

**IN THE MATTER OF THE OPERATING RULE CURVE FOR  
THE STORAGE OF WATER IN AND THE RELEASE OF WATER FROM COWICHAN LAKE  
AS AUTHORIZED BY CONDITIONAL WATER LICENCES ("CWL") 23085 AND 29542**

**ORDER OF APPROVAL  
May 30th, 2013**

**WHEREAS:**

CWL 22864 (issued on February 13th, 1956) authorizes the diversion and use of a maximum of 100 cubic feet per second ("cfs") from Cowichan River for industrial purpose on Sections 2, 3, 4 and 5, Range 10, Chemainus District ("the Crofton pulp mill");

CWLs 23085 (issued June 15<sup>th</sup>, 1956) and 29542 (issued January 4<sup>th</sup>, 1965) (together the "storage licences"), authorize the storage of water in Cowichan Lake in the amounts of 32,000 and 17,700 acre feet per annum of water respectively in support of CWL 22864;

In a submission by British Columbia Forest Products Limited ("BCFP") dated March 20<sup>th</sup>, 1956, at a public hearing into their application for a water licence for storage of water in Cowichan Lake in support of CWL 22864, BCFP indicated that the minimum controlled discharge during low flow months of the year would be 250 cfs, of which 100 cfs was to be for the Crofton pulp mill and 150 cfs was to be for other water users. The submission noted that the Fisheries Department had advised that the increased flow in normal low water periods would be of benefit to fish propagation and migration.;

Clause (k) of the storage licences states: *"The licensee herein shall maintain at its own expense a minimum flow of 250 cubic feet per second below the control weir as shown on Exhibit "A" hereto attached"*;

The works authorized in the storage licences are a "dam", consisting of four control gates, an overflow control weir on the dam ("dam weir") and boat lock, which has been constructed at or near the outlet of Cowichan Lake (the "storage works");

The elevation of the crest of the dam weir on Cowichan Lake is 162.37 metres, Geodetic Survey of Canada datum (GSC);

The minimum lake elevation required to discharge the minimum required flow of 250 cfs, or 7.08 cubic metres per second ("cms"), through the fully opened control gates is 161.40 metres, GSC;

The equivalent volume of storage on Cowichan Lake between elevations 161.40 metres and 162.37 metres, GSC, is approximately equivalent to the combined licensed volume authorized by the storage licences of 49,700 acre feet per annum;

Catalyst Paper Corporation is the current holder of CWLs 22864, 23085 and 29542;

The current operational regime for Cowichan Lake storage has been governed by a rule curve which has been in place since 1990;

The “Cowichan Basin Water Management Plan”, dated March 2007, was commissioned by a partnership of the Cowichan Valley Regional District, BC Ministry of Environment, Fisheries and Oceans Canada, Catalyst Paper Corporation, Cowichan Tribes and the Pacific Salmon Commission in response to community concerns regarding the adequacy of the current storage works and the management of releases from Cowichan Lake to address complex, long term issues related to balancing water supply and demand in the Cowichan Basin, particularly during the summer and fall period. The plan included recommendations for changes to the management and release of water stored on Cowichan Lake;

On November 30, 2012, the Cowichan Valley Regional District (CVRD) held a Special Board Meeting to consider the operation of the Cowichan Lake dam, including consideration of climatic trends, land use and ecological conditions, and the need for more *“a flexible Cowichan Lake Weir protocol to ensure the ecological, cultural, environmental, social and economic values attributable to a healthy Cowichan River are maintained”*;

At that meeting the CVRD Board passed a resolution supporting *“a decision by the Province of British Columbia, or an application to the Province of British Columbia, to implement a “rule band” protocol consistent with the plan prepared by Kerr Wood Leidal entitled “Cowichan Lake Weir Proposed 2012 Operating Rules” (dated May 29, 2012);*

The “rule band” protocol proposed in the Kerr Wood Leidal plan included utilization of an additional 0.2 metres of storage above the current elevation of the dam weir crest on Cowichan Lake. Before the proposed rule band protocol could be adopted an application for a water licence for the increased storage volume on Cowichan Lake would need to be submitted and approved; to date an application for a licence for the additional storage has not been received;

Given that an application for a water licence for additional storage on Cowichan Lake has not been received, a second option was developed which proposed revisions to the rule curve for Cowichan Lake storage based on the drawdown proposed in the rule band protocol while still respecting the storage volumes authorized in the existing storage licences (the “proposal”);

Following receipt of the CVRD resolution and the development of the second option the province, with support from the CVRD, initiated a process to seek comments from the licensee, First Nations, stakeholders, fisheries agencies, affected property owners and the public regarding the proposed changes to the 1990 Cowichan Lake operating rule curve;

The process undertaken to seek comments both options included advertisement in newspapers, notification by mail to lakefront property owners, posting of the proposed changes on a public website, a public meeting held in Lake Cowichan on March 9, 2013, and written referrals to First Nations and the various interested agencies.

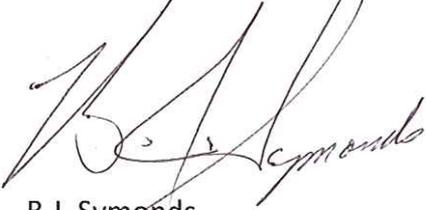
**THEREFORE**, after considering the proposal to increase operational flexibility through changes to the existing rule curve for Cowichan Lake storage (the second option) and the comments received during the review process regarding that proposal, I hereby approve the following revised requirements to govern the operation of the storage works on Cowichan Lake:

1. In any given year the control of outflow through the Cowichan Lake storage works shall commence following the winter high water season and when the lake, on its falling stage, is approaching the full storage level of 162.37 metres, GSC. Control of outflow shall not commence prior to April 1<sup>st</sup>, unless otherwise approved in writing by the Comptroller of Water Rights or the Regional Water Manager.
2. After control of outflow commences and until control of outflow ceases, the licensee shall maintain a minimum outflow from Cowichan Lake of 250 cfs (7.08 cms) as specified in the storage licences, except when the release of a lesser outflow is otherwise approved in writing by the Comptroller of Water Rights or the Regional Water Manager.
3. After control of outflow commences the licensee shall operate the storage works to maintain the level of Cowichan Lake at or below the elevations specified below:
  - Prior to July 31<sup>st</sup> 162.37 metres
  - August 31<sup>st</sup> 162.06 metres
  - September 30<sup>th</sup> 161.76 metres
  - October 31<sup>st</sup> 161.45 metres
  - November 5<sup>th</sup> 161.40 metres
4. While under outflow control there may be periods of abnormally high inflow to Cowichan Lake during which the lake's elevation may temporarily rise above the lake elevations specified in section 3 of this Order. As far as practicable during these periods the licensee shall operate the storage works to prevent the rise exceeding the specified elevations by more than 0.10 metres and, thereafter, shall take the necessary and reasonable steps to return Cowichan Lake to the specified elevations in the shortest practicable time possible.

5. On or before November 5<sup>th</sup>, the gates of the Cowichan Lake dam shall be fully opened and shall remain open until commencement of control of outflow at the start of the following water season, as described in section 1 of this Order.

This Order is effective on the date of its signing and supersedes all previous Orders of the Comptroller of Water Rights with respect to the operation of the storage works on Cowichan Lake.

Signed the 30th day of May, 2013

A handwritten signature in black ink, appearing to read "B.J. Symonds". The signature is written in a cursive style with a large initial "B" and "S".

B.J. Symonds  
Deputy Comptroller of Water Rights

File No: 76940-50/206435

