## STATE OF VERMONT DAM SAFETY PROGRAM FACILITIES ENGINEERING DIVISION ANR - DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## Dam Safety Program Overview

- Full time staff of two engineers with a summer intern and about 200 hours of FED staff member
- Mission different than most divisions within ANR/DEC. *Primary focus is Public Safety.*
- Act as Dam owners, regulators, and engineers

# Chapter 43: Dams

- Recently underwent updates in the 2018 session as Act 161
- Applies to non-hydropower, non-federal dams
- Rules under development for administrative requirements and design standards

#### Vermont Dam Inventory

- Access database, Natural Resources Atlas mapping interface
- Contains ~1,200 records (current and former dam sites) and is updated regularly
- 413 under full jurisdiction of VTDEC, 41 HIGH, 110 SIGNIFICANT, 262 LOW

# **Registration Program**

- Annual fee for Owners of Dams capable of impounding > 500,000 cf
  - $\blacktriangleright$  HIGH Hazard Dams = \$1,000
  - ➢ SIGNIFICANT Hazard Dams = \$350
  - $\blacktriangleright$  LOW Hazard Dams = \$200
- Fees help to fund Dam Safety Program

#### Inspection Program

- Visual Dam Safety Inspections by Program Staff generally between May and August
- Participation is voluntary. Owner permission obtained before performing inspection.
- Target schedule, HIGH -1 to 2 years, SIGNIFICANT 3 to 5 years, LOW 5 to 10 years
- Complete 80 to 100 per year.
- Report generated and forwarded to Owner with recommendations:

# Dam Orders

- Authorization/Permits/Application required for dams that impound > 500,000 cf
- Application submitted by a Vermont licensed Engineer experienced in Dam Safety Engineering
- Order (Permit) with General and Special conditions as well as F&W and water quality comments

# Unsafe Dam Proceedings

- Quasi-judicial process to require dams be repaired or removed to make them safe.
- Can be initiated by Dam Safety Program or Public via petition, followed by investigation and hearing
- Funding assistance available up to \$50,000 (account has ~\$250k created in 2014)
- Used infrequently (14 times since 1955), program strives to educate and work with owners.

# State Owned Dams:

- DEC directly owns 14 (including the 3 flood control dams)
  - State owns ~100 dams: F&W (76), FPR (15), VTrans (2), BGS (1), State Colleges (6)
  - Flood operations and monitoring at Waterbury Dam, Wrightsville Dam, East Barre Dam
- Recent/ongoing projects at DEC owned dams:
  - Lake Carmi Dam Rehabilitation (design phase) \$250,000
  - Crystal Lake Dam Rehabilitation (design phase) \$300,000
  - Waterbury Dam Risk Assessment (pre-cursor to spillway proj., pre-planning) \$215,000
  - ▶ Waterbury Dam Dewatering Well Slug Tests and Camera Inspections \$60,000