

Classifying Streams Upstream of a Licensed Waterworks Intake

Purpose:

To describe the Council's policy regarding stream classification upstream of the point where water is diverted by a licensed waterworks intake (LWI).

This policy applies to streams and portions of streams located upstream of a LWI for a distance of 1,000 m. The 1,000 m distance is a map radius or horizontal distance not a slope distance. If a stream is located beyond 1,000 m but a section upstream of that point is within 1,000 m the guideline does not apply to the stream (see example 1, Lake Creek).

A **licensed waterworks intake** (LWI) as defined in the Private Managed Forest Land Matters Regulation, means a water intake that

- (a) is to provide water for human consumption, and
- (b) is licensed under the *Water Act* for
 - (i) a waterworks purpose, if the license is held by or is subject to the control of a municipality, regional district or improvement district, or
 - (ii) a domestic purpose, if the license is held by or is subject to the control of a water users' community incorporated under the *Water Act*.

Regulatory Requirements:

The Schedule in the Council Regulation 2007 describes stream riparian classes as:

- (1) A portion of a stream that is a fish stream or is located upstream of the point where water is diverted by a licensed waterworks intake has the following riparian class:
 - (a) A, if the stream channel width is 10 m or wider;
 - (b) B, if the stream channel width is 3 m or wider but narrower than 10 m;
 - (c) C, if the stream channel width is 1.5 m or wider but narrower than 3 m;
 - (d) D, if the stream channel width is narrower than 1.5 m.
- (2) A portion of a stream has a riparian class E if the portion of the stream:
 - (a) has a stream channel width of 1.5 m or wider, and
 - (b) is a direct tributary to a class A, B, C or D stream.

Guideline:

Non-fish streams upstream of a LWI:

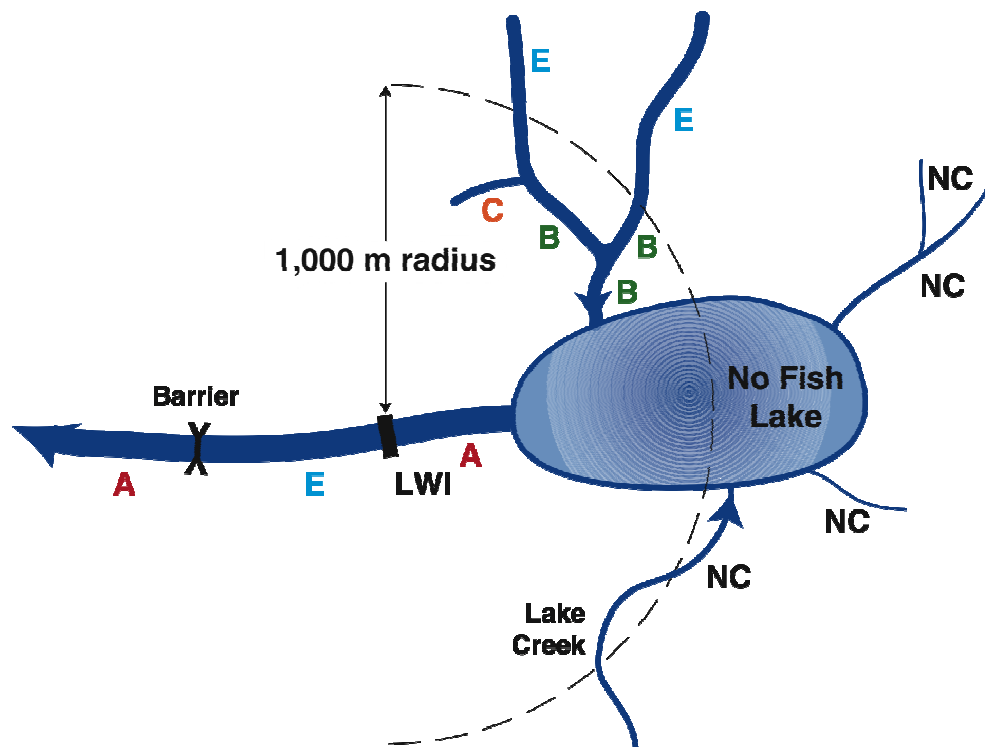
- (1) The portion of the non-fish stream located within 1,000 m upstream of a LWI will have a stream riparian class A to D depending on the channel width.
- (2) The portion of the non-fish stream located more than 1,000 m upstream of a LWI will have
 - (a) a stream riparian class E if the stream
 - (i) is a continuation of the same stream channel of a stream that was classified as a class A to D under subsection (1), and
 - (ii) has a minimum channel width of 1.5 m, and
 - (b) no classification if the stream is not a class E stream described in paragraph (a).

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Applying the Guideline:

Two hypothetical examples illustrate how streams would be classified upstream of a LWI.

Example 1: LWI just downstream of a lake

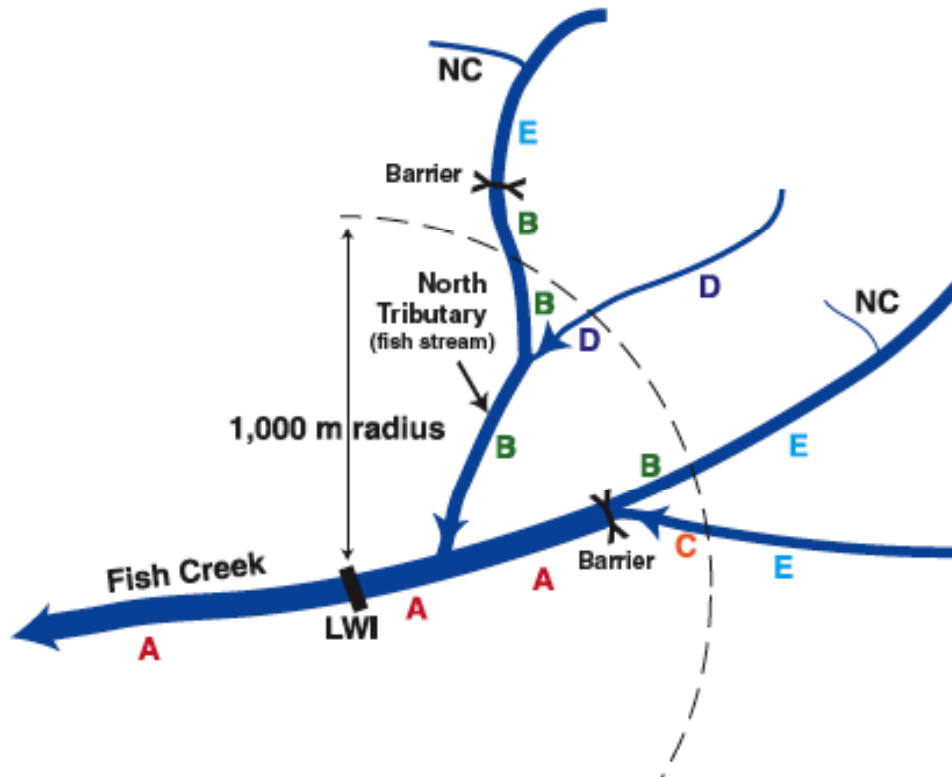


Example 1 shows a LWI just downstream of No Fish Lake. There is an impassable barrier downstream of the LWI and there are no fish upstream of this barrier. The stream below the barrier is a class A stream and immediately upstream of the barrier the stream class is E since there is no fish and it flows directly into a class A stream and is 1.5 m or wider. The presence of the LWI, however, changes the class E stream to a class A stream between the intake and the lake. The lake has no classification (NC) under the Council Regulation but may require protective measures under other legislation.

Four tributaries flow into the lake and all are non-fish bearing. The streams and portions of streams within the 1,000 m radius (dashed line) are classed as A to D based on channel width. In this example the portions of the two streams within the 1,000 m radius are either class B or C based on stream width. The streams that are a direct tributary to the class B and C streams are class E as long as they are greater than 1.5 m wide. The remaining streams and stream reaches have no classification since they are further than 1,000 m and are not direct tributaries to a class A to D stream.

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Example 2: LWI on a Fish Stream



Example 2 shows how a LWI on a fish stream with barrier falls at two locations upstream of the LWI intake affects stream classification. The LWI is on the main stem of Fish Creek, a class A fish stream. The stream class of fish-bearing stream reaches upstream of the LWI does not change. On North Tributary, the 1,000 m radius upstream of the LWI has no effect on stream class since fish are present. The stream directly upstream of the barrier falls on North Tributary is class E since it flows directly into a class B stream reach and is greater than 1.5 m wide. Streams flowing into class E streams are not classified (NC).

There is also a barrier falls on the main stem Fish Creek about 500 m upstream of the LWI. There are no fish or potential for fish above this barrier. The LWI influences the stream class upstream of this barrier even though there are no fish for a distance of 1,000 m. The main stem upstream of the 1,000 m radius is class E as long as it is greater than 1.5 m wide. The portion of the lower main stem tributary just upstream of the 1,000 m radius is also class E. All other tributaries would have no riparian class (NC).

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Approved: Original signed
Trevor Swan, Chair