

**STANDARD OPERATING PROCEDURE (SOP)
FLOOD CONTROL REGULATION
MACDOWELL DAM AND RESERVOIR**

PHASE	24-HOUR RAINFALL ON		MACDOWELL RESERVOIR	CONTOOCOOK RIVER INDEX STATIONS (STAGE IN FEET)			REGULATION INSTRUCTIONS	DUTIES DURING EACH PHASE
	SNOW COVERED, WET OR FROZEN GROUND	DRY GROUND		PETERBOROUGH 6.8 SQ MI	MOTEL 118 SQ MI	HENNIKER 368 SQ MI		
I-APPRAISAL FIRST ALERT	1.0"	1.0"	913 (RISING)	3.0 (415 CFS)	4.0 (1,400 CFS)	----	NORMAL SETTING 2'-0-0	FLOOD CONTROL PROJECT MANAGER PHASE I 1. Collect and report rainfall and stage data to RRT. 2. Operate according to instructions from RRT. PHASE II 1. Operate according to instructions from RRT. 2. Note any unusual conditions at dam, in downstream channels or at index stations. PHASE III 1. Check downstream channel and damage areas. 2. Report to RRT for further instructions.
SECOND ALERT	1.5"	2.0"	As instructed					
INITIAL REGULATION	2.0"	3.0"	As instructed	3.5 (620 CFS)	5.0 (1,850 CFS)	9.5 (3,100 CFS)	RESTRICT OUTFLOW TO 1'-0'-0'	
II-CONTINUATION OF REGULATION	3.0"	4.0"	As instructed	6.0 (2,320 CFS)	6.0 (2,400 CFS)	10.0 (3,800 CFS)	RESTRICT OUTFLOW TO 25cfs	
III-EMPTYING THE RESERVOIR	STORM HAS ABATED		----	THE NORMAL MAXIMUM RELEASE RATE AT MACDOWELL IS 650 CFS.				PROJECT REGULATOR PHASE I 1. Compile data. 2. Plan and coordinate next instructions to Project Manager. 3. Restrict outflow to maintain safe channel capacity in the Nubanusit Brook and the Contoocook River. PHASE II 1. Continue regulation instructions to Project Manager. PHASE III 1. Collect data from Project Manager. 2. Check downstream conditions for allowable releases. 3. Continue regulation instructions to Project Manager.

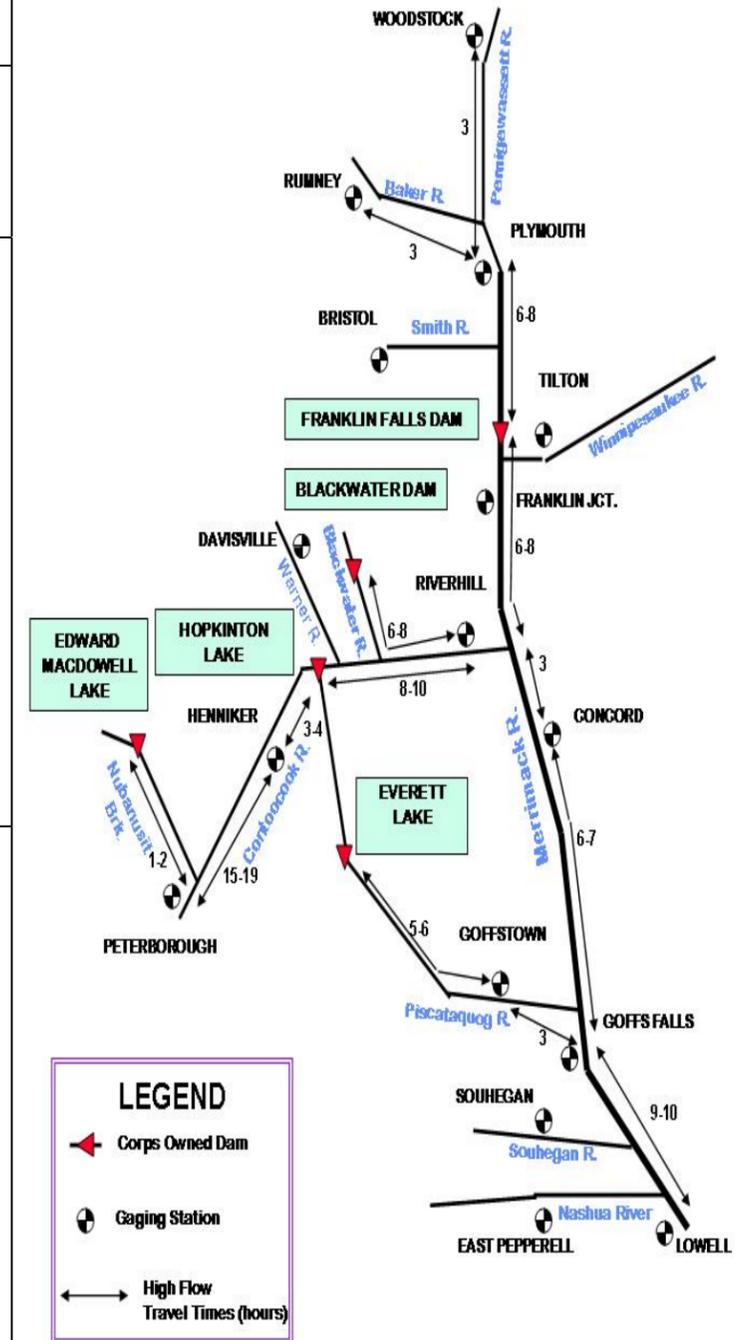
EMERGENCY OPERATION PROCEDURE (EOP) DURING COMMUNICATION FAILURE WITH RRT

Gate operation for the following conditions:

	Partial closure (1'-0-0)	Minimum opening (0-0.1'-0)
Rainfall 24-hour	2.0'	3.0'
Peterborough stage (415 CFS)	3.0'	6.0'
Motel Stage (1,850 CFS)	5.0'	6.0'
Henniker Stage (2,300 CFS)	9.0'	9.5'

- NOTES:**
- Emptying the reservoir shall not be initiated until contact has been established with RRT.
 - Rate of increase of discharge should not exceed 100 CFS per hour to 400 CFS then 50 CFS per hour to 650 CFS
 - Maximum rate of reservoir drawdown should not exceed 5 feet in 24 hours
 - Refer to Table C-2 for road closures.
 - Refer to section C-05 for snowmelt regulation.
 - Refer to section C-05 for ice jam flooding.
 - Refer to section C-05 for regulation during spillway discharge.

Merrimack River Basin



updated 01/10