

VERMONT
Department of Environmental Conservation
Dam Safety Program



Waterbury Dam

House Environment and Energy
S.213

April 10, 2024

Ben Green, PE
Dam Safety Engineer
VTDEC Dam Safety Program

Presentation Overview

- General Dams and Dam Safety in Vermont Overview
- Dam Safety Program Information
- Dam Ownership Overview
- Dam Regulation Overview
- Rulemaking
- S.213 Review



Noyes Pond Dam, Groton

Dam Hazard Potential Classifications

- Potential for loss of life, property losses, lifeline losses, or environmental losses due to a dam failure or incident.

Classification¹	Direct Loss of Life	Property Losses	Lifeline Losses	Environmental Losses
HIGH	Probable or Certain (one or more) (extensive downstream residential, commercial, or industrial development)	Not considered for this classification	Not considered for this classification	Not considered for this classification
SIGNIFICANT	None expected	Major or extensive public and private facilities	Disruption of essential or critical facilities and access	Major or extensive mitigation required or impossible to mitigate
LOW	None expected	Private agricultural lands, equipment and isolated non-occupied buildings, non-major roads.	No disruption of services – repairs are cosmetic or rapidly repairable damage	Minimal incremental damage
MINIMAL	Same as LOW hazard, above			

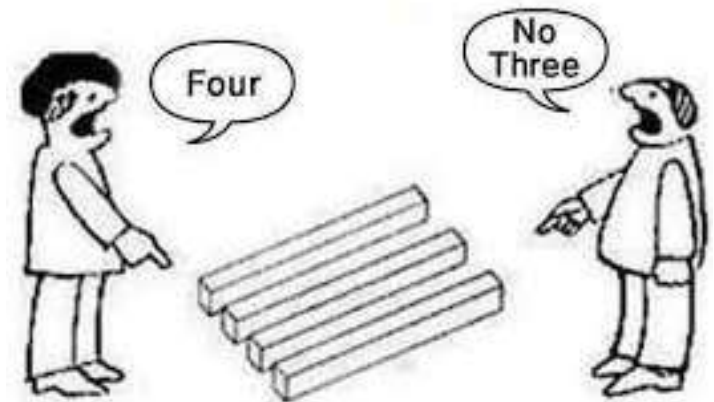
1) Categories are based on overall dam performance and do not apply to appurtenances.

- Independent of condition rating of the dam.

Regulation of Dams in Vermont

Dams in Vermont regulated by one of four agencies:

1. Department of Environmental Conservation (DEC) = Non-hydropower, non-federal dams at the State Level
2. Public Utility Commission (PUC) = Hydropower Dams Constructed pre-1935 at the State Level
3. Federal Energy Regulatory Commission (FERC) = Hydropower Dams Constructed post 1935 at the Federal Level
4. United States Army Corps of Engineers (USACE) = Dams owned by the Corps or other Federal Entity



Vermont Dam Inventory / Natural Resources Atlas

- Contains ~1,119 records (active and historic sites)
- ~992 under jurisdiction of VTDEC (Non-Power, Non-Federal)
44 HIGH, 133 SIGNIFICANT, 252 LOW, 563 MINIMAL or not rated
- ~21 PUC (Hydropower pre-1935)
4 HIGH, 4 SIGNIFICANT, 13 LOW, 1 not rated
- ~82 FERC (Power post-1935)
15 HIGH, 7 SIGNIFICANT, 46 LOW, 14 MINIMAL or not rated
- ~24 other dams are under jurisdiction of Federal Government (USACE, National Park Service, US Forest Service, etc.)

VERMONT OFFICIAL STATE WEBSITE
AGENCY OF NATURAL RESOURCES
DAMSINVENTORY
HOME DAMS PERMITS CONTACTS MAINTENANCE LOGINS

View Dams Record

Edit Close Tools

Names/Location	Contacts	Permits	Reservoir	Dam	Construction/Reconstruction
StateID:	226 01				
Dam Type:	RE				
Construction Type:	Zoned Earthfill				
Core:	IEK				
Foundation:	RSK				
Low Level Outlet:					
Length:	2130.0				
Height (feet):	187.0				
Upstream Height (feet):	145				
Structural Height (feet):	187				
Hydraulic Height (feet):	183				
Maximum Discharge (cfs):	84000				
Principal Spillway:					
Principal Spillway Design Capacity (cfs):					
Principal Spillway Maximum Capacity (cfs):					
Auxiliary Spillway:					
Auxiliary Spillway Design Capacity (cfs):					

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Program Overview

- Located in the Water Investment Division (WID) within VTDEC
- "The mission of the Vermont Dam Safety Program is to reduce risks to life, property, and the environment from dam incidents and dam failure through effective communication, education, regulation, and dam ownership"
- RESPONSIBILITIES:
 - dam regulation
 - dam ownership
 - lands management
- CURRENT STAFFING:
 - (2) licensed engineer
 - (2) staff engineers
 - (1) program administrator/analyst
 - Summer Temporary (pending funding)
- STATUTE/RULES:
 - 10 V.S.A Chapter 43: Dams, Non-federal, non-power dams (Rules in development)
- DAM OWNERSHIP: 14 dams including the (3) Winooski River Flood Control Dams.
- GOALS: Become more effective dam regulators and owners.



Silver Lake Dam, Barnard

ANR-Owned Dams

- DEC directly owns 14 (including the 3 flood control dams)
- ANR owns ~100.
 - F&W (76)
 - FPR (15)

TYPICAL TASKS

- *Site visits and checks*
- *Operation and Maintenance*
- *Emergency Action Planning*
- *Flood monitoring/operations*
- *Incident Response*
- *Capital Planning*
- *Design, permitting, construction*
- *Project Management*
- *Debris removal*
- *Beaver conflicts*
- *Mowing and Brushing Contract*



Lake Bomoseen Dam, Castleton



Waterbury Dam Tunnel

Winooski River Flood Control Dams

- Own/operate three HIGH hazard 1930s era USACE Flood Control Dams :

Waterbury Dam: 109 SM drainage area, 187 ft. tall, 2,100 ft. long.

Wrightsville Dam: 68 SM drainage area, 115 ft. tall, 1,525 ft. long.

East Barre Dam: 39 SM drainage area, 65 ft. tall, 1,460 ft. long. Dry pool.



Waterbury



Wrightsville



East Barre

Flood Monitoring and Operations

- Monitor and operate Flood Control Dams
- Communicate with DEC Management, SEOC (as needed)
- Communicate with Downstream Communities (as needed)
- During flood and post-flood inspections
- Evaluate ANR-owned Dams
- Design and oversee implementation of temporary repairs (as needed)
- Examples:
 - Spring 2019
 - July 2023
 - December 2023



Wrightsville Dam



Waterbury Dam

Flood Release at Waterbury Dam

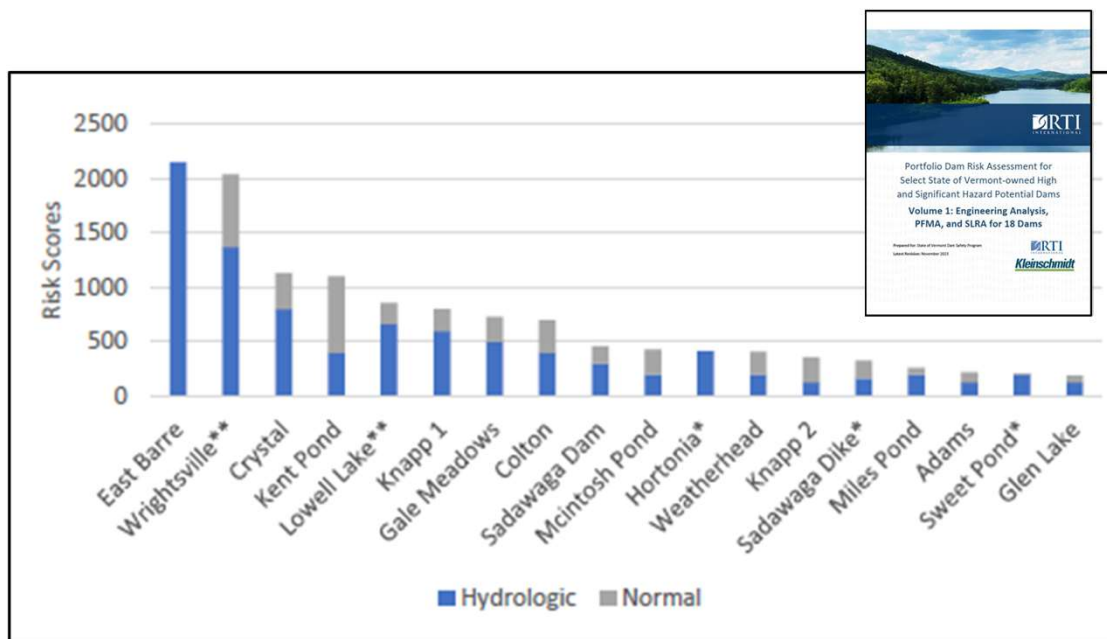


2023 Floods – ANR-Owned Dam Recovery

- Post-flood Inspections/Evaluations.
- Minor repair, debris removal.
- Working with USACE to set up study of Wrightsville and East Barre performance and eventual evaluation of alternatives to improve it in the future.
- Waterbury Dam Spillway Risk Reduction and Spillway Replacement Project.
- Working to improve Emergency communications procedures, tools, and technology.
- Working with Consultant to improve/update ANR-owned Dam Emergency Action Plans.
- Working with Consultant to collect additional engineering data on select dams
- Overall:
 - Working on completing comprehensive internal DSP After-Action Report

Ownership Challenges

- ~40% ANR-owned Dams in POOR/UNSATISFACTORY Condition .
- ~80% are more than 50-years old.
- Based on Risk Assessment of 18 HIGH and SIGNIFICANT hazard potential ANR-owned dams, approximately half have potential failure modes that require additional action or follow-up.
- Rough estimate, ~\$20-25M to rehabilitate ANR dams (Excluding Flood Dams).
- Lack of coordinated ANR Dam Management Strategy/dam owner safety program.
- Upcoming dam safety rules/compliance.

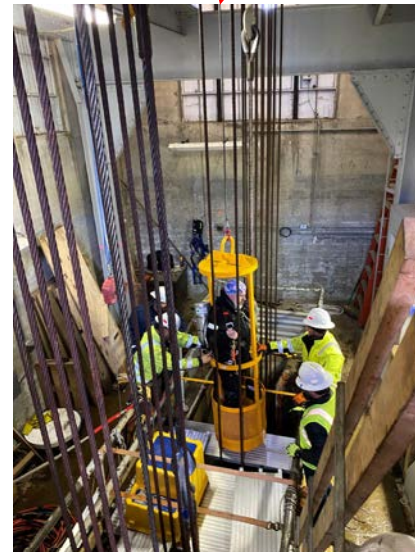


Lowell Lake Dam, Londonderry

Capital and General Funded Project Management/Oversight

- Example 2023 Projects (not all inclusive, budgets approximate):

- Wrightsville Dam Aux. Spillway - \$530,000
- ANR-Owned Dams Risk Assessment - \$445,000
- Noyes Pond Dam Comprehensive Assessment - \$170,000
- Silver Lake Dam Comprehensive Assessment - \$170,000
- Lake Bomoseen Dam Actuator Replacement - \$50,000
- Waterbury Dam Risk Reduction - \$727,000
- Waterbury Dam Broome Gate Structural Assessment - \$85,000
- DEC Dam Instrumentation - \$170,000
- East Barre Dam Debris Management - \$10,000
- DEC Dam Mowing and Brushing - \$35,000



Status of the Green River Reservoir Dam and Dike Study

- Currently managing Two Phase Project, budgeted ~\$514k to evaluate state ownership of the dam/dike. Contracted with GEI, Inc.

- Phase I: **(underway)**

- NDAs
- Existing Information Review and Site Visit
- Data Gaps and Contract Negotiation
 - 11 data gaps identified

- Phase II: **(upcoming)**

- Field Inspection
- H&H, Stability Analyses, Risk Assessment
- Valuation
- Alternative Analyses
 - No Action (ANR does not take dam/dike, MWL removes)
 - ANR acquires dam/dike:
 - Maintains for power/recreation
 - Maintains for recreation, decommissions power
 - Lowers and maintains for recreation
- Summary Report



Chapter 43: Dams

- **Legislation that guides regulation of dams at the State level (DEC and PUC)**
- **Main Takeaways:**
 - Basic Definitions
 - Jurisdiction between DEC and PUC
 - Authorization/Permits/Application for dams that impound more than 500,000 cubic feet (about 11.5 acre-feet)
 - Public Good Criteria
 - Dam Inspections
 - Unsafe Dams
- **Recently underwent updates in the 2018 session as Act 161**



Periodic Inspections

- Performed according to schedule:

Periodic Inspections ⁽¹⁾	
Hazard Classification	Frequency
HIGH	2 years
SIGNIFICANT	5 years
LOW	10 years
MINIMAL	None

- Determine condition rating.
- Currently/historically performed by Program Staff, Rules allow for Program to require owners hire an engineer to perform.

iPad Solution for Inspections/Reporting

- Used extensively since 2021 field season.
- Standardized checklist and reporting, saves times, improves consistency.



VERMONT Department of Environmental Conservation		Dam Safety Inspection Report		State GRAP Program Grant Number: 19-0001-0001 10/23/2019-09/30/2020 10/23/2019-09/30/2020	
Name: Lowell Lake		Town: Londonderry			
State ID: 115.02 NID ID: VT00079		Watershed: West River			
Hazard Class: High Hazard Potential		Stream: West River-TR			
Inspection Details					
Inspection date: 06/28/2021 11:00					
Inspection type: Periodic				Weather: Sunny, Cloudy, 84F	
Inspected by: Steven Hanna, Katherine King, Peyton Lashart					
Dam Safety Recommendations					
The following recommendations and remedial measures describe the recommended approach to address current deficiencies of the dam. Maintenance level activities can be performed by the Owner, while Studies and Analyses and Remedial Repair Recommendations will require the services of a qualified professional engineer registered in the State of Vermont who is experienced in dam safety engineering design, permitting, and construction.					
Overall dam condition: <input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/> Unsatisfactory <input type="checkbox"/> Not Rated <small>See general information section at the end of report for further details.</small>					
Maintenance level recommendations					
Spillways		<ul style="list-style-type: none"> Maintain the principal and/or auxiliary spillway free of debris to ensure free flow conditions. 			
Low-level outlets		<ul style="list-style-type: none"> Test operate the low-level outlet twice yearly to maintain operability and check leakage. Remove debris and maintain outlet trash racks. 			
Studies and analysis					
Dam Information					
Type: Earth		Status: In Service		Construction date:	
Purpose: Recreation		Height: 16 ft		1850	
		Length: 225 ft		Foundation conditions: Glacial till	



Dam Orders (Permits)

- Required for construction, alteration, rehabilitation, removal of dams >500,000 cf.
- Receive/process about 5+/- per year.
- Review application, engineering analyses, basis of design report, plans, and specifications.
- Public Comment Period
- Issue Dam Safety Order with Conditions or deny application.
- Monitor project, approve reservoir filling



Lake Champagne Dam,
Randolph, 1st CIPP Project in VT



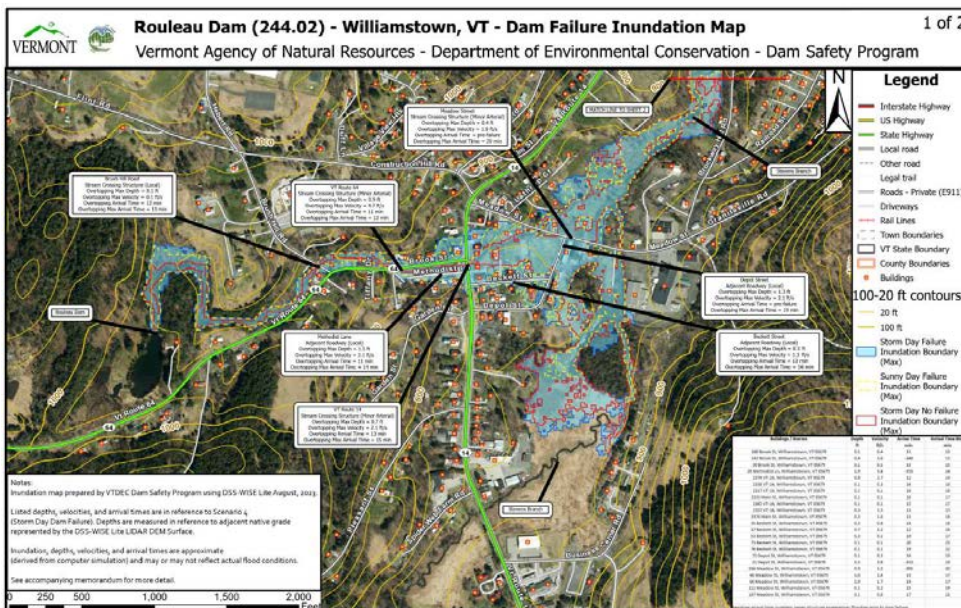
Magic Mountain Snow Making Dam,
Londonderry



Sweet Pond Dam
Guilford

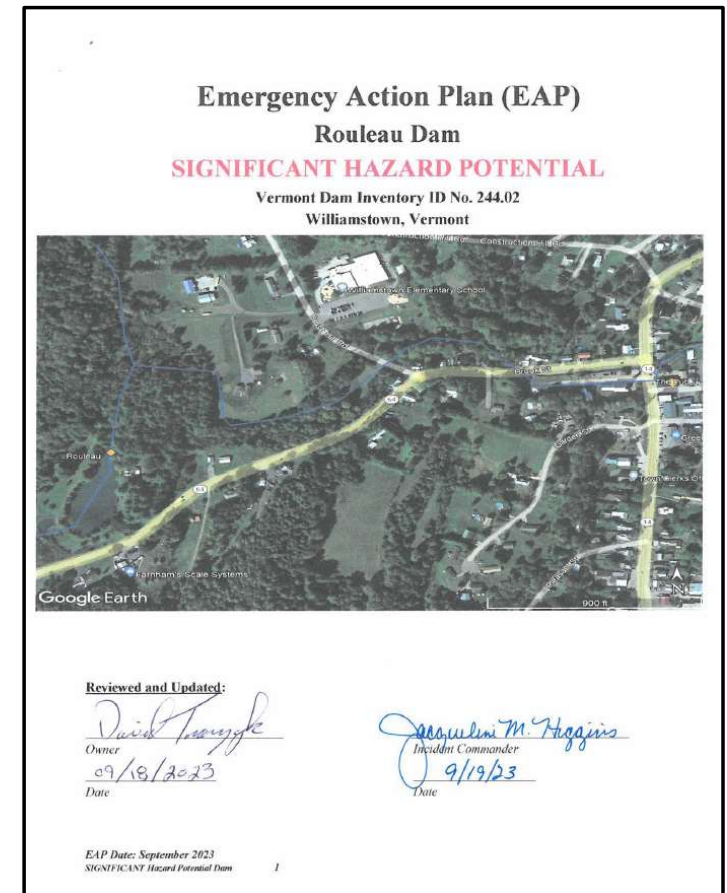
Unsafe Dams

- Quasi-judicial process to deal with dams with imminent safety concerns and an unwilling or unable dam owner.
- Possible funding assistance generally up to \$50,000:
 - Dam Removal = 25% Grant, 75% Loan
 - Reconstruction = 100% Loan
- Post-July 2023 Flood - Petition from Town of Williamstown regarding Rouleau Dam
- Funded design and construction of partial breach to lower dam 3-4 ft to reduce loading on dam, improve stability, and decrease potential consequences.
- Dam slated for future removal.



Emergency Action Planning (EAP)

- “written plan that identifies the area that would likely be inundated by dam failure and identifies Owner actions to protect life, property, lifelines, and the environment in the event of a dam incident or failure. Typically implemented in cooperation with the local, regional, and state emergency personnel.”
- Historically no authority to require dam owners to develop or maintain.
- New Rules will require development and updating.
- Many existing EAPs paid with FEMA Grant funds.
- Developing EAP templates
- Simplified EAPs and Full EAPs
- Leveraging DSS-Wise Lite, free dam failure flood analysis software.



Dam Registration Program

- Annual fee to dam owners of dams that are capable of impounding >500,000 cf
 - **HIGH** hazard Dams = \$1,000
 - **SIGNIFICANT** hazard Dams = \$350
 - **LOW** Hazard Dams = \$200
- Designed ~2015 to fund an additional Dam Safety Engineer (never realized)
- Potential to raise ~\$130k annually
- Currently working to attempt to recover ~\$65k in unpaid fees.

VERMONT Agency of Natural Resources & Natural Resources Board (Act 250)

VTANR Home Home Form Finder Dashboard My Submissions Help Benjamin Green Sign Out

Annual Dam Registration

VERSION 1.37

INSTRUCTIONS

Register Your Dam(s) Online

IMPORTANT: Please do not fill out and submit this online form if you are not going to pay the annual dam registration electronically by credit card or electronic check. This form should only be used if you are paying electronically.

The benefits of completing the form online are that; the form will be prefilled with data from the Vermont Dam Inventory database so there will be almost nothing you have to enter; if you have multiple dams they will all be registered in a single submittal, and you can pay the registration fee electronically by credit card or electronic check. If you have questions or need assistance with completing the online form, contact us by email at ANR.OnlineServices@vermont.gov or by phone at 802-272-4529.

Please review the following instructions before beginning your online registration:

[Follow these instructions to submit your annual dam registration electronically](#)

Registration Fees

Your registration fee will be calculated by the system. The registration fee is based on the hazard class of the dam(s) as follows:

- \$200 per year for each **LOW** hazard dam
- \$350 per year for each **SIGNIFICANT** hazard dam
- \$1,000 per year for each **HIGH** hazard dam

CONTACT INFORMATION

Contact

Vermont Department of Environmental Conservation
Water Investment Division
Dam Safety Program
Davis Building - 3rd Floor
One National Life Drive
Montpelier, VT 05620-3510

Payment Remittance Address

Vermont Department of Environmental Conservation
Water Investment Division
Dam Safety Program
Davis Building - 3rd Floor
One National Life Drive
Montpelier, VT 05620-3510

CONTACTS

For issues with submitting payment contact:
ANR.DamSafety@vermont.gov

Dam Incident/Flood Response

- Respond to dam failures, incidents, and floods.
- Rapid/emergency inspections, emergency actions, risk reduction measures.
- Examples:

- Nissenbaum Dam Failure, December 2022

- ❖ Private Dam in Stowe completed in 2022
- ❖ Internal erosion failure, slope instability
- ❖ Downstream impacts



- July 2023 Flood

- ❖ Rapid Inspections – 390 dams
- ❖ Follow-up Inspections – 65 dams
- ❖ Ongoing/related regulatory work
 - Follow-up Inspections
 - Follow-up with owners with damage requiring extra measures
 - Assisting owners develop EAPs
 - Internal After-Action Report



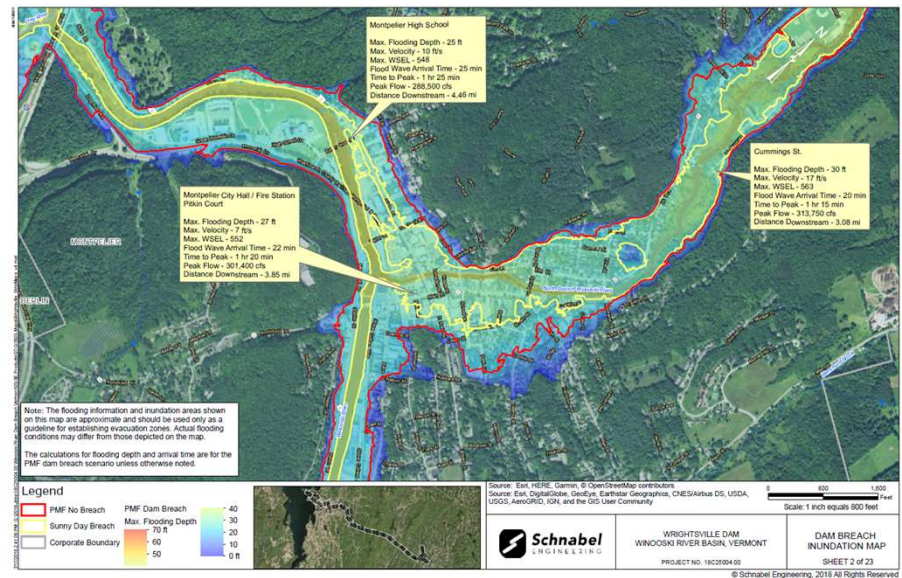
- December 2023 Flood

- ❖ Communication with dam owners
- ❖ Targeted site visits

FEMA GRANTS:

Dam Safety Assistance Grant:

- Program historically ~\$60-\$100k/year:
 - Supplies, Equipment, Vehicles
 - Summer Temporary salary
 - EAP/H&H Projects
 - Fund Program Administer Position
- 2024 funding increase to **~\$246k for 2 years**



High Hazard Potential Dam Grant (HHPD):

- Recently completed project with \$311k award (35%/65% Cost Share)
- Risk Assessment at 7 HIGH/POOR dams.
- Potential for dam owners to apply in future to obtain funding.

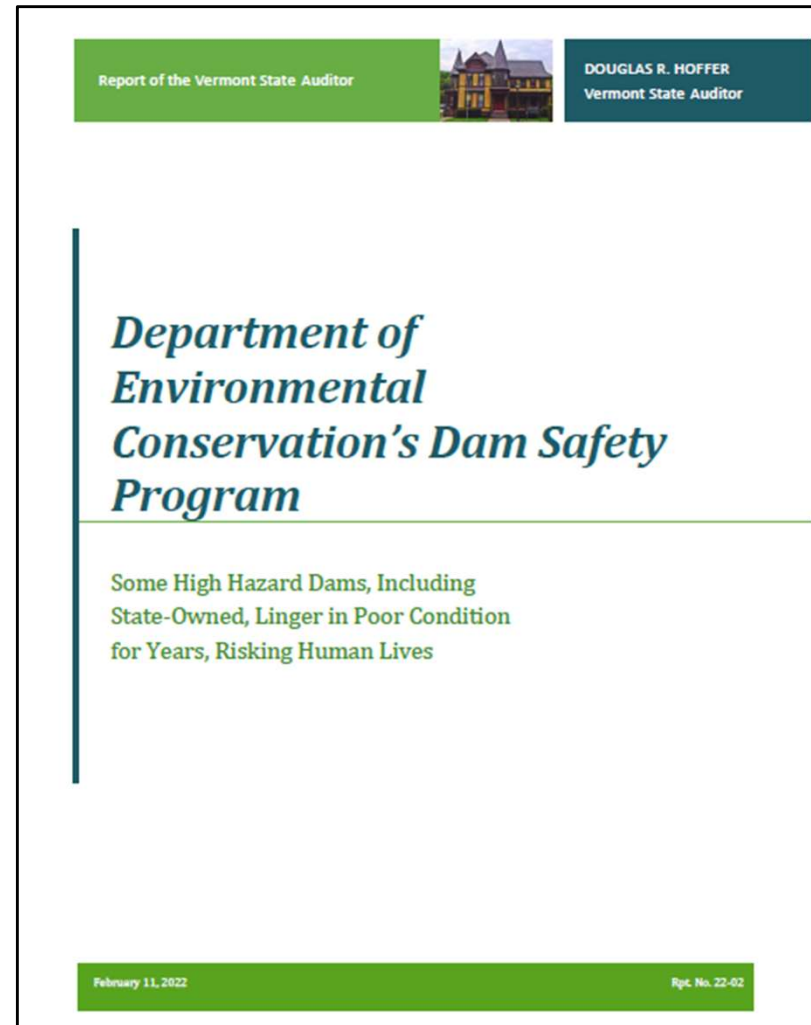
Owner	Dam Name	Town	State ID	NID ID	Dam Type
City of Barre	Thurman W. Dix Reservoir Dam	Orange	147.01	VT00069	Earthen
City of St. Albans	St. Albans North Reservoir Dam	Fairfax	70.01	VT00058	Earthen
Hardwick Electric Department	East Long Pond Dam	Woodbury	252.02	VT00185	Earthen/Gravity
	Wolcott Dam	Wolcott	251.04	VT00179	Gravity
Lyndon Institute	Institute Pond Dam	Lyndon	119.01	VT00216	Earthen
Town of Essex	Indian Brook Reservoir Dam	Essex	69.01	VT00055	Gravity
Town of St. Johnsbury	Stiles Pond Dam	Waterford	227.01	VT00054	Earthen/Gravity

Rank	Dam	Modified SLPRA Score	Life Safety Consequences						Downstream Economic Impacts	
			Fair Weather Failure			Incremental PMF Failure			Fair Weather Failure	Incremental PMF Failure
			PAR	Loss of Life Best Est.	Range	Incremental PAR	Incremental Loss of Life Best Est.	Range		
1	East Long	1850	129	0.3	0-5	25	1.4	0-3	\$8,313,000	\$9,032,000
2	Indian Brook	1650	712	5.3	0-9	52	18	1-33	\$8,185,000	\$15,043,000
3	Stiles	1500	5	0	0-0	10	3	2-5	\$1,643,000	\$11,371,000
4	Wolcott	1400	6	0	0-0	2	7.7	4-13	\$54,000	\$3,090,000
5	Institute	1200	9	0	0-0	8	0	0-1	\$140,000	\$1,320,000
6	Thurman	1000	7	0	0-0	1,535	7.1	0-17	\$530,000	\$96,321,000
7	St Albans	800	5	0	0-0	17	1.6	0-3	\$181,000	\$444,000

Modified SLPRA Score = Summation of 4 highest rated risks for each dam.
 PAR = Population at Risk.

Dam Safety Program Audit

- State Auditor of Accounts completed Audit of Program, Aug 2021-Feb 2022.
- Audit focused on regulatory practices, periodic inspections and inventorying on HIGH and SIGNIFICANT hazard dams.
- Identified some deficiencies in these areas.
- Recommended:
 - Accelerated Rulemaking.
 - Inspection and inventory improvements.
 - Staffing level assessment
- DSP hopes to use Audit results to make programmatic improvements and increase staffing levels.



Rulemaking

Overview:

- Entirely **NEW** rule
- Interest Group
- Peer Review
- Rule Workshop for Owners/ interested parties
- Formal Rulemaking, ICAR/LCAR
- Implementation

Phase I Rules - Major changes/updates:

- Refined Definition of a “Dam” with exemptions
- Dam Owner Obligation and Responsibility
- Recording Dams in the Land Records
- Hazard Potential Definitions updated to match NID
- Periodic Inspection Schedule
- Periodic Inspections by State or Owner
- Comprehensive Inspections
- Compliance with Inspection Results



Miles Pond Dam, Concord

Rulemaking Continued

Phase II Rules – Planned Major changes/updates:

- Dam Order Application Requirements
- Design, Planning, and Construction Requirements
- Operation and Maintenance Requirements
- Inspection Requirements
- EAPs required for all SIGNIFICANT and HIGH hazard dams, updated every 2 years. Regional training and testing.
- Detailed technical standards:
 - H&H, Geotechnical, Structural, Mechanical, Instrumentation



Lake Groton Dam, Groton

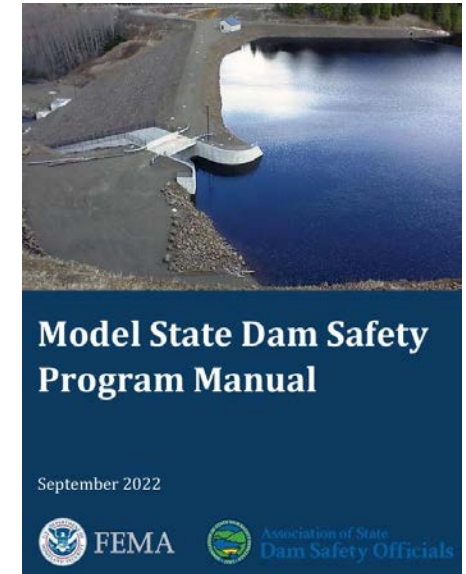
Importance of Rulemaking/Rules:

- Significant change to way dams are regulated.
- Proactive rather than reactive. Owners will be held more accountable.
- Priority to finish rules, complete transfer to full and modern dam safety regulation in Vermont, address Audit recommendation.
- Without new rules, Program limited in making dam safety strides on the ground.

S.213 Dams

1. Dam Safety Resources:

- At the recommendation of the Audit, performed Staffing Assessment based on App. E Staffing Level Requirements in the Dam Safety Guidance Document, “Model Dam Safety Program Manual,” by FEMA and ASDSO, dated September 2022.
- Existing program is under resourced and not able to meet existing regulatory and ownership requirements.
- Results indicate the following staffing levels are necessary to adequately cover existing regulatory and ownership responsibilities:



- Dam Ownership = 4 FTE
- Dam Regulation = 7 FTE
- Sub-Total = 11 FTE
- Est. for S.213 = 2 FTE
- Total = 13 FTE needed
- Current = 5 FTE (3 Limited Service)
- Additional Needed = 8 FTE

Part of Staffing Assessment

Vermont Dam Safety Program - Regulatory - Administration of Chapter 43 Dams and associated rules				SUMMARY TOTAL	
DRAFT Staffing Level Assessment				Total	6.98 FTE
Reference: Model Dam Safety Program, FEMA/ASDSO, Dated September 2022					7 Staff Required
By:	Ben Green	Date:	Jan-24		
Notes:					
PD = People days, or one 8 hour day for 1 staff member.					
52 weeks per year, assume typical employee has 2 weeks off and 10 holidays, so 48 weeks or 240 PD/year, is equal to one Full-Time Equivalent (FTE)					
Staffing assessment does not include special projects such as significant rule writing, database overhaul, inspection application development, etc.					
The below assessment is an estimate based on reasonable assumptions, program experience, and recommended values from the reference.					
Assumes level of work necessary to meet requirements of Chapter 43 Dams, as well as existing Administrative Rules and upcoming Standards Rules.					
Task No.	Task Description				
1 Inspections and Inspection Reviews (\$1109, §17-110)					
Periodic inspection planning, field work, report completion/submital					
	HIGH hazard dams	44	inspected every	2	years
	SIGN hazard dams	133	inspected every	5	years
	LOW hazard dams	292	inspected every	10	years
	MINIMAL hazard	563	inspected every	NA	years
	Est. Total	84	Inspections/year		
					Subtotal 251 PD
Dam Safety Consultant Performed inspections, planning, communication, review					
	3	Inspection Reports per year (estimated) at 2 PD per dam			
					Subtotal 16 PD
Follow-up on Deficiencies					
	84	Inspections DSP per year (approx)	40 %	have deficiencies that require follow-up at 3 PD each to address	101 PD
	5	Inspections Dam Consultant/year	40 %	have deficiencies that require follow-up at 5 PD each to address	6 PD
					Subtotal 107 PD
Unsafe Dams					
	1	Unsafe dam per year, assume 15 PD/Unsafe dam			15 PD
					Subtotal 15 PD
Construction Inspections (permitted repair)					
	1.0	new dam per year	10 PD	performing site inspection of a new dam	10 PD
	3	dam rehabilitations per year	3 PD	minimum performing site inspection of rehabilitation	9 PD
	2	dam removals per year	3 PD	performing site inspection for removal	6 PD
					Subtotal 25 PD
					Total 408 PD
					1.70 FTE
Assumptions:					

S.213 Dams

2. **Dam Safety Revolving Loan Fund**: Provide much needed, flexible dam safety funding for the following purposes:

- Emergency – temporary risk reduction measures (water level lowering, stabilization, etc.). Mechanism to address unsafe and developing safety conditions on a temporary basis to “buy time” until permanent solutions can be designed, permitted, and constructed.
- Non-Emergency – Permanent safety and risk reduction projects (repair, rehabilitation, removal). Assist owners in need to bring their dam into safety compliance.

Critical for following reasons:

- Dam Safety Projects are expensive, even at smaller dams can approach and exceed \$500,000.
- Necessary to maximize positive dam safety impact in VT communities, mitigate risk of existing dams, and bring dams into compliance with new Dam Safety rules.
- Avoid impasse between dam owner and regulator when the owner is not able to afford regulatorily required safety improvements.

S.213 Dams

3. Study Committee on Dam Emergency Operations Planning:

- Study how to improve regional emergency action and operations planning for dam.
- DSP willing to participate, value to public safety in this study.
- Vermont lacks centralized emergency operations beyond municipalities as there is no county government to assist in emergency planning and response.
- Some small and rural communities lack resources to plan for and act in these types of emergencies.
- Related to the following initiatives:
 - Ongoing rulemaking regarding EAPs and improvements to emergency planning, actions, and operations.
 - Ongoing improvements to dam safety emergency communications
 - Future plans to improve dam owner and emergency manager education.

S.213 Dams

4. Transfer of Dam Safety Regulatory Jurisdiction from PUC to DSP:

- On or before July 1, 2028, the DSP to assume regulatory jurisdiction. The PUC shall maintain jurisdiction until the transfer.
- By July 31, 2025, the DSP and PUC shall file petitions for a Declaratory Order from FERC with target to have FERC take regulation of sub-set of dams, as appropriate.

DSP View:

- Transition is not a program priority, but we agree it is logical and aligns with Federal Dam Safety Guidance for dam safety regulation to be in one agency.
- A distraction from current initiatives, including dam safety rule development and managing safety projects at ANR-owned dams.
- Complexity of dams is greater and unique to current dams that we regulate, will require a higher level of effort on a per dam basis.
- Many of the dams likely meet requirements to be FERC regulated. Filing Declaratory Orders necessary step to make sure the right regulator is in place.
- Allowing time for transition prevents unnecessary work by DSP, causes less confusion for dam owners, and allows time for Dam Safety rules to be finalized, put in place, and tested prior to application to these dams.

**Thank you!
Questions?**



View from Wrightsville Dam

Ben Green, PE
Dam Safety Engineer
VTDEC Dam Safety Program
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