal Class EA - Part C Municipal Wastewater Projects

Source: 1993 Class EA for Municipal Water and Wastewater Projects

Typical Effects on the Environment caused by construction activities * likely positive or negative effect	Constructed Wetland	Advanced Treatment Option	Ponds and Lagoons	Maple Lake Site
AESTHETICS				
removal of vegetation or landscape features	*	*	*	negative impact - removal of vegetation
change of compatibility with landscape	*	*	*	negative impact - not compatible with existing landscape
residents, non-residents, recreationalists and tourists exposed to new view	*	*	*	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
CLIMATIC EFFECTS				
vegetation removal or snow accumulation, wind screening and shade on adjacent buildings and activities	*	*	*	minimal - adjacent building and activities are far enough away there should be no impact
change in air quality	*	*	*	moderate - possible odours
ECONOMIC AND SOCIAL EFFECTS				
change to tax base	*	*	*	negative - potential increase in taxes
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
GROUNDWATER				
change in quality			*	moderate - potential to change water quality
interference with flows or levels				minimal - potential to increase flows and levels
PUBLIC HEALTH				
effects on quality of life e.g. decreased sewage back-up	*	*	*	positive - knowledge that residents septage is being handled properly
NOISE & VIBRATION				
changes in existing noise and vibration levels	*	*	*	minimal during construction
RECREATION				
effects on quality of user experience due to environmental changes	*	*	*	potential impact - users of the hiking trail located near the landfill may be able to see the treatment system
RESIDENTIAL, COMMERCIAL, INDUSTRIAL, INSTITUTIONAL				
temporary disruption during construction	*	*	*	minimal - possible industrial impact during construction
nuisance odours	*	*	*	negative - potential for odours
SOIL AND GEOLOGY				
erosion or compaction during construction	*	*	*	negative - soil will be compacted during construction activities
contamination of soils	*	*	*	negative - possibility of soil contamination i.e. spills
mixing of topsoil with subsoil	*	*	*	negative - possibility of mixing of soils
SURFACE DRAINAGE				
increased surface runoff				negative - potential for increased surface water runoff
decreased surface water drainage	*	*	*	negative - potential for a decrease in surface water drainage
TERRESTRIAL VEGETATION AND WILDLIFE				
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	*	*	*	high - vegetation will be impacted due to construction. minimal impact due to increased soil moisture
changes in vegetative composition as a result of environmental changes	*	*	*	high - vegetation will be removed resulting in the reduction of wildlife habitat
removal or disturbance of significant trees and/or ground flora	*	*	*	minimal - no significant changes in vegetation composition high - a significant amount of trees and/or ground flora will have to be removed
new or increased exposure of trees leading to increased loss of habitat for wildlife	*	*	*	high - new areas of trees will be exposed leading to loss of habitat
effect on wildlife habitat	*	*	*	high - some habitat will be lost
effect of contaminants on vegetation and wildlife			*	minimal - contaminants may act as a fertilizer for vegetation
UTILITIES				
effects on other utilities				site has single phase hydro

At this point the Advanced Treatment Option will be divided into two (2) different treatment systems: The Waterloo Biofilter and the FAST system