



Province of British Columbia
Water Act

Order

File No.: 0236915

WHEREAS, British Columbia Hydro and Power Authority (BC Hydro) is the operator of the Hugh Keenleyside Dam, and the Arrow Lake Reservoir, in respect of which it holds Conditional Water Licence (CWL) 27066;

WHEREAS, construction and operation of the works authorized by CWL 27066 has caused flooding of existing access facilities and may result in elevation fluctuations of Arrow Lake Reservoir of more than 20 metres (440.14 m and 419.99 m);

WHEREAS, enjoyment of the reservoir area in a manner similar to that which was available to the public prior to the creation of the reservoir, in the form of boat launches, may be limited due to the reservoir fluctuations and the need for facilities which are effective over a greater operational range;

WHEREAS, clause (m) was included in CWL 27066 to provide the Comptroller of Water Rights with the authority to direct the licensee to provide public access to the reservoir area;

WHEREAS, I have considered the information available regarding public access to Arrow Lake;

I HEREBY ORDER THAT:

1. Pursuant to Clause (m) of CWL 27066 the licensee is to provide public access to the reservoir area at or near the locations, and in the form, noted below for the term of the licence:

1.1. Public access in the form of boat launching facilities is to be provided in the vicinity of the areas noted:

Shelter Bay
Nakusp
McDonald Creek
Burton

Fauquier
Edgewood (Eagle Creek)
Syringa Creek

1.2. Public access in the form of a park with a dyked swimming lagoon in the vicinity of Blanket Creek.

2. The public access ordered in 1 shall be developed and maintained in accordance with terms of reference as approved by the Comptroller of Water Rights.

3. The terms of reference shall be submitted to the Comptroller of Water Rights within six months from the date of issue of this order.

Dated at Victoria BC this 23rd day of January, 2006.

James S. Mattison, P.Eng.
Comptroller of Water Rights



BRITISH
COLUMBIA

The Best Place on Earth

ORDER

Section 88 of the
Water Act of British Columbia

IN THE MATTER OF Water Licence C027066, held by British Columbia Hydro & Power Authority (BC Hydro), which authorizes the storage of water for power purpose behind the Hugh Keenleyside Dam and identified by Provincial Dam Number D350003-01.

WHEREAS BC Hydro plans to improve the reliability of the flood discharge gate systems at the Hugh Keenleyside Dam.

WHEREAS BC Hydro has submitted a Gate Reliability Improvement Program plan in a letter dated March 12, 2010 requesting approval to alter the Hugh Keenleyside Dam.

WHEREAS the Dam Safety Section has reviewed the letter and accepted the Gate Reliability Improvement Program plan as being satisfactory.

NOW THEREFORE, I, Glen Davidson, Deputy Comptroller of Water Rights, hereby order pursuant to Section 88 of the *Water Act* of British Columbia, and pursuant to the Dam Safety Regulation, BC Reg. 44/2000, OIC 131/2000, that BC Hydro has authorization to proceed with the Gate Reliability Improvement Program at the Hugh Keenleyside Dam subject to the following:

- Maintain sufficient flood discharge capacity during construction by developing construction methodology and sequencing the work to manage the risk. Prior to construction, develop and forward to our office an Interim Dam Safety Risk Management Plan for placement in Appendix C of the Hugh Keenleyside Dam OMS manual.

Dated at Victoria, British Columbia this 31 day of March, 2010.

Glen Davidson, P.Eng.
Deputy Comptroller of Water Rights



Province of British Columbia
Water Act

ORDER

WATER ACT

File No. 0236915, 76954-70/Arrow Licence, 76975-35/Columbia River

WHEREAS British Columbia Hydro and Power Authority (BC Hydro) is the holder of Conditional Water Licence 27066 which authorises the storage of water in Arrow Lakes Reservoir (the "Reservoir") to a pool elevation not to exceed 440.74 metres (m) (1446 ft), providing that the pool elevation shall not be raised above 440.13 m (1444 ft), until authorized by the Comptroller of Water Rights (the "Comptroller"); and

WHEREAS the current Flood Control Curve (the "FCC") for the operation of the Reservoir under the Columbia River Treaty (the "Treaty") is based on storage in the Reservoir to a pool elevation of 440.13 m (1444 ft); and

WHEREAS the availability of 0.61 m (2 ft) storage above 440.13 m (1444 ft) would change the FCC and provide greater flexibility in the operation of the storage reservoirs in the Columbia River basin in British Columbia that is expected to improve fishery conditions in the Columbia River below the Reservoir and fulfil BC Hydro's obligations under the Non-Power Uses Agreement that is part of the Columbia River Treaty; and

WHEREAS section 4.5.1 of the Columbia River Project Water Use Plan (the "WUP") provides for the storage of water in the Reservoir above pool elevation 440.13 m (1444 ft) for environmental considerations; and

WHEREAS BC Hydro has estimated the impacts of an increase in the FCC on the **Soft Constraint Target Objectives for Arrow lakes Reservoir** in Table 4-1 of the WUP to be neutral to positive; and

WHEREAS under section 4.5.1 of the WUP BC Hydro proposes mitigation and/or compensation measures for any impacts from an increase in the pool elevation of the Reservoir above 440.13 m (1444 ft); and

WHEREAS BC Hydro has requested the Comptroller of Water Rights to authorize a pool elevation on the Reservoir that exceeds 440.13 m (1444 ft); and

WHEREAS the current operation of the Reservoir is not planned to exceed a pool elevation of 440.13 m (1444 ft) as the likelihood of exceeding this pool elevation is very small in 2012;

I HEREBY ORDER THAT:

BC Hydro may store water in the Reservoir to a maximum pool elevation of 440.74 m under the following conditions:

1. The period of storage above 440.13 m (1444 ft) is May 1 to July 31, 2012.
2. When the inflow forecast calls for a planned operation of the Reservoir to exceed a pool elevation of 440.13m (1444 ft), the procedures set out in the Hugh Keenleyside Dam Operation and Maintenance and Surveillance Manual for Dam Safety must be initiated.

Dated at Victoria, British Columbia, this 2nd day of May, 2012.



Glen Davidson, P. Eng.
Comptroller of Water Rights

MINISTRY OF ENVIRONMENT
WATER STEWARDSHIP DIVISION
VICTORIA, BRITISH COLUMBIA

APPROVAL

WATER ACT – Subsection 8(1)
(Short term use of water)

The British Columbia Hydro and Power Authority being the holder of Conditional water licences 27066 for the storage of water in Arrow Reservoir, is hereby authorized to store water in excess of that allowed under the licence.


- (a) The maximum additional water to be stored is 321,000 cubic decameters (260,000 acre-feet) above El. 440.1 m (1444 ft).
- (b) The period during which water may be stored is from March 25, 2008 to August 15, 2008.
- (c) The water level of the reservoir shall not be allowed to exceed El. 440.7m (1446 feet).
- (d) This approval does not authorize entry of privately held land.
- (e) Claims for any damages arising out of this Approval shall be the responsibility of BC Hydro.
- (f) The additional storage of water authorized under this approval may be prohibited or restricted at any time by direction of the Comptroller of Water Rights.



Glen Davidson, P.Eng.
Deputy Comptroller of Water Rights

File: 76940-70/ARROW

Date: March 26, 2008



March 26/08



Province of
British Columbia

BC
Environment
Lands and Parks

Water Management Division
765 Broughton Street
Victoria
British Columbia
V8V 1X5

ORDER

WATER ACT

File No. 48120-70/A

IN THE MATTER OF clause (i), Conditional Water Licence 27066,
which authorizes the storage of water in Arrow Lakes;

I HEREBY AUTHORIZE the British Columbia Hydro and Power
Authority to store water in Arrow Lakes for regulation for power purpose to
pool elevation in excess of 1,444 feet, but not in excess of 1,446 feet, for a period
of one year from the 1st January to the 31st December, 1992.

Dated at Victoria, British Columbia, this 20th day of December 1992.

D. A. Kasianchuk
Comptroller of Water Rights





Province of
British Columbia

Ministry of
Environment

Water Management Branch
Parliament Buildings
Victoria
British Columbia
V8V 1X5

ORDER
WATER ACT

File No. 0236915

IN THE MATTER OF clause (i), Conditional Water Licence 27066,
which authorizes the storage of water in Arrow Lakes;

I HEREBY AUTHORIZE the British Columbia Hydro and Power Authority
to store water in Arrow Lakes for regulation for power purpose to pool
elevation in excess of 1,444 feet, but not in excess of 1,446 feet,
for a period of one year from 1st January to 31st December, 1990.

Dated at Victoria, B.C. this 14th day of December, 1989.

A handwritten signature in cursive script, appearing to read "J. E. Farrell".

J. E. Farrell
Deputy Comptroller of Water Rights



ORDER

WATER ACT

File No. 0236915

IN THE MATTER OF clause (i), Conditional Water Licence 27066,
which authorizes the storage of water in Arrow Lakes;

I HEREBY AUTHORIZE the British Columbia Hydro and Power
Authority to store water in Arrow Lakes for regulation for power
purpose to pool elevation in excess of 1,444 feet, but not in excess of
1,446 feet, for a period of one year from the 1st of January to the 31st
of December, 1991.

Dated at Victoria, B.C., this 6th day of February, 1991.

J. E. Farrell
Deputy Comptroller of Water Rights



ORDER
WATER ACT

File No. 0236915

IN THE MATTER OF Clause (i), Conditional Water Licence No. 27066,
which authorizes the storage of water in Arrow Lakes;

I HEREBY AUTHORIZE the British Columbia Hydro and Power Authority to
store water in Arrow Lakes for regulation for power purpose to a pool
elevation in excess of 1,444 feet, but not in excess of 1,446 feet,
for the period of the year from 1st April to 31st December, 1989.

Dated at Victoria, B. C., this 30th day of March, 1989.

W. E. Farrell,
Deputy Comptroller of Water Rights.

ORDER
WATER ACT


File: 0236915

IN THE MATTER OF Clause (i) Conditional Water Licence
No. 27066, which authorizes the storage of water in Arrow
Lakes.

I HEREBY AUTHORIZE the British Columbia Hydro and Power
Authority to store water in Arrow Lakes for regulation for
power purpose to a pool elevation in excess of 1444 feet, but
not in excess of 1446 feet, for the period from 17 May 1987 to
1 June 1987, only.

This Order is in addition to a previous Order dated
8 May, 1983.

DATED at Victoria, B. C. this 28th Day of May, 1987.


P. M. Brady,
Comptroller of Water Rights.

ORDER

WATER ACT

File: 0236915

IN THE MATTER OF Clause (i) Conditional Water Licence No. 27066, which authorizes the storage of water in Arrow Lakes.

I HEREBY AUTHORIZE the British Columbia Hydro and Power Authority to store water in Arrow Lakes for regulation for power purpose to a pool elevation in excess of 1444 feet, but not in excess of 1446 feet, for the period of the year from 1 June to 31 December, in each of the calendar years 1983 to 1987 inclusive.

DATED at Victoria, B. C. this 8th day of February, 1983.


P. M. Brady,
Comptroller of Water Rights.



Province of
British Columbia

Ministry of
the Environment

WATER RIGHTS BRANCH

O R D E R

W A T E R A C T

File: 0236915

IN THE MATTER OF Clause (i) of Conditional Water Licence No. 27066, which authorises the storage of water in Arrow Lakes.

I HEREBY AUTHORIZE the British Columbia Hydro and Power Authority to store water in Arrow Lakes for regulation for power purpose to a pool elevation in excess of 1444 feet, but not in excess of 1446 feet, for the period of the year from 1 June to 31 December, in each of the years 1979, 1980, 1981 and 1982.

DATED at Victoria, B. C. this 2nd day of April, 1979.

A handwritten signature in black ink, appearing to read 'H. D. DeBeck'.

H. D. DeBeck,
Comptroller of Water Rights.



ORDER

WATER ACT

File 0236915

In the matter of Clause (i) of Conditional Water Licence No. 27066, which authorizes the storage of water in Arrow Lakes.

I hereby authorize the British Columbia Hydro and Power Authority to store water in Arrow Lakes for regulation for power purpose to a pool elevation in excess of 1,444 feet, but not to exceed 1,446 feet, for the period 1st October, 1978 to 31st December, 1978

Dated at Victoria, B. C., this 19th day of September, 1978.

H. D. DeBeck,
Comptroller of Water Rights.




DEPARTMENT OF LANDS, FORESTS, AND WATER RESOURCES
WATER RESOURCES SERVICE
WATER RIGHTS BRANCH
VICTORIA, B.C.

ORDER
WATER ACT

File No. 0236915

In the matter of Clause (i) of Conditional Water Licence No. 27066, authorizing the storage of water in Arrow Lakes, the British Columbia Hydro and Power Authority, for the purpose of regulating the flow of water for power purpose, is hereby authorized to store water in Arrow Lakes to a pool elevation not to exceed 1446 feet for the period of the year from 15th June to 31st December, commencing upon the date of issue of this Order and expiring on 30th September 1978.

DATED at Victoria, British Columbia this 13th day of June, 1972.


H. D. DeBeck,
Comptroller of Water Rights.

O R D E R

W A T E R A C T

FILE NO. 0236915

In the matter of Clause (1) of Conditional Water Licence No. 27066, authorizing the storage of water in Arrow Lakes, the British Columbia Hydro and Power Authority, for the purpose of regulating the flow of water for power purposes, is hereby authorized to store water in Arrow Lakes to a pool elevation not to exceed 1446' for the period from this date until December 31st, 1970.

Dated at Victoria, B.C., this 19th day of June, 1970.

A handwritten signature in cursive script, appearing to read 'H. D. DeBeck', is written over a rectangular stamp area.

H. D. DeBeck,
Comptroller of Water Rights.



THE GOVERNMENT OF
THE PROVINCE OF BRITISH COLUMBIA

DEPARTMENT OF LANDS, FORESTS, AND WATER RESOURCES
WATER RESOURCES SERVICE
WATER RIGHTS BRANCH
VICTORIA, B.C.

ORDER

WATER ACT

FILE NO. 0236915

In the matter of Clause (i) of Conditional Water Licence No. 27066, authorizing the storage of water in Arrow Lakes, the British Columbia Hydro and Power Authority, for the purpose of meeting its requirements in providing flood control in Canada and the United States of America, is hereby authorized to store water in Arrow Lakes in excess of elevation 1444 feet during any year of extreme flood, provided that the pool elevation shall not exceed elevation 1446 feet for a flood of comparable magnitude to that which occurred in the year 1894 and provided that the maximum pool elevation shall not exceed 1444 feet for years of normal flow.

It is further provided that any water stored for flood control purposes above elevation 1444 feet shall be released as soon as flood control requirements permit such release.

Dated at Victoria, B.C., this 18th day of June, 1965.

A handwritten signature in cursive script, appearing to read 'H.D. DeBeck'.

H.D. DeBeck,
Comptroller of Water Rights.

ORDER
WATER ACT
Section 15

File No. 0236915

Being satisfied that no person's rights will be injuriously affected, I hereby amend clause (j) of Conditional Water Licence No. 27066, Arrow Lakes and the Columbia River and its tributaries, to read:

- (j) The construction of the said works shall be commenced on or before the 31st day of December, 1964, and shall be completed and the water beneficially used on or before the 31st day of December, 1969.

DATED at Victoria, B. C., this 19th day of November, 1963.


A.F. Ragot,
Comptroller of Water Rights.

ORDER
WATER ACT

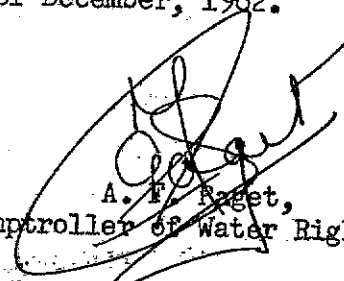
Section 15

FILE 0236915

Being satisfied that no person's rights will be injuriously affected, I hereby amend clause (j) of Conditional Water Licence No. 27066, Arrow Lakes and the Columbia River and its tributaries, to read:

- (j) The construction of the said works shall be commenced on or before the 31st day of December, 1963, and shall be completed and the water beneficially used on or before the 31st day of December, 1968.

Dated at Victoria, B.C., this 14th day of December, 1962.


A. F. Baget,
Comptroller of Water Rights.



Province of
British Columbia

Ministry of
Environment,
Lands and Parks

BC
Lands and Water
Management

LICENSE FOLDER

Water Management Division
765 Broughton Street
Victoria
British Columbia
V8V 1X4

ORDER

WATER ACT

File No.: 48120-70/A

IN THE MATTER OF clause (i), Conditional Water Licence 27066,
which authorizes the storage of water in Arrow Lakes;

I HEREBY AUTHORIZE British Columbia Hydro and Power Authority
to store water in Arrow Lakes for regulation for power purpose to pool
elevation in excess of 1,444 feet, but not in excess of 1,446 feet for the period
1st January, 1996, to the 31st December, 1996.

Dated at Victoria, British Columbia, this 16th day of January, 1996.



J. E. Farrell

Deputy Comptroller of Water Rights



Province of
British Columbia

Ministry of
Environment,
Lands and Parks

BC
Environment

Water Management Division
765 Broughton Street
Victoria
British Columbia
V8V 1X4

ORDER
WATER ACT

File No. 48120-70/A

IN THE MATTER OF clause (i), Conditional Water Licence 27066,
which authorizes the storage of water in Arrow Lakes;

I HEREBY AUTHORIZE the British Columbia Hydro and Power
Authority to store water in Arrow Lakes for regulation for power purpose to
pool elevation in excess of 1,444 feet, but not in excess of 1,446 feet, for a
period of one year from the 1st January to the 31st December, 1993.

Dated at Victoria, British Columbia, this 11th day of December, 1992.

Dr. D. A. Kasianchuk, P.Eng.
Comptroller of Water Rights