

### 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

	Constructed Wetland	Maple Lake Site
<b>AESTHETICS</b> removal of vegetation or landscape features change of compatibility with landscape  residents, non-residents, recreationalists and tourists exposed to new view	* * *	negative impact - removal of vegetation negative impact - will work with existing landscape negative to neutral - 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. View would be of a wetland, for some aesthetically pleasing
<b>CLIMATIC EFFECTS</b> vegetation removal or snow accumulation, wind screening and shade on adjacent buildings and activities change in air quality	*	none - vegetation will be removed however it is being replace with new vegetation negative - moderate - possible odours
<b>ECONOMIC AND SOCIAL EFFECTS</b>  change to tax base change in employment opportunities change in tax rate or cost of service	* * *	negative - potential increase in taxes. Moderate to High capital costs approx. \$ 500 K positive - possibility of an employment opportunity negative - potential to increase taxes or to charge for service
<b>GROUNDWATER</b> change in quality interference with flows or levels		none - effluent is of good quality none - will not interfere with groundwater flow 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 to neutral - there is a potential that residents maybe able to see wetland from trail however, it is a natural feature, will blend in.
<b>RESIDENTIAL, COMMERCIAL, INDUSTRIAL, INSTITUTIONAL</b>  temporary disruption during construction nuisance odours	* *	negative - minimal - possible industrial impact during construction I.e. impede traffic negative - potential for odours
<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 negative - surface water may settle in the wetland 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	* * * * * *	high - vegetation will be impacted due to construction. minimal impact due to increased soil moisture negative - moderate- vegetation will be removed resulting in the reduction of wildlife habitat however new vegetation will be plant which will promote new wildlife habitat  negative - vegetation composition will be change to wetland vegetation negative - high - a significant amount of trees and/or ground flora will have to be removed - total area 8 ha negative - high - new areas of trees will be exposed leading to loss of habitat high - some habitat will be lost none - only contamination on site would result from spills which should be cleaned, and may act as fertilizer