

KNIGHTVILLE DAM

WESTFIELD RIVER - Connecticut River Basin - Huntington, MA

DRAINAGE AREA= 162 sq.mi.

PERMANENT POOL

Summer = None

Winter = 35 Ft

DAM

Type= Rolled rock and earth fill

Length= 1,200 Feet

Top Elev = 630.0 Ft-NGVD (150 Ft)

FLOOD CONTROL STORAGE

Capacity= 49,000 Acre Feet

5.6 Inches of Runoff

Area at Crest= 960 Acres

CONTROL WORKS

Type= One circular tunnel

Size= 16 Feet diameter

Length= 605 Feet

Invert Elev = 480.0 Ft-NGVD

Discharge Capacity at Full Pool= 14,500 cfs

Gates (Type)= Broome

Number= 3

Size= 6' x 12'

Channel Capacity = 4,500 cfs

SPILLWAY

Type= Chute Spillway Ogee Weir

Length= 400 Feet

Elev = 610.0 Ft-NGVD (130 Ft)

SPILLWAY DESIGN FLOOD

- Original Design Criteria=
 - Rainfall Excess = 15.6 inches
 - Initial Pool Level = Full
 - Flood Control Outlet Gates = Inoperable
 - Peak Inflow = 113,200 cfs
 - Peak Outflow = 91,000 cfs
 - Max. Pool = 625.0 ft-NGVD
 - Freeboard = 5.0 ft
- Current HMR 51 & 52 Criteria=
 - Rainfall Excess = 23.8 inches
 - Initial Pool Level = Full
 - Flood Control Outlet Gates = Operable
 - Peak Inflow = 171,800 cfs

- Peak Outflow = 160,000 cfs
- Max. Pool = 630.3 ft-NGVD
- Freeboard = -0.3 ft

RECREATIONAL FACILITIES= Damsite picnic area, 10 picnic tables with grills, group picnic shelter and bathroom, two large group camping areas with Indian Hollow group Campground parking, bathroom, showers and drinking water.

TOTAL COST= \$3,300,000

PLACED IN OPERATION= December 1941
