



Province of British Columbia

Water Sustainability Act

The existing Water License authorizes water to be withdrawn after the hydrometric gauge (08HB002) which is currently located downstream of the intake. At this time, we are withdrawing water upstream of the gauge. Staff is working with the Province to obtain an updated Water License in 2023.

CONDITIONAL WATER LICENCE

The Regional District of Nanaimo, City of Parksville and Town of Qualicum Beach are hereby authorized to store, divert, and use water as follows:

- a) The stream on which the rights are granted is Englishman River and storage is in Arrowsmith Lake.
- b) The points of diversion are located as shown on the attached plan.
- c) The date from which this licence shall have precedence is August 10, 1995.
- d) The purposes for which this licence is issued are storage and waterworks.
- e) The maximum quantity of water which may be held in storage is 9,000,000 cubic metres per year and the maximum quantity of water which may be diverted for waterworks purpose is 7,000,000 cubic metres per year, at a rate not to exceed 48,000 cubic metres per day.
- f) The period of the year during which water may be diverted into storage is the whole year; and the period of the year during which the water may be used for waterworks purpose is the whole year, subject to the water being available from storage during the period June 1 to October 31.
- g) The land upon which the water is to be used and to which this licence is appurtenant is all the lands within the boundaries of the Regional District of Nanaimo, City of Parksville, and Town of Qualicum Beach.
- h) The authorized works are dam, intake, pumps, pipes and treatment system and facility which shall be located approximately as shown on the attached plan.
- i) The construction of the said works shall be completed and the water shall be beneficially used prior to December 31, 2020. Thereafter, the licensee shall continue to make regular beneficial use of the water in the manner authorized herein.
- j) The dam authorized under clause (h) is subject to the Dam Safety Regulations and shall be designed, constructed and maintained to the satisfaction of a Dam Safety Officer under the *Water Sustainability Act* and in accordance with the Canadian Dam Association Guidelines.
- k) The licensee shall maintain a flow measuring device that is incorporated into the works at the source to the satisfaction of the Water Manager under the *Water Sustainability Act*.

- l) The licensee shall release adequate water from storage in Arrowsmith Lake during the period of June 1 to October 31 to fully support the diversion of water from the Englishman River for the waterworks purpose.
- m) The diversion of water authorized under this licence may be regulated at any time by an order in writing from the Water Manager under the *Water Sustainability Act* in order to maintain a minimum flow in the stream.
- n) This licence is issued in substitution of Conditional Water Licence C129710.



Darryl Slater
Water Manager


ORDER

Section 18 *Water Act*

Provisional Operation Rule

Arrowsmith Lake Reservoir

1. The licensees shall install, maintain and operate the following gauges and provide water level, flow measurement, and meter reading reports, at the end of each month, for the period May through November, to the Engineer under the *Water Act*:
 - a. water level gauge in Arrowsmith Lake;
 - b. flow measurement gauge on Arrowsmith Creek at the outlet of Arrowsmith Lake;
 - c. flow measurement gauge on Englishman River near Parksville (08HB002); and
 - d. meter(s) at the intake works to measure the water withdrawal from the Englishman River.
2. The Arrowsmith Lake Reservoir shall be maintained at the full supply by July 1 of each year.
3. Between the period of June 1 and October 31 in any year, the flow releases shall be made from the Arrowsmith Lake Reservoir if the Englishman River flow is below $1.6\text{m}^3/\text{sec}$, a flow release shall be made to maintain the flow in the Englishman River above $1.6\text{m}^3/\text{sec}$ at the Englishman River near Parksville (08HB002) hydrometric gauge. (Note – $1.6\text{m}^3/\text{sec}$ is a quantity greater than instream fish flow maintenance plus future maximum monthly water withdrawal demand).
4. When the residual volume of water in the Arrowsmith Lake Reservoir is greater than 75% of the total reservoir volume on August 31 of any year, the Engineer under the *Water Act* (in consultation with the fisheries agencies and the water licensees) may increase the minimum flow required to be maintained in the Englishman River at the Englishman River near Parksville (08HB002) hydrometric gauge.
5. When the volume of water in the Arrowsmith Lake Reservoir is less than 25% of the total reservoir volume on September 30 of any year, the Engineer under the *Water Act* may decrease the minimum flow required to be maintained in the Englishman River at the Englishman River near Parksville (08HB002) hydrometric gauge.
6. This operation rule shall be revised when the intake works are relocated above the Englishman River near Parksville (08HB002) hydrometric gauge.



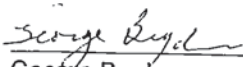
Larry Barr
Engineer under the *Water Act*

Approved this 2nd day of January, 2008

Provisional Operation Rule

Arrowsmith Lake Reservoir

1. The licensees shall install, maintain and operate the following gauges and provide water level, flow measurement, and meter reading reports, at the end of each month, for the period of May through November, to the Engineer under the Water Act:
 - (a) water level gauge in Arrowsmith Lake;
 - (b) flow measurement gauge on Arrowsmith Creek at the outlet of Arrowsmith Lake;
 - (c) flow measurement gauge on Englishman River near Parksville (08HB002); and,
 - (d) meter(s) at the intake works to measure the water withdrawal from the Englishman River.
2. The Arrowsmith Lake Reservoir shall be maintained at the full supply by June 1 of each year.
3. Between the period of June 1 and October 31 in any year the following flow releases shall be made from the Arrowsmith Lake Reservoir:
 - (a) Englishman River flow is above 1.6 m³/sec a flow quantity shall be released at least equal to the quantity withdrawn at the intake works.
 - (b) Englishman River flow is below 1.6 m³/sec a flow releases shall be made to maintain the flow in the Englishman River above 1.6 m³/sec at the Englishman River near Parksville (08HB002) hydrometric gauge.
(Note - 1.6 m³/sec is a quantity greater than instream fish flow maintenance plus future maximum monthly water withdrawal demand.)
4. When the residual volume of water in the Arrowsmith Lake Reservoir is greater than 75% of the total reservoir volume on August 31 of any year, the Engineer under the Water Act (in consultation with the fisheries agencies and the water licensees) may increase the minimum flow required to be maintained in the Englishman River at the Englishman River near Parksville (08HB002) hydrometric gauge.
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6. This operation rule shall be revised when the intake works are relocated above the Englishman River near Parksville (08HB002) hydrometric gauge.


George Bryden
Engineer under the Water Act

Approved this 4th day of March, 1997