



Province of British Columbia

WATER SUSTAINABILITY ACT

ORDER

Section 93

Capilano River File Numbers: 0115178, 0154757 and 2003606

Seymour River File Numbers: 0115177, 0154757, 0218830 and 2003607

WHEREAS the Greater Vancouver Water District (GVWD) is the operator of the Capilano and Seymour waterworks systems (“the Systems”);

WHEREAS the Capilano system is comprised of Cleveland Dam, Palisade Lake Dam, Capilano Reservoir and Palisade Lake Reservoir in respect of which the GVWD holds Final Water Licences 008691 and 008692 and Conditional Water Licences 016296, 123813 and 133133;

WHEREAS the GVWD is the sole owner and sole operator of the storage works at Palisade Lake and the diversion works at Capilano River authorised in Final Water Licences 008691 and 008692, up to the East boundary of DL 140;

WHEREAS, in accordance with Section 83(1) of the *Greater Vancouver Water District Act*, the GVWD has extended its water service to supply water to the inhabitants of DL 140;

WHEREAS the Seymour system is comprised of Seymour Falls Dam, Burwell Lake Dam, Loch Lomond Dam, Seymour Reservoir, Burwell Lake Reservoir and Loch Lomond Reservoir, in respect of which the GVWD holds Final Water Licences 008689 and 008690, and Conditional Water Licences 016298, 123895, 024510, 118986 and 133154;

WHEREAS Conditional Water Licences 133133 and 133154 issued to GVWD authorise the construction of hydro-electric generating stations immediately below the Cleveland Dam and Seymour Falls Dam, which would utilise water otherwise spilled at the dams;

WHEREAS an extension of rights Order issued under Section 37 of the *Water Sustainability Act* authorizes the GVWD to use a limited amount of stored water in Capilano Reservoir and Seymour Reservoir for power purpose;

WHEREAS the three alpine lake reservoirs, being Palisade Lake, Burwell Lake and Loch Lomond, will not be used to augment the volume of water stored in the Capilano and Seymour Reservoirs for power purposes;

WHEREAS the GVWD has engaged in public consultation to determine parameters and procedures for the operation of the Systems which may provide benefits as described below;

WHEREAS the GVWD will operate the works in such manner as to maintain drinking water and provide environmental flow releases as the first and second priorities, followed by the generation of hydropower as the third priority;

WHEREAS GVWD has submitted the Joint Water Use Plan for the Capilano and Seymour Watersheds (“the JWUP”) dated October 27, 2017;

WHEREAS the JWUP recommends operational changes to the Systems and further operational changes following completion of the proposed generating station at Cleveland Dam, with the intent of providing benefits to fish and recreation and additional hydro-electricity without altering the reliability of the drinking water supply;

WHEREAS the Joint Water Use Plan recommends a monitoring program to determine whether implementation of the JWUP and development and operation of the proposed generating stations will provide the expected benefits; and,

WHEREAS I have accepted the Joint Water Use Plan dated October 27, 2017;

I HEREBY ORDER THAT:

CAPILANO

Pre Hydro Development – Minimum Flows and Ramp Rates

1. A minimum of 0.57 cubic meters per second (m^3/s) measured at the point of discharge will be released below Cleveland Dam through the mechanical pump tailrace, or alternative means approved by the Comptroller of Water Rights (CWR), at all times to meet fisheries and recreation interests in the lower Capilano River.
2. Prior to the development of the generating station, Cleveland Dam increasing and decreasing discharge ramping rates will be regulated using the Drum Gates, Howell-Bunger (HB) valves and slide gates as outlined in Schedule A.

Post Hydro Development - Minimum Flows, Ramp Rates and Reservoir Operations

3. Minimum flows from Cleveland Dam, as measured at point of discharge below the dam, shall be released into the lower Capilano River for fisheries and recreation interests, as follows:

Period	Reservoir Elevation (meters*)	Minimum Flow (cubic meters/second)	Released From
All year	< 130	0.57	Mechanical Pump Tailrace, or alternative means approved by CWR
Dec. 1 – May 31	> 130	1.20	Combination of Mechanical Pump Tailrace, New Fish Flow Release or alternative means approved by CWR
June 1 – Nov. 30	> 130	Varies from 0.57 to 2.30 as per Schedule B	Combination of Mechanical Pump Tailrace, New Fish Flow Release or alternative means approved by CWR

* As measured at the dam using geodetic datum.

4. Following development of the generating station, Cleveland Dam discharge ramping rates will be regulated using the Drum Gates, Howell-Bunger (HB) valves and slide gates as outlined in Schedule A and by using the generating station and bypass valve as authorized by Conditional Water Licence 133133 and associated subsequent approvals.

The Capilano Hydropower Project will operate as follows:

5. From May 1 to October 31, energy may be generated from water that would otherwise spill or be discharged from the Capilano Reservoir into Capilano River;
6. From November 1 to April 30, energy may be generated from water stored at reservoir elevations between full pool level (elevation 145.9m) and 4 meters down (elevation 141.9m). The volume of water available for power purpose between the two elevations is estimated to be 9.7 Mm³;
7. To make beneficial use of water that needs to be released, energy may be generated at other times and reservoir elevations in the event of an emergency, unusual maintenance condition, extreme hydrological event or other reasons;
8. The maximum rate of diversion for power purposes will be the maximum instantaneous rate of 27.0 m³/s, as authorised in Conditional Water Licence 133133.

MONITORING

9. GVWD shall submit for approval by the Comptroller of Water Rights, terms of reference for monitoring studies as described in Schedule C.
10. Upon receiving from the Comptroller of Water Rights, approval of the above terms of reference and leave to commence, GVWD shall:
 - a) Implement the monitoring programs in accordance with approved terms of reference; and
 - b) Following completion of each monitoring study, submit a report to the Comptroller of Water Rights on the results of the approved monitoring program as specified in each terms of reference.

RECORDS

11. With respect to the maintenance and annual provision of records GVWD shall:
 - a) Keep records of:
 - i. Fish flow releases from Cleveland Dam;
 - ii. Drinking water withdrawals from Capilano Reservoir;
 - iii. Flow and rate of flow change in Capilano River below Cleveland Dam measured at the GVWD flow gauge located 250m below Cleveland Dam;
 - iv. Elevation of Capilano Reservoir;
 - v. Flow in the Capilano River above the Capilano Reservoir measured at Water Survey of Canada gauge 08GA010;
 - vi. Rate of diversion from Capilano Reservoir for power upon completion of the Capilano generating station;
 - b) Provide a written report to the Comptroller of Water Rights and to the Water Manager in February of each year summarizing the records from the previous calendar year; and
 - c) Provide on request of the Comptroller of Water Rights or Water Manager, records collected under Clause 11.

SEYMOUR

Pre Hydro Development – Minimum Flows and Ramp Rates

12. Minimum flows shall be released from the Seymour Falls Dam for fisheries and recreation interests in the lower Seymour River, as set out in the following table, and these minimum flows shall supersede the minimum flows specified in GVWD Drawing WG-395 under a previous 1960 Provincial *Water Act* Order:

Period	Minimum Flow (cubic meters per second)	Released From
Dec. 1 – May 31	1.36	Combination of existing fish flow release valve and future turbine discharge, or alternative means approved by CWR
June 1 – Nov. 30	Varies from 0.7 and 2.8 as per Schedule E	Combination of existing fish flow release valve and future turbine discharge, or alternative means approved by CWR

13. Seymour Falls discharge ramping rates will be regulated using the fish valve and Howell-Bunger (HB) valves as outlined in Schedule D.

Post Hydro Development - Minimum Flows, Ramp Rates and Reservoir Operations

14. Minimum flows shall be released from the Seymour Falls Dam for fisheries and recreation interests in the lower Seymour River, as directed in Clause 12 above.
15. Following development of the generating station, Seymour Falls discharge ramping rates will be regulated using the fish valve and Howell-Bunger (HB) valves as outlined in Schedule D, and by using the generating station as authorized by Conditional Water Licence 133154 and associated subsequent approvals.

The Seymour Hydropower Project will operate as follows:

16. From May 1 to October 31, energy may be generated from water that would otherwise spill or be discharged from the Seymour Reservoir into Seymour River;
17. From November 1 to April 30, energy may be generated from water stored at reservoir elevations between winter full pool level (elevation 212.9m) and 1 meter down (elevation 211.9m). The volume of water available for power purposes between the two elevations is estimated to be 2.5 Mm³;

18. To make beneficial use of water that needs to be released, energy may be generated at other times and reservoir elevations in the event of an emergency, unusual maintenance condition, extreme hydrological event or other reasons;
19. The maximum rate of diversion for power purposes will be the maximum instantaneous rate of 16.2 m³/s, as authorised in Conditional Water Licence 133154.

Monitoring

20. GVWD shall submit for approval by the Comptroller of Water Rights, terms of reference for monitoring studies as described in Schedule F.
21. Upon receiving, from the Comptroller of Water Rights, approval of the above terms of reference and leave to commence, GVWD shall:
 - a) Implement the monitoring programs in accordance with approved terms of reference; and
 - b) Following completion of each monitoring study, submit a report to the Comptroller of Water Rights on the results of the approved monitoring program as specified in each terms of reference.

Records

22. With respect to the maintenance and provision of records GVWD shall:
 - a) Keep records of:
 - i. Elevation of Seymour Reservoir;
 - ii. Drinking water withdrawals from Seymour Reservoir;
 - iii. Fish flow releases from Seymour Falls Dam;
 - iv. Flow and rate of flow change in Seymour River below Seymour Falls Dam measured at the Metro Vancouver flow gauge located 4 km below the Seymour Falls Dam;
 - v. Inflows to Seymour Reservoir; and
 - vi. Rate of diversion from Seymour Falls Reservoir for power upon completion of the Seymour generation station;
 - b) Provide a written report to the Comptroller of Water Rights and to the Water Manager in February of each year summarizing the records from the previous calendar year;
 - c) Provide upon request of the Comptroller of Water Rights or Water Manager, records collected under Clause 22.

CAPILANO and SEYMOUR

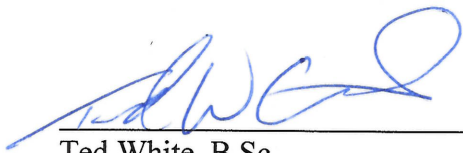
Emergency Operations

23. GVWD may operate the Systems in a manner other than set out above in the event of an emergency, dam safety matter, an unusual maintenance condition or extreme hydrological event; in which case the minimum fish flows may be reduced to 0.57 cubic meters per second (m^3/s) at Cleveland Dam and 0.7 m^3/s at Seymour Dam, if required.

Notice

24. Any emergency or dam safety matter or unusual maintenance condition or extreme hydrological event that causes deviations from the operations ordered above shall be reported to the Comptroller of Water Rights in a timely manner.

Dated at Victoria, B.C., this 26 day of January, 2018.



Ted White, B.Sc.
Comptroller of Water Rights

Schedule A

This schedule contains four tables for increasing and decreasing the discharge from the reservoir. Each table describes the ramping operations of the respective works. Although the works may be operated separately, at times their operations may be coordinated depending on the magnitude of the changes to the inflow of the reservoir.

The tables provide the estimated discharge flow when the reservoir is at its maximum level during the winter. The discharge will decrease when the reservoir is at lower levels.

Cleveland Dam					
Increasing Ramping Rates					
1 st Opened Howell- Bunger Valve	2 nd Opened Howell- Bunger Valve	1 st Opened Slide Gate	2 nd Opened Slide Gate	Minimum Time Before Next Change in Valve Setting	Estimated Discharge Flow at Reservoir Elevation of 145.89m
% Open	% Open	% Open	% Open	minutes	m ³ /s
0				n/a	0.0
5				30	4.2
10				30	8.2
15				30	12.2
20				15	15.9
25				15	19.5
30				15	22.9
40				15	29.2
50				15	34.8
65				15	41.3
100				15	49.8
100	10			15	58.1
100	25			15	69.0
100	40			15	79.0
100	60			15	89.8
100	100			15	99.7
100	100	50		15	132
100	100	100	0	15	157
100	100	100	50	15	190
100	100	100	100	n/a	214

Schedule A

Cleveland Dam Drum Gate			
Increasing Ramping Rates			
Drum Gate Elevation Step Change Increments	Minimum Time between Changes in Discharge Flow	Change in Discharge Flow	Estimated Discharge Flow Range
m	minutes	m ³ /s	m ³ /s
0.06864	15	1.4	0 – 6.0
0.03466	10	1.4	6.0 – 14.0
0.0268	5	1.4	14.0 – 28.0
0.0425	5	2.8	28.0 – 56.0
0.0508	5	4.2	56.0 – 112.0
0.0702	5	7.0	112.0 – 170.0
0.1205	5	14.0	170.0 – 280.0
0.1485	5	21.2	280.0 – 560.0
0.1646	5	28.3	560.0 – 850.0
0.2922	5	56.6	850.0 – 1130.0
0.6006	5	141.6	>1130.0

Schedule A

Cleveland Dam					
Decreasing Ramping Rates					
1 st Closed Slide Gate	2 nd Closed Slide Gate	1st Closed Howell-Bunger Valve	2 nd Closed Howell-Bunger Valve	Minimum Time Before Next Change in Valve Setting	Estimated Discharge Flow at Reservoir Elevation of 145.89m
% Open	% Open	% Open	% Open	minutes	m ³ /s
100	100	100	100	n/a	214
50	100	100	100	30	190
0	100	100	100	30	157
	50	100	100	30	132
	0	100	100	30	99.7
		70	100	30	94.0
		50	100	30	84.4
		40	100	30	79.0
		30	100	30	72.2
		20	100	30	65.7
		10	100	30	58.1
		0	100	60	49.8
			80	60	47.0
			60	60	39.9
			50	60	34.5
			40	60	29.2
			35	60	26.2
			30	60	22.4
			25	60	19.0
			20	60	15.9
			16	60	12.5
			12	60	9.6
			8	60	6.5
			5	120	4.2
			0	n/a	0.0

Schedule A

Cleveland Dam Drum Gate			
Decreasing Ramping Rates			
Drum Gate Elevation Step Change Increments	Minimum Time between Changes in Discharge Flow	Change in Discharge Flow	Estimated Discharge Flow Range
(m)	(minutes)	(m ³ /s)	(m ³ /s)
0.6197	5	141.6	>1130.0
0.2979	5	56.6	1130.0 – 850.0
0.1669	5	28.3	850.0 – 560.0
0.1404	5	21.2	560.0 – 420.0
0.1052	5	14.0	420.0 – 280.0
0.0983	5	11.3	280.0 – 170.0
0.086	15	8.5	170.0 – 112.0
0.0869	15	7.0	112.0 – 56.0
0.0853	30	5.6	56.0 – 28.0
0.0768	60	4.2	28.0 – 16.0
0.0618	60	2.8	16.0 – 9.0
0.0555	60	2.1	7.0 – 9.0
0.0686	60	1.4	< 7.0

Schedule B

Capilano - Minimum Dam Releases June 1 – November 30

	June 1	June 15	July 1	July 15
Abundant Water Conditions <i>Criteria / Threshold</i>	Q _{min} = 2.3cms If by June 1 st : • Lake level is > (145.89m) and • Spilling >10cms	Q _{min} = 2.3cms If by June 15 th : • Lake level is > (145.89m) and • Spilling >10cms	Q _{min} = 2.3cms If by July 1 st : • Lake level is @ full pool (145.89m) and • Spilling >10cms	Q _{min} = 2.3cms If by July 15 th : • Lake level is @ full pool (145.89m) and • Spilling >2 cms
Average Water Conditions <i>Criteria</i>	Q _{min} = 1.2cms <i>Between Abundant and Drought water condition thresholds</i>			
Drought Conditions <i>Criteria / Threshold</i>	Q _{min} = 0.57cms If by June 1 st : • Lake level is less than 145.0m	Q _{min} = 0.57cms If by June 15 th : • Lake level is less than 145.0m	Q _{min} = 0.57cms If by July 1 st : • Lake level is less than 145.0m	Q _{min} = 0.57cms If by July 15 th : • Lake level is less than 143.0m
	Aug 1	Aug 15	Sept 1	Sept 15
Abundant Water Conditions <i>Criteria / Threshold</i>	Q _{min} = 2.3cms If by Aug 1 st : • Lake level is >143.5m and Inflows to lake >12cms (excl Alpine releases)	Q _{min} = 2.3cms If by Aug 15 th : • Lake level is >142.0m	Q _{min} = 2.3cms If by Sep 1 st : • Lake level is >140m	Q _{min} = 2.3cms If by Sept 15 th : • Lake level is >138m
Average Water Conditions <i>Criteria</i>	Q _{min} = 1.2cms <i>Between Abundant and Drought water condition thresholds</i>			
Drought Conditions <i>Criteria / Threshold</i>	Q _{min} = 0.57cms If by Aug 1 st : • Lake level is <139.0m	Q _{min} = 0.57cms If by Aug 15 th : • Lake level is <135.0m	Q _{min} = 0.57cms If by Sep 1 st : • Lake level is <130m	Q _{min} = 0.57cms If by Sep 15 th : • Lake level is <130m and • Alpine storage has been released
	Oct 1	Oct 15	Nov 1	Nov 15 to 30
Abundant Water Conditions <i>Criteria / Threshold</i>	Q _{min} = 2.3cms If by Oct 1 st : • Lake level is >136m	Q _{min} = 2.3cms If by Oct 15 th : • Lake level is >134m	Q _{min} = 2.3cms If by Nov 1 st : • Lake level is >136m	Q _{min} = 2.3cms If by Nov 15 th : • Lake level is >138m
Average Water Conditions <i>Criteria</i>	Q _{min} = 1.2cms <i>Between Abundant and Drought water condition thresholds</i>			
Drought Conditions <i>Criteria / Threshold</i>	Q _{min} = 0.57cms If by Oct 1 st : • Lake level is <130m and • Alpine storage has been released	Q _{min} = 0.57cms If by Oct 15 th : • Lake level is <130m and • Alpine storage has been released	Q _{min} = 0.57cms If by Nov 1 st : • Lake level is <130m and • Alpine storage has been released	Q _{min} = 0.57cms If by Nov 15 th : • Lake level is <130m and • Alpine storage has been released

Schedule C

Capilano Monitoring

1. The licensee shall submit within 9 months of the date of this Order, for approval by the Comptroller of Water Rights, terms of reference for the monitoring programs listed under 1.a. below. Terms of reference for monitoring programs listed under 1.b. shall be submitted 6 months after GVWD completes their feasibility study. Monitoring programs listed under 1.b. shall be completed prior to GVWD applying for Leave to Commence Construction. If GVWD concludes not to continue with the project, a letter to the Comptroller of Water Rights outlining the decision is requested. Terms of Reference for monitoring programs listed under 1.c. shall be submitted for approval by the Comptroller of Water Rights in advance of the Water Manager's approval for Leave to Commence Operations (LCO) of the Capilano generating station.

a. **Current Facilities**

- i. Assess risk of stranding associated with ramping protocol;
- ii. Assess effectiveness of the fish trap and truck program at the Cleveland Dam.

b. **Pre-Hydro Development**

- i. Monitor water temperature below Cleveland Dam for two years;
- ii. Monitor biological response of status and trends in key fish species in the Capilano River for two years;
- iii. Monitor distribution and abundance of SARA-listed species for one year;
- iv. Monitor risk of stranding in drawdown zone of Capilano Reservoir for one year;
- v. Assess fish habitat in the Capilano River for one year;
- vi. Assess for one year the habitat expected to be impacted by construction of the hydro-electric generating station and develop a habitat compensation plan.

c. **Post Hydro Development**

- i. Assess risk of stranding below Cleveland Dam associated with ramping protocol;
- ii. Monitor water temperature below Cleveland Dam for three years;
- iii. Monitor biological response of status and trends in key fish species in the Capilano River for five years;
- iv. Assess upstream migration enhancement using pulse flows for three to five years;
- v. Assess effectiveness of fish screens at power intake and monitor fish collection system; and
- vi. Assess effectiveness of the fish trap and truck program at Cleveland Dam.

Schedule D

This schedule contains two tables for increasing and decreasing the discharge from the reservoir. Each table describes the ramping operations of the respective works. The tables provide the estimated discharge flow when the reservoir is at its maximum level during the winter. The discharge flow will decrease when the reservoir is at lower levels.

Seymour Falls Dam				
Increasing Ramping Rates				
Fish Valve	1 st Opened Howell-Bunger Valve	2 nd Opened Howell-Bunger Valve	Minimum Time before Next Change in Valve Setting	Estimated Discharge Flow for Reservoir at Spillway Elevation of 212.94m
% Open	%Open	%Open	minutes	m ³ /s
15/Auto	0	0	n/a	0.79
25	0	0	15	1.3
50	0	0	15	2.6
75	0	0	15	3.7
100	0	0	15	4.6
-	5	0	30	7.8
-	10	0	30	9.5
-	15	0	30	11.7
-	20	0	15	13.7
-	30	0	15	17.1
-	40	0	15	20.5
-	50	0	15	22.8
-	60	0	15	25.0
-	100	0	15	28.4
-	-	10	15	33.2
-	-	20	15	37.5
-	-	30	15	40.9
-	-	40	15	44.3
-	-	50	15	46.6
-	-	60	15	48.8
-	-	100	n/a	52.2

Schedule D

Seymour Falls Dam

Decreasing Ramping Rates

1 st Closed Howell-Bunger Valve	2 nd Closed Howell-Bunger Valve	Fish Valve	Minimum Time before Next Change in Valve Setting	Estimated Discharge Flow for Reservoir at Spillway Elevation of 212.94m
% Open	% Open	% Open	minutes	m ³ /s
100	100	100	n/a	52.2
60	100	100	30	48.8
30	100	100	30	40.9
10	100	100	30	33.2
0	100	100	30	28.4
-	60	100	30	25.0
-	40	100	30	20.5
-	25	100	30	15.4
-	15	100	30	11.7
-	5	100	30	7.8
-	0	100	60	4.6
-	-	80	30	3.9
-	-	65	30	3.2
-	-	50	30	2.6
-	-	40	30	2.1
-	-	30	30	1.6
-	-	25	30	1.3
-	-	15/Auto	n/a	0.79

Schedule E

Seymour - Minimum Dam Releases June 1 – November 30

	June 1	June 15	July 1	July 15
Abundant Water Conditions <i>Criteria / Threshold</i>	Q _{min} = 1.36cms	Q _{min} = 1.36cms	Q _{min} = 1.4cms	Q _{min} = 1.4cms
Average Water Conditions <i>Criteria</i>	<i>Between Abundant and Drought water condition thresholds</i>			
Impending Drought Conditions <i>Criteria / Threshold</i>	Q _{min} = 1.1cms If by June 1 st : Lake level <213m	Q _{min} = 1.1cms If by June 15 th : Lake level is <214m	Q _{min} = 1.1cms If by July 1 st : Lake level is < 213m	Q _{min} = 1.1cms If by July 15 th : Lake level is <211m
Drought Conditions <i>Criteria / Threshold</i>	Q _{min} = 0.7cms If by June 1 st : Lake level < 212m	Q _{min} = 0.7cms If by June 15 th : Lake level is <213m	Q _{min} = 0.7cms If by July 1 st : Lake level <212m	Q _{min} = 0.7cms If by July 15 th : Lake level is <210m
	Aug 1	Aug 15	Sept 1	Sept 15
Abundant Water Conditions <i>Criteria / Threshold</i>	Q _{min} = 2.8cms If by Aug 1 st : Lake level is >213.8m	Q _{min} = 2.8cms If by Aug 15 th : Lake level is >213.4m	Q _{min} = 2.8cms If by Sep 1 st : Lake level is >213m	Q _{min} = 2.8cms If by Sept 15 th : Lake level is >212m
Average Water Conditions <i>Criteria</i>	<i>Between Abundant and Drought water condition thresholds</i>			
Impending Drought Conditions <i>Criteria / Threshold</i>	Q _{min} = 1.1cms If by Aug 1 st : Lake level is <208m	Q _{min} = 1.1cms If by Aug 15 th : Lake level is <206m	Q _{min} = 1.1cms If by Sep 1 st : Lake level is <204 and Alpine storage released	Q _{min} = 1.1cms If by Sep 15 th : Lake level is <204 and Alpine storage released
Drought Conditions <i>Criteria / Threshold</i>	Q _{min} = 0.7cms If by Aug 1 st : Lake level is <207m	Q _{min} = 0.7cms If by Aug 15 th : Lake level is <205m	Q _{min} = 0.7cms If by Sep 1 st : Lake level is <203 and Alpine storage released	Q _{min} = 0.7cms If by Sep 15 th : Lake level is <203 and Alpine storage released
	Oct 1	Oct 15	Nov 1	Nov 15-30
Abundant Water Conditions <i>Criteria / Threshold</i>	Q _{min} = 2.8cms If by Oct 1 st : Lake level is >211m	Q _{min} = 2.8cms If by Oct 15 th : Lake level is >210m	Q _{min} = 2.8cms If by Nov 1 st : Lake level is >210m	Q _{min} = 2.8cms If by Nov 15 th : Lake level is >212m
Average Water Conditions <i>Criteria</i>	<i>Between Abundant and Drought water condition thresholds</i>			
Impending Drought Conditions <i>Criteria / Threshold</i>	Q _{min} = 1.1cms If by Oct 1 st : Lake level is <204 and Alpine storage released	Q _{min} = 1.1cms If by Oct 15 th : Lake level is <204 and Alpine storage released	Q _{min} = 1.1cms If by Nov 1 st : Lake level is <204 and Alpine storage released	Q _{min} = 1.1cms If by Nov 15 th : Lake level is <206 and Alpine storage released
Drought Conditions <i>Criteria / Threshold</i>	Q _{min} = 0.7cms If by Oct 1 st : Lake level is <203 and Alpine storage released	Q _{min} = 0.7cms If by Oct 15 th : Lake level is <203 and Alpine storage released	Q _{min} = 0.7cms If by Nov 1 st : Lake level is <203 and Alpine storage released	Q _{min} = 0.7cms If by Nov 15 th : Lake level is <205 and Alpine storage released

Schedule F

Seymour Monitoring

1. The licensee shall submit within 9 months of the date of this Order, for approval by the Comptroller of Water Rights, terms of reference for the monitoring programs listed under 1.a. below. Terms of reference for monitoring programs listed under 1.b. shall be submitted 6 months after GVWD completes their feasibility study. Monitoring programs listed under 1.b. shall be completed prior to GVWD applying for Leave to Commence Construction. If GVWD concludes not to continue with the project, a letter to the Comptroller of Water Rights outlining the decision is requested. Terms of Reference for monitoring programs listed under 1.c. shall be submitted for approval by the Comptroller of Water Rights in advance of the Water Manager's approval for Leave to Commence Operations (LCO) of the Seymour generating station.

a. Current Facilities

- i. Assess risk of stranding below the Seymour Falls Dam associated with ramping protocol.

b. Pre-Hydro Development

- i. Monitor water temperature below the Seymour Falls Dam at Water Survey of Canada gauge 08GA030 for two years;
- ii. Monitor distribution and abundance of SARA-listed species for one year;
- iii. Assess fish habitat in the Seymour River for one year;
- iv. Assess for one year the habitat expected to be impacted by construction of the hydropower plant and develop a habitat compensation plan.

c. Post Hydro Development

- i. Assess risk of stranding below the Seymour Falls Dam associated with ramping protocol;
- ii. Monitor water temperature below the Seymour Falls Dam at Water Survey of Canada gauge 08GA030;
- iii. Assess risk of fish entrainment below Seymour Falls Dam.

