

## EVALUATION CRITERIA FOR NEW DRINKING WATER SURFACE SOURCES GUIDELINE

### 1.0 INTRODUCTION

The intent of the source assessment process is to provide the information necessary to evaluate potential health risks, support source protection planning, and facilitate proper system design. The information provided should include the following elements:

1. Source assessment (e.g. hydrology, water quality, trends).
2. Identification of hazards in watershed that may impact water quality.
3. Source protection measures to be considered or implemented.

### 2.0 INVESTIGATION CRITERIA

The depth of investigation and amount of information required to support system design will vary with each situation.

- a) Water systems servicing or proposing to service >500 persons should typically be expected to complete an assessment equivalent to that described in modules 1, 2, & 7 of the BC *Comprehensive Source-to-Tap Assessment Guideline* (see References)
- b) Small water systems (i.e. those serving <500 persons) should at a minimum provide an assessment equivalent to that described in the BC Drinking Water Source-to-Tap Screening Tool (see references)
- c) Considerations:

The following items may be considered during the site assessment of a proposed surface drinking water source. This list is not exhaustive, but is intended to stimulate thought:

Are there any sewage discharge/outfalls upstream or within 100m downstream of the proposed intake?						<input type="checkbox"/> Yes	<input type="checkbox"/> No
Is the source subject to natural events (slides, extreme storms)?						<input type="checkbox"/> Yes	<input type="checkbox"/> No
Are there any sewerage disposal systems within 30 metres?						<input type="checkbox"/> Yes	<input type="checkbox"/> No
Are any of the following occurring upstream or within 100m of the intake?							
Recreation	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Logging/Forestry	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
Agriculture	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Mining	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
Cattle Grazing	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Industrial	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
Fertilizer Use	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Fuel Storage	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
Landfills	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Manure Stockpiles	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
Salt Storage	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Wildlife	<input type="checkbox"/> Yes	<input type="checkbox"/> No		

### 3.0 REFERENCE DOCUMENTS

No one process for assessing surface water sources will be appropriate for all systems. However, the following provincial documents provide some guidance regarding the collection of information to support water system construction:

- a) *BC Drinking Water Source-to-Tap Screening Tool* (Section B2)  
([www.health.gov.bc.ca/protect/source.html#water2](http://www.health.gov.bc.ca/protect/source.html#water2))
- b) *BC Comprehensive Source-to-Tap Assessment Guideline* (Modules 1, 2, & 7)  
([www.bcwwa.org/source-to-tap/index.php](http://www.bcwwa.org/source-to-tap/index.php))

More extensive lists of activities, characteristics, and hazards to consider in surface water source assessment can be found in the:

- c) CCME's *From Source to Tap: Guidance on the Multi-barrier Approach to Safe Drinking Water* ([www.ccme.ca/publications/list\\_publications.html](http://www.ccme.ca/publications/list_publications.html)) and
- d) USEPA Source Water Protection website  
(<http://cfpub.epa.gov/safewater/sourcewater/>)