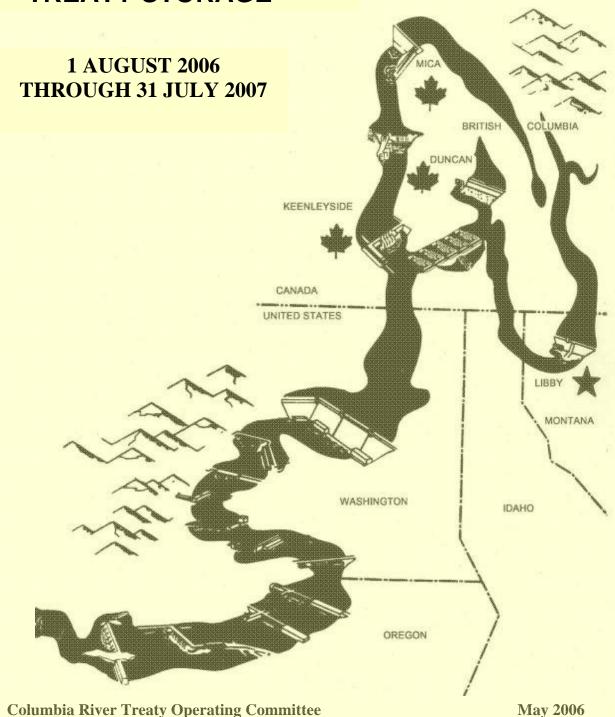
DETAILED OPERATING PLAN FOR COLUMBIA RIVER TREATY STORAGE



COLUMBIA RIVER TREATY ENTITY AGREEMENT ON THE DETAILED OPERATING PLAN FOR COLUMBIA RIVER TREATY STORAGE 1 AUGUST 2006 THROUGH 31 JULY 2007

Article XIV 2.(k) of the Columbia River Treaty between Canada and the United States of America (Treaty) provides that the power and duties of the Entities includes preparation and implementation of detailed operating plans that may produce results more advantageous to both countries than those that would arise from operation under the Assured Operating Plan (AOP).

The Entities agree that Treaty storage shall be operated and electric power delivered in accordance with the attached "Detailed Operating Plan for Columbia River Treaty Storage – 1 August 2006 through 31 July 2007" (2006-07 Detailed Operating Plan), dated May 2006.

The Entities agree that the December 2003 Entity Agreement on "Principles and Procedures for Preparing and Implementing of Hydroelectric Operating Plans for Operation of Canadian Treaty Storage," or its successor, will guide the Entities in implementing the 2006-07 Detailed Operating Plan.

In witness thereof, the Entities have caused this agreement to be executed.

Executed for the Canadian Entity this 22 day of

Ву

Robert G. Elton

Chair

Executed for the United States Entity this 15th day of May, 2006.

By

Stephen J. Wrigh

Chairman

Brigadier General Gregg F. Martin

Member

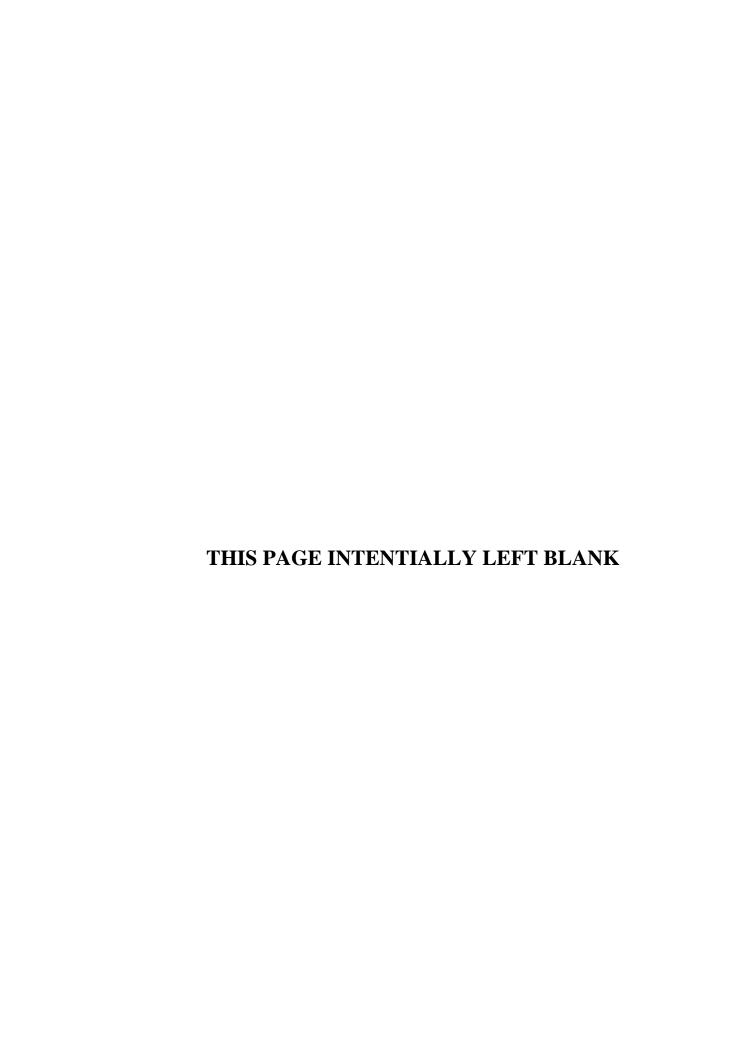


TABLE OF CONTENTS

I.	REFERENCES AND INTERPRETATION	1
II.	PREPARATION AND SCOPE	2
	A. General	2
	B. STORAGE AMOUNTS	
	C. Preparation of the Treaty Storage Regulation Study	
	D. AUTHORIZATION FOR CHANGES TO THE TSR	5
	Е. Libby	5
III.	POWER DELIVERIES	5
	A. Delivery of the Canadian Entitlement	5
	B. LCA Power	
	C. OPERATIONAL AGREEMENT POWER	
IV.	STORAGE OPERATION	6
	A. OPERATION AUTHORITY	6
	B. CANADIAN STORAGE OPERATION	
	C. OBJECTIVES FOR SUPPLEMENTAL OPERATING AGREEMENTS	
	D. Provisional Draft at Arrow	
	E. GENERAL STORAGE OPERATION GUIDELINES	
v.	SCHEDULING STORAGE REGULATION	7
	A. OPERATING DATA	
	B. Volume Runoff Forecasts	
	C. Treaty Storage Regulation Study	
	D. SCHEDULING AGREEMENTS	
VI.	OPERATING GUIDES	11
	A. OPERATING RULE CURVE	11
	B. RULE CURVES AND OPERATING DATA	
	C. RESERVOIR CAPACITY TABLES	12
VII.	OPERATING LIMITS	13
	A. DUNCAN PROJECT	13
	B. ARROW PROJECT	
	C. MICA PROJECT	14
	MICA PROJECT OPERATING CRITERIA (ENGLISH)	
	MICA PROJECT OPERATING CRITERIA (SI)	17
EXH	IBITS	18
	Exhibit 1 - Assured Refill Curves (English) 1/	
	EXHIBIT 1M - ASSURED REFILL CURVES (SI) 1/	
	EXHIBIT 2 - FIRST CRITICAL RULE CURVES (ENGLISH & SI)	
	EXHIBIT 3 - SECOND CRITICAL RULE CURVES (ENGLISH & SI)	
	EXHIBIT 4 - THIRD CRITICAL RULE CURVES (ENGLISH & SI)	
	EXHIBIT 5 - FOURTH CRITICAL RULE CURVES (ENGLISH & SI)	
	EXHIBIT 7 - VARIABLE REFILL CURVE PROCEDURES (ENGLISH)	
	EXHIBIT 7M - VARIABLE REFILL CURVE PROCEDURES (ENGLISH) EXHIBIT 7M - VARIABLE REFILL CURVE PROCEDURES (SI)	
	EXHIBIT 8 - COORDINATED SYSTEM LOADS AND RESOURCES USED IN THE TSR	
	EXHIBIT 9 – DUNCAN RESERVOIR CAPACITY TABLE (ENGLISH)	
	EXHIBIT 9 – DUNCAN RESERVOIR CAPACITY TABLE (ENGLISH)	

EXHIBIT 9 – DUNCAN RESERVOIR CAPACITY TABLE (ENGLISH)	28
EXHIBIT 9M– DUNCAN RESERVOIR CAPACITY TABLE (SI)	29
EXHIBIT 9M– DUNCAN RESERVOIR CAPACITY TABLE (SI)	30
EXHIBIT 9M– DUNCAN RESERVOIR CAPACITY TABLE (SI)	31
EXHIBIT 10 – ARROW RESERVOIR CAPACITY TABLE (ENGLISH)	32
EXHIBIT 10 – ARROW RESERVOIR CAPACITY TABLE (ENGLISH)	33
EXHIBIT 10M – ARROW RESERVOIR CAPACITY TABLE (SI)	34
EXHIBIT 10M – ARROW RESERVOIR CAPACITY TABLE (SI)	35
EXHIBIT 11 – MICA RESERVOIR CAPACITY TABLE (ENGLISH)	
EXHIBIT 11 – MICA RESERVOIR CAPACITY TABLE (ENGLISH)	37
EXHIBIT 11 – MICA RESERVOIR CAPACITY TABLE (ENGLISH)	38
EXHIBIT 11 – MICA RESERVOIR CAPACITY TABLE (ENGLISH)	39
EXHIBIT 11M- MICA RESERVOIR CAPACITY TABLE (SI)	40
EXHIBIT 11M– MICA RESERVOIR CAPACITY TABLE (SI)	
EXHIBIT 11M– MICA RESERVOIR CAPACITY TABLE (SI)	42
EXHIBIT 11M-MICA RESERVOIR CAPACITY TABLE (SI)	43

DETAILED OPERATING PLAN FOR COLUMBIA RIVER TREATY STORAGE 1 AUGUST 2006 THROUGH 31 JULY 2007

I. REFERENCES AND INTERPRETATION

In this document:

- A. "Assured Operating Plan" (AOP07) means the hydroelectric operating plan developed in accordance with the Treaty for the Operating Year as further described in the document "Columbia River Treaty Hydroelectric Operating Plan Assured Operating Plan for Operating Year 2006-07" dated January 2004."
- B. "Canadian storage" means the storage provided by Canada under Article II of the Treaty, which is a total of 19.119 cubic kilometers (km³ = 10⁹ cubic meters) (15.5 million acre feet (Maf)) at the Mica, Duncan, and Arrow reservoirs.
- C. "Aspects Agreement" means the Entity Agreement on Aspects of the Delivery of the Canadian Entitlement for 1 April 1998 through 15 September 2024 between the Canadian Entity and the United States Entity, dated 29 March, 1999, together with its Attachment B Scheduling Guidelines as they may be subsequently modified or amended by the Operating Committee.
- D. "Detailed Operating Plan" (DOP) means a detailed operating plan prepared for the Operating Year by the Operating Committee pursuant to the guidelines provided in the Principles and Procedures and consisting of the contents of this document.
- E. "Flood Control Operating Plan" (FCOP) means the document "Columbia River Treaty Flood Control Operating Plan," dated May 2003.
- F. "Libby Coordination Agreement (LCA)" means the "Columbia River Treaty Entity Agreement Coordinating the Operation of the Libby Project With the Operation Of Hydroelectric Plans on the Kootenay River and Elsewhere in Canada", dated 16 February 2000.
- G. "Libby Operating Plan" (LOP) means the operating plan prepared by the U.S. Army Corps of Engineers ("Corps of Engineers") on behalf of the U.S. Entity for the Libby project in accordance with Section 9 of the LCA, and incorporated as Attachment B to the LCA.
- H. "Operating Committee" means the Columbia River Treaty Operating Committee.
- I. "Operating Year" means the period from 1 August 2006 through 31 July 2007.
- J. "Principles and Procedures" (POP) means the document "Columbia River Treaty Principles and Procedures for Preparation and Use of Hydroelectric Operating Plans for

Canadian Treaty Storage," dated October 2003, or any future document the Entities agree supersedes the 2003 document, and any Appendices approved by the Operating Committee.

- K. "Supplemental Operating Agreement" (SOA) means any Entity agreement(s) (signed either by the Entities or the Operating Committee) that authorize Canadian storage operations above or draft below the TSR levels as described in Section IV(A) of this DOP and Section 11 of the LCA, but not including Section 10 of the LCA.
- L. "Treaty Storage Regulation" (TSR) means the Coordinated System hydro regulation study performed for the Operating Committee by Bonneville Power Administration (BPA) staff using actual and forecasted streamflow conditions and implementing operating criteria contained in this DOP, including any changes agreed to under Subsection II(D), but excluding Subsections IV(D) and SOA operations authorized under Subsection IV(A).
- M. Weekly Treaty Storage Operation Agreement" means the note electronically transferred (e-mail or FaxTM) each Friday from the U.S. Section to the Canadian Section of the Operating Committee to confirm the verbal agreement by the Operating Committee for the weekly Treaty storage changes and outflows that implement this DOP, including any changes agreed to under Subsection II(D) and Section IV.

Other capitalized terms used in this document, not defined above, should be interpreted to have the meaning ascribed to them in POP (either in the definitions or the text), the FCOP or the generally accepted meaning within the industry in the Columbia River Basin.

II. PREPARATION AND SCOPE

A. General

This DOP for Canadian storage is based on the operating criteria contained in the AOP07 and its supporting hydro regulation studies with agreed revisions noted in Subsection II(C) below, together with scheduling procedures and other mutually beneficial changes from the AOP data agreed to by the Entities.

This DOP was developed in accordance with the procedures outlined in the POP and incorporates the use of the International System of Units (SI, or Metric); however, for operational purposes, reliance should be placed on measurements in the English system.

B. Storage Amounts

1. The usable Canadian storage space available for power purposes during the Operating Year is 19.119 km³ (15.5 Maf) in Canada distributed as follows:

Duncan Reservoir

1.727 km³ (1.4 Maf or 705.8 thousand second-foot-days (ksfd)) between elevations 576.68 meters (m) (1892.0 feet) and 546.87 m (1794.2 feet) as measured at Duncan forebay, and based on British Columbia Hydro and Power Authority (BC Hydro) table dated 21 February 1973.

Arrow Reservoir

8.758 km³ (7.1 Maf or 3579.6 ksfd) between elevations 440.13 m (1444.0 feet) and 419.98 m (1377.9 feet) as measured at Fauquier, B.C, and based on BC Hydro table dated 28 February 1974.

Mica Reservoir

8.634 km³ (7 Maf or 3529.2 ksfd) between elevations 754.38 m (2475.0 feet) and 707.41 m (2320.9 feet) as measured at Mica forebay, and based on BC Hydro table dated 25 March 1974. The total available storage between these elevations is 14.802 km³ (12 Maf, 6050.0 ksfd), but only 8.634 km³ (7 Maf, 3529.2 ksfd) of this storage is utilized for power purposes, except as described in paragraph VII(C)6.

2. The requirements for flood control operations are defined in the Treaty and the Flood Control Operating Plan. In accordance with Section 6-6 of the Flood Control Operating Plan, the Canadian Entity has selected a reallocation of Mica/Arrow system flood control space to be 5.033 km³ (4.08 Maf) at Mica and 4.441 km³ (3.6 Maf) at Arrow for the Operating Year. The usable Canadian storage available for normal flood control purposes during the Operating Year will be 1.567 km³ (1.27 Maf) in Duncan Reservoir below elevation 576.68 m (1892.0 feet), 4.441 km³ (3.6 Maf) in Arrow Reservoir below elevation 440.13 m (1444.0 feet), and 5.033 km³ (4.08 Maf) in Mica Reservoir. Additional storage may also be operated for flood control purposes under special circumstances, as described in Section 3-2 of the Flood Control Operating Plan.

To the extent that the flood control storage allocation differs from that included in the AOP07, the Operating Committee will develop and execute an agreement that will result in the same Treaty flows at the U.S.-Canadian border as that provided in the AOP07, as modified in subsection II(C) below, unless otherwise agreed by the Committee.

In order to respond to requirements in Duncan's Water Use Plan, BC Hydro will likely request a variance for the 2006-07 Operating Year to the February Duncan flood control draft requirements in the current (2003) Flood Control Operating Plan. The Corps of Engineers will review this variance request in its normal manner.

C. Preparation of the Treaty Storage Regulation Study

The TSR study uses DOP operating criteria for both Canadian and U.S. projects to define a Canadian storage operation. The TSR07 study shall be based on the loads, thermal and other resources, rule curves, non-power constraints, and other plant and operating data contained in the AOP07 Step I hydro regulation study, except for the following changes agreed to by the Entities.

- 1. Flood control rule curves for Canadian projects will be defined as noted in subsection II(B)2 above.
- 2. Use of the hydro-independent generation included in the Pacific Northwest Coordination Agreement (PNCA) Actual Energy Regulation (AER) and the 60-year median values for hydro independents not included in the AER from the AOP07

AOP07 Step I hydro regulation study.

- 3. Addition of a maximum January outflow limit at Arrow of 2,265 m³/s (80,000 cfs) as described in subsection VII(b)1 of this document.
- 4. Use of updated distribution factors at Hungry Horse and Grand Coulee, based on the 2000 Level Modified Flows from the U.S. Department of Interior, Bureau of Reclamation, as submitted for use in the PNCA 2004-05 and later operating years. Use of updated distribution factors for Libby, based on the 1 February 2005 PNCA data submittal, and updated forecast errors (hedges) for Libby based on the 2006-07 Modified Regulation data submittal. The Committee may revise forecast errors and distribution factors in accordance with Subsection II(D).
- 5. For current and future months, update Coulee pumping flows to the 1 February 2006 PNCA data submittal, or current forecast values if available, and use actual values for after-the-fact months. Adjustments to return flows are not needed because the observed streamflows and streamflow forecasts include return flows.
- 6. The plant data (physical description) at Arrow and Brilliant will be updated to the 1 February 2005 PNCA data submittal.
- 7. Use of forecasted streamflows as a percentage of 71-year medians from the 2000 Modified Flows without Grand Coulee pumping.
- 8. The hydro regulation model used will be PCHYDSIM version 27, or later version if agreed by the Operating Committee.
- 9. Flood control curves at Grand Coulee will be adjusted for additional draft below flood control levels at upstream reservoirs in accordance with the Flood Control Operating Plan. Flood control rule curves at Coeur d'Alene Lake (Post Falls) will be updated to the 1 February 2001 PNCA data submittal.

Although not changed from the AOP07, some notable assumptions for this TSR include:

- 10. U.S. flood control curves will include VarQ at Hungry Horse but not at Libby, and will not include Variable End-of-December flood control rule curves at Libby or shifted flood control from Brownlee and Dworshak to Grand Coulee.
- 11. Arrow Project Operating Criteria will be updated based on the procedures defined in Subsection VII(B)7 of this DOP.
- 12. Brownlee's storage operation will be based on critical rule curves and energy content curves included in the AOP07, but the project minimum outflows will be calculated based on the minimum flow requirement at Lime Point.

The Lower Granite April-July volume runoff forecast, used to calculate Lower Granite minimum fish flow objectives during April through August, will be updated in the TSR07 studies.

The TSR includes the operating guides and limits listed in Sections VI and VII of this

DOP.

D. Authorization for Changes to the TSR

The Operating Committee is authorized to modify the TSR only as needed to correct errors or omissions, update forecast data and procedures, and update the hydroregulation model.

E. Libby

Libby operating limits and the expected operation of the Libby project are not included in the DOP. That information is available in the Libby Operating Plan that will be updated by the U.S. Entity when planned operations change. The operation of Libby in the TSR07 will be based on the AOP07 Step 1 operating criteria.

III. POWER DELIVERIES

A. Delivery of the Canadian Entitlement

The obligation of the United States to return the Canadian Entitlement to Canada for the Operating Year based on the AOP07 is:

Dependable Capacity = 1,244.3 MW Average Annual Usable Energy = 488.5 aMW

Arrangement for the delivery of this Canadian entitlement power, including the point of delivery, transmission losses, and scheduling guidelines, are defined by the Aspects Agreement, and Articles V and VIII of the Columbia River Treaty. Section 11 of Attachment B to the Aspects Agreement delegates to the Operating Committee the responsibility for modifying or amending Attachment B - Scheduling Guidelines, as needed from time to time.

B. LCA Power

In accordance with Section 7(b) of the LCA, the Canadian Entity shall deliver to the U.S. Entity one (1) average MW, shaped flat, during the Operating Year. In accordance with Section 10 of the LCA, the Entities shall deliver and receive power relating to the provisional draft of Arrow reservoir. The Entities hereby authorize BC Hydro and BPA to make suitable arrangements for delivery of LCA power at the points of interconnection between BC Hydro and the Federal Columbia River Transmission System.

C. Operational Agreement Power

In accordance with Section IV of this DOP, the Entities shall make arrangements to deliver and/or receive power required by any SOA. The Entities hereby authorize BC Hydro and BPA to make suitable arrangements for delivery of Operational Agreement Power at the points of interconnection between BC Hydro and the Federal Columbia River Transmission System.

IV. STORAGE OPERATION

A. Operation Authority

The operation of Canadian storage by the Columbia River Treaty Operating Committee during the period 1 August 2006 through 31 July 2007 shall be in accordance with this DOP, the FCOP, the LCA, and any SOA applicable to this Operating Year. Consistent with the operating objectives in this section, the Operating Committee is authorized to enter into SOA's consistent with the objectives defined in Subsection IV(C) on behalf of the Entities that store above or draft below end-of-month TSR levels, and may include the delivery of power, for mutual benefits that occur during the period covered by this DOP.

B. Canadian Storage Operation

The Weekly Treaty Storage Operation Agreements shall be based on operating Canadian storage to the end-of-month contents contained in the current TSR study, plus any operations under SOA's and the LCA (as described in subsections C and D below) or as required by the FCOP.

From time to time, due to updated forecasts or differences between forecast and actual inflows, the actual operation of Treaty composite storage will differ from the end of period storage prescribed by the TSR as modified by SOA, LCA, or flood control operations. The Operating Committee will make reasonable efforts to correct these differences via the regular Weekly Treaty Storage Operation Agreements in a timely manner without exceeding the specified project limits for discharges and ramp-rates.

C. Objectives for Supplemental Operating Agreements

Consistent with the FCOP and operating limits defined in Section VII of this DOP, the objectives for SOA's include the following.

1. Power Objectives:

Power objectives include minimizing spill and optimizing energy production, power marketing, and purchase decisions. Operations for power objectives may be combined with non-power objectives. When appropriate, the Operating Committee will make suitable arrangements for delivery of power relating to sharing of power benefits from operational agreements.

2. Non-power Objectives:

Potential Canadian non-power objectives may include, but are not limited to, whitefish and trout spawning downstream of Arrow, dust storm avoidance upstream of Arrow, and recreation needs. Potential U.S. non-power objectives may include, but are not limited to, storage up to 1.233 km³ (1 Maf) for anadromous fish flow augmentation, minimum flows at Bonneville dam and at Vernita Bar for fish spawning, and recreation needs. Non-power objectives considered in this section do not include flood control and operating limits in Section VII.

Recognizing that it may not be possible to meet all non-power objectives, the Operating Committee shall in general attempt to share equally the risk and amount of failure. The parties shall make reasonable efforts to use available flexibility at their projects prior to requesting changes to the Treaty storage operation.

Operations designed to help meet non-power objectives do not imply that either Entity acknowledges any obligation, domestic or international, to meet those objectives. The Entities agree that operations for non-power objectives do not set a precedent concerning any current or future dispute over Treaty rights and obligations, nor do they set a precedent for non-power objectives or flow objectives and contents.

D. Provisional Draft at Arrow

The Canadian Section of the Operating Committee may provisionally draft from Arrow reservoir below TSR levels in accordance with Section 10 of the LCA.

E. General Storage Operation Guidelines

The values used in the AOP studies to define the various rule curves were period-end values only. In actual operation, it is necessary to operate in such a manner during the course of each period that these period-end values can be achieved in accordance with the operating rules. Due to the normal variation of power load and streamflow during any period, straight-line interpolation between the period-end points should not be assumed. During the storage drawdown season, Canadian storage should not be drafted below its period-end point at any time during the period unless it can be conservatively demonstrated that sufficient inflow is available, in excess of the minimum outflow required to serve power demand, to refill the reservoir to its end-of-period values as required.

V. <u>SCHEDULING STORAGE REGULATION</u>

A. Operating Data

The Operating Committee will exchange all current operating data necessary for the regulation of Canadian storage projects as soon as available, including the beginning and end of the flood control season.

B. Volume Runoff Forecasts

Seasonal runoff volume forecasts for Canadian Treaty Projects shall be made available by the Canadian Section no later than the seventh working day of each month, as required. The Operating Committee may request forecasts of seasonal runoff volume at periods other than those representing month-end conditions if hydrologic conditions warrant. Seasonal runoff volume forecasts for the Columbia River at The Dalles, Oregon, shall be made available by the U.S. Section no later than the seventh working day of each month, as required.

C. Treaty Storage Regulation Study

The TSR study is performed at least twice each month (within the first nine working days and the last eight working days of each month). Actual unregulated streamflows and forecasted unregulated streamflows will be updated for each TSR study. Variable refill curves, flood control storage evacuation requirements, and variable flood control refill curves will be updated for the first TSR of the month. At the request of either section of the Operating Committee, additional TSR studies shall be performed to reflect the most current unregulated streamflow forecasts and rule curves. The Operating Committee shall agree on procedures for developing streamflow forecasts and rule curves at that time.

Errors and omissions in the TSR will be handled as follows, unless otherwise agreed:

- 1. All identified errors, omissions, or revisions in the TSR issued during the current Operating Year should be documented and reported to the Operating Committee.
- 2. Errors/omissions identified within two working days of the initial TSR distribution which, in the view of either Section, may affect the final TSR for the previous operation period or which may impact operations prior to issuance of the next TSR, should be corrected immediately and the TSR re-run. If such errors/omissions are identified after the two-day review period, the TSR will be corrected only if requested by either Section of the Operating Committee.
- 3. Errors/omissions that do not affect the final TSR for the previous period or impact operations prior to issuance of the next TSR should be corrected in the subsequent TSR.
- 4. Errors/omissions that affect periods previously finalized and which result in a significant impact to the TSR in future periods, should be brought to the attention of the Committee for resolution.

During the Flood Control Storage Evacuation Period and the Flood Control Refill period, project Flood Control Curves will be determined through 30 June by the North Pacific Region, Northwestern Division, U.S. Army Corps of Engineers, in accordance with the Flood Control Operating Plan. These curves will be computed consistent with the timing of the TSR Schedule.

D. Scheduling Agreements

Unless otherwise agreed, requests by the U.S. Section of the Operating Committee for the regulation of the Canadian storage content will be made to the Canadian Section on a regular basis in accordance with the following procedures:

1. Storage Regulation for Power Operations

- a) <u>Timing</u>: A preliminary request will be made not later than noon each Thursday, followed by a final agreement by noon Friday.
- b) <u>Confirmation</u>: The agreed operation will be confirmed in a Weekly Treaty Storage Operation Agreement transmitted via electronic mail or fax on Friday in accordance with the following format unless otherwise agreed:

This message confirms our verbal agreement on	(date)	
that the (storing/drafting) of an estimated	ksfd	_ (in/from
the whole of Canadian storage for the Period	through	is
consistent with the Detailed Operating Plan (DOP).		
This agreement is based on an estimated average inflo	w during the a	bove-
mentioned period of kcfs to Duncan Reser	voir,	
kcfs to Libby Reservoir,		
kcfs to Mica Reservoir, an		
Estimated average regulated inflow of		

	kcfs to Arrow Reservoir, and an
	Estimated regulated outflow of
	kcfs from the Libby Project,
	That will result in average weekly Treaty discharges of
	kcfs from the Duncan Project,
	kcfs from the Mica Project, and
	kcfs from the Arrow Project.
	This operation of the whole of Canadian storage is based on the(date) DOP TSR expected end-of (month, except split April & August)
	storage level for the whole of Canadian storage of ksfd.
	This operation includes expected (storage above/draft below) the
	end-of (month, except April & August) DOP TSR level for the whole of
	Canadian storage of ksfd.
	Treaty discharges will be made effective at the Canadian-United States border. The Weekly Treaty Storage Operation Agreement will be deemed to have been fulfilled if the total amount of Treaty water agreed to is released from Arrow plus Duncan reservoir provided an amount equal to or greater than the water released from Duncan reservoir is concurrently discharged from Kootenay Lake.
c)	SOA's and LCA: The Weekly Treaty Storage Operation Agreements shall indicate operations under any SOA or LCA activity.
d)	Period Covered by Weekly Treaty Storage Operation Agreement: The period covered by the agreement shall be from Saturday following the date of the

e) Release Determination: The amount of water released or stored during the period of the Weekly Treaty Operation Storage Agreement will be determined by the changes in reservoir contents based on the recorded reservoir elevation and storage capacity tables for Duncan (Exhibit 9), Arrow (Exhibit 10), and Mica (Exhibit 11). The change in Arrow storage content will be determined using the recorded reservoir elevation at the gauge near Fauquier, BC

weekly request to the following Friday.

- f) Modification: If any modification to a written Weekly Treaty Storage Operation Agreement is agreed by the Operating Committee, a further written Storage Agreement superseding the original will be dispatched immediately by the U.S. Section of the Operating Committee to the Canadian Section of the Operating Committee. In accordance with Section 12 of the LCA, the Canadian Section shall implement at the request of the U.S. Section, up to five (5) mid-week requests for changes to the Canadian storage operation, consistent with this DOP and operating agreements entered into pursuant to this DOP. In addition, upon receipt of the preliminary weekly request each Thursday, the Canadian Section may request a modification to the current week's Treaty Storage Operation as may be necessary to meet flow ramping and fish salvage requirements in transitioning project releases from one Treaty week into the next, subject to agreement by the U.S. Section.
- d) <u>Provisional Draft</u>: Scheduling arrangements for provisional draft from Arrow reservoir, in accordance with Section 10 of the LCA, shall follow the same

- same schedule as outlined in subsections a) and b) above, and subsequently confirmed in the Weekly Treaty Storage Operation Agreement.
- e) <u>Non-routine Operation</u>: Any special operation that is agreed to by the Operating Committee will be suitably documented.

2. Storage Regulation during Flood Control

- a) Forecasts: Daily time-step streamflow forecasts will be accomplished by use of computer simulation by the National Weather Service River Forecast Center. The regulation center required by the Flood Control Operating Plan for the flood regulation will be located in the North Pacific Region, Northwestern Division, U.S. Army Corps of Engineers offices in Portland, Oregon.
- b) Requests for Project Outflows: Pursuant to the operating rules in the Flood Control Operating Plan, the outflows from individual Canadian storage projects may be specified, as outlined in the Flood Control Operating Plan. Requests will be coordinated by telephone daily or on an as needed basis, by conference calls between members of the Operating Committee or their representatives. The requests will normally prescribe the requested outflows as a mean daily discharge in cubic feet per second, for the 24-hour period from noon to noon of each day. Requests for project outflows will be determined by methods as agreed upon, and documented with a confirmation agreement by a message transmitted via e-mail or FaxTM from the Corps of Engineers, in Portland, Oregon. The Canadian Section of the Operating Committee or their representative will make acknowledgment of this agreement via e-mail or FaxTM. Any modification of the documented daily request shall be agreed by the Operating Committee before being put into effect, and shall be documented immediately using the procedure described above.
- c) Regulation during Winter Floods: Daily requests for project outflows from Canadian projects are normally implemented in the flood control refill period. During the occurrence of winter floods (periods of high winter flows) in the Lower Columbia River, if a special regulation of Arrow storage becomes necessary to preserve the natural flood control storage effect, then the outflows from Arrow will be regulated on a day-to-day basis by agreement of the Operating Committee in accordance with the requests of the U.S. Section of the Operating Committee. Insofar as possible the outflows from Arrow will not exceed the calculated natural lake outflows until the space obligated for this purpose as shown on Chart 5 of the Flood Control Operating Plan is filled. The requests for such regulation will be in accordance with procedures described above. If, as a result of operation for winter flood control, a reservoir ends up above its flood control rule curve, then an appropriate outflow schedule for that reservoir will be determined to ensure that the reservoir will be drafted to its flood control rule curve as soon as feasible.

VI. OPERATING GUIDES

A. Operating Rule Curve

The ORC for the whole of Canadian storage shall be the sum of the ORC's for each of Duncan, Arrow, and Mica. The ORC for each of the Duncan, Arrow, and Mica Reservoirs during the period 1 August 2006 through 31 July 2007 is determined in accordance with the reference documents of Section I, and is defined as follows:

- 1. During the period 1 August 2006 through 31 December 2006, it is the higher of the First Critical Rule Curve or the Assured Refill Curve.
- 2. During the period 1 January 2007 through 31 July 2007, it is the higher of the First Critical Rule Curve or the Assured Refill Curve, unless the Variable Refill Curve (VRC) is below the higher of the above two curves; then it is defined by the VRC.
- 3. During the period 1 January 2007 through 15 April 2007, it will not be lower than the Operating Rule Curve Lower Limit designed to protect firm loads with recurrence of 1936-37 hydro conditions unless a lower reservoir elevation is required for flood control (Exhibit 6).
- 4. During any month in the Operating Year, it will not be higher than the Flood Control Rule Curve, defined as the maximum elevation of each reservoir established by flood control requirements and may be modified on mutual agreement for construction and other contingency requirements.
- 5. Operation of Mica will be in accordance with the Mica Project Operating Criteria tabulated with specified qualifications in Section VII(C). Differences between Mica's storage operation and its ORC (or Proportional Draft Point (PDP) if different) shall be balanced with equal and opposite changes to Arrow's ORC (or PDP) to the extent possible within agreed Operating Limits. The obligation to operate Mica and Arrow to produce optimum benefits in Canada and downstream in the United States will be deemed to have been fulfilled by operating to these criteria.
- 6. The VRC's for Arrow, Duncan, and Mica shall be constructed based on procedures, power discharge requirements, and Variable Refill Curve Lower Limits as specified in Exhibit 7 (Total Inflow Method), except that the Operating Committee, in consideration of mutually beneficial operating arrangements, may agree to use an alternate procedure for Arrow which uses Arrow local inflows (Arrow Local Inflow Method) as follows.
 - a) If the current TSR study shows for the end of the current month that 1) the projected Mica Treaty storage content is lower than its ORC, and 2) the Coordinated System draft point is on the ORC, then the TSR shall be rerun with Arrow's VRC calculated as follows:
 - i) The forecast volume of inflow for Arrow will exclude the volume of inflow above the Mica project. This Arrow local inflow volume will be reduced by a forecast error such that there is a 95 percent probability that the reduced forecast is equaled or exceeded.

- ii) The total Mica target outflow as specified in VII(C) will be added to the forecast volume described in a(i) above.
- iii) In computing water available for refill of Arrow Reservoir the power discharge requirements for Arrow as specified in Exhibit 7 will be deducted from the volume calculated in a(ii).
- b) During any period when the Arrow Local Inflow Method is used, the Mica/Arrow balancing (as described in subsection VI(A)5) is not used. This is implemented in BPA's hydro regulation model by setting the composite ORC for Canadian storage equal to the Mica Treaty storage content as defined in Subsection VII(C), plus the ORC at Arrow and Duncan.

B. Rule Curves and Operating Data

Rule Curves and operating data are shown in both English and SI (Metric) units. SI values are displayed with either one or two decimal places to assure consistency with English units and do not imply that level of precision.

1.	Assured Refill Curve for Duncan, Arrow, and Mica.	Exhibit 1
2.	First Critical Rule Curve for Duncan, Arrow, Mica, and the whole of Canadian storage.	Exhibit 2
3.	Second Critical Rule Curve for Duncan, Arrow, Mica, and the whole of Canadian storage.	Exhibit 3
4.	Third Critical Rule Curve for Duncan, Arrow, Mica, and the whole of Canadian storage.	Exhibit 4
5.	Fourth Critical Rule Curve for Duncan, Arrow, Mica, and the whole of Canadian storage.	Exhibit 5
6.	Lower Limit for Operating Rule Curve based on 1936-37 Hydro Conditions.	Exhibit 6
7.	Variable Refill Curve Procedures.	Exhibit 7
8.	Coordinated System Loads and Resources	Exhibit 8

C. Reservoir Capacity Tables

The following tables shall be considered to be the official storage for the projects:

1.	Duncan Reservoir Capacity Table (based on BC Hydro Table dated 21 February 1973).	Exhibit 9
2.	Arrow Reservoir Capacity Table (based on BC Hydro Combined Storage Table dated 28 February 1974).	Exhibit 10
3.	Mica Reservoir Capacity Table (based on BC Hydro	Exhibit 11

Table dated 25 March 1974).

VII. OPERATING LIMITS

A. Duncan Project

- 1. Maximum outflow is 566.34 m³/s (20,000 cfs) through outlets but limited to 283.17 m³/s (10,000 cfs) each month in the TSR model.
- 2. Minimum average weekly outflow is 2.83 m³/s (100 cfs).
- 3. Maximum rate of change in outflow is normally 113.27 m³/s (4,000 cfs) per day unless a larger change is necessary to accomplish the objectives of the Flood Control Operating Plan.
- 4. Normal full pool elevation is 576.68 m (1,892.0 feet).
- 5. Normal minimum pool elevation is 546.87 m (1,794.2 feet).
- 6. Normal maximum reservoir average monthly draft rate in elevation during any month is limited to 0.30 m (1 foot) per day.

B. Arrow Project

- 1. Maximum outflow is limited to physical capability only, except during January when Attachment C to the LCA requires that outflows in actual operations be limited to a maximum of 2,265 m³/s (80,000 cfs) unless otherwise agreed or higher outflows are needed to meet flood control requirements.
- 2. Minimum average weekly outflow is 141.58 m³/s (5,000 cfs).
- 3. Maximum rate of change in outflow is normally 424.75 m³/s (15,000 cfs) per day unless a larger change is necessary to accomplish the objectives of the Flood Control Operating Plan.
- 4. Normal full pool elevation is 440.13 m (1,444.0 feet).
- 5. Normal minimum pool elevation is 419.98 m (1,377.9 feet).
- 6. Normal maximum reservoir average monthly draft rate in elevation during any month is limited to 0.30 m (1 foot) per day.
- 7. The Arrow reservoir storage operation in the TSR will be limited to a maximum storage level defined by the Arrow Project Operating Criteria (APOC) during the period January through June. The APOC shall be calculated as follows:
 - a) During January through March, the APOC will be determined using the following table and the forecast of unregulated April through August volume runoff at The Dalles.

les Apr-	Arrow Project Operating Criteria Maximum Storage									
low Vol.		km³			Maf					
<u>Maf</u>	<u>31-Jan</u>	28-Feb	<u>31-Mar</u>	<u>31-Jan</u>	28-Feb	<u>31-Mar</u>				
0	7.524	7.524	7.524	6.100	6.100	6.100				
64	7.524	7.524	7.524	6.100	6.100	6.100				
65	7.397	7.281	7.154	5.997	5.903	5.800				
70	6.845	6.230	5.551	5.549	5.051	4.500				
75	6.292	5.179	3.947	5.101	4.199	3.200				
80	5.783	4.209	2.467	4.688	3.412	2.000				
1000	5.783	4.209	2.467	4.688	3.412	2.000				
	low Vol. Maf 0 64 65 70 75 80	low Vol. Maf 0 7.524 64 7.524 65 7.397 70 6.845 75 6.292 80 5.783	low Vol. km³ 28-Feb 0 7.524 7.524 64 7.524 7.524 65 7.397 7.281 70 6.845 6.230 75 6.292 5.179 80 5.783 4.209	Maf 31-Jan 28-Feb 31-Mar 0 7.524 7.524 7.524 64 7.524 7.524 7.524 65 7.397 7.281 7.154 70 6.845 6.230 5.551 75 6.292 5.179 3.947 80 5.783 4.209 2.467	Iow Vol. km³ Maf 31-Jan 28-Feb 31-Mar 31-Jan 0 7.524 7.524 7.524 6.100 64 7.524 7.524 7.524 6.100 65 7.397 7.281 7.154 5.997 70 6.845 6.230 5.551 5.549 75 6.292 5.179 3.947 5.101 80 5.783 4.209 2.467 4.688	Iow Vol. km³ Maf Maf 31-Jan 28-Feb 31-Mar 31-Jan 28-Feb 0 7.524 7.524 7.524 6.100 6.100 64 7.524 7.524 6.100 6.100 65 7.397 7.281 7.154 5.997 5.903 70 6.845 6.230 5.551 5.549 5.051 75 6.292 5.179 3.947 5.101 4.199 80 5.783 4.209 2.467 4.688 3.412				

For intermediate forecast volumes, the APOC will be interpolated linearly between the values shown above.

b) During April through June, the APOC will be based on the same monthly percent refill as the April through June Arrow Upper Rule Curve (URC). For example:

April APOC = March APOC + (Full – March APOC) * April URC Percent Refill Where April URC Percent Refill = (April URC – March URC) / (Full – March URC)

c) The APOC storage levels shall be less than or equal to the URC.

C. Mica Project

The Mica Project Treaty storage operation in the TSR will be according to the Mica Project Operating Criteria shown in the following table except as qualified in subsections VII(C)1 through VII(C)6.

- 1. VRCs shall be constructed according to Exhibit 7 with the 31 July Treaty storage content of 8,634.5 hm³ (3,529.2 ksfd). However, the Operating Committee may agree to set Mica's VRC July refill target equal to the Mica End of Month Storage Content of 8,267.6 hm³ (3,379.2ksfd) indicated on the following "Mica Project Operating Criteria" table.
- 2. Mica project operation will be determined by the End of Previous Month Arrow Storage Content as shown in the following table, except for the limitations or changes required by subsections VII(C)3 through VII(C)6. The End of Previous Month Arrow Storage Content shall be determined from the current TSR study, except when the Arrow Local Inflow Method was used for the prior month the TSR with the Arrow Total Inflow Method shall be used. Mica's target operation will be defined either by a Target End of Month Storage Content or a Target Month Average Outflow.
- 3. Mica operation to the Target End-of-Month Treaty Storage Contents shall be limited by the Minimum and Maximum Outflows shown in the following table, unless needed to accomplish the objectives of the FCOP.
- 4. Mica operation to the Target Month Average Outflow shall be limited by the Minimum Target Treaty Content shown in the following table. Mica outflows shall be reduced as required down to a lower limit of the Minimum Outflow shown in the

- the table below, to prevent draft below the Minimum Target Treaty Storage Content. Minimum Outflows may cause the reservoir to draft below the Minimum Target Treaty Content.
- 5. Mica outflows will be increased during the months October through July as required to avoid violation of the Flood Control Rule Curve.
- 6. Treaty storage releases from Mica in excess of 8.634 km³ (7 Maf) that result from operating Mica under the criteria described in VII(C)2 through VII(C)6 above will be retained in the Arrow reservoir, subject to flood control and minimum flow requirements at Arrow, and Mica will be reduced to Minimum Outflow as required to minimize releases in excess of 8.634 km³ (7 Maf). The total combined storage draft from Mica and Arrow will not exceed 17.392 km³ (14.1 Maf) unless flood control or minimum flow criteria at Arrow will not permit the excess Mica storage releases to be retained at Arrow. If such a release should occur, the target Mica operation will remain as specified in Mica Project Operating Criteria, and the excess release will be returned as soon as the operating criteria permit.

MICA PROJECT OPERATING CRITERIA (English)

		Target (Operation	Target Operation Limits			
Month	End of Previous Month	Month Average	End-of-Month	Minimum Target Treaty	1 -	Minimum	
	Arrow Storage Content (ksfd)	Outflow (cfs)	Storage Content <u>1/</u> (ksfd)	Storage Content 2/ (ksfd)	Maximum Outflow (cfs)	Outflow (cfs)	
August 1-15	3,57(- FULL	-	3,454.2	-	34,000	15000	
	2,39(- 3,570	25,000	-	0.0	-	15000	
	(2,390	32,000	_	0.0	_	15000	
August 16-31	3,57(- FULL	-	3,529.2	-		15000	
S	3,45(- 3,570	-	3,364.2	_	34,000	15000	
	3,00(- 3,450	25,000	-	0.0	-	15000	
	(3,000	32,000	_	0.0	_	15000	
September	3,57(- FULL	-	3529.2	-		10,000	
•	3,39(- 3,570	22,000	-	0.0	-	10,000	
	2,51(3,390	27,000	-	0.0	-	10,000	
	(- 2,510	32,000	-	0.0	-	10,000	
October	3,57(- FULL	-	3,428.4	-	34,000	10,000	
	3,12(- 3,570	20,000	· -	0.0	-	10,000	
	75(3,120	22,000	-	0.0	-	10,000	
	(- 750	32,000	-	0.0	<u>-</u>	10,000	
November	3,45(- FULL	20,000	-	0.0	-	10,000	
	3,02(- 3,450	19,000	-	0.0	-	10,000	
	63(3,020	25,000	-	0.0	-	10,000	
	(- 630	32,000	.	0.0		10,000	
December	3,34(- FULL	25,000	-	390.1	-	10,000	
	2,87(- 3,340	22,000	-	390.1	-	10,000	
	90(2,870	27,000	-	390.1	-	10,000	
	(- 900	32,000		390.1		10,000	
January	2,74(- FULL	24,000	-	134.1	-	10,000	
	2,53(- 2,740	26,000	-	134.1	-	10,000	
	1,630 2,530	28,000	-	134.1	-	10,000	
	(- 1,630	30,000		134.1		10,000	
February	1,51(- FULL	21,000	-	164.1	-	10,000	
	1,35(- 1,510	25,000	-	164.1	-	10,000	
	1,14(1,350	20,000	-	164.1	-	10,000	
	(- 1,140	26,000		164.1	-	10,000	
March	62(- FULL	18,000	-	120.3	-	10,000	
	48(- 620	19,000	-	120.3	-	10,000	
	7(480	20,000	-	120.3	-	10,000	
	(- 70	22,000	.	120.3		10,000	
April 1-15	1,00(- FULL	18,000	-	15.3	-	11,000	
	96(- 1,000	27,000	-	15.3	-	11,000	
	77(960	12,000	-	15.3	-	11,000	
A '116 20	(770	18,000		15.3		11,000	
April 16-30	92(- FULL	12,000	-	0.0	-	10,000	
	49(- 920	15,000	-	0.0	-	10,000	
	2(490	12,000	-	0.0	-	10,000	
Mov	-	15,000	·····	0.0		10,000	
May	1,14(- FULL	10,000	-	0.0	-	10,000	
	68(- 1,140	15,000	-	0.0	-	10,000	
Iuma		10,000	:	0.0	-	10,000	
June	1,82(- FULL 1,59(1,820	10,000 15,000	-	0.0 0.0	-	10,000 10,000	
	1,59(1,820 1,09(1,590	10,000	-	0.0	-	10,000	
	(- 1,090	15,000	-	0.0	-	10,000	
July		13,000	3 270 2		34,000		
July	3,34(- FULL 2,25(3,340	-	3,379.2 3,317.2	-	34,000 34,000	10,000 10,000	
	1,52(2,250	19,000	3,317.4	0.0	54,000	10,000	
	(- 1,520	30,000	<u>-</u>	0.0	<u>-</u> _	10,000	
	· - 1,320	30,000		0.0	-	10,000 0,000	

Notes: 1/ If the Mica target End-of-Month Storage Content target is less than 3529.2 ksfd, then a maximum outflow of 34,000 cfs will apply. These maximum flows may be exceeded for flood control.

^{2/} For month average outflow target operation, Mica outflows will be reduced to minimum to maintain the reservoir above the Minimum Target Treaty Storage Content.

MICA PROJECT OPERATING CRITERIA (SI)

			Target (Operation	Target Operation Limits			
Month	End of Previo		Month Average	End-of-Month	Minimum Target Treaty		Minimum	
	Arrow Stora	~	Outflow	Storage Content 1/	Storage Content 2/	Maximum Outflow	Outflow	
1 15	(hm	,	(m ³ /s)	(hm³)	(hm³)	(m³/s)	(m ³ /s)	
August 1-15		FULL	-	8451.0	-	962.77	424.75	
		8734.4	707.92	-	0.0	-	424.75	
		5847.4	906.14		0.0	-	424.75	
August 16-31		FULL	-	8634.5	-	-	424.75	
		8734.4	-	8230.9	-	962.77	424.75	
		8440.8	707.92	-	0.0	-	424.75	
		7339.8	906.14		0.0	-	424.75	
September		FULL	-	8634.5	-	-	283.17	
		8734.4	622.97	-	0.0	-	283.17	
		8294.0	764.55	-	0.0	-	283.17	
		6141.0	906.14		0.0	-	283.17	
October		FULL	-	8387.9-	-	962.77	283.17	
		8734.4	566.34	-	0.0	-	283.17	
		7633.4	622.97	-	0.0	-	283.17	
		1835.0	906.14		0.0	-	283.17	
November		FULL	566.34	-	0.0	-	283.17	
		8440.8	538.02	-	0.0	-	283.17	
		7388.7	707.92	-	0.0	-	283.17	
		1541.4	906.14		0.0		283.17	
December		FULL	707.92	-	954.4	-	283.17	
		8171.6	622.97	-	954.4	-	283.17	
		7021.7	764.55	-	954.4	-	283.17	
		2201.9	906.14	-	954.4		283.17	
January		FULL	679.60	-	328.1	-	283.17	
		6703.7	736.24	-	328.1	-	283.17	
		6189.9	792.87	-	328.1	-	283.17	
		3988.0	849.50	-	328.1		283.17	
February		FULL	594.65	-	401.5	-	283.17	
		3694.4	707.92	-	401.5	-	283.17	
		3302.9	566.34	-	401.5	-	283.17	
		2789.1	736.24	:	401.5		283.17	
March		FULL	509.70	-	294.3	-	283.17	
		1516.9	538.02	-	294.3	-	283.17	
		1174.4	566.34	-	294.3	-	283.17	
		171.3	622.97		294.3		283.17	
April 1-15		FULL	509.70	-	37.4	-	311.49	
		2446.6	764.55	-	37.4	-	311.49	
		2348.7	339.80	-	37.4	-	311.49	
		1883.9	509.70	-	37.4		311.49	
April 16-30		FULL	339.80	-	0.0	-	283.17	
		2250.9	424.75	-	0.0	-	283.17	
		1198.8	339.80	-	0.0	-	283.17	
		48.9	424.75		0.0		283.17	
May		FULL	283.17	-	0.0	-	283.17	
		2789.1	424.75	-	0.0	-	283.17	
		1663.7	283.17		0.0		283.17	
June		FULL	283.17	-	0.0	-	283.17	
		4452.8	424.75	-	0.0	-	283.17	
		3890.1	283.17	-	0.0	-	283.17	
		2666.8	424.75	-	0.0	-	283.17	
July		FULL	-	8267.6	-	962.77	283.17	
		8171.6	-	8115.9	=	962.77	283.17	
		5504.9	538.02	-	0.0	-	283.17	
	3718.8	3718.8	849.50	-	0.0	-	283.17	

Notes:

¹/ If the Mica target End-of-Month Storage Content is less than 8634.5 hm³, then a maximum outflow of 962.77 m³/s will apply. These maximum flows may be exceeded for flood control.

^{2/} For month average outflow target operation, Mica outflows will be reduced to minimum to maintain the reservoir above the Minimum Target Treaty Storage Content.

EXHIBITS

Exhibit 1 - Assured Refill Curves (English) 1/

		D	UNCA	N		MICA					ARROW						
	1931 Inflow	PDR	Water Av for Re		ARC	1931 Inflow	PDR	Wate Availa for Re	ble	CRC1	ARC	1931 Inflow	PDR	Wa Avail for R	lable	MICA Refill	ARC
Month	cfs <u>3</u> /	cfs <u>4</u> /	cfs	ksfd	ksfd	cfs	cfs <u>4</u> /	cfs	Ksfd	ksfd	ksfd	Cfs	cfs <u>4</u> /	Cfs	ksfd	ksfd 2/	Ksfd
July	7320	2465	4855	150.5	705.8	56494	56466	28	0.9	3017.4	3529.2	88803	68385	20418	633.0	0.9	3579.0
June	8030	3030	5000	150.0	555.3	60134	20819	39315	1179.5	2126.3	3528.3	114432	68580	45853	1375.€	1179.5	2947.5
May	5170	106	5064	157.0	405.3	28065	6167	21898	678.8	492.7	2348.9	69071	10761	58310	1807.€	678.8	2751.4
Apr2	1137	100	1037	15.€	248.3	7218	8494	-1276	-19.1	32.4	1670.0	20470	56663	-36193	-542.9	-19.1	1622.6
Apr1	825	100	725	10.9	232.8	466€	3000	1666	25.0	220.3	1689.2	12047	5000	7047	105.7	25.0	2146.4
Mar	555	100	455	14.1	221.9	3218	3000	218	6.8	582.2	1664.2	7849	5000	2849	88.3	6.8	2065.6
Feb	428	100	328	9.2	207.8	2589	3000	-411	-11.5	706.0	1657.4	5759	5000	759	21.3	-11.5	1984.
Jan	428	100	328	10.2	198.0	2834	3000	-166	-5.1	1522.5	1668.9	6451	5000	1451	45.0	-595.8	1951.3
Dec	461	100	361	11.2	188.4	3531	3000	531	16.5	2264.7	1674.	6480	5000	1480	45.9	-738.4	1310.6
Nov	684	100	584	17.5	177.2	517€	3000	2176	65.3	3003.1	1657.6	9369	5000	4369	131.1	-398.5	526.3
Oct	1089	100	989	30.7	159.1	8761	3000	5761	178.€	3401.€	1592.3	14427	5000	9427	292.2	-127.€	0.0
Sep	2310	100	2210	66.3	129.	23080	3000	20080	602.4	3529.2	1413.8	38807	5000	33807	1014.2	13.3	0.0
Aug2	3875	100	3775	60.4	62.8	3943€	3000	3643€	583.0	3515.9	811.4	61741	5000	56741	907.9	-13.3	0.0
Aug1	5228	100	5128	76.9	2.4	52209	3000	49209	738.1	3529.2	228.4	81724	5000	76724	1150.9	3529.2	0.0

Exhibit 1M - Assured Refill Curves (SI) 1/

		DI	JNCA	N				MIC	Δ			ARROW					
	1931 Inflow	PDR	Wat Availa for Re	er able	ARC	1931 Inflow	PDR	Wate Availa For Re	er ble	CRC1	ARC	1931 Inflow	PDR	Wa Avai For F	iter lable	MICA Refill	ARC
Month	m ³ /s <u>3</u> /	m ³ /s <u>4</u> /	m ³ /s	hm ³	hm^3	m^3/s	m ³ /s <u>4</u> /	m ³ /s	hm ³	hm^3	hm^3	m^3/s	m ³ /s <u>4</u> /	M^3/s	hm ³	hm ³ <u>2</u> /	hm ³
July	207.29	69.80	137.48	368.2	1726.8	1599.74	1598.94	0.79	2.	7382.4	8634.	2514.60	1936.45	578.17	1548.6	2.1	8757.
June	227.38	85.80	141.58	367.0	1358.0	1702.80	589.53	1113.28	2885.0	5202.2	8632.4	3240.36	1941.97	1298.41	3365.5	2885.€	7211.4
May	146.40	3.00	143.40	384.1	991.0	794.72	174.63	620.08	1660.	1205.4	5746.	1955.86	304.72	1651.15	4422.5	1660.8	6731.:
Apr2	32.20	2.83	29.3€	38.1	607.5	204.39	240.52	-36.13	-46.3	79.3	4085.9	579.65	1604.52	-1024.87	-1328.2	-46.8	3969.
Apr1	23.3€	2.83	20.53	26.€	569.5	132.13	84.95	47.18	61.	539.0	4132.	341.13	141.58	199.55	258.6	61.1	5251.3
Mar	15.70	2.83	12.88	34.5	542.9	91.12	84.95	6.17	16.	1424.4	4071.	222.24	141.58	80.67	216.1	16.5	5053.
Feb	12.12	2.83	9.29	22.5	508.3	73.32	84.95	-11.64	-28.2	1727.3	4055.	163.09	141.58	21.49	52.0	-28.2	4854.2
Jan	12.12	2.83	9.29	24.9	485.9	80.25	84.95	-4.70	-12.0	3724.9	4083.	182.67	141.58	41.09	110.1	-1457.6	4774.
Dec	13.05	2.83	10.22	27.4	461.0	100.00	84.95	15.04	40.	5540.8	4095.	183.49	141.58	41.91	112.3	-1806.6	3206.5
Nov	19.37	2.83	16.54	42.9	433.0	146.55	84.95	61.62	159.	7347.4	4055.0	265.30	141.58	123.72	320.7	-975.0	1287.
Oct	30.85	2.83	28.01	75.0	390.8	248.07	84.95	163.13	436.9	8322.4	3895.	408.52	141.58	266.94	715.0	-312.2	0.0
Sep	65.41	2.83	62.58	162.2	315.1	653.55	84.95	568.60	1473.	8634.5	3458.9	1098.88	141.58	957.31	2481.4	32.5	0.0
Aug2	109.73	2.83	106.90	147.8	153.5	1116.70	84.95	1031.75	1426.	8602.0	1985.	1748.31	141.58	1606.72	2221.2	-32.5	0.0
Aug1	148.04	2.83	145.21	188.2	5.8	1478.39	84.95	1393.44	1805.9	8634.5	558.	2314.16	141.58	2172.58	2815.7	8634.5	0.0

Notes on Exhibit 1 and Exhibit 1M:

- 1/ The Assured Refill Curve (ARC) indicates the end-of-month storage content required to assure refill of Canadian storage by 31 July based on 1931 historical monthly inflow. The monthly inflow at each reservoir is reduced by deducting the Power Discharge Requirements (PDR) and water required for refill, if any, at upstream reservoirs. The Entities may agree to revise the data upon the completion of the Refill Study by the Operating Committee.
- 2/ Upstream refill requirement: these values are computed by subtracting current month from previous month's higher of Mica's ARC or first critical rule curve (CRC1) except July value is Mica full minus previous month's higher of Mica's ARC or CRC1. CRC1 is shown in Exhibit 2.
- 3/ Inflows are from the 2000 Level Modified streamflow (Hydrosim file).
- 4/ PDRs are from the AOP07.

Exhibit 2 - First Critical Rule Curves (English & SI)

End-of-Month Usable Storage Content

		(Eng l			(SI) (hm³)					
Month	Mica	Arrow	Duncan	Total	Mica	Arrow	Duncar	Total		
August 15	3529.2	3579.6	705.8	7814.6	8634.5	8757.8	1726.8	19119.2		
August 31	3515.9	3575.4	694.8	7786.1	8602.0	8747.€	1699.9	19049.5		
September	3529.2	3106.2	705.8	7341.2	8634.5	7599.€	1726.8	17961.0		
October	3401.€	2847.1	651.9	6900.6	8322.4	6965.7	1594.9	16883.0		
November	3003.1	2679.8	621.3	6304.2	7347.4	6556.4	1520.1	15423.9		
December	2264.7	2373.€	495.5	5133.8	5540.8	5807.2	1212.3	12560.4		
January	1522.5	1410	413.2	3345.1	3724.9	3449.7	1010.9	8185.6		
February	70€	823	338	1867.0	1727.3	2013.€	827.0	4567.8		
March	582.2	622.3	131	1335.5	1424.4	1522.5	320.5	3267.4		
April 15	220.3	544.7	74.3	839.3	539.(1332.7	181.8	2053.4		
April 30	32.4	601.1	82.7	716.2	79.3	1470.7	202.3	1752.3		
May	492.7	1487.4	200.2	2180.3	1205.4	3639.1	489.8	5334.3		
June	2126.3	3040.€	475	5641.9	5202.2	7439.1	1162.1	13803.5		
July	3017.4	3485.2	645.1	7147.1	7382.4	8526.9	1578.3	17487.6		

Source: First-year critical rule curves from the AOP07.

Exhibit 3 - Second Critical Rule Curves (English & SI)

End-of-Month Usable Storage Content

		(Engli) (ksfd			(SI) (hm³)					
Month	Mica	Arrow	Duncan	Total	Mica	Arrow	Duncan	Total		
August 15	3479	3371.8	590.7	7441.5	8511.	8249.4	1445.2	18206.4		
August 31	3329.2	3443.2	653.7	7426.1	8145.	8424.1	1599.3	18168.7		
September	3226.€	284€	705.8	6778.4	7894.	6963.0	1726.8	16584.0		
October	2391.5	2736.8	651.9	5780.2	5851.	6695.9	1594.9	14141.8		
November	1953.1	1926.7	535.2	4415.0	4778.	4713.9	1309.4	10801.7		
December	1428.9	1347.8	494.4	3271.1	3495.	3297.5	1209.€	8003.1		
January	502.3	398.5	345.7	1246.5	1228.	975.0	845.8	3049.7		
February	79.€	83.5	145.9	309.0	194.	204.3	357.0	756.0		
March	C	C	0.1	0.1	0.0	0.0	0.2	0.2		
April 15	22.9	55	12	89.9	56.	134.6	29.4	219.9		
April 30	C	183.€	22.8	206.4	0.0	(449.2	55.8	505.0		
May	368.€	1163.9	137.8	1670.3	901.	₹ 2847.€	337.1	4086.6		
June	825.5	2592.4	320.5	3738.4	2019.	6342.6	784.1	9146.4		
July	2595.5	3051.1	477.7	6124.3	6350.	7464.8	1168.7	14983.7		

Adjusted for Crossover 1/

Source: Second-year critical rule curves from the AOP07, except when higher than the first-year critical rule curve use the first-year critical curve.

1/ A "crossover" occurs when a critical rule curve is higher than another critical rule curve in earlier time sequence (eg. when a second critical rule curve is higher than the first critical rule curve). During proportional draft, no individual project is permitted to refill while other projects are proportionately drafting. This is accomplished by eliminating crossovers, i.e. by reducing all subsequent critical rule curves to being no greater than previous critical rule curves

Exhibit 4 - Third Critical Rule Curves (English & SI)

End-of-Month Usable Storage Content

		(Englis (ksfd)	*		(SI) (hm³)						
Month	Mica	Arrow	Duncan	Total		Mica	Arrow	Duncar	Total		
August 15	2914.1	3199.8	481.4	6595.3		7129.€	7828.€	1177.8	16136.1		
August 31	3034.4	3215.1	513.8	6763.3		7424.(7866.1	1257.1	16547.1		
September	3117.1	2788.1	570.4	6475.6		7626.3	6821.4	1395.5	15843.2		
October	2357.€	2734.4	566.7	5658.7		5768.1	6690.0	1386.5	13844.6		
November	1937.2	1926.7	476.6	4340.5		4739.6	4713.9	1166.0	10619.5		
December	1281.8	1329.4	341.7	2952.9		3136.1	3252.5	836.(7224.6		
January	502.3	398.5	185.9	1086.7		1228.9	975.0	454.8	2658.7		
February	74.9	83.5	89.3	247.7		183.3	204.3	218.5	606.0		
March	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
April 15	21.7	55.0	2.0	78.7		53.1	134.6	4.9	192.5		
April 30	0.0	54.8	0.0	54.8		0.0	134.1	0.0	134.1		
May	351.5	966.7	83.5	1401.7		860.0	2365.1	204.3	3429.4		
June	753.1	2095.9	50.7	2899.7		1842.5	5127.8	124.0	7094.4		
July	1205.3	2680.3	60.1	3945.7		2948.9	6557.€	147.(9653.5		

Adjusted for Crossover

Source: Third-year critical rule curves from the AOP07.

Exhibit 5 - Fourth Critical Rule Curves (English & SI)

End-of-Month Usable Storage Content

		(Engl (ksfd		(S (hn	á			
Month	Mica	Arrow	Duncan	Total	Mica	Arrow	Duncar	Total
August 15	1201.7	2682.1	33.9	3917.7	2940.1	6562.0	82.9	9585.0
August 31	1096.7	2614.4	46.7	3757.8	2683.2	6396.4	114.3	9193.8
September	800.3	2130.9	117.2	3048.4	1958.(5213.5	286.7	7458.2
October	1051.4	1218.9	51.4	2321.7	2572.4	2982.2	125.8	5680.3
November	616.9	794.€	72.5	1484.0	1509.3	1944.1	177.4	3630.8
December	24.9	385.8	0.3	411.0	60.9	943.9	0.7	1005.6
January	31.1	103.€	0.0	134.7	76.1	253.5	0.0	329.6
February	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Fourth-year critical rule curves from the AOP07.

Exhibit 6 - Operating Rule Curve Lower Limit (English & SI)

End-of-Month Usable Storage Content

	((English) (ksfd)		(SI) (hm³)					
Month	Mica	Arrow	Duncan	Mica	Arrow	Duncan			
January	298.€	251.3	107.1	730.€	614.8	262.0			
February	35.2	18.4	42.0	86.1	45.(102.8			
March	0.0	0.0	0.0	0.0	0.0	0.0			
Apr-15	0.5	1.3	0.0	1.2	3.2	0.0			

Source: Operating Rule Curve Lower Limits from the AOP07.

Exhibit 7 - Variable Refill Curve Procedures (English)

The Variable Refill Curves (VRC) indicate the end-of-month storage content required to refill Canadian storage based on forecasts of natural inflow volume. The probable forecast volume at each reservoir is reduced by deducting the 95 percent confidence forecast error, Power Discharge Requirements (PDR), and water required for refill at upstream reservoirs based on the ORC. The Entities have agreed to limit the VRC to be no lower than the Variable Refill Curve Lower Limit (VRCLL), which is defined by studies that optimize power production during the refill period. The VRCLL's are a function of the unregulated January through July runoff volume at The Dalles, Oregon. The following schedule for PDR's and VRCLL's will apply when computing the VRC's during the period January 1 through June 1, unless the Operating Committee agrees to use updated study results.

POWER DISCHARGE REQUIREMENTS, IN CFS, AND VARIABLE REFILL CURVE LOWER LIMITS, IN KSFD, FOR JANUARY - JULY VOLUME RUNOFF OF THE COLUMBIA RIVER AT THE DALLES, OREGON

Project	Jan	Feb	Mar	Ap1	Ap2	May	Jun	Ju
Mica								
ARC PDR's	3000	3000	3000	3000	8494	6167	20819	56466
80 MAF PDR's	3000	3000	3000	3000	3000	3000	34000	40000
95 MAF PDR's	3000	3000	3000	3000	3000	3000	34000	40000
110 MAF PDR's	3000	3000	3000	3000	3000	3000	34000	40000
80 MAF VRCLL's	224.9	241.3	270.8	331.0	470.1	1460.8	2823.8	3529.2
95 MAF VRCLL's	39.3	0.0	20.7	27.3	0.0	681.8	2297.2	3529.2
110 MAF VRCLL's	11.9	0.0	0.0	0.0	3.7	658.7	1809.5	3529.2
Distribution Factors	0.9750	0.9770	0.9740	0.9812	0.9650	0.7950	0.4950	N/A
Forecast Errors (ksfd)	652.9	510.3	465.3	444.4	444.4	360.4	360.4	N/A
Arrow								
ARC PDR's	5000	5000	5000	5000	56663	10761	68580	68385
80 MAF PDR's	5000	5000	5000	5000	8000	8000	50000	50000
95 MAF PDR's	5000	5000	5000	5000	5000	5000	50000	50000
110 MAF PDR's	5000	5000	5000	5000	5000	5000	50000	50000
80 MAF VRCLL's	138.7	211.9	378.4	553.0	833.0	2118.5	3039.6	3579.6
95 MAF VRCLL's	14.€	0.2	18.9	32.1	26.7	1164.4	2953.5	3579.6
110 MAF VRCLL's	2.0	0.0	17.2	0.0	4.7	900.0	2703.8	3579.6
Distribution Factors – Total	0.9710	0.9747	0.9691	0.9741	0.9530	0.7483	0.4631	N/A
Forecast Errors (ksfd) – Total	1233.1	987.3	825.3	715.1	715.1	501.4	501.4	N/A
Distribution Factors – Local	0.9680	0.9730	0.9640	0.9680	0.9390	0.7020	0.4270	N/A
Forecast Errors (ksfd) - Local	761.8	632.8	504.9	403.2	403.2	341.8	341.8	N/A
Duncan								
ARC PDR's	100	100	100	100	100	10€	3030	2465
80 MAF PDR's	100	500	500	500	1800	1800	2300	3300
95 MAF PDR's	100	100	100	100	100	1800	2000	2800
110 MAF PDR's	100	100	100	100	100	1800	2000	2800
80 MAF VRCLL's	190.5	40.€	62.1	81.9	114.8	323.1	555.5	705.8
95 MAF VRCLL's	27.€	18.8	16.9	0.0	33.2	204.6	522.7	705.8
110 MAF VRCLL's	5.9	0.0	0.3	4.8	2.9	105.5	444.6	705.8
Distribution Factors	0.9720	0.9790	0.9740	0.9790	0.9570	0.7580	0.4690	N/A
Forecast Errors (ksfd)	118.4	109.0	97.5	88.1	88.1	73.3	73.3	N/A

Notes:

- (1) If the forecasted natural January through July volume runoff at The Dalles is less than 80 Maf, the Power Discharge Requirement in the 80 Maf schedule will be used. For intermediate forecasted volumes, the Power Discharge Requirement will be interpolated linearly between the values shown above.
- (2) PDR's and VRCLL's are from the AOP07. Data may be revised upon completion of any Refill Studies agreed to by the Operating Committee.

Exhibit 7M - Variable Refill Curve Procedures (SI)

The Variable Refill Curves (VRC) indicate the end-of-month storage content required to refill Canadian storage based on forecasts of natural inflow volume. The probable forecast volume at each reservoir is reduced by deducting the 95 percent confidence forecast error, Power Discharge Requirements (PDR), and water required for refill at upstream reservoirs based on the ORC. The Entities have agreed to limit the VRC to be no lower than the Variable Refill Curve Lower Limit (VRCLL), which is defined by studies that optimize power production during the refill period. The VRCLL's are a function of the unregulated January through July runoff volume at The Dalles, Oregon. The following schedule for PDR's and VRCLL's will apply when computing the VRC's during the period January 1 through June 1, unless the Operating Committee agrees to use updated study results.

POWER DISCHARGE REQUIREMENTS, IN m³/s,
AND VARIABLE REFILL CURVE LOWER LIMITS, IN hm³, FOR
JANUARY - JULY VOLUME RUNOFF OF THE COLUMBIA RIVER AT THE DALLES, OREGON

Project	Jar	Fet	Mai	Ap1	Ap2	May	Jur	Ju
Mica								
ARC PDR's	84.95	84.95	84.95	84.95	240.52	174.63	589.53	1598.94
98.68 km ³ PDR's	84.95	84.95	84.95	84.95	84.95	84.95	962.77	1132.67
117.18 km ³ PDR's	84.95	84.95	84.95	84.95	84.95	84.95	962.77	1132.67
135.69 km ³ PDR's	84.95	84.95	84.95	84.95	84.95	84.95	962.77	1132.67
98.68 km ³ VRCLL	84.95	84.95	84.95	84.95	240.52	174.63	589.53	1598.94
117.18 km ³ VRCLL	550.2	590.4	662.5	809.8	1150.1	3574.(6908.7	N/A
135.69 km ³ VRCLL	96.2	0.0	50.€	66.8	0.0	1668.1	5620.3	N/A
Distribution Factors	29.1	0.0	0.0	0.0	9.1	1611.6	4427.1	N/A
Forecast Errors (hm ³)	0.9750	0.977(0.974(0.9812	0.965(0.795(0.495(N/A
Arrow								
ARC PDR's	141.58	141.58	141.58	141.58	1604.52	304.72	1941.97	1936.45
98.68 km ³ PDR's	141.58	141.58	141.58	141.58	226.53	226.53	1415.84	1415.84
117.18 km ³ PDR's	141.58	141.58	141.58	141.58	141.58	141.58	1415.84	1415.84
135.69 km ³ PDR's	141.58	141.58	141.58	141.58	141.58	141.58	1415.84	1415.84
98.68 km ³ VRCLL	339.3	518.4	925.8	1353.0	2038.0	5183.1	7436.7	N/A
117.18 km ³ VRCLL	35.7	0.5	46.2	78.5	65.3	2848.8	7226.0	N/A
135.69 km ³ VRCLL	4.9	0.0	42.1	0.0	11.5	2201.9	6615.1	N/A
Distribution Factors - Total	0.9710	0.9747	0.9691	0.9741	0.9530	0.7483	0.4631	N/A
Forecast Errors (hm³) - Total	3016.9	2415.5	2019.2	1749.€	1749.€	1226.7	1226.7	N/A
Distribution Factors - Local	0.9680	0.9730	0.9640	0.9680	0.939(0.7020	0.4270	N/A
Forecast Errors (hm ³) - Local	1863.8	1548.2	1235.3	986.5	986.5	836.2	836.2	N/A
Duncan								
ARC PDR's	2.83	2.83	2.83	2.83	2.83	3.00	85.80	69.80
98.68 km ³ PDR's	2.83	14.16	14.16	14.1€	50.97	50.97	65.13	93.45
117.18 km ³ PDR's	2.83	2.83	2.83	2.83	2.83	50.97	56.63	79.29
135.69 km ³ PDR's	2.83	2.83	2.83	2.83	2.83	50.97	56.63	79.29
98.68 km ³ VRCLL	466.1	99.3	151.9	200.4	280.9	790.5	1359.1	N/A
117.18 km ³ VRCLL	67.5	46.0	41.3	0.0	81.2	500.€	1278.8	N/A
135.69 km ³ VRCLL	14.4	0.0	0.7	11.7	7. 1	258.1	1087.8	N/A
Distribution Factors	0.9720	0.9790	0.9740	0.979(0.957(0.7580	0.4690	N/A
Forecast Errors (hm ³)	289.7	266.7	238.5	215.5	215.5	179.3	179.3	N/A

Notes:

- (1) If the forecasted natural January through July volume runoff at The Dalles is less than 98.7 km³, the Power Discharge Requirement in the 98.7 km³ schedule will be used. For intermediate forecasted volumes, the Power Discharge Requirement will be interpolated linearly between the values shown above.
- (2) PDR's and VRCLL's are from the AOP07. Data may be revised upon completion of any Refill Studies agreed to by the Operating Committee.

Exhibit 8 - Coordinated System Loads and Resources used in the TSR (Energy in aMW)

Month	Total Loads 1/	Other Resources 2/	Coordinated Hydro Load 3
August 15	22158	11021	11137
August 31	22156	10991	11165
September	21355	10506	10849
October	22234	12452	9782
November	24441	13284	11157
December	26577	13385	13192
January	27159	14084	13075
February	26172	14272	11901
March	24176	12862	11315
April 15	23218	12628	10589
April 30	23195	10373	12822
May	22186	8695	13491
June	22483	8404	14079
July	22791	10068	12723

Notes: Data for columns 1, 2, and 3 are from Table 1A of the AOP07. References to line numbers in the notes below are references to lines in Table 1A of the AOP07.

^{1/} The total loads are the Pacific Northwest regional firm load plus pumping, but excludes Utah loads (line 1b).

^{2/} Other resources include total flows out (line 2g), total load served by flows-in (line 3e), total load served by non-step1 hydro and non-thermal resources (line 4d), total thermal installations (line 6c), and hydro maintenance (line 7a). Other resources include hydro independents (1929 for example) that will be updated from the best data available.

^{3/} AOP07 Coordinated Hydro Model Load, line 7b.

Exhibit 9 – Duncan Reservoir Capacity Table (English) ksfd

ELEVATION IN											AVERAGE DIFFERENCE PER TENTH
FEET	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	FT
1892.	705.8										
1891.	696.9	697.8	698.7	699.6	700.5	701.3	702.2	703.1	704.0	704.9	0.89
1890.	688.0	688.9	689.8	690.7	691.6	692.4	693.3	694.2	695.1	696.0	0.89
1889.	679.2	680.1	681.0	681.8	682.7	683.6	684.5	685.4	686.2	687.1	0.88
1888.	670.4	671.3	672.2	673.0	673.9	674.8	675.7	676.6	677.4	678.3	0.88
1887.	661.5	662.4	663.3	664.2	665.1	665.9	666.8	667.7	668.6	669.5	0.89
1886.	652.8	653.7	654.5	655.4	656.3	657.1	658.0	658.9	659.8	660.6	0.87
1885.	644.0	644.9	645.8	646.6	647.5	648.4	649.3	650.2	651.0	651.9	0.88
1884.	635.3	636.2	637.0	637.9	638.8	639.6	640.5	641.4	642.3	643.1	0.87
1883.	626.6	627.5	628.3	629.2	630.1	630.9	631.8	632.7	633.6	634.4	0.87
1882.	617.9	618.8	619.6	620.5	621.4	622.2	623.1	624.0	624.9	625.7	0.87
1881.	609.2	610.1	610.9	611.8	612.7	613.5	614.4	615.3	616.2	617.0	0.87
1880.	600.6	601.5	602.3	603.2	604.0	604.9	605.8	606.6	607.5	608.3	0.86
1879.	592.0	592.9	593.7	594.6	595.4	596.3	597.2	598.0	598.9	599.7	0.86
1878.	583.4	584.3	585.1	586.0	586.8	587.7	588.6	589.4	590.3	591.1	0.86
1877.	574.8	575.7	576.5			579.1	580.0	580.8	581.7	582.5	0.86
1876.			568.0	577.4 568.8	578.2 569.7	570.5	571.4	572.2	573.1	573.9	0.85
1875.	566.3 557.8	567.1 558.6	559.5	560.3	561.2	562.0	562.9	563.7	564.6	565.4	0.85
1673.	337.c	336.0	339.3	300.3	301.2	302.0	302.9	303.7	304.0	303.4	0.65
1874.	549.3	550.1	551.0	551.8	552.7	553.5	554.4	555.2	556.1	556.9	0.85
1873.	540.9	541.7	542.6	543.4	544.3	545.1	545.9	546.8	547.6	548.5	0.84
1872.	532.4	533.2	534.1	534.9	535.8	536.6	537.5	538.3	539.2	540.0	0.85
1871.	524.0	524.8	525.7	526.5	527.4	528.2	529.0	529.9	530.7	531.6	0.84
1870.	515.7	516.5	517.4	518.2	519.0	519.8	520.7	521.5	522.3	523.2	0.83
1869.	507.3	508.1	509.0	509.8	510.7	511.5	512.3	513.2	514.0	514.9	0.84
1868.	499.0	499.8	500.7	501.5	502.3	503.1	504.0	504.8	505.6	506.5	0.83
1867.	490.7	491.5	492.4	493.2	494.0	494.8	495.7	496.5	497.3	498.2	0.83
1866.	482.4	483.2	484.1	484.9	485.7	486.5	487.4	488.2	489.0	489.9	0.83
1865.	474.2	475.0	475.8	476.7	477.5	478.3	479.1	479.9	480.8	481.6	0.82
1864.	466.0	466.8	467.6	468.5	469.3	470.1	470.9	471.7	472.6	473.4	0.82
1863.	457.8	458.6	459.4	460.3	461.1	461.9	462.7	463.5	464.4	465.2	0.82
1862.	449.7	450.5	451.3	452.1	452.9	453.7	454.6	455.4	456.2	457.0	0.81
1861.	441.6	442.4	443.2	444.0	444.8	445.6	446.5	447.3	448.1	448.9	0.81
1860.	433.5	434.3	435.1	435.9	436.7	437.5	438.4	439.2	440.0	440.8	0.81
1859.	425.4	426.2	427.0	427.8	428.6	429.4	430.3	431.1	431.9	432.7	0.81
1858.	417.4	418.2	419.0	419.8	420.6	421.4	422.2	423.0	423.8	424.6	0.80
1857.	409.4	410.2	411.0	411.8	412.6	413.4	414.2	415.0	415.8	416.6	0.80
1856.	401.4	402.2	403.0	403.8	404.6	405.4	406.2	407.0	407.8	408.6	0.80
1855.	393.5	394.3	395.1	395.9	396.7	397.4	398.2	399.0	399.8	400.6	0.79
1854.	385.6	386.4	387.2	388.0	388.8	389.5	390.3	391.1	391.9	392.7	0.79
1854. 1853.	385.c 377.7		387.2 379.3								0.79
		378.5		380.1	380.9	381.6	382.4	383.2	384.0	384.8	
1852.	369.9	370.7	371.5	372.2	373.0	373.8	374.6	375.4	376.1	376.9	0.78
1851.	362.1	362.9	363.7	364.4	365.2	366.0	366.8	367.6	368.3	369.1	0.78

1850. 354.3 355.1 355.9 356.6 357.4 358.2 359.0 359.8 360.5 361.3 0.78

Exhibit 9 – Duncan Reservoir Capacity Table (English) ksfd

ELEVATION IN											AVERAGE DIFFERENCE PER TENTH
FEET	0.	.1	.2	.3	.4	.5	.6	.7	8.	.9	FT
1849.	346.6	347.4	348.1	348.9	349.7	350.4	351.2	352.0	352.8	353.5	0.77
1848.	338.9	339.7	340.4	341.2	342.0	342.7	343.5	344.3	345.1	345.8	0.77
1847.	331.2	332.0	332.7	333.5	334.3	335.0	335.8	336.6	337.4	338.1	0.77
1846.	323.6	324.4	325.1	325.9	326.6	327.4	328.2	328.9	329.7	330.4	0.76
1845.	316.0	316.8	317.5	318.3	319.0	319.8	320.6	321.3	322.1	322.8	0.76
1844.	308.5	309.2	310.0	310.7	311.5	312.2	313.0	313.7	314.5	315.2	0.75
1843.	300.9	301.7	302.4	303.2	303.9	304.7	305.5	306.2	307.0	307.7	0.76
1842.	293.5	294.2	295.0	295.7	296.5	297.2	297.9	298.7	299.4	300.2	0.74
1841.	286.0	286.7	287.5	288.2	289.0	289.7	290.5	291.2	292.0	292.7	0.75
1840.	278.6	279.3	280.1	280.8	281.6	282.3	283.0	283.8	284.5	285.3	0.74
1839.	271.2	271.9	272.7	273.4	274.2	274.9	275.6	276.4	277.1	277.9	0.74
1838.	263.9	264.6	265.4	266.1	266.8	267.5	268.3	269.0	269.7	270.5	0.73
1837.	256.6	257.3	258.1	258.8	259.5	260.2	261.0	261.7	262.4	263.2	0.73
1836.	249.4	250.1	250.8	251.6	252.3	253.0	253.7	254.4	255.2	255.9	0.72
1835.	242.2	242.9	243.6	244.4	245.1	245.8	246.5	247.2	248.0	248.7	0.72
1834.	235.0	235.7	236.4	237.2	237.9	238.6	239.3	240.0	240.8	241.5	0.72
1833.	227.9	228.6	229.3	230.0	230.7	231.4	232.2	232.9	233.6	234.3	0.71
1832.	220.8	221.5	222.2	222.9	223.6	224.3	225.1	225.8	226.5	227.2	0.71
1831.	213.8	214.5	215.2	215.9	216.6	217.3	218.0	218.7	219.4	220.1	0.70
1830.	206.8	207.5	208.2	208.9	209.6	210.3	211.0	211.7	212.4	213.1	0.70
1829.	199.9	200.6	201.3	202.0	202.7	203.3	204.0	204.7	205.4	206.1	0.69
1828.	193.0	193.7	194.4	195.1	195.8	196.4	197.1	197.8	198.5	199.2	0.69
1827.	186.1	186.8	187.5	188.2	188.9	189.5	190.2	190.9	191.6	192.3	0.69
1826.	179.3	180.0	180.7	181.3	182.0	182.7	183.4	184.1	184.7	185.4	0.68
1825.	172.6	173.3	173.9	174.6	175.3	175.9	176.6	177.3	178.0	178.6	0.67
1824.	165.9	166.6	167.2	167.9	168.6	169.2	169.9	170.6	171.3	171.9	0.67
1823.	159.2	159.9	160.5	161.2	161.9	162.5	163.2	163.9	164.6	165.2	0.67
1822.	152.6	153.3	153.9	154.6	155.2	155.9	156.6	157.2	157.9	158.5	0.66
1821.	146.1	146.7	147.4	148.0	148.7	149.3	150.0	150.6	151.3	151.9	0.65
1820.	139.6	140.2	140.9	141.5	142.2	142.8	143.5	144.1	144.8	145.4	0.65
1819.	133.2	133.8	134.5	135.1	135.8	136.4	137.0	137.7	138.3	139.0	0.64
1818.	126.8	127.4	128.1	128.7	129.4	130.0	130.6	131.3	131.9	132.6	0.64
1817.	120.5	121.1	121.8	122.4	123.0	123.6	124.3	124.9	125.5	126.2	0.63
1816.	114.3	114.9	115.5	116.2	116.8	117.4	118.0	118.6	119.3	119.9	0.62
1815.	108.1	108.7	109.3	110.0	110.6	111.2	111.8	112.4	113.1	113.7	0.62
1814.	102.0	102.6	103.2	103.8	104.4	105.0	105.7	106.3	106.9	107.5	0.61
1813.	96.0	96.6	97.2	97.8	98.4	99.0	99.6	100.2	100.8	101.4	0.60
1812.	90.0	90.6	91.2	91.8	92.4	93.0	93.6	94.2	94.8	95.4	0.60
1811.	84.1	84.7	85.3	85.9	86.5	87.0	87.6	88.2	88.8	89.4	0.59
1810.	78.3	78.9	79.5	80.0	80.6	81.2	81.8	82.4	82.9	83.5	0.58

Exhibit 9 – Duncan Reservoir Capacity Table (English) ksfd

ELEVATION											AVERAGE IFFERENCE
IN	.0	.1	.2	.3	.4	.5	.6	.7	.8		PER TENTH
FEET										-	FT
1809.	72.5	73.1	73.7	74.2	74.8	75.4	76.0	76.6	77.1	77.7	0.58
1808.	66.9	67.5	68.0	68.6	69.1	69.7	70.3	70.8	71.4	71.9	0.56
1807.	61.3	61.9	62.4	63.0	63.5	64.1	64.7	65.2	65.8	66.3	0.56
1806.	55.8	56.3	56.9	57.4	58.0	58.5	59.1	59.6	60.2	60.7	0.55
1805.	50.4	50.9	51.5	52.0	52.6	53.1	53.6	54.2	54.7	55.3	0.54
1804.	45.1	45.6	46.2	46.7	47.2	47.7	48.3	48.8	49.3	49.9	0.53
1803.	39.9	40.4	40.9	41.5	42.0	42.5	43.0	43.5	44.1	44.6	0.52
1802.	34.8	35.3	35.8	36.3	36.8	37.3	37.9	38.4	38.9	39.4	0.51
1801.	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	0.50
1800.	25.0	25.5	26.0	26.4	26.9	27.4	27.9	28.4	28.8	29.3	0.48
1799.	20.3	20.8	21.2	21.7	22.2	22.6	23.1	23.6	24.1	24.5	0.47
1798.	15.7	16.2	16.6	17.1	17.5	18.0	18.5	18.9	19.4	19.8	0.46
1797.	11.3	11.7	12.2	12.6	13.1	13.5	13.9	14.4	14.8	15.3	0.44
1796.	7.1	7.5	7.9	8.4	8.8	9.2	9.6	10.0	10.5	10.9	0.42
1795.	3.0	3.4	3.8	4.2	4.6	5.0	5.5	5.9	6.3	6.7	0.41
1794.			0.0	0.4	8.0	1.1	1.5	1.9	2.3	2.6	0.37

Exhibit 9M– Duncan Reservoir Capacity Table (SI) $${\rm hm}^3$$

ELEVATION IN	.00	.03	.0€	.09	.12	.15	.18	.21	.24	.27	AVERAGE DIFFERENCE PER
METERS	.00	.0.	.00	.0:	.12	.1.	.1(.21	.2-	.21	3/100 M
576.68	1726.8										
576.38	1705.0	1707.2	1709.4	1711.€	1713.8	1715.8	1718.(1720.2	1722.4	1724.6	2.18
576.07	1683.3	1685.5	1687.7	1689.9	1692.1	1694.(1696.2	1698.4	1700.€	1702.8	2.18
575 77	16613	16626	1,000 1	1660 1	1670 1	1670 6	16745	16766	1.70 (1601.1	2.15
575.77	1661.7	1663.9	1666.1	1668.1	1670.3	1672.5	1674.7	1676.9	1678.9	1681.1	2.15
575.46	1640.2	1642.4	1644.6	1646.6	1648.8	1651.(1653.2	1655.4	1657.3	1659.5	2.15
575.16 574.85	1618.4 1597.1	1620.€ 1599.€	1622.8 1601.3	1625.(1603.;	1627.2 1605.7	1629.2 1607.7	1631. ⁴ 1609. ⁵	1633.€ 1612.∃	1635.8 1614.3	1638.0 1616.2	2.18 2.13
574.55	1575.6	1577.8	1580.(1582.(1584.2	1586.4	1588.6	1590.8	1592.7	1594.9	2.15
374.33	1373.0	13//.(1360.0	1362.(1304.2	1360.2	1300.0	1390.0	1392.7	1394.5	2.13
574.24	1554.3	1556.5	1558.5	1560.7	1562.9	1564.8	1567.(1569.2	1571.5	1573.4	2.13
573.94	1533.0	1535.2	1537.2	1539.4	1541.6	1543.¢	1545.8	1548.(1550.2	1552.1	2.13
573.63	1511.8	1514.(1515.9	1518.1	1520.3	1522.3	1524.5	1526.7	1528.9	1530.8	2.13
573.33	1490.5	1492.7	1494.6	1496.8	1499.(1501.(1503.2	1505.4	1507.€	1509.¢	2.13
573.03	1469.4	1471.6	1473.€	1475.8	1477.7	1479.5	1482.2	1484.1	1486.3	1488.3	2.10
273.03	1.07.	11/11	11,000	11701	1	1.,,,,,	1.02	1.0	1.001	1.0010	2.10
572.72	1448.4	1450.€	1452.5	1454.7	1456.7	1458.9	1461.1	1463.1	1465.3	1467.2	2.10
572.42	1427.3	1429.5	1431.5	1433.7	1435.7	1437.5	1440.1	1442.(1444.2	1446.2	2.10
572.11	1406.3	1408.5	1410.5	1412.7	1414.6	1416.8	1419.(1421.(1423.2	1425.1	2.10
571.81	1385.5	1387.5	1389.7	1391.6	1393.8	1395.8	1398.(1399.9	1402.1	1404.1	2.08
571.50	1364.7	1366.7	1368.9	1370.8	1373.(1375.(1377.2	1379.1	1381.4	1383.3	2.08
071.00	150	1000.7	1000.5	10701	10,000	10701	10,,,12	10,71.	1001.	100010	2.00
571.20	1343.9	1345.9	1348.1	1350.0	1352.2	1354.2	1356.4	1358.4	1360.€	1362.5	2.08
570.89	1323.4	1325.3	1327.5	1329.5	1331.7	1333.€	1335.€	1337.8	1339.8	1342.0	2.06
570.59	1302.€	1304.5	1306.7	1308.7	1310.9	1312.8	1315.(1317.0	1319.2	1321.2	2.08
570.28	1282.0	1284.0	1286.2	1288.1	1290.3	1292.3	1294.3	1296.5	1298.4	1300.€	2.06
569.98	1261.7	1263.7	1265.9	1267.8	1269.8	1271.7	1273.9	1275.9	1277.9	1280.1	2.03
569.67	1241.2	1243.1	1245.3	1247.3	1249.5	1251.4	1253.4	1255.€	1257.€	1259.8	2.06
569.37	1220.9	1222.8	1225.0	1227.0	1228.9	1230.9	1233.1	1235.0	1237.0	1239.2	2.03
569.06	1200.5	1202.5	1204.7	1206.7	1208.€	1210.€	1212.8	1214.7	1216.7	1218.9	2.03
568.76	1180.2	1182.2	1184.4	1186.4	1188.3	1190.3	1192.5	1194.4	1196.4	1198.€	2.03
568.45	1160.2	1162.1	1164.1	1166.3	1168.3	1170.2	1172.2	1174.1	1176.3	1178.3	2.01
568.15	1140.1	1142.1	1144.(1146.2	1148.2	1150.1	1152.1	1154.1	1156.3	1158.2	2.01
567.84	1120.1	1122.0	1124.0	1126.2	1128.1	1130.1	1132.0	1134.0	1136.2	1138.2	2.01
567.54	1100.2	1102.2	1104.2	1106.1	1108.1	1110.0	1112.2	1114.2	1116.1	1118.1	1.98
567.23	1080.4	1082.4	1084.3	1086.3	1088.2	1090.2	1092.4	1094.4	1096.3	1098.3	1.98
566.93	1060.€	1062.€	1064.5	1066.5	1068.4	1070.4	1072.€	1074.5	1076.5	1078.5	1.98
566.62	1040.8	1042.7	1044.7	1046.7	1048.€	1050.€	1052.8	1054.7	1056.7	1058.€	1.98
566.32	1021.2	1023.2	1025.1	1027.1	1029.0	1031.0	1033.0	1034.9	1036.9	1038.8	1.96
566.01	1001.€	1003.€	1005.€	1007.5	1009.5	1011.4	1013.4	1015.3	1017.3	1019.3	1.96
565.71	982.1	984.(986.(987.5	989.9	991.9	993.8	995.8	997.7	999.7	1.96
565.41	962.7	964.7	966.7	968.€	970.€	972.3	974.2	976.2	978.2	980.1	1.93
565.10	943.4	945.4	947.3	949.3	951.2	953.(954.9	956.9	958.8	960.8	1.93
564.80	924.1	926.0	928.0	930.(931.9	933.€	935.€	937.5	939.5	941.5	1.93
564.49	905.(907.(908.9	910.€	912.€	914.5	916.5	918.5	920.2	922.1	1.91
564.19	885.9	887.9	889.8	891.5	893.5	895.5	897.4	899.4	901.1	903.0	1.91
563.88	866.8	868.8	870.7	872.5	874.4	876.4	878.3	880.3	882.(884.0	1.91

Exhibit 9M– Duncan Reservoir Capacity Table (SI) $$\operatorname{hm}^3$$

ELEVATION											AVERAGE DIFFERENCE
IN METERS	.00	.03	.0€	.09	.12	.15	.18	.21	.24	.27	PER 3/100 M
563.58	848.0	849.5	851.7	853.€	855.€	857.3	859.2	861.2	863.2	864.9	1.88
563.27	829.2	831.1	832.8	834.8	836.7	838.4	840.4	842.4	844.3	846.0	1.88
562.97	810.3	812.3	814.0	815.9	817.9	819.€	821.€	823.5	825.5	827.2	1.88
562.66	791.7	793.7	795.4	797.3	799.1	801.0	803.0	804.7	806.€	808.4	1.86
562.36	773.1	775.1	776.8	778.8	780.5	782.4	784.4	786.1	788.0	789.8	1.86
562.05	754.8	756.5	758.4	760.2	762.1	763.8	765.8	767.5	769.5	771.2	1.83
561.75	736.2	738.1	739.9	741.8	743.5	745.5	747.4	749.1	751.1	752.8	1.86
561.44	718.1	719.8	721.7	723.5	725.4	727.1	728.8	730.8	732.5	734.5	1.81
561.14	699.7	701.4	703.4	705.1	707.1	708.8	710.7	712.4	714.4	716.1	1.83
560.83	681.€	683.3	685.3	687.(689.(690.7	692.4	694.3	696.1	698.0	1.81
560.53	663.5	665.2	667.2	668.9	670.9	672.€	674.3	676.2	678.0	679.9	1.81
560.22	645.7	647.4	649.3	651.(652.8	654.5	656.4	658.1	659.8	661.8	1.79
559.92	627.8	629.5	631.5	633.2	634.9	636.€	638.€	640.3	642.(643.9	1.79
559.61	610.2	611.5	613.€	615.€	617.3	619.(620.7	622.4	624.4	626.1	1.76
559.31	592.€	594.3	596.(597.9	599.7	601.4	603.1	604.8	606.8	608.5	1.76
559.00	575.0	576.7	578.4	580.3	582.(583.8	585.5	587.2	589.1	590.9	1.76
558.70	557.€	559.3	561.(562.7	564.4	566.1	568.1	569.8	571.5	573.2	1.74
558.39	540.2	541.9	543.€	545.3	547.1	548.8	550.7	552.4	554.2	555.9	1.74
558.09	523.1	524.8	526.5	528.2	529.9	531.€	533.4	535.1	536.8	538.5	1.71
557.79	506.(507.7	509.4	511.1	512.8	514.5	516.2	517.9	519.7	521.4	1.71
557.48	489.1	490.8	492.5	494.2	495.9	497.4	499.1	500.8	502.5	504.2	1.69
557.18	472.2	473.9	475.€	477.3	479.0	480.5	482.2	483.9	485.7	487.4	1.69
556.87	455.3	457.(458.7	460.5	462.2	463.€	465.3	467.1	468.8	470.5	1.69
556.57	438.7	440.4	442.1	443.€	445.3	447.(448.7	450.4	451.9	453.€	1.66
556.26	422.3	424.(425.5	427.2	428.9	430.4	432.1	433.8	435.5	437.0	1.64
555.96	405.9	407.€	409.1	410.8	412.5	414.0	415.7	417.4	419.1	420.€	1.64
555.65	389.5	391.2	392.7	394.4	396.1	397.€	399.3	401.0	402.7	404.2	1.64
555.35	373.4	375.1	376.5	378.2	379.7	381.4	383.1	384.€	386.3	387.8	1.61
555.04	357.4	358.9	360.€	362.1	363.8	365.3	367.(368.5	370.2	371.€	1.59
554.74	341.5	343.0	344.7	346.2	347.5	349.4	351.1	352.€	354.3	355.7	1.59
554.43	325.9	327.4	329.1	330.5	332.2	333.7	335.2	336.5	338.4	340.1	1.57
554.13	310.2	311.7	313.4	314.9	316.€	318.1	319.5	321.2	322.7	324.4	1.57
553.82	294.8	296.3	298.0	299.5	300.9	302.4	304.1	305.€	307.0	308.8	1.54
553.52	279.€	281.1	282.€	284.3	285.8	287.2	288.7	290.2	291.9	293.3	1.52
553.21	264.5	265.9	267.4	269.1	270.€	272.1	273.5	275.0	276.7	278.2	1.52
552.91	249.€	251.(252.5	254.(255.4	256.9	258.€	260.1	261.5	263.(1.49
552.60	234.9	236.3	237.8	239.3	240.7	242.2	243.7	245.1	246.€	248.1	1.47
552.30	220.2	221.7	223.1	224.€	226.1	227.5	229.0	230.5	231.9	233.4	1.47
551.99	205.8	207.2	208.7	210.2	211.€	212.9	214.3	215.8	217.3	218.7	1.44
551.69	191.€	193.(194.5	195.7	197.2	198.7	200.1	201.€	202.8	204.3	1.42

Exhibit 9M– Duncan Reservoir Capacity Table (SI) $${\rm hm}^3$$

											AVERAGE
ELEVATION											DIFFERENCE
IN	06	01	0.4	06	1.0	17	16	2.1	2.	25	PER
METERS	.00	.03	.0€	.09	.12	.15	.18	.21	.24	.27	3/100 M
551.38	177.4	178.8	180.3	181.5	183.0	184.5	185.9	187.4	188.€	190.1	1.42
551.08	163.7	165.1	166.4	167.8	169.1	170.5	172.0	173.2	174.7	175.9	1.37
550.77	150.0	151.4	152.7	154.1	155.4	156.8	158.3	159.5	161.(162.2	1.37
550.47	136.5	137.7	139.2	140.4	141.9	143.1	144.€	145.8	147.3	148.5	1.35
550.17	123.3	124.5	126.0	127.2	128.7	129.9	131.1	132.€	133.8	135.3	1.32
	110.3	111. (113.(114.3	115.5	116.7	118.2	119.4	120.€	122.1	1.30
549.56	97.€	98.8	100.1	101.5	102.8	104.0	105.2	106.4	107.5	109.1	1.27
549.25	85.1	86.4	87.€	88.8	90.0	91.3	92.7	93.9	95.2	96.4	1.25
548.95	72.9	74. 1	75.4	76.t	77.8	79.(80.2	81.5	82.7	83.9	1.22
548.64	61.2	62.4	63.€	64.€	65.8	67.(68.3	69.5	70.5	71.7	1.17
548.34	49.7	50.9	51.9	53. 1	54.3	55.3	56.5	57.7	59.(59.9	1.15
548.03	38.4	39.€	40.€	41.8	42.8	44.(45.3	46.2	47.5	48.4	1.13
547.73	27.€	28.€	29.8	30.8	32.1	33.0	34.(35.2	36.2	37.4	1.08
547.42	17.4	18.3	19.3	20.€	21.5	22.5	23.5	24.5	25.7	26.7	1.03
547.42	17.4	18.3	19.3	20.€	21.5	22.5	23.5	24.5	25.7	26.7	1.03
546.81			0.0	1.0	2.0	2.7	3.7	4.6	5.€	6.4	0.91

1405.

1272.1

1277.4

Exhibit 10 – Arrow Reservoir Capacity Table (English) ksfd

AVERAGE ELEVATION DIFFERENCE PER TENTH FT IN .3 8. 0. .2 .4 .5 .7 .1 .6 **FEET** 1444. 3579.6 1443. 3514.1 3520.6 3527.2 3533.7 3540.3 3546.8 3553.4 3559.9 3566.5 3573.0 6.55 3461.9 3468.5 3475.0 3481.5 3488.0 3494.5 3501.1 3507.€ 6.52 1442. 3448.9 3455.4 1441. 3397.0 3403.5 3422.9 3429.4 3435.9 6.49 3384.0 3390.5 3410.0 3416.4 3442.4 1440. 3319.5 3325.9 3332.4 3338.8 3345.3 3351.7 3358.2 3364.6 3371.1 3377.5 6.45 1439. 3255.2 3261.€ 3268.1 3274.5 3280.9 3287.3 3293.8 3300.2 3306.6 3313.1 6.43 1438. 3191.4 3197.8 3204.2 3210.5 3216.9 3223.3 3229.7 3236.1 3242.4 3248.8 6.38 1437. 3127.8 3134.2 3140.5 3146.9 3153.2 3159.6 3166.0 3172.3 3178.7 3185.0 6.36 3070.9 3077.2 3083.6 3089.9 3096.2 1436. 3064.€ 3102.5 3108.8 3115.2 3121.5 6.32 1435. 3001.7 3008.0 3014.3 3020.€ 3026.9 3033.1 3039.4 3045.7 3052.0 3058.3 6.29 1434. 2939.2 2945.4 2951.7 2957.9 2964.2 2970.4 2976.7 2982.9 2989.2 2995.4 6.25 1433. 2877.0 2883.2 2889.4 2895.7 2901.9 2914.3 2920.5 2926.8 2933.0 2908.1 6.22 2852.2 1432. 2815.1 2821.3 2827.5 2833.7 2839.9 2846.0 2858.4 2864.6 2870.8 6.19 1431. 2753.5 2759.7 2765.8 2772.0 2778.1 2784.3 2790.5 2796.6 2802.8 2808.9 6.16 1430. 2692.3 2698.4 2704.5 2710.7 2716.8 2722.9 2729.0 2735.1 2741.3 2747.4 6.12 1429. 2631.5 2637.€ 2643.7 2649.7 2655.8 2661.9 2668.0 2674.1 2680.1 2686.2 6.08 1428. 2570.9 2577.0 2583.0 2589.1 2595.1 2601.2 2607.3 2613.3 2619.4 2625.4 6.06 1427. 2510.7 2516.7 2522.7 2528.8 2534.8 2540.8 2546.8 2552.8 2558.9 2564.9 6.02 2450.8 2468.8 2474.8 2492.7 2498.7 2504.7 1426. 2456.8 2462.8 2480.7 2486.7 5.99 1425. 2391.2 2397.2 2403.1 2409.1 2415.0 2421.0 2427.0 2432.9 2438.9 2444.8 5.96 1424. 2331.9 2337.8 2349.7 2355.6 2361.5 2379.3 2385.3 2343.8 2367.5 2373.4 5.93 1423. 2272.8 2278.7 2284.6 2290.5 2296.4 2302.3 2308.3 2314.2 2320.1 2326.0 5.91 2249.3 1422. 2214.12220.0 2225.8 2231.7 2237.6 2243.4 2255.2 2261.1 2266.9 5.87 2173.2 2202.4 1421. 2155.7 2161.5 2167.4 2179.1 2184.9 2190.7 2196.6 2208.3 5.84 2115.1 2144.1 1420. 2097.7 2103.5 2109.3 2120.9 2126.7 2132.5 2138.3 2149.9 5.80 1419. 2040.1 2045.9 2051.6 2057.4 2063.1 2068.9 2074.7 2080.4 2086.2 2091.9 5.76 1418. 1982.9 1988.6 1994.3 2000.1 2005.8 2011.5 2017.2 2022.9 2028.7 2034.4 5.72 1417. 1926.1 1931.8 1937.5 1943.1 1948.8 1954.5 1960.2 1965.9 1971.5 1977.2 5.68 1416. 1869.6 1875.2 1880.9 1886.5 1892.2 1897.8 1903.5 1909.1 1914.8 1920.4 5.65 1415. 1813.5 1819.1 1824.7 1830.3 1835.9 1841.5 1847.2 1852.8 1858.4 1864.0 5.61 1414. 1807.9 1757.8 1763.4 1768.9 1774.5 1780.1 1785.6 1791.2 1796.8 1802.4 5.57 1413. 1702.4 1719.0 1752.3 1707.9 1713.5 1724.€ 1730.1 1735.€ 1741.2 1746.7 5.54 1412. 1680.4 1685.9 1696.9 1647.4 1652.9 1658.4 1663.9 1669.4 1674.9 1691.4 5.50 1411. 1592.7 1598.2 1603.6 1609.1 1614.6 1620.0 1625.5 1631.0 1636.5 1641.9 5.47 1410. 1538.4 1543.8 1549.3 1554.7 1560.1 1565.5 1571.0 1576.4 1581.8 1587.3 5.43 1409. 1484.5 1489.9 1495.3 1500.7 1506.1 1511.4 1516.8 1522.2 1527.€ 1533.0 5.39 1408. 1430.9 1436.3 1441.6 1447.0 1452.3 1457.7 1463.1 1468.4 1473.8 1479.1 5.36 1407. 1377.7 1383.0 1388.3 1393.7 1399.0 1404.3 1409.6 1414.9 1420.3 1425.6 5.32 1406. 1324.7 1330.0 1335.3 1340.6 1345.9 1351.2 1356.5 1361.8 1367.1 1372.4 5.30

1293.1

1298.4

1303.7

1308.9

1314.2

1319.4

5.26

1287.9

1282.€

Exhibit 10 – Arrow Reservoir Capacity Table (English) ksfd

ELEVATION IN FEET	.0	.1	.2	.3	.4	.5	.€	.7	.8	.9	AVERAGE DIFFERENCE PER TENTH FT
1404.	1219.5	1224.8	1230.0	1235.3	1240.5	1245.8	1251.1	1256.3	1261.€	1266.8	5.26
1403.	1167.3	1172.5	1177.7	1183.0	1188.2	1193.4	1198.€	1203.8	1209.1	1214.3	5.22
1402.	1115.4	1120.€	1125.8	1131.0	1136.2	1141.3	1146.5	1151.7	1156.9	1162.1	5.19
1401.	1063.9	1069.0	1074.2	1079.3	1084.5	1089.6	1094.8	1099.9	1105.1	1110.2	5.15
1400.	1012.8	1017.9	1023.0	1028.1	1033.2	1038.3	1043.5	1048.€	1053.7	1058.8	5.11
1399.	962.5	967.5	972.€	977.€	982.6	987.€	992.7	997.7	1002.7	1007.8	5.03
1398.	912.7	917.7	922.7	927.6	932.€	937.6	942.€	947.€	952.5	957.5	4.98
1397.	863.2	868.1	873.1	878.0	883.0	887.9	892.9	897.8	902.8	907.7	4.95
1396.	814.1	819.0	823.9	828.8	833.7	838.6	843.6	848.5	853.4	858.3	4.91
1395	765.2	770.1	775.0	779.9	784.8	789.€	794.5	799.4	804.3	809.2	4.89
1394.	716.2	721.1	726.0	730.9	735.8	740.7	745.6	750.5	755.4	760.3	4.90
1393.	667.5	672.4	677.2	682.1	687.0	691.8	696.7	701.€	706.5	711.3	4.87
1392.	619.3	624.1	628.9	633.8	638.6	643.4	648.2	653.0	657.9	662.7	4.82
1391.	571.5	576.3	581.1	585.8	590.6	595.4	600.2	605.0	609.7	614.5	4.78
1390.	524.2	528.9	533.7	538.4	543.1	547.8	552.€	557.3	562.0	566.8	4.73
1389.	477.9	482.5	487.2	491.8	496.4	501.0	505.7	510.3	514.9	519.€	4.63
1388.	432.3	436.9	441.4	446.0	450.5	455.1	459.7	464.2	468.8	473.3	4.56
1387.	387.2	391.7	396.2	400.7	405.2	409.7	414.3	418.8	423.3	427.8	4.51
1386.	342.€	347.1	351.5	356.0	360.4	364.9	369.4	373.8	378.3	382.7	4.46
1385.	298.5	302.9	307.3	311.7	316.1	320.5	325.0	329.4	333.8	338.2	4.41
1384.	254.€	259.0	263.4	267.8	272.2	276.5	280.9	285.3	289.7	294.1	4.39
1383.	211.2	215.5	219.9	224.2	228.€	232.9	237.2	241.6	245.9	250.3	4.34
1382.	168.4	172.7	177.0	181.2	185.5	189.8	194.1	198.4	202.6	206.9	4.28
1381.	126.1	130.3	134.6	138.8	143.0	147.2	151.5	155.7	159.9	164.2	4.23
1380.	84.3	88.5	92.7	96.8	101.0	105.2	109.4	113.6	117.7	121.9	4.18
1379.	43.2	47.3	51.4	55.5	59.€	63.7	67.9	72.0	76.1	80.2	4.11
1378.	2.7	6.7	10.8	14.8	18.9	22.9	27.0	31.0	35.1	39.1	4.05
1377.										0.0	2.70

Exhibit 10M – Arrow Reservoir Capacity Table (SI) $$\operatorname{hm}^3$$

ELEVATION IN METERS	.0(.03	.0€	.09	.12	.15	.18	.21	.24	.27	AVERAGE DIFFERENCE PER 3/100 M
METERS											3/100 141
440.13	8757.8										
439.83	8597.€	8613.5	8629.€	8645.€	8661.7	8677.€	8693.7	8709.7	8725.8	8741.7	16.03
439.52	8438.1	8454.(8469.9	8486.0	8501.9	8517.8	8533.7	8549.€	8565.8	8581.7	15.95
439.22	8279.3	8295.2	8311.1	8327.0	8342.9	8358.€	8374.5	8390.4	8406.3	8422.2	15.88
438.91	8121.5	8137.1	8153.0	8168.7	8184.€	8200.3	8216.2	8231.8	8247.7	8263.4	15.78
438.61	7964.2	7979.8	7995.7	8011.4	8027.0	8042.7	8058.€	8074.3	8089.9	8105.8	15.73
438.30	7808.1	7823.7	7839.4	7854.8	7870.5	7886.1	7901.8	7917.4	7932.9	7948.5	15.61
438.00	7652.5	7668.1	7683.5	7699.2	7714.€	7730.3	7745.9	7761.3	7777.(7792.4	15.56
437.69	7497.9	7513.3	7528.7	7544.3	7559.7	7575.2	7590.€	7606.0	7621.€	7637.1	15.46
437.39	7344.(7359.4	7374.8	7390.2	7405.€	7420.8	7436.2	7451.€	7467.(7482.4	15.39
437.08	7191.(7206.2	7221.€	7236.8	7252.2	7267.4	7282.8	7298.(7313.4	7328.5	15.29
436.78	7038.9	7054.0	7069.2	7084.€	7099.8	7115.0	7130.1	7145.3	7160.7	7175.9	15.22
436.47	6887.4	6902.€	6917.8	6932.9	6948.1	6963.(6978.2	6993.4	7008.5	7023.7	15.14
436.17	6736.7	6751.9	6766.8	6782.(6796.9	6812.1	6827.2	6842.2	6857.3	6872.3	15.07
435.86	6587.(6601.9	6616.8	6632.(6646.9	6661.8	6676.8	6691.7	6706.9	6721.8	14.97
435.56	6438.2	6453.2	6468.1	6482.8	6497.7	6512.€	6527.5	6542.5	6557.1	6572.1	14.88
435.26	6290.0	6304.9	6319.€	6334.5	6349.2	6364.1	6379.(6393.7	6408.€	6423.3	14.83
434.95	6142.7	6157.4	6172.0	6187.0	6201.€	6216.3	6231.0	6245.7	6260.€	6275.3	14.73
434.65	5996.1	6010.8	6025.5	6040.2	6054.8	6069.3	6084.0	6098.€	6113.3	6128.0	14.66
434.34	5850.3	5865.0	5879.4	5894.1	5908.5	5923.2	5937.9	5952.3	5967.(5981.4	14.58
434.04	5705.2	5719.7	5734.3	5748.8	5763.2	5777.€	5792.3	5806.8	5821.2	5835.9	14.51
433.73	5560.€	5575.1	5589.5	5603.9	5618.4	5632.8	5647.5	5661.9	5676.4	5690.8	14.46
433.43	5417.(5431.5	5445.€	5460.1	5474.5	5488.7	5503.1	5517.€	5532.(5546.2	14.36
433.12	5274.1	5288.3	5302.8	5317.(5331.4	5345.€	5359.8	5374.2	5388.4	5402.8	14.29
432.82	5132.2	5146.4	5160.€	5174.8	5189.0	5203.2	5217.4	5231.€	5245.8	5259.9	14.19
432.51	4991.3	5005.5	5019.4	5033.€	5047.€	5061.8	5076.(5089.9	5104.1	5118.0	14.09
432.21	4851.4	4865.3	4879.3	4893.4	4907.4	4921.3	4935.3	4949.2	4963.4	4977.4	13.99
431.90	4712.4	4726.3	4740.3	4754.(4767.9	4781.9	4795.8	4809.8	4823.5	4837.4	13.90
431.60	4574.2	4587.9	4601.8	4615.5	4629.5	4643.2	4657.1	4670.8	4684.7	4698.5	13.82
431.29	4436.9	4450.€	4464.3	4478.0	4491.7	4505.4	4519.4	4533.1	4546.8	4560.5	13.73
430.99	4300.€	4314.3	4327.8	4341.5	4355.2	4368.€	4382.3	4396.1	4409.8	4423.2	13.63
430.68	4165.1	4178.5	4192.2	4205.7	4219.4	4232.9	4246.3	4260.0	4273.5	4287.2	13.55
430.38	4030.5	4044.(4057.4	4070.9	4084.4	4097.8	4111.3	4124.7	4138.2	4151.€	13.46
430.07	3896.7	3910.2	3923.4	3936.8	3950.3	3963.5	3976.9	3990.4	4003.9	4017.1	13.38
429.77	3763.8	3777.1	3790.5	3803.7	3816.9	3830.2	3843.€	3856.8	3870.0	3883.5	13.29
100.45	26226	2645.6	2650	2671 :	26046	2607.6	27117	27246	2727	2750	12.10
429.46	3632.(3645.2	3658.4	3671.€	3684.8	3697.8	3711.(3724.2	3737.4	3750.€	13.19
429.16	3500.8	3514.1	3527.(3540.2	3553.2	3566.4	3579.€	3592.€	3605.8	3618.8	13.11
428.85	3370.7	3383.€	3396.6	3409.8	3422.8	3435.8	3448.7	3461.7	3474.9	3487.5	13.02
428.55	3241.(3254.(3266.9	3279.9	3292.5	3305.8	3318.8	3331.8	3344.7	3357.7	12.97
428.24	3112.3	3125.3	3138.0	3151.(3163.7	3176.7	3189.€	3202.4	3215.3	3228.0	12.87

Exhibit 10M – Arrow Reservoir Capacity Table (SI) hm^3

ELEVATION IN METERS	.00	.03	.06	.09	.12	.15	.18	.21	.24	.27	AVERAGE DIFFERENCE PER 3/100 M
427.94	2983.€	2996.€	3009.3	3022.3	3035.0	3048.0	3060.9	3073.7	3086.€	3099.4	12.87
427.64	2855.9	2868.€	2881.4	2894.3	2907. 1	2919.8	2932.5	2945.2	2958.2	2970.9	12.77
427.33	2728.9	2741.7	2754.4	2767.1	2779.8	2792.3	2805.0	2817.7	2830.5	2843.2	12.70
427.03	2602.9	2615.4	2628.1	2640.€	2653.3	2665.8	2678.5	2691.(2703.7	2716.2	12.60
426.72	2477.5	2490.4	2502.9	2515.3	2527.8	2540.3	2553.(2565.5	2578.0	2590.5	12.50
426.42	2354.9	2367.1	2379.€	2391.8	2404.(2416.3	2428.7	2441.(2453.2	2465.7	12.31
426.11	2233.(2245.2	2257.5	2269.5	2281.7	2293.9	2306.2	2318.4	2330.4	2342.€	12.18
425.81	2111.5	2123.9	2136.1	2148.1	2160.3	2172.3	2184.€	2196.€	2208.8	2220.8	12.11
425.50	1991.8	2003.8	2015.8	2027.7	2039.7	2051.7	2064.(2075.9	2087.9	2099.9	12.01
425.20	1872.1	1884.1	1896.1	1908.1	1920.1	1931.8	1943.8	1955.8	1967.8	1979.8	11.96
424.89	1752.3	1764.2	1776.2	1788.2	1800.2	1812.2	1824.2	1836.2	1848.2	1860.1	11.99
424.59	1633.1	1645.1	1656.8	1668.8	1680.8	1692.€	1704.5	1716.5	1728.5	1740.3	11.91
424.28	1515.2	1526.9	1538.7	1550.7	1562.4	1574.1	1585.9	1597.€	1609.€	1621.4	11.79
423.98	1398.2	1410.0	1421.7	1433.2	1445.(1456.7	1468.4	1480.2	1491.7	1503.4	11.69
423.67	1282.5	1294.0	1305.8	1317.2	1328.7	1340.2	1352.0	1363.5	1375.0	1386.7	11.57
423.37	1169.2	1180.5	1192.(1203.2	1214.5	1225.7	1237.2	1248.5	1259.8	1271.3	11.33
423.06	1057.7		1079.9	1091.2			1124.7		1147.(11.16
423.06	947.5	1068.9 958.3	969.3	980. ²	1102.2 991.4	1113. ² 1002. ²	1013.6	1135.7 1024.ϵ	1147.0 1035.6	1158.0	11.16
422.45	947.2 838.2	958.2 849.2	969.: 860.(980.² 871.(991. ² 881.{	892.8	903.8	914.5	925.5	1046.7	10.91
					773. ²	784.1	795.1		923.3 816.7	936.3	10.79
422.15	730.3	741.1	751.8	762.€	113.2	/84.]	793.1	805.9	810.7	827.4	10.79
421.84	622.9	633.7	644.4	655.2	666.(676.5	687.2	698.(708.8	719.5	10.74
421.54	516.7	527.2	538.0	548.5	559.3	569.8	580.3	591.1	601.€	612.4	10.62
421.23	412.0	422.5	433.0	443.3	453.8	464.4	474.9	485.4	495.7	506.2	10.47
420.93	308.5	318.8	329.3	339.€	349.9	360 .1	370.7	380.9	391.2	401.7	10.35
420.62	206.2	216.5	226.8	236.8	247.1	257.4	267.7	277.5	288.0	298.2	10.23
420.32	105.7	115.7	125.8	135.8	145.8	155.8	166.1	176.2	186.2	196.2	10.06
420.02	6.6	16.4	26.4	36.2	46.2	56.0	66.1	75.8	85.9	95.7	9.91
419.71							~~.,			0.0	6.61

Exhibit 11 – Mica Reservoir Capacity Table (English) ksfd

ELEVATION IN											AVERAGE DIFFERENCE PER TENTH
FEET	.С	.1	.2	.3	.4	.5	.6	.7	8.	.9	FT
2475.	10121.1										5.38
2474.	10067.5	10072.9	10078.2	10083.€	10088.9	10094.3	10099.7	10105.C	10110.4	10115.7	5.36
2473.	10014.1	10019.4	10024.8	10030.1	10035.5	10040.8	10046.1	10051.5	10056.8	10062.2	5.34
2472.	9960.8	9966.1	9971.5	9976.8	9982.1	9987.4	9992.8	9998.1	10003.4	10008.8	5.33
2471.	9907.8	9913.1	9918.4	9923.7	9929.0	9934.3	9939.€	9944.9	9950.2	9955.5	
2470.	9854.8	9860.1	9865.4	9870.7	9876.0	9881.3	9886.6	9891.9	9897.2	9902.5	5.30
2469.	9802.1	9807.4	9812.€	9817.9	9823.2	9828.5	9833.7	9839.0	9844.3	9849.5	5.27
2468.	9749.5	9754.8	9760.0	9765.3	9770.5	9775.8	9781.1	9786.3	9791.€	9796.8	5.26
2467.	9697.1	9702.3	9707.6	9712.8	9718.1	9723.3	9728.5	9733.8	9739.0	9744.3	5.24
2466.	9644.8	9650.0	9655.3	9660.5	9665.7	9671.0	9676.2	9681.4	9686.6	9691.9	5.23
2465.	9592.7	9597.9	9603.1	9608.3	9613.5	9618.8	9624.0	9629.2	9634.4	9639.€	5.21
2464.	9540.8	9546.0	9551.2	9556.4	9561.6	9566.8	9571.9	9577.1	9582.3	9587.5	5.19
2463.	9489.0	9494.2	9499.4	9504.5	9509.7	9514.9	9520.1	9525.3	9530.4	9535.6	
2462.	9437.4	9442.€	9447.7	9452.9	9458.0	9463.2	9468.4	9473.5	9478.7	9483.8	
2461.	9386.0	9391.1	9396.3	9401.4	9406.6	9411.7	9416.8	9422.0	9427.1	9432.3	
2460.	9334.8	9339.9	9345.0	9350.2	9355.3	9360.4	9365.5	9370.6	9375.8	9380.9	
2.450		00000		00000	02011	0.000.0		0010.			
2459.	9283.7	9288.8	9293.9	9299.0	9304.1	9309.3	9314.4	9319.5	9324.6	9329.7	
2458.	9232.8	9237.9	9243.0	9248.1	9253.2	9258.3	9263.3	9268.4	9273.5	9278.€	
2457.	9182.0	9187.1	9192.2	9197.2	9202.3	9207.4	9212.5	9217.6	9222.6	9227.7	
2456.	9131.4	9136.5	9141.5	9146.6	9151.6	9156.7	9161.8	9166.8	9171.9	9176.9	
2455.	9081.0	9086.0	9091.1	9096.1	9101.2	9106.2	9111.2	9116.3	9121.3	9126.4	5.04
2454.	9030.8	9035.8	9040.8	9045.9	9050.9	9055.9	9060.9	9065.9	9071.0	9076.0	5.02
2453.	8980.7	8985.7	8990.7	8995.7	9000.7	9005.8	9010.8	9015.8	9020.8	9025.8	5.01
2452.	8930.8	8935.8	8940.8	8945.8	8950.8	8955.8	8960.7	8965.7	8970.7	8975.7	4.99
2451.	8881.0	8886.0	8891.0	8895.9	8900.9	8905.9	8910.9	8915.9	8920.8	8925.8	4.98
2450.	8831.4	8836.4	8841.3	8846.3	8851.2	8856.2	8861.2	8866.1	8871.1	8876.0	4.96
2449.	8782.0	8786.9	8791.9	8796.8	8801.8	8806.7	8811.€	8816.€	8821.5	8826.5	4.94
2448.	8732.8	8737.7	8742.6	8747.6	8752.5	8757.4	8762.3	8767.2	8772.2	8777.1	
2447.	8683.7	8688.6	8693.5	8698.4	8703.3	8708.3	8713.2	8718.1	8723.0	8727.9	
2446.	8634.8	8639.7	8644.6	8649.5	8654.4	8659.3	8664.1	8669.0	8673.9	8678.8	
2445.	8586.0	8590.9	8595.8	8600.€	8605.5	8610.4	8615.3	8620.2	8625.0	8629.9	
2444.	8537.5	8542.4	8547.2	8552.1	8556.9	8561.8	8566.6	8571.5	8576.3	8581.2	
2443.	8489.1	8493.9	8498.8	8503.6	8508.5	8513.3	8518.1	8523.0	8527.8	8532.7	
2442.	8440.8	8445.6	8450.5	8455.3	8460.1	8465.0	8469.8	8474.6	8479.4	8484.3	
2441.	8392.7	8397.5	8402.3	8407.1	8411.9	8416.8	8421.6	8426.4	8431.2	8436.0	
2440.	8344.8	8349.€	8354.4	8359.2	8364.0	8368.8	8373.5	8378.3	8383.1	8387.9	4.79
2439.	8297.1	8301.9	8306.€	8311.4	8316.2	8321.0	8325.7	8330.5	8335.3	8340.0	4.77
2438.	8249.5	8254.3	8259.0	8263.8	8268.5	8273.3	8278.1	8282.8	8287.6	8292.3	4.76
2437.	8202.1	8206.8	8211.6	8216.3	8221.1	8225.8	8230.5	8235.3	8240.0	8244.8	4.74
2436.	8154.8	8159.5	8164.3	8169.0	8173.7	8178.5	8183.2	8187.9	8192.6	8197.4	
2435.	8107.8	8112.5	8117.2	8121.9	8126.€	8131.3	8136.0	8140.7	8145.4	8150.1	4.70

Exhibit 11 – Mica Reservoir Capacity Table (English) ksfd

ELEVATION IN FEET	.C	.1	.2	.3	.4	.5	.€	.7	.8	.9	AVERAGE DIFFERENCE PER TENTH FT
TEET											1,1
2434.	8060.9	8065.€	8070.3	8075.0	8079.7	8084.4	8089.0	8093.7	8098.4	8103.1	4.69
2433.	8014.1	8018.8	8023.5	8028.1	8032.8	8037.5	8042.2	8046.9	8051.5	8056.2	4.68
2432.	7967.5	7972.2	7976.8	7981.5	7986.1	7990.8	7995.5	8000.1	8004.8	8009.4	4.66
2431.	7921.1	7925.7	7930.4	7935.0	7939.7	7944.3	7948.9	7953.€	7958.2	7962.9	4.64
2430.	7874.9	7879.5	7884.1	7888.8	7893.4	7898.0	7902.€	7907.2	7911.9	7916.5	4.62
2429.	7828.8	7833.4	7838.0	7842.€	7847.2	7851.9	7856.5	7861.1	7865.7	7870.3	4.61
2428.	7782.9	7787.5	7792.1	7796.7	7801.3	7805.9	7810.4	7815.0	7819.€	7824.2	4.59
2427.	7737.2	7741.8	7746.3	7750.9	7755.5	7760.1	7764.6	7769.2	7773.8	7778.3	4.57
2426.	7691.6	7696.2	7700.7	7705.3	7709.8	7714.4	7719.0	7723.5	7728.1	7732.6	4.56
2425.	7646.2	7650.7	7655.3	7659.8	7664.4	7668.9	7673.4	7678.0	7682.5	7687.1	4.54
2424	7600.6	7605.4	7610.6	76145	7610.6	7600 6	7620.1	7622.6	7627.1	7641.5	4.52
2424.	7600.9	7605.4	7610.0	7614.5	7619.0	7623.6	7628.1	7632.6	7637.1	7641.7	4.53
2423.	7555.9	7560.4	7564.9	7569.4	7573.9	7578.4	7582.9	7587.4	7591.9	7596.4	4.50
2422.	7511.0	7515.5	7520.0	7524.5	7529.0	7533.5	7537.9	7542.4	7546.9	7551.4 7506.5	4.49
2421.	7466.2	7470.7	7475.2	7479.6	7484.1	7488.6	7493.1	7497.6	7502.0		4.48
2420.	7421.€	7426.1	7430.5	7435.0	7439.4	7443.9	7448.4	7452.8	7457.3	7461.7	4.46
2419.	7377.2	7381.€	7386.1	7390.5	7395.0	7399.4	7403.8	7408.3	7412.7	7417.2	4.44
2418.	7333.0	7337.4	7341.8	7346.3	7350.7	7355.1	7359.5	7363.9	7368.4	7372.8	4.42
2417.	7288.9	7293.3	7297.7	7302.1	7306.5	7311.0	7315.4	7319.8	7324.2	7328.6	4.41
2416.	7245.0	7249.4	7253.8	7258.2	7262.€	7267.0	7271.3	7275.7	7280.1	7284.5	4.39
2415.	7201.3	7205.7	7210.0	7214.4	7218.8	7223.2	7227.5	7231.9	7236.3	7240.€	4.37
2414	71575	71.60.1	71664	7170.6	7175 1	7170.5	7102.6	7100.2	7102 (71066	1.26
2414.	7157.7	7162.1	7166.4	7170.8	7175.1	7179.5	7183.9	7188.2	7192.6	7196.9	4.36
2413.	7114.3	7118.6	7123.0	7127.3	7131.7	7136.0	7140.3	7144.7	7149.0	7153.4	4.34
2412.	7071.0	7075.3	7079.7	7084.0	7088.3	7092.7	7097.0	7101.3	7105.6	7110.0	4.33
2411. 2410.	7028.0	7032.3 6989.4	7036.6 6993.7	7040.9 6998.0	7045.2 7002.3	7049.5 7006.6	7053.8 7010.8	7058.1 7015.1	7062.4	7066.7	4.30 4.29
2410.	6985.1	0989.4	0993.7	0998.0	7002.3	7006.0	7010.6	7013.1	7019.4	7023.7	4.29
2409.	6942.3	6946.6	6950.9	6955.1	6959.4	6963.7	6968.0	6972.3	6976.5	6980.8	4.28
2408.	6899.7	6904.0	6908.2	6912.5	6916.7	6921.0	6925.3	6929.5	6933.8	6938.0	4.26
2407.	6857.3	6861.5	6865.8	6870.0	6874.3	6878.5	6882.7	6887.0	6891.2	6895.5	4.24
2406.	6815.1	6819.3	6823.5	6827.8	6832.0	6836.2	6840.4	6844.6	6848.9	6853.1	4.22
2405.	6773.0	6777.2	6781.4	6785.6	6789.8	6794.1	6798.3	6802.5	6806.7	6810.9	4.21
2404	6721.0	6725.2	6720.5	67.42.5	67.47.6	6750.1	67563	6760.5	67645	6760.6	4.20
2404.	6731.2	6735.3	6739.5	6743.7	6747.9	6752.1	6756.3	6760.5 6718.7	6764.7	6768.9	4.20
2403. 2402.	6689.5 6648.0	6693.7 6652.2	6697.9	6702.0	6706.2	6710.4	6714.5	6677.1	6722.9	6727.1 6685.5	4.17 4.16
		6610.9	6656.3	6660.5 6619.2	6664.7 6623.3	6668.8	6673.0	6635.7	6681.3		
2401.	6606.7		6615.0			6627.4	6631.6		6639.9	6644.0	4.14
2400.	6565.5	6569.7	6573.8	6577.9	6582.1	6586.2	6590.3	6594.5	6598.6	6602.7	4.13
2399.	6524.6	6528.7	6532.8	6536.9	6541.0	6545.1	6549.2	6553.3	6557.4	6561.5	4.11
2398.	6483.9	6487.9	6492.0	6496.1	6500.1	6504.2	6508.3	6512.4	6516.4	6520.5	4.07
2397.	6443.5	6447.€	6451.€	6455.€	6459.€	6463.7	6467.7	6471.8	6475.8	6479.8	4.03
2396.	6403.5	6407.5	6411.5	6415.5	6419.5	6423.5	6427.5	6431.5	6435.5	6439.5	4.00
2395.	6363.9	6367.8	6371.8	6375.7	6379.7	6383.7	6387.€	6391.6	6395.6	6399.5	3.96

Exhibit 11 – Mica Reservoir Capacity Table (English) ksfd

ELEVATION IN											AVERAGE DIFFERENCE PER TENTH
FEET	.0	.1	.2	.3	.4	.5	.6	.7	8.	.9	FT
2394.	6324.5	6328.5	6332.4	6336.3	6340.2	6344.2	6348.1	6352.0	6356.0	6359.9	3.93
2393.	6285.6	6289.5	6293.4	6297.2	6301.1	6305.0	6308.9	6312.8	6316.7	6320.6	3.90
2392.	6246.9	6250.8	6254.6	6258.5	6262.4	6266.2	6270.1	6274.0	6277.8	6281.7	3.87
2391.	6208.6	6212.4	6216.2	6220.0	6223.9	6227.7	6231.5	6235.4	6239.2	6243.1	3.83
2390.	6170.€	6174.4	6178.2	6181.9	6185.7	6189.5	6193.3	6197.2	6201.0	6204.8	3.80
2389.	6132.9	6136.7	6140.4	6144.2	6147.9	6151.7	6155.5	6159.2	6163.0	6166.8	3.77
2388.	6095.5	6099.2	6103.0	6106.7	6110.4	6114.2	6117.9	6121.7	6125.4	6129.2	3.74
2387.	6058.4	6062.1	6065.8	6069.5	6073.2	6076.9	6080.€	6084.3	6088.1	6091.8	3.71
2386.	6021.7	6025.3	6029.0	6032.7	6036.3	6040.0	6043.7	6047.4	6051.0	6054.7	3.68
2385.	5985.2	5988.8	5992.5	5996.1	5999.7	6003.4	6007.0	6010.7	6014.3	6018.0	3.65
2384.	5949.0	5952.6	5956.2	5959.8	5963.4	5967.0	5970.7	5974.3	5977.9	5981.6	3.62
2383.	5913.0	5916.6	5920.2	5923.8	5927.4	5931.0	5934.€	5938.2	5941.8	5945.4	3.59
2382.	5877.4	5881.0	5884.5	5888.1	5891.7	5895.2	5898.8	5902.3	5905.9	5909.5	3.56
2381.	5842.1	5845.6	5849.2	5852.7	5856.2	5859.7	5863.3	5866.8	5870.3	5873.9	3.53
2380.	5807.0	5810.5	5814.0	5817.5	5821.0	5824.5	5828.0	5831.€	5835.1	5838.€	3.51
2379.	5772.2	5775.7	5779.1	5782.€	5786.1	5789.€	5793.0	5796.5	5800.0	5803.5	3.48
2378.	5737.€	5741.1	5744.5	5748.0	5751.4	5754.9	5758.3	5761.8	5765.3	5768.7	3.45
2377.	5703.4	5706.8	5710.2	5713.€	5717.1	5720.5	5723.9	5727.3	5730.8	5734.2	3.43
2376.	5669.3	5672.7	5676.1	5679.5	5682.9	5686.3	5689.7	5693.1	5696.5	5700.0	3.41
2375.	5635.5	5638.9	5642.3	5645.6	5649.0	5652.4	5655.8	5659.2	5662.5	5665.9	3.38
2374.	5602.0	5605.3	5608.7	5612.0	5615.4	5618.7	5622.1	5625.5	5628.8	5632.2	3.35
2373.	5568.7	5572.0	5575.4	5578.7	5582.0	5585.3	5588.7	5592.0	5595.3	5598.7	3.33
2372.	5535.6	5538.9	5542.2	5545.5	5548.8	5552.1	5555.4	5558.7	5562.1	5565.4	3.31
2371.	5502.8	5506.1	5509.3	5512.€	5515.9	5519.2	5522.5	5525.7	5529.0	5532.3	3.28
2370.	5470.2	5473.4	5476.7	5479.9	5483.2	5486.5	5489.7	5493.0	5496.3	5499.5	3.26
2369.	5437.8	5441.0	5444.3	5447.5	5450.7	5453.9	5457.2	5460.4	5463.7	5466.9	3.24
2368.	5405.6	5408.9	5412.1	5415.3	5418.5	5421.7	5424.9	5428.1	5431.4	5434.6	3.22
2367.	5373.7	5376.9	5380.1	5383.3	5386.5	5389.7	5392.9	5396.1	5399.3	5402.4	3.19
2366.	5342.0	5345.2	5348.3	5351.5	5354.7	5357.8	5361.0	5364.2	5367.4	5370.5	3.17
2365.	5310.5	5313.6	5316.8	5319.9	5323.0	5326.2	5329.3	5332.5	5335.7	5338.8	3.15
2364.	5279.1	5282.3	5285.4	5288.5	5291.€	5294.8	5297.9	5301.0	5304.2	5307.3	3.13
2363.	5248.0	5251.1	5254.2	5257.4	5260.5	5263.6	5266.7	5269.8	5272.9	5276.0	
2362.	5217.1	5220.2	5223.3	5226.4	5229.5	5232.6	5235.7	5238.7	5241.8	5244.9	3.09
2361.	5186.4	5189.4	5192.5	5195.€	5198.7	5201.7	5204.8	5207.9	5211.0	5214.0	3.07
2360.	5155.9	5158.9	5162.0	5165.0	5168.0	5171.1	5174.2	5177.2	5180.3	5183.3	3.05
2359.	5125.5	5128.5	5131.6	5134.6	5137.€	5140.7	5143.7	5146.7	5149.8	5152.8	3.03
2358.	5095.4	5098.4	5101.4	5104.4	5107.4	5110.4	5113.4	5116.5	5119.5	5122.5	3.02
2357.	5065.4	5068.4	5071.4	5074.4	5077.4	5080.4	5083.4	5086.4	5089.4	5092.4	3.00
2356.	5035.6	5038.5	5041.5	5044.5	5047.5	5050.4	5053.4	5056.4	5059.4	5062.4	2.98
2355.	5005.9	5008.9	5011.9	5014.8	5017.8	5020.7	5023.7	5026.7	5029.€	5032.6	2.96

Exhibit 11 – Mica Reservoir Capacity Table (English) $$\operatorname{ksfd}$$

ELEVATION IN FEET	Э.	.1	.2	.3	.4	.5	.6	.7	.8	.9	AVERAGE DIFFERENCE PER TENTH FT
2354.	4976.5	4979.4	4982.4	4985.3	4988.3	4991.2	4994.1	4997.1	5000.0	5003.0	2.94
									4970.6		
2353.	4947.2	4950.1	4953.0	4956.0	4958.9	4961.8	4964.8	4967.7		4973.6	2.93
2352.	4918.0	4920.9	4923.9	4926.8	4929.7	4932.6	4935.5	4938.4	4941.3	4944.3	2.91
2351.	4889.1	4892.0	4894.9	4897.8	4900.6	4903.5	4906.4	4909.3	4912.2	4915.1	2.90
2350.	4860.3	4863.1	4866.0	4868.9	4871.8	4874.€	4877.5	4880.4	4883.3	4886.2	2.88
2349.	4831.ć	4834.4	4837.3	4840.2	4843.1	4845.9	4848.8	4851.7	4854.5	4857.4	2.87
2348.	4803.1	4805.9	4808.8	4811.€	4814.5	4817.3	4820.2	4823.0	4825.9	4828.7	2.85
2347.	4774.7	4777.5	4780.4	4783.2	4786.0	4788.9	4791.7	4794.6	4797.4	4800.2	2.84
2346.	4746.5	4749.3	4752.1	4755.0	4757.8	4760.6	4763.4	4766.2	4769.1	4771.9	2.82
2345.	4718.4	4721.2	4724.0	4726.8	4729.€	4732.4	4735.3	4738.1	4740.9	4743.7	2.81
2344.	4600.5	4693.3	4696.1	4698.8	4701.ć	4704.4	4707.2	4710.C	4712.8	1715 6	2.79
2344.	4690.5							4710.0	4/12.c 4684.9	4715.6	
2343.	4662.7 4635.0	4665.4 4637.8	4668.2 4640.5	4671.0 4643.3	4673.8 4646.1	4676.5 4648.8	4679.3 4651.6	4682.1 4654.4		4687.7 4659.9	2.78 2.77
		4610.2							4657.1 4629.5		
2341.	4607.4		4613.0	4615.7	4618.5	4621.2	4624.0	4626.7		4632.2	2.76
2340.	4580.0	4582.8	4585.5	4588.2	4591.0	4593.7	4596.5	4599.2	4602.0	4604.7	2.74
2339.	4552.7	4555.4	4558.2	4560.9	4563.€	4566.4	4569.1	4571.8	4574.€	4577.3	2.73
2338.	4525.5	4528.2	4530.9	4533.6	4536.4	4539.1	4541.8	4544.5	4547.3	4550.0	2.72
2337.	4498.3	4501.0	4503.7	4506.5	4509.2	4511.9	4514.6	4517.3	4520.0	4522.8	2.72
2336.	4471.2	4473.9	4476.€	4479.3	4482.0	4484.7	4487.5	4490.2	4492.9	4495.€	2.71
2335.	4444.2	4446.9	4449.6	4452.3	4455.0	4457.7	4460.4	4463.1	4465.8	4468.5	2.70
2334.	4417.3	4420.0	4422.€	4425.3	4428.0	4430.7	4433.4	4436.1	4438.8	4441.5	2.69
2333.	4390.4	4393.1	4395.8	4398.4	4428.0 4401.1	4403.8	4406.5	4409.2	4436.c 4411.9	4441.5	2.69
2333. 2332.	4363.6	4366.3	4368.9	4371.6	4374.3	4377.0	4379.7	4382.3	4385.0	4387.7	2.68
2331.	4305.0	4339.6	4342.2	4344.9	4347.6	4377.0	4379.7	4355.6	4358.2	4360.9	2.67
2330.	4310.2	4312.9	4342.2	4318.2	4320.9	4323.6	4326.2	4328.9	4331.6	4334.2	2.66
2330.	4310.2	4312.5	4313.0	4316.2	4320.3	4323.0	4320.2	4320.3	4331.0	4334.2	2.00
2329.	4283.7	4286.3	4289.0	4291.€	4294.3	4296.9	4299.6	4302.3	4304.9	4307.6	2.66
2328.	4257.2	4259.8	4262.5	4265.1	4267.8	4270.4	4273.1	4275.7	4278.4	4281.0	2.65
2327.	4230.8	4233.4	4236.1	4238.7	4241.3	4244.0	4246.6	4249.3	4251.9	4254.5	2.64
2326.	4204.5	4207.1	4209.7	4212.3	4215.0	4217.€	4220.2	4222.9	4225.5	4228.1	2.63
2325.	4178.2	4180.8	4183.4	4186.1	4188.7	4191.3	4193.9	4196.6	4199.2	4201.8	2.63
2324.	4152.0	4154.6	4157.2	4159.9	4162.5	4165.1	4167.7	4170.3	4173.0	4175.€	2.62
2323.	4125.9	4128.5	4131.2	4133.8	4136.4	4139.0	4141.6	4144.2	4146.8	4149.4	2.61
2322.	4099.9	4102.5	4105.1	4107.7	4110.3	4112.9	4115.5	4118.1	4120.7	4123.3	2.61
2321.	4074.0	4076.6	4079.1	4081.7	4084.3	4086.9	4089.5	4092.1	4094.7	4097.3	2.59
2320.	4048.1	4050.7	4073.1	4055.9	4058.4	4061.0	4063.6	4066.2	4068.8	4071.4	2.59
2320. 2319.	4048.1	4030.7	4033.3	4033.9	4038.4	4035.2	4037.8	4040.4	4042.9	4071.4	2.58
4319.	4022.3	4024.5	4047.J	4030.0	4032.0	4033.2	4037.0	4040.4	4042.5	4043.3	2.30

Exhibit 11M– Mica Reservoir Capacity Table (SI) hm³

ELEVATION											AVERAGE DIFFERENCE
IN METERS	.00.	.03	.06	.09	.12	.15	.18	.21	.24	.27	PER 3/100 M
754.38	24762.3										13.16
754.08	24631.1	24644.4	24657.3	24670.5	24683.5	24696.7	24709.9	24722.9	24736.1	24749.1	13.11
753.77	24500.5	24513.5	24526.7	24539.6	24552.9	24565.8	24578.8	24592.0	24605.0	24618.2	13.06
753.47	24370.1	24383.1	24396.3	24409.2	24422.2	24435.2	24448.4	24461.4	24474.3	24487.5	13.04
753.16	24240.4	24253.4	24266.4	24279.3	24292.3	24305.3	24318.2	24331.2	24344.2	24357.1	12.97
752.86	24110.8	24123.7	24136.7	24149.7	24162.6	24175.6	24188.€	24201.5	24214.5	24227.5	12.97
752.55	23981.8	23994.8	24007.5	24020.5	24033.4	24046.4	24059.1	24072.1	24085.1	24097.8	12.89
752.25	23853.1	23866.1	23878.8	23891.8	23904.5	23917.5	23930.4	23943.2	23956.1	23968.9	12.87
751.94	23724.9	23737.€	23750.€	23763.3	23776.3	23789.0	23801.7	23814.7	23827.4	23840.4	12.82
751.64	23597.0	23609.7	23622.7	23635.4	23648.1	23661.1	23673.8	23686.5	23699.2	23712.2	12.80
751.33	23469.5	23482.2	23494.9	23507.7	23520.4	23533.4	23546.1	23558.8	23571.5	23584.2	
751.03	23342.5	23355.2	23368.0	23380.7	23393.4	23406.1	23418.€	23431.3	23444.1	23456.8	12.70
750.72	23215.8	23228.5	23241.2	23253.7	23266.4	23279.2	23291.9	23304.6	23317.1	23329.8	
750.42	23089.5	23102.3	23114.7	23127.5	23139.9	23152.7	23165.4	23177.9	23190.6	23203.1	12.62
750.11	22963.8	22976.3	22989.0	23001.5	23014.2	23026.7	23039.1	23051.9	23064.3	23077.1	12.58
749.81	22838.5	22851.0	22863.5	22876.2	22888.7	22901.2	22913.6	22926.1	22938.8	22951.3	
749.50	22713.5	22726.0	22738.5	22750.9	22763.4	22776.1	22788.€	22801.1	22813.6	22826.0	12.50
749.20	22589.0	22601.4	22613.9	22626.4	22638.9	22651.4	22663.6	22676.1	22688.5	22701.0	
748.90	22464.7	22477.2	22489.6	22501.9	22514.3	22526.8	22539.3	22551.8	22564.0	22576.5	
748.59	22340.9	22353.4	22365.6	22378.1	22390.3	22402.8	22415.3	22427.5	22440.0	22452.2	
748.29	22217.6	22229.8	22242.3	22254.5	22267.0	22279.2	22291.5	22303.9	22316.2	22328.7	
747.98	22094.8	22107.0	22119.2	22131.7	22143.9	22156.2	22168.4	22180.€	22193.1	22205.3	12.28
747.68	21972.2	21984.4	21996.6	22008.9	22021.1	22033.6	22045.8	22058.1	22070.3	22082.5	
747.37	21850.1	21862.3	21874.6	21886.8	21899.0	21911.3	21923.2	21935.5	21947.7	21959.9	
747.07	21728.3	21740.5	21752.7	21764.7	21776.9	21789.2	21801.4	21813.6	21825.6	21837.9	
746.76	21606.9	21619.1	21631.1	21643.4	21655.3	21667.6	21679.8	21691.8	21704.0	21716.0	
746.46	21486.0	21498.0	21510.3	21522.3	21534.5	21546.5	21558.5	21570.7	21582.7	21594.9	
746.15	21365.7	21377.7	21389.€	21401.9	21413.9	21425.9	21437.8	21449.8	21462.1	21474.1	
745.85	21245.5	21257.5	21269.5	21281.5	21293.5	21305.7	21317.7	21329.7	21341.7	21353.7	
745.54	21125.9	21137.9	21149.9	21161.9	21173.9	21185.8	21197.6	21209.6	21221.6	21233.6	
745.24	21006.5	21018.5	21030.5	21042.2	21054.2	21066.2	21078.2	21090.2	21101.9	21113.9	11.94
744.93	20887.8	20899.8	20911.6	20923.6	20935.3	20947.3	20959.0	20971.0	20982.8	20994.8	11.87
744.63	20769.4	20781.2	20793.2	20804.9	20816.9	20828.€	20840.4	20852.4	20864.1	20876.1	11.84
744.32	20651.3	20663.0	20675.0	20686.7	20698.5	20710.5	20722.2	20734.0	20745.7	20757.7	
744.02	20533.€	20545.3	20557.1	20568.8	20580.€	20592.5	20604.3	20616.0	20627.8	20639.5	11.77
743.71	20416.4	20428.1	20439.9	20451.6	20463.4	20475.1	20486.6	20498.3	20510.1	20521.8	11.72
743.41	20299.7	20311.4	20322.9	20334.7	20346.4	20358.2	20369.7	20381.4	20393.1	20404.€	11.67
743.10	20183.2	20195.0	20206.5	20218.2	20229.7	20241.5	20253.2	20264.7	20276.4	20287.9	11.65
742.80	20067.3	20078.8	20090.5	20102.0	20113.7	20125.2	20136.7	20148.5	20160.0	20171.7	
742.49	19951.5	19963.0	19974.8	19986.3	19997.8	20009.5	20021.0	20032.5	20044.0	20055.8	
742.19	19836.5	19848.0	19859.5	19871.0	19882.5	19894.0	19905.5	19917.0	19928.5	19940.0	

Exhibit 11M– Mica Reservoir Capacity Table (SI) $$\operatorname{hm}^3$$

ELEVATION IN	00	02	0.6	00	10	15	16	21	24	25	AVERAGE DIFFERENCE PER
METERS	.00.	.03	.06	.09	.12	.15	.18	.21	.24	.27	3/100 M
741.88	19721.8	19733.3	19744.8	19756.3	19767.8	19779.3	19790.5	19802.(19813.5	19825.(11.47
741.58	19607.3	19618.8	19630.3	19641.:	19653.(19664.5	19676.(19687.5	19698.8	19710.3	11.45
741.28	19493.3	19504.8	19516.(19527.5	19538.8	19550.3	19561.8	19573.(19584.5	19595.8	11.40
740.97	19379.8	19391.(19402.5	19413.8	19425.3	19436.5	19447.8	19459.3	19470.5	19482.(11.35
740.67	19266.7	19278.(19289.2	19300.7	19312.(19323.2	19334.5	19345.8	19357.3	19368.5	11.30
7 10.07	1,200.7	1,2,0.0	1,20,.1	17300.7	17312.	17323.1	1755 1	173 13.0	17337.	17500.	11.50
740.36	19153.9	19165.2	19176.5	19187.7	19199.(19210.5	19221.7	19233.(19244.2	19255.5	11.28
740.06	19041.€	19052.9	19064.2	19075.4	19086.7	19097.9	19108.9	19120.2	19131.4	19142.7	11.23
739.75	18929.8	18941.1	18952.1	18963.4	18974.€	18985.9	18996.9	19008.1	19019.4	19030.4	11.18
739.45	18818.3	18829.5	18840.5	18851.8	18862.8	18874.1	18885.3	18896.3	18907.€	18918.€	11.16
739.14	18707.2	18718.2	18729.5	18740.5	18751.7	18762.7	18773.7	18785.0	18796.(18807.3	11.11
738.84	18596.4	18607.4	18618.¢	18629.t	18640.¢	18651.9	18662.5	18673.9	18684.9	18696.2	11.08
738.53	18486.3	18497.3	18508.3	18519.3	18530.3	18541.3	18552.3	18563.3	18574.3	18585.4	11.01
738.23	18376.4	18387.4	18398.4	18409.4	18420.5	18431.5	18442.2	18453.2	18464.2	18475.3	10.99
737.92	18266.8	18277.8	18288.8	18299.€	18310.€	18321.¢	18332.€	18343.€	18354.4	18365.4	10.96
737.62	18157.7	18168.7	18179.5	18190.5	18201.2	18212.2	18223.3	18234.(18245.(18255.8	10.91
737.31	18049.1	18059.8	18070.8	18081.€	18092.€	18103.4	18114.1	18125.1	18135.9	18146.9	10.86
737.01	17940.9	17951.7	17962.4	17973.5	17984.2	17995.(18005.8	18016.5	18027.5	18038.3	10.81
736.70	17833.0	17843.8	17854.€	17865.3	17876.1	17887.1	17897.5	17908.€	17919.4	17930.2	10.79
736.40	17725.€	17736.4	17747.1	17757.9	17768.7	17779.4	17790.0	17800.7	17811.5	17822.3	10.74
736.09	17618.7	17629.5	17640.(17650.8	17661.5	17672.3	17682.8	17693.€	17704.3	17714.9	10.69
735.79	17512.(17522.8	17533.3	17544.1	17554.€	17565.4	17576.1	17586.7	17597.4	17607.9	10.67
735.48	17405.8	17416.4	17427.1	17437.7	17448.4	17458.9	17469.5	17480.2	17490.7	17501.5	10.62
735.18	17299.5	17310.4	17321.2	17331.7	17342.2	17353.(17363.5	17374.(17384.€	17395.3	10.59
734.87	17194.7	17205.2	17215.7	17226.3	17236.8	17247.3	17257.8	17268.3	17278.9	17289.4	10.52
734.57	17089.7	17100.3	17110.8	17121.3	17131.8	17142.3	17152.€	17163.1	17173.7	17184.2	10.50
724.26	1,0005.6	1.600.5 /	150061	150166	170266	15025	15045 (15050	170605	15050 (10.45
734.26	16985.(16995.€	17006.1	17016.3	17026.9	17037.4	17047.5	17058.4	17068.7	17079.2	10.47
733.96	16880.8	16891.3	16901.6	16912.1	16922.4	16932.5	16943.4	16953.7	16964.2	16974.5	10.42
733.66	16777.1	16787.3	16797.5	16808.1	16818.7	16828.9	16839.2	16849.7	16860.(16870.5	10.37
733.35	16673.8	16684.1 16581.1	16694.4	16704.9	16715.2	16725.4	16735.7	16746.(16756.5	16766.8	10.32
733.05	16570.8	10381.1	16591.4	16601.6	16611.9	16622.4	16632.7	16643.(16653.3	16663.5	10.30
732.74	16468.4	16478.7	16489.0	16499.2	16509.5	16519.8	16530.0	16540.3	16550.€	16560.8	10.27
732.44	16366.€	16376.8	16387.(16397.2	16407.4	16417.€	16427.8	16438.0	16448.2	16458.5	10.21
732.13	16265.1	16275.3	16285.4	16295.€	16305.7	16315.9	16326.1	16336.3	16346.4	16356.€	10.17
731.83	16164.1	16174.2	16184.3	16194.4	16204.5	16214.€	16224.8	16234.9	16245.1	16255.2	10.13
731.52	16063.3	16073.4	16083.5	16093.€	16103.7	16113.8	16123.9	16134.(16144.1	16154.2	10.10
731.22	15963.(15973.1	15983.1	15993.1	16003.2	16013.2	16023.3	16033.3	16043.4	16053.4	10.05
730.91	15863.5	15873.4	15883.3	15893.3	15903.2	15913.2	15923.1	15933.1	15943.1	15953.1	
730.61	15764.8	15774.¢	15784.5	15794.3	15804.2	15814.(15823.5	15833.8	15843.7	15853.t	9.87
730.30	15666.8	15676.6	15686.4	15696.2	15706.0	15715.7	15725.5	15735.3	15745.1	15755.(9.79
730.00	15569.8	15579.5	15589.2	15598.9	15608.€	15618.2	15628.0	15637.7	15647.4	15657.1	9.70

Exhibit 11M– Mica Reservoir Capacity Table (SI) $$\operatorname{hm}^3$$

ELEVATION IN											AVERAGE DIFFERENCE
METERS	.00	:00	.0€	.09	.12	.15	.18	.21	.24	.27	PER 3/100 M
729.69	15473.€	15483.2	15492.8	15502.4	15512.(15521.€	15531.3	15540.9	15550.€	15560.2	9.62
729.39	15378.3	15387.8	15397.3	15406.8	15416.4	15425.9	15435.4	15445.(15454.5	15464.1	9.53
729.08	15283.7	15293.1	15302.€	15312.0	15321.5	15330.9	15340.4	15349.9	15359.3	15368.8	9.46
728.78	15189.9	15199.3	15208.€	15218.0	15227.3	15236.€	15246.0	15255.4	15264.8	15274.3	9.37
728.47	15096.9	15106.2	15115.5	15124.8	15134.(15143.3	15152.€	15162.(15171.3	15180.€	9.30
728.17	15004.7	15013.9	15023.1	15032.3	15041.5	15050.7	15060.0	15069.2	15078.5	15087.7	9.22
727.86	14913.2	14922.4	14931.5	14940.€	14949.8	14958.9	14968.1	14977.3	14986.4	14995.€	9.15
727.56	14822.5	14831.6	14840.€	14849.7	14858.7	14867.8	14876.8	14885.9	14895.(14904.1	9.07
727.25	14732.€	14741.5	14750.5	14759.5	14768.5	14777.4	14786.5	14795.5	14804.5	14813.5	8.99
726.95	14643.4	14652.3	14661.2	14670.0	14678.9	14687.8	14696.8	14705.7	14714.7	14723.€	8.92
726.64	14554.7	14563.6	14572.4	14581.3	14590.1	14599.0	14607.8	14616.7	14625.€	14634.5	8.86
726.34	14466.8	14475.6	14484.4	14493.2	14502.0	14510.7	14519.5	14528.3	14537.1	14545.9	8.79
726.04	14379.7	14388.4	14397.1	14405.8	14414.5	14423.2	14431.9	14440.7	14449.4	14458.1	8.71
725.73	14293.3	14301.9	14310.€	14319.2	14327.8	14336.4	14345.1	14353.7	14362.4	14371.(8.64
725.43	14207.4	14215.9	14224.5	14233.1	14241.7	14250.3	14258.9	14267.5	14276.1	14284.7	8.59
725.12	14122.2	14130.7	14139.2	14147.7	14156.2	14164.7	14173.3	14181.8	14190.3	14198.8	8.51
724.82	14037.7	14046.2	14054.€	14063.(14071.5	14079.9	14088.4	14096.8	14105.3	14113.8	8.45
724.51	13953.8	13962.2	13970.€	13979.(13987.4	13995.7	14004.1	14012.5	14020.9	14029.3	8.39
724.21	13870.5	13878.8	13887.2	13895.5	13903.8	13912.2	13920.5	13928.8	13937.2	13945.5	8.33
723.90	13787.9	13796.1	13804.4	13812.€	13820.9	13829.1	13837.4	13845.7	13854.0	13862.2	8.26
723.60	13705.8	13714.0	13722.2	13730.4	13738.€	13746.8	13755.(13763.2	13771.4	13779.7	8.20
723.29	13624.4	13632.5	13640.7	13648.8	13656.9	13665.1	13673.2	13681.4	13689.5	13697.7	8.14
722.99	13543.4	13551.5	13559.€	13567.€	13575.7	13583.8	13591.9	13600.0	13608.1	13616.3	8.09
722.68	13463.1	13471.1	13479.2	13487.2	13495.2	13503.2	13511.3	13519.3	13527.3	13535.4	8.03
722.38	13383.4	13391.3	13399.3	13407.2	13415.2	13423.2	13431.2	13439.1	13447.1	13455.1	7.97
722.07	13304.2	13312.1	13319.9	13327.8	13335.7	13343.€	13351.5	13359.5	13367.5	13375.4	7.92
721.77	13225.5	13233.3	13241.2	13249.0	13256.8	13264.7	13272.€	13280.5	13288.4	13296.3	7.87
721.46	13147.3	13155.1	13162.9	13170.7	13178.5	13186.3	13194.2	13202.0	13209.8	13217.€	7.81
721.16	13069.7	13077.5	13085.2	13092.9	13100.7	13108.4	13116.2	13124.0	13131.8	13139.5	7.76
720.85	12992.6	13000.3	13008.0	13015.7	13023.3	13031.(13038.8	13046.5	13054.2	13062.0	7.71
720.55	12915.9	12923.€	12931.2	12938.9	12946.5	12954.2	12961.9	12969.5	12977.2	12984.9	7.66
720.24	12839.9	12847.4	12855.0	12862.€	12870.2	12877.8	12885.4	12893.1	12900.7	12908.3	7.61
719.94	12764.2	12771.7	12779.3	12786.9	12794.4	12802.0	12809.5	12817.1	12824.7	12832.3	7.56
719.63	12689.0	12696.5	12704.0	12711.5	12719.1	12726.€	12734.1	12741.€	12749.1	12756.7	7.52
719.33	12614.3	12621.8	12629.2	12636.7	12644.2	12651.€	12659.1	12666.€	12674.0	12681.5	7.46
719.02	12540.1	12547.5	12554.9	12562.3	12569.7	12577.2	12584.€	12592.(12599.5	12606.9	7.42
718.72	12466.3	12473.7	12481.0	12488.4	12495.8	12503.2	12510.5	12517.9	12525.3	12532.7	7.38
718.42	12392.9	12400.2	12407.€	12414.9	12422.3	12429.€	12436.9	12444.3	12451.€	12459.0	7.34
718.11	12320.0	12327.3	12334.€	12341.9	12349.1	12356.4	12363.7	12371.0	12378.3	12385.€	7.29
717.81	12247.5	12254.8	12262.0	12269.2	12276.5	12283.7	12291.(12298.2	12305.5	12312.7	7.25

Exhibit 11M– Mica Reservoir Capacity Table (SI) $$\operatorname{hm}^3$$

ELEVATION IN											AVERAGE DIFFERENCE PER
METERS	.00	.03	.0€	.09	.12	.15	.18	.21	.24	.27	3/100 M
717.50	12175.5	12182.7	12189.9	12197.1	12204.3	12211.5	12218.7	12225.9	12233.1	12240.3	7.20
717.20	12103.7	12110.9	12118.1	12125.2	12132.4	12139.€	12146.8	12153.5	12161.1	12168.3	7.17
716.89	12032.5	12039.€	12046.7	12053.8	12061.0	12068.1	12075.2	12082.3	12089.5	12096.€	7.13
716.59	11961.t	11968.7	11975.8	11982.8	11989.9	11997.(12004.1	12011.2	12018.3	12025.4	7.09
716.28	11891.1	11898.2	11905.2	11912.2	11919.3	11926.3	11933.4	11940.4	11947.5	11954.5	7.04
715.98	11820.9	11828.0	11835.(11842.(11849.(11856.(11863.1	11870.1	11877.1	11884.1	7.02
715.67	11751.2	11758.2	11765.1	11772.1	11779.1	11786.0	11793.(11800.0	11807.0	11814.(6.97
715.37	11681.8	11688.8	11695.7	11702.6	11709.5	11716.5	11723.4	11730.4	11737.3	11744.3	6.94
715.06	11612.8	11619.7	11626.6	11633.5	11640.4	11647.3	11654.2	11661.1	11668.0	11674.5	6.90
714.76	11544.(11550.9	11557.8	11564.7	11571.5	11578.4	11585.3	11592.2	11599.(11605.5	6.87
714.70	11344.(11330.	11337.0	11304.7	113/1	11376	11303	11372.2	11377.	11005.	0.07
714.45	11475.7	11482.5	11489.4	11496.2	11503.(11509.8	11516.7	11523.5	11530.4	11537.2	6.83
714.15	11407.7	11414.5	11421.3	11428.1	11434.9	11441.€	11448.5	11455.3	11462.1	11468.9	6.80
713.84	11340.0	11346.8	11353.5	11360.3	11367.1	11373.8	11380.€	11387.4	11394.1	11400.9	6.77
713.54	11272.€	11279.3	11286.0	11292.8	11299.5	11306.3	11313.0	11319.8	11326.5	11333.3	6.74
712.93	11138.7	11145.4	11152.(11158.7	11165.4	11172.1	11178.8	11185.4	11192.1	11198.{	6.68
712.62	11072.(11078.7	11132.0	11092.(11103.5	111/2.1	11178.0	11118.7	11125.3	11138.0	6.66
712.32	11072.0	11078.7	11083.2	11092.0	11038.7	1103.8	11112.0	11052.1	11058.7	11132.0	6.65
712.32	1003.	1012.2	1016.6	1025.1	1032.1	1038.4	1043.2	11032.1	10992.3	1003.2	6.63
712.01	10939.2	10943.5	10932.5	10939.1	10903.a	10972.2	10979.0	10983.0	10992.3	10998.5	6.61
/11./1	106/3.2	108/9.0	10860.2	10693.0	10899.0	10900.2	10912.0	10919.2	10920.0	10932.7	0.01
711.40	10807.3	10813.9	10820.5	10827.0	10833.€	10840.2	10846.8	10853.4	10860.0	10866.€	6.59
711.10	10741.5	10748.1	10754.7	10761.2	10767.8	10774.4	10781.(10787.5	10794.1	10800.7	6.58
710.80	10676.0	10682.5	10689.1	10695.€	10702.2	10708.7	10715.3	10721.8	10728.4	10734.9	6.55
710.49	10610.€	10617.1	10623.7	10630.2	10636.7	10643.3	10649.8	10656.3	10662.9	10669.4	6.53
710.19	10545.4	10552.(10558.5	10565.0	10571.5	10578.0	10584.5	10591.1	10597.€	10604.1	6.52
709.88	10480.4	10486.9	10493.4	10499.5	10506.4	10512.5	10519.4	10525.9	10532.4	10538.9	6.50
709.58	10415.€	10422.1	10428.ϵ	10435.1	10441.5	10448.0	10454.5	10461.(10467.5	10473.5	6.48
709.27	10351.(10357.5	10363.5	10370.4	10376.8	10383.3	10389.8	10396.2	10402.7	10409.2	6.46
708.97	10286.€	10293.0	10299.5	10305.9	10312.3	10318.8	10325.2	10331.7	10338.1	10344.6	6.44
708.66	10233.4	10228.8	10235.2	10241.6	10248.(10254.4	10260.9	10267.3	10273.7	10280.2	6.43
708.00	10222.5	10226.0	10233.2	10241.0	10246.0	10254.5	10200.3	10207	10273.7	10280.2	0.43
708.36	10158.3	10164.7	10171.1	10177.5	10183.9	10190.3	10196.7	10203.1	10209.5	10215.9	6.40
708.05	10094.5	10100.9	10107.3	10113.€	10120.0	10126.4	10132.8	10139.2	10145.5	10151.9	6.38
707.75	10030.8	10037.1	10043.5	10049.9	10056.2	10062.€	10069.(10075.4	10081.8	10088.1	6.37
707.44	9967.4	9973.7	9980.(9986.4	9992.7	9999.(10005.4	10011.7	10018.1	10024.4	6.34
707.14	9904. 1	9910.4	9916.7	9923.1	9929.4	9935.7	9942.(9948.4	9954.7	9961.(6.33
706.83	9841.(9847.3	9853.7	9859.8	9866.2	9872.5	9878.8	9885.1	9891.5	9897.8	6.31