

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

PHASE	24-HOUR RAINFALL ON		BLACKWATER RESERVOIR	RIVER INDEX STATIONS (STAGE IN FEET)			REGULATION INSTRUCTIONS	DUTIES DURING EACH PHASE	
	SNOW COVERED, WET OR FROZEN GROUND	DRY GROUND		CONTOOCOOK RIVER AT RIVER HILL 760 SQ MI	MERRIMACK RIVER AT				
					CONCORD 2,385 SQ MI	GOFFS FALLS 1,507 SQ MI			LOWELL 4,635 SQ MI
I-APPRAISAL FIRST ALERT	1.0"	1.0"	525 (RISING)	14.0 (4,400 CFS)	---	---	NORMAL SETTING 3'-3'-3	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" (Or as instructed)	As instructed	---	---	---			
INITIAL REGULATION	2.0"	3.0" (Or as instructed)	As instructed	GS 14.7 (5,600 CFS) NON-GS 15.6 (7,300 CFS)	GS 10.0 (18,000 CFS) NON-GS 11.0 (21,000 CFS)	9.5 (24,500 CFS) 49.0 (31,000 CFS)	RESTRICT OUTFLOW GATE SETTING 0-3'-0		
II-CONTINUATION OF REGULATION	3.0"	4.0" (Or as instructed)	As instructed	GS 15.6 (7,300 CFS) NON-GS 16.4 (8,800 CFS)	GS 11.0 (21,300 CFS) NON-GS 12.0 (24,300 CFS)	11.0 (31,600 CFS) 50.0 (36,000 CFS)	RESTRICT OUTFLOW TO 65cfs		
III-EMPTYING THE RESERVOIR	STORM HAS ABATED		---	THE NORMAL MAXIMUM RELEASE RATE AT BLACKWATER IS 2,300 CFS.					

EMERGENCY OPERATION PROCEDURE (EOP) DURING COMMUNICATION FAILURE WITH RRT

Gate operation for the following conditions:

	Partial closure (0-4'-0)	Minimum opening (0-0.1'-0)
Rainfall 24-hour	2.0"	3.0"
River Hill stage	14.7'	15.6'
Concord Stage	10.0'	11.0'

- NOTES:**
- Emptying the reservoir shall not be initiated until contact has been established with RRT.
 - Rate of increase of discharge should not exceed 300 CFS per hour to 1,800 CFS then 100 CFS per hour to 2,300 CFS
 - Maximum rate of reservoir drawdown should not exceed 10 feet in 24 hours
 - Refer to Table B-3 for road closures.
 - Refer to section B-05 for snowmelt regulation.
 - Refer to section B-05 for ice jam flooding.
 - Refer to section B-05 for regulation during spillway discharge.

- 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 Contoocook and Merrimack Rivers.
- 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.

