

STANDARD OPERATING PROCEDURE (SOP)
FLOOD CONTROL REGULATION
KNIGHTVILLE DAM AND LITTLEVILLE DAM

PHASE	24-HOUR RAINFALL ON		RISING POOL STAGE (FEET)		RIVER INDEX STATIONS (STAGE IN FEET)					REGULATION INSTRUCTIONS	
	SNOW COVERED WET OR FROZEN GROUND	DRY GROUND	KNIGHTVILLE DAM	LITTLEVILLE DAM	WESTFIELD RIVER		CONNECTICUT RIVER			GATE SETTINGS	
					HUNTINGTON 93.7 SQ MI	WESTFIELD 497 SQ. MI	MONTAGUE CITY 7,865 SQ MI	HARTFORD 10,428 SQ. MI	THOMPSONVILLE 9,661 SQ MI	KNIGHTVILLE DAM	LITTLEVILLE DAM
I-INITIAL REGULATION	2.0" OR AS INSTRUCTED	3.0" OR AS INSTRUCTED	AS INSTRUCTED		7.5	8.0	26.0	18.0	5.0	DISCHARGE REDUCED AS PER RCC	
II-CONTINUATION OF REGULATION	3.0" OR AS INSTRUCTED	4.0" OR AS INSTRUCTED	AS INSTRUCTED		9.0	12.0	30.0	20.0	8.0	RESTRICT OUTFLOW TO MINIMUM RELEASES 80 CFS 25 CFS	
III-EMPTYING THE RESERVOIR	STORM HAS ABATED		APPROXIMATE NON-DAMAGING DOWNSTREAM CAPACITY: KNIGHTVILLE DAM 4,500 CFS LITTLEVILLE DAM 1,500 CFS								

EMERGENCY OPERATION PROCEDURE (EOP) DURING COMMUNICATION FAILURE WITH RRT

Go to Gate Settings/Releases as follows for the following conditions:

24 Hour Rainfall	Minimum Release (CFS)	
	Knightville	Littleville
Wet Ground	2.0" 80	25
Dry Ground	3.0" 80	25

Rising Stage at	Minimum Release (CFS)	
	Knightville	Littleville
W. Branch @ Huntington	4.0' 80	25
Westfield River @ Westfield	9.0' 80	25
Montague City	26.0' 80	25
Hartford	19.0' 80	25
Thompsonville	5.0 80	25

NOTES:

- All gate settings and alert conditions are subject to change by RRT.
- Emptying the reservoir shall not be initiated until contact has been established with RRT.
- Rate of increase in reservoir discharge shall not exceed the following:
KNIGHTVILLE = 500 cfs/hr up to 2,500 cfs, then 250 cfs/hr
LITTLEVILLE = 300 cfs/hr up to 1,200 cfs, then 100 cfs/hr
- Maximum rate of reservoir drawdown shall not exceed 15 feet in 24 hours at Knightville Dam or 5 feet in 24 hours at Littleville Dam.
- Flood Stages at the above river index stations are as follows: Westfield - 13 feet, Thompsonville - 9.2 feet, Hartford - 22 feet. (Agricultural lands adjacent o the Connecticut River start to become inundated when Hartford Stages rise above 16.0 feet)
- Consider road closures at Knightville when a rising pool is expected to reach 40.0 feet.
- Evacuation of Indian Hollow camping area at Knightville should be considered when a rising pool reaches 80.0 feet.
- Regulation for snowmelt will be based on maintaining releases consistent with full downstream channel capacities.

Maximum Non-Damaging Channel Capacity

Westfield River at Westfield = 13.0 ft. = 11,250 cfs.
Connecticut River at Thompsonville = 9.2 ft. = 157,000 cfs.
Connecticut River at Hartford = 22.0 ft. = 112,500 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 downstream channel capacities.

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.

