13 Compliance Monitoring Plan

The Compliance Monitoring Plan defines the parameters (levels and/or flows) that will be monitored to determine whether the waterpower facility is within the established operating range (see Section 12 for facility operating plans and operating zones), identifies exceptional operating circumstances, establishes the reporting procedures and format, and establishes the format for data reports. While it is recognized that MNR may audit waterpower facility operations at any time to verify compliance, the procedures contained herein pertain to self-reporting by waterpower industry facilities to meet the requirements of the Muskoka River Water Management Plan.

13.1 Compliance Definitions

Twenty-four hour daily average data elevations will be the basis of all compliance and enforcement auditing, monitoring, inspections and reporting. Average daily water levels that are outside the 'NOZ' will be reported under all circumstances. Reporting procedures are described in Sections 13.3 and 13.4.

Flows arriving at waterpower facility dams are typically the result of operation of upstream MNR controlled dams, and are not under the control of waterpower operators. No compliance limits for river flow are established at waterpower facilities outside the spring walleye spawning period.

During the spring walleye spawning period (as determined by MNR[*]) hourly flow data will be recorded and reported at Matthias Generating Station and South Falls spillway channel. Hourly flows that are less than the values noted below will be considered to be out of compliance, unless the flow from the upstream MNR-controlled dam is below the noted minimum value. In the event that the flow at Baysville Dam falls below 5 m^3/s, the South Branch facilities will endeavor to maintain a minimum consistent flow of 3 m^3/s at the walleye spawning site at South Falls during the walleye spawning period until such time as reservoir water levels reach the lower limit of the NOZ.

[*] Approximately the third week of April to June 1 annually.

	Mathias/South Falls*	**Baysville Dam**
Minimum flow	3 m^3/s	5 m^3/s

Flow for the Moon Falls walleye spawning site is provided through the Moon Dam, which is operated by OPG. During the walleye spawning period (as determined by MNRF), flows will be maintained as per Section 12.3.2. OPG and SREL will cooperate and coordinate operation of their respective dams (Moon dam and Bala dams, respectively) to achieve the proposed daily flow value. Amendment to flow management for the Moon River are expected as new information becomes available (see Section 15), through an adaptive management process.

13.2 Exceptional Operating Circumstances

The proponents of the Muskoka River Water Management Plan recognize that there may be exceptional circumstances which can affect the ability of each partner to maintain flows and water levels within the prescribed ranges as noted in Section 12 of this document. Natural, anthropogenic and mechanically induced occurrences may result in levels or flows outside the normal operating range. Reporting of these "out of range" occurrences will take place as noted in Section 13.2.1.

1. Significant rain or drought events which exceed the high or low water triggers established for each facility (as identified in Section 12). Reporting of high and low water triggers shall be undertaken at the beginning and end of each event.

2. Large scale operation of an upstream MNR dam during a high flow period may cause an exceedance of a waterpower facility's high water trigger. Such events will be reported immediately to the local MNR office (Senior Water Control Technologist or alternate).

3. An Independent Electricity System Operator (IESO) or provincially declared energy emergency. If requested to respond to such an emergency, MNR and waterpower operators would work together to optimize power output from the river system. Waterpower facility operations outside the NOZ would be reported as per Section 13.4.1.

* South Falls minimum flow provided through the spillway channel.

4. Failure of generating station monitoring, mechanical equipment, or structures may result in the facility going outside its NOZ. Such events will be reported immediately to the local MNR office (Senior Water Control Technologist or alternate) and to the central WMP 'reporting line' as noted in Section 13.4.1.

5. Icing of physical structures and monitoring equipment may result in the loss of operational/monitoring capability with that equipment. Such events will be reported immediately to the local MNR office (Senior Water Control Technologist or alternate) and to the central WMP 'reporting line' as noted in Section 13.4.1. MNR will be notified of the expected return to service time/date.

6. An electrical distribution system outage may cause generating plants to be isolated from the distribution network, and need to be shut down. Under these conditions, head-pond levels may rise temporarily until flow can be diverted through spillways or bypass channels. Such events will be reported immediately to the local MNR office (Senior Water Control Technologist or alternate) and to the central WMP 'reporting line' as noted in Section 13.4.1.

7. Short-term flow or water level changes resulting from dam safety tests (i.e., to ensure that stop logs can be removed to pass high flow events). Such events will be reported immediately to the local MNR office (Senior Water Control Technologist or alternate) and to the central WMP 'reporting line' as noted in Section 13.4.1.

13.2.1 Reporting During Exceptional Operating Circumstances

1. Reporting during exceptional operating circumstances will be via telephone to the Senior Water Control Technologist at the MNR Bracebridge Area office immediately upon verification of an out of range event.

2. Subsequent reporting will be as per Section 13.4.1.

13.3 Deviations from Mandatory Compliance with Natural Variations in Water Supplies

MNR recognizes that weather conditions and their impacts on water supplies are a source of ongoing uncertainty in managing water power facilities and other control structures.

Operators will **not** be considered to be out of compliance with their WMP when they operate outside the specified operating range as a result of a high or low water conditions as defined below.

Low Water Indicator

Facilities with minimum downstream flow and minimum reservoir/head-pond water level requirements are in a low water condition when all of the following conditions are met:

- outflow from the facility is at or below the minimum flow targeted in each branch
- water level in the head pond/reservoir is at or below the minimum water level stipulated in the WMP, and
- the head pond/reservoir water level is decreasing.

Facilities with no minimum downstream flow requirements but having a minimum reservoir/head-pond water level are in a low water condition when all of the following conditions are met:

- outflow from the facility is at the minimum possible
- the head pond/reservoir water level continues to decrease.

High Water Indicator

High water conditions exist at a facility when all the following conditions are met:

- water level in the head pond/reservoir is at or above the maximum water level stipulated in the approved WMP, and
- head pond/reservoir water level is increasing, and
- discharge facilities have been operated to discharge the maximum discharge possible (while minimizing upstream and downstream flood damages).

In instances where waterpower operators report that they can no longer operate within the approved operating range because a low or high water indicator has been met, they will

- immediately advise MNR and file an event report

- comply with any conditions/components contained in the WMP related to these circumstances.

MNR requires owners of facilities that have mandatory water flow and level requirements to convene the Standing Advisory Committee (SAC) to assess options once a low water indicator has been met. Assessments will consider the circumstances of the situation against the priorities that were set during the planning process and will make recommendations accordingly. SAC's do not have a regulatory role. The role is to provide advice during low water conditions where operations are outside of the approved plan (MNR, 2002).

MNR requires that an official record be maintained of all recommendations made by the SAC to the operator and copied to MNR.

Once a high or low water trigger has been met, the Plan will permit the owner/operator to deviate outside the operating range while continuing to meet any other requirements of the Plan until the condition described by the trigger ends (i.e., as long as the conditions applies, operations outside of the approved operating range will be in compliance with the Plan).

MNR may request appropriate existing data and information to confirm or assess the high or low water conditions, or may independently verify the situation. MNR has indicated that reports generated as a result of such a review will not constitute non-compliance reports unless the owner/operator is found to be deliberately or negligently operating outside the approved operating range.

13.4 Reporting Procedures and Format

13.4.1 Self-Monitoring, Data Reporting and Incident Notification

All facilities are required to self-monitor mandatory water flow and level limits, and report on any incidents where a deviation from the operating requirements of the WMP (mandatory water flow and level), or other mandatory conditions of the Muskoka River WMP. All incidents must be reported to the MNRF.

An initial notification to the MNRF (via telephone to the Bracebridge Area office or other office as per MNRF direction) is required within 24 hours of the occurrence of the incident or when the proponent(s) first becomes aware of the incident.

The report should include:

- The date, time and nature of the deviation;
- The extent of the deviation;
- Possible causes of the deviation;
- Known or anticipated impacts associated with the deviation; and
- Steps taken or to be taken, including the timeframe, to correct the deviation.

The facility owner/operator is then required to provide a written report via fax to the MNRF Bracebridge Area office within 30 days, outlining the details of the incident, any additional information not provided in the incident notification and subsequent remediation. The report must be signed and dated. (See event report form located at the end of Section 13).

Proponents shall make water flow and level data available to the Ministry upon Request.

13.4.2 Annual Compliance Reporting

Each individual plan proponent will prepare and submit an Annual Compliance Report. The report will contain a summary and description of all incidents and any remedial action(s) proposed or undertaken. In the event there were no recorded incidents of noncompliance, the report will state as such.

13.4.3 Data Reporting Format

Should the Ministry request that a proponent make water flow and level data available to the Ministry, the following reporting format will be used.

1. Recording Formats:

    a. **Flow Data**: Hourly - date, hour, hourly flow value.

– During walleye spawning period at designated facilities
– North Bala GS, North Bala Dam, Bala South Dam and total Bala discharge

Daily
– High Falls (as per Flow Distribution Plan, when second unit in operation)
– Burgess

b. **Water Level Data**: Daily – date, average daily water level (average of 24 hour values)

2. Data Reporting – Data to be archived for a period of 5 years. Any data collected near the end of the WMP term must be retained for 5 years from the day it is collected.

3. Data will be provided electronically as Comma Separated Variable (CSV) format, Microsoft Excel Version 97 or above, or equivalent. If agreed by both parties, electronic data can be sent via e-mail.

13.4.4 Data Reporting Exceptions

It is acknowledged that at times mechanical failure may cause data to be unavailable for specific time intervals. Industry will notify MNRF the next business day of any mechanical failures to monitoring equipment. Under these conditions, manual readings will be taken as possible, and will be recorded and reported. MNRF shall understand that the water levels and flows may be out of compliance until such time that the mechanical failure is identified and rectified. Industry shall make all reasonable efforts to make the required repairs in a timely manner, and will inform MNRF when equipment is operational.

13.5 Reporting by MNR

MNRF will notify waterpower industry operators of all dam operations that change flow within the downstream reach below Port Sydney (Mary Lake) and Baysville (Lake of Bays) . Industry will be notified of the change by means of a telephone call to their respective operational centres. Under unusual circumstances (i.e., a flow change that exceeds the high or low water triggers), the

call will also provide immediate notification and provide the opportunity to develop joint strategies to deal with the situation. MNRF will advise industry of any loss of active gauging capability (i.e., Mary Lake and Baysville).

Flows in excess of the high or low water trigger values shall be reported to the central WMP 'reporting line' by MNRF Bracebridge Area Office.