

**STANDARD OPERATING PROCEDURE (SOP)
FLOOD CONTROL REGULATION
MANSFIELD HOLLOW LAKE**

PHASE	24-HOUR RAINFALL ON		MANSFIELD HOLLOW RISING POOL STAGE (FEET)		RIVER INDEX STATIONS (STAGE IN FEET)			REGULATION INSTRUCTIONS
	SNOW COVERED, WET OR FROZEN GROUND	DRY GROUND	SUMMER	WINTER	NATCHAUG RIVER	SHETUCKET RIVER	QUINEBAUG RIVER	GATE SETTINGS
					WILLIMANTIC 171 SQ MI	WILLIMANTIC 402 SQ MI	JEWETT CITY 715 SQ MI	
I-APPRAISAL								
FIRST ALERT	1.0"	1.0"	19.0	16.0	----	7.5 (4,010 CFS)	----	NORMAL SETTING (settings varied)
SECOND ALERT	1.5"	2.0"	20.0	17.0	----	8.5 (5,120 CFS)	----	
INITIAL REGULATION	2.0"	3.0"	21.0	18.0	6.0 (1,560 CFS)	9.0 (5,760 CFS)	----	RESTRICT OUTFLOW (settings varied)
II-CONTINUATION OF REGULATION	3.0"	4.0"	As instructed		7.0 (2,120 CFS)	10.0 (7,130 CFS)	17.0 (13,500 CFS)	RESTRICT OUTFLOW TO MINIMUM (80 CFS) 1'-0-0-0-0
III-EMPTYING THE RESERVOIR	STORM HAS ABATED		THE NORMAL MAXIMUM RELEASE RATE AT MANFIELD HOLLOW IS 2,900 CFS.					

EMERGENCY OPERATION PROCEDURE (EOP) DURING COMMUNICATION FAILURE WITH RRT

Gate operation for the following conditions:

	Partial closure (4-0-0.1-0-0)	Minimum Opening (1-0-0-0-0)
Rainfall 24-hour	2.0"	3.0"
Natchaug River Stage	6.0'	6.5'
Shetucket River Stage	8.0'	9.0'

- NOTES:**
- Emptying the reservoir shall not be initiated until contact has been established with RRT.
 - Rate of increase of discharge should not exceed 500 CFS per hour to 2,000 CFS then 250 CFS per hour to 2,900 CFS
 - Maximum rate of reservoir drawdown should not exceed 5 feet in 24 hours
 - Refer to Plate A-3 for road closures.
 - Refer to section A-05 paragraph (e) for snowmelt regulation.
 - Refer to section A-05 paragraph (f) for ice jam flooding.
 - Refer to section A-05 for regulation during spillway discharge.
 - Maximum Non-Damaging Channel Capacities at river index stations:
Natchaug River at Willimantic: 8.1 feet = 2,900 CFS
Shetucket River at Willimantic: 11.3 feet = 9,160 CFS

- DUTIES DURING EACH PHASE**
- 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.
- 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 Natchaug and Shetucket 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.

