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Vermont Department of Environmental Conservation *Agency of Natural Resources*
Dam Safety Program
Water Investment Division
1 National Life Drive, Davis 3
Montpelier, VT 05620-3510

Meeting Notes

SUBJECT: Act 161 – Regulation of Dams - Phase II Technical Standards Interest Group Meeting 1
DAY/TIME: February 15, 2023, 10:00 AM to 12:00 PM
LOCATION: ANR Annex, 190 Junction Road, Berlin, Vermont
Call-in Phone Number and Teams Meeting also provided.
PREPARED BY: Ben Green, VTDEC Dam Safety Program (DSP)

Attendee List*:

In-Person	
Ron Rhodes, CT River Conservancy	Will Eldridge, VT Fish & Wildlife
Becky Budd, CT River Conservancy	Phil Forzley, Fuss & O'Neil
Andy Vallance, Lake Mansfield Trout Club	Charles Johnston, Dubois & King
Cameron Twombly, Stone Environmental	Jessica Louisos, SLR
Mike Wichrowski, VT Fish & Wildlife	Tessa Schneider, DEC DSP
Robert Wildey, VHB	Russ McGinnis, DEC DSP
Jeff Tucker, Dubois & King	Andrew Sampsell, DEC DSP
Bill Dehler, Barr Engineering	Steve Hanna, DEC DSP
Ben Matthews, TNC	Ben Green, DEC DSP
Karina Dailey, VNRC	

Online/Phone	
B.T. Fitzgerald, VNRC Retired	John Austin, VT Fish & Wildlife
Craig Digiammarino, VT Agency of Transportation	Harry Schoppmann, VEM
Julie Butler, US Fish & Wildlife	Micah Howe, Public Utility Commission
Mike Sullivan, Hardwick Electric	Robert Faley, VT Agency of Transportation
Luis Bango, Private Dam Owner	Jeff Crocker, DEC Flow Protection
Jay Kullman, Private Dam Owner	Mary Perchlik, VNRC
Harry Shepard, Town of Stowe	Matt Musgrave, Associated General Contractors
Abe Collins, Agricultural/Farming interests	Rob Evans, DEC Rivers Program
Hannah Smith, DEC Legal	

*Attendee lists are attached.

Attachments:

- Attachment 1: PowerPoint Presentation Slides
- Attachment 2: In-Person Sign-In sheet
- Attachment 3: Online/Phone roster

Notes:

1. Following introductions, a brief overview of the Rulemaking process was presented and discussed. Topics to be covered in the rule were provided. The Technical Standard rules currently under development will be appended to the Administrative Rules adopted in 2020. This means that the existing rule will be re-opened to add in the Technical Standards, allowing for updating or editing of the Administrative Rules, as needed. The objective of the Technical Standards is to provide a clear standard for dams in Vermont to be used to improve the safety of Vermont's dam inventory. Non-compliance with the rules will result in the potential for enforcement actions.

2. The draft rulemaking schedule was presented. The goal is to have the Technical Standards adopted by July 2024. To meet that goal, three Interest Meetings are planned for winter through summer 2023 to get to a working draft. It is planned to have an external/independent, formal peer review of the rules late summer/fall, with a public meeting with the entire regulated base and dam safety community invited to present and take questions and comments on the working draft. The plan is then to file the rules with ICAR and LCAR in late 2023/early 2024 with the goal of adoption by mid-2024.

3. The objectives of the Interest Group were then briefly discussed, followed by an overview and update of the DSP. This was followed by a brief overview of the Administrative Rules.

4. The remainder of the meeting was spent reviewing proposed rule concepts around inspections, hydrologic and hydraulic (H&H) standards, and Emergency Action Plan (EAP) requirements:

    a. The rules are being developed using Federal guidance documents from agencies including FEMA, USACE, NRCS, USBR, FERC, etc. The FEMA Model Dam Safety Program, which was recently updated, is being used, as well as dam safety rules from surrounding northeastern States (NH, MA, NY) as well as States that have most recently updated (CO, OR).

    b. Inspections: Periodic and Comprehensive
        i. Periodic Inspections:
            - Visual inspections performed according to a schedule (2-years HIGH hazard, 5-years SIGNIFICANT hazard, 10-years LOW hazard, Not required of MINIMAL hazard dams) by the Department or engineer hired by the owner. The inspections include file review and review of relevant plans, visual inspection of observable areas, comparison of the dam to standards, and determination of the condition rating. This effort is a continuation of the inspection program historically carried out by the DSP.
            - The DSP is working on a template usable through ArcGIS Survey 123 or WORD/EXCEL for use by dam inspectors including engineering consultants to standardize inspections as much as possible.
            - It was commented the State performing the inspections is appreciated and an opportunity to get face time with the regulators. It is the DSP's intent to perform as many periodic inspections as manpower and time allows.

        ii. Comprehensive Inspections (CI):
            - Detailed assessments/investigations performed according to a schedule (10-years for HIGH hazard, 15 years for SIGNIFICANT hazard) by an engineer hired by the owner.
            - CIs will include work to fill data gaps on dams, including topographic/bathometric survey, detailed file review, updated visual inspection, special inspections, H&H analyses, geologic/geotechnical and structural explorations and analyses, review of applicable plans, risk assessment, comparison with technical standards, guidelines, and best practices, ranking of deficiencies for remedial action, and documentation of the work in a report. The intent of CIs is to not only identify the needed inspections, studies, and analyses, but also to perform them.
            - The level of effort will be contingent on quality and quantity of available/existing information on the dam. The first comprehensive inspection for a dam with limited records will require a full scope. Dams with good records and documentation may require a lesser scope.
            - It was asked if there would be funding available or cost relief for owners to perform CIs. The costs of these inspections will vary but will likely be in the tens of thousands of dollars. At this point, there is no direct funding available,

dam owners are responsible for the significant financial undertaking of dam ownership.

- It is the intent that these inspections will be completed in accordance with the schedule in the rule. The DSP does acknowledge that these inspections will take some time to complete given their wide scope. A notice could be sent to dam owners when they are 2 years away from a required CI to give them time to prepare a schedule for the work. There are some analyses that are not time sensitive, such as test borings, that could also be performed in the time leading up to this requirement to help spread costs over time.
- In terms of rollout of this requirement, it is planned to stage it based on condition rating and hazard classification of the dam. HIGH hazard, POOR condition dams will be prioritized first while SATISFACTORY condition, SIGNIFICANT hazard dams will not be required for some time.
- At this point, we are considering incorporating risk assessment into the CIs, which may include Potential Failure Mode Analyses up to perhaps qualitative or semi-quantitative risk assessment.

iii. General Inspection Discussion:

- Engineer qualifications for inspections and other dam safety requirements were discussed. DSP does not have authority to qualify engineers but does acknowledge challenges with this issue. The DSP can provide guidelines on experience for different tasks.
- Dam breach clarification and dam removal process streamlining were briefly discussed. Dam removal standards are planned to be discussed in a future meeting.

c. H&H Standards:

i. Prescriptive Inflow Design Floods (IDF): The term Spillway Design Flood used and defined in the Phase I rule will be replaced with IDF as it is a more current and appropriate term. FEMA Guidance Document P-94 is being used as the main resource for developing H&H standards.

- Prescriptive IDFs will be based on hazard potential classification as laid out in P-94.

ii. Incremental Damage Assessments (IDA)

- IDA's following the appropriate standards will be allowed to right-size the IDF for a dam. The process allows for downsizing the IDF based on incremental damage downstream of a flood with dam failure versus a flood without dam failure.
- The risk with IDAs is that it is possible that the study may determine the required IDF is the Prescriptive value, or alternately, an IDA may permit the use of a lower IDF now, but hazard creep downstream of the dam in the future to no fault of the dam owner may invalidate the IDA, requiring future analysis and perhaps changes to the dam.

iii. Risk Based IDF Selection

- Method is based on accepted Risk Informed Decision Making techniques to select an IDF other than the prescriptive. It allows dam owners to assess probability of an adverse loading condition and resulting consequence compared to societal tolerability for risk to select an IDF.
- The method will likely not apply to SIGNIFICANT hazard dams as it focuses on life loss and may also not be feasible for small dams, as it was designed for large, federal flood control dams.

iv. Site Specific PMP Studies:

- To determine the Probable Maximum Precipitation (PMP)/Probable Maximum Flood (PMF), the prescriptive IDF for a HIGH hazard dam, guidance documents from the 1970s/80s developed by NOAA are still used.
- 22 States in the country have done a modern State Specific PMP Study. Largely these results yield more accurate flows that the old NOAA methods as the new studies use current data and improved analysis techniques.
- While expensive for a small dam, this would be permitted, although we would require an independent peer review.
- The DSP is not actively pursuing a State or Regional PMP study. It is something of interest, however, if funding and support were there.
- There is a Federal initiative to update the old NOAA PMP guidance. Time frame is unclear, but hopefully in the next 5-to-10-year range.

v. General H&H discussions:
- Back to back storm events will likely be considered in H&H design.
- Freeboard standards historically used in the Vermont are 3 feet during normal pool and 1.5 feet during maximum pool during the IDF. At this time, we are not planning on changing this requirement, but will be investigating it further. With analysis and justification, we may allow less freeboard. Conversely, there are cases where perhaps those values are inadequate and additional freeboard and analysis may be required.
- The rule is not able to prevent or slow hazard creep. Hazard creep is outside the control of the dam owner and regulators, as it is related to downstream property ownership and development. Is comes down to a land owner rights and local zoning/permitting issue.

d. Emergency Action Plan (EAP) requirements
   i. Currently, the DSP uses the SCS/NRCS template, which is a nation-wide template. We are planning to use this to develop a template that is more State friendly. The website will eventually be updated with EAP resources and templates, including inundation maps for dams.
   ii. EAPs will be required for all HIGH and SIGNFICANT hazard dams and updating will be required every 2 years.
   iii. Functional and tabletop exercises are useful. Difficult to regulate these activities as we only regulate the dam owner, not other participants like incident commanders and emergency managers. Contemplating regional EAP/tabletop training in the future.
   iv. The EAPs will be designed to eliminate single point of failure communication issues.

5. Potential Future Meeting Topics:
   a. Sub-500 and +500 dams
   b. Geotechnical and Structural Standards
   c. Operation & Maintenance and Instrumentation Standards
   d. Dam Removal Standards

At approximately 12:00 PM, the meeting was adjourned.

<u>To Do:</u>
Dam Safety Program:
- Continue to outline and draft Technical Standard Rule.
- Schedule and plan next meeting.

Others:
- Review meeting notes and presentation and provide questions or comments.
- Stay tuned for details on the next meeting.

Attachment 1

ACT 161

CHAPTER 43 DAMS - VERMONT DAM SAFETY RULE

Phase II – Standards Rules

Interest Group Meeting 1

VTDEC Dam Safety Program:
Ben Green
Steven Hanna
Andrew Sampsell
Russ McGinnis
Tessa Schneider

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Presentation Overview

- Introductions
- Review Rulemaking phases and requirements, and schedule
- Interest Group Objectives
- Update on Dam Safety Program
- Quick Phase I – Administrative Rules Review
- Review some rule concepts, Inspections, H&H, EAP requirements

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Act 161
§1110 Rulemaking

<u>Phase I</u>: Rules adopted August 1, 2020

Administrative Rules

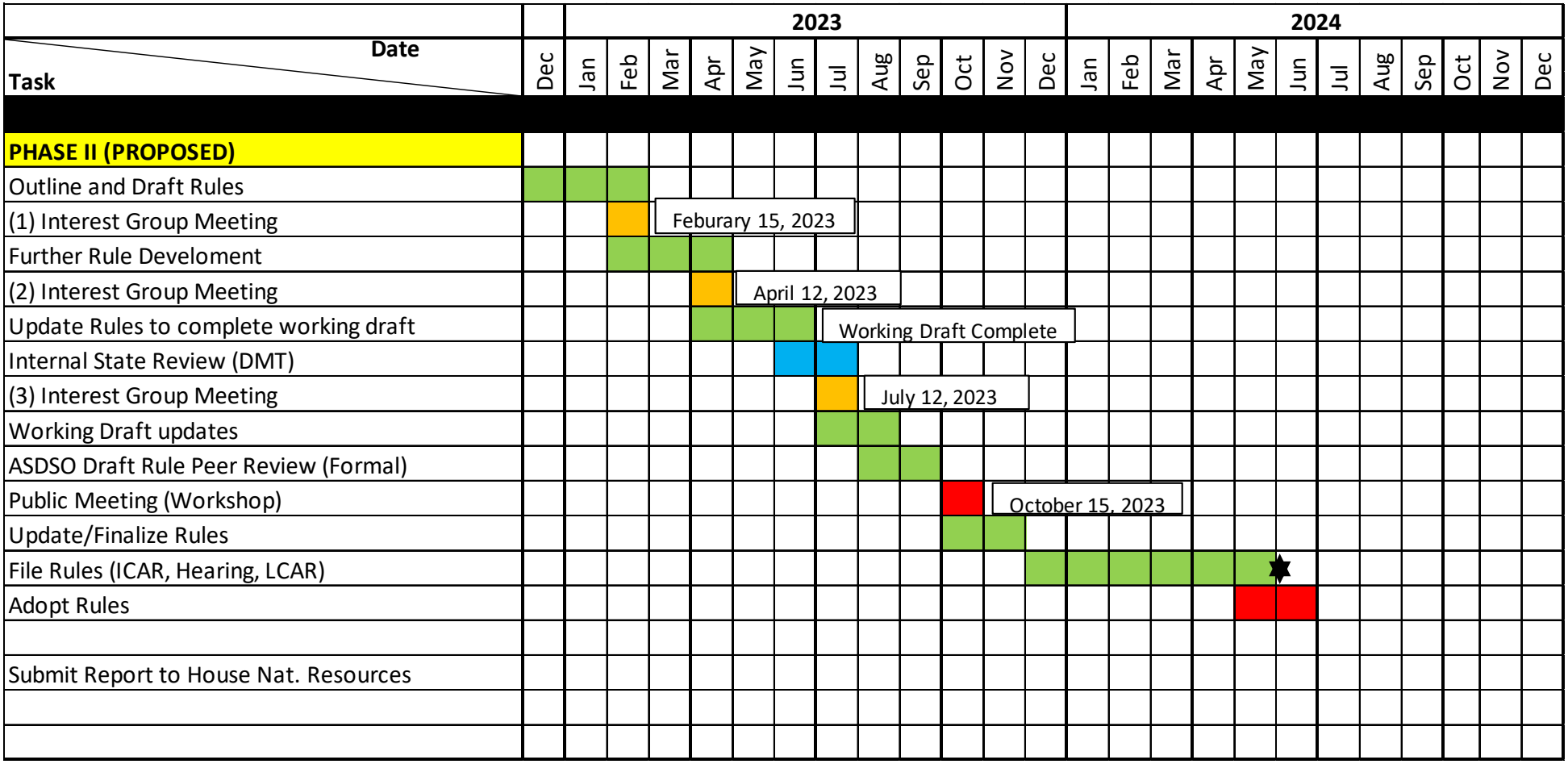
<u>Phase II</u>: Rules to be adopted by July 1, 2024

Technical Standards, including:

- Siting, design, construction, alteration
- Operation & Maintenance
- Inspection, monitoring, record keeping, reporting
- Repair, breach or removal
- Application for authorization under 1082
- Emergency Action Plans requirements and guidance

- Re-opening the existing Rule, able to edit/update Administrative Rules

Proposed (Draft) Rulemaking Schedule



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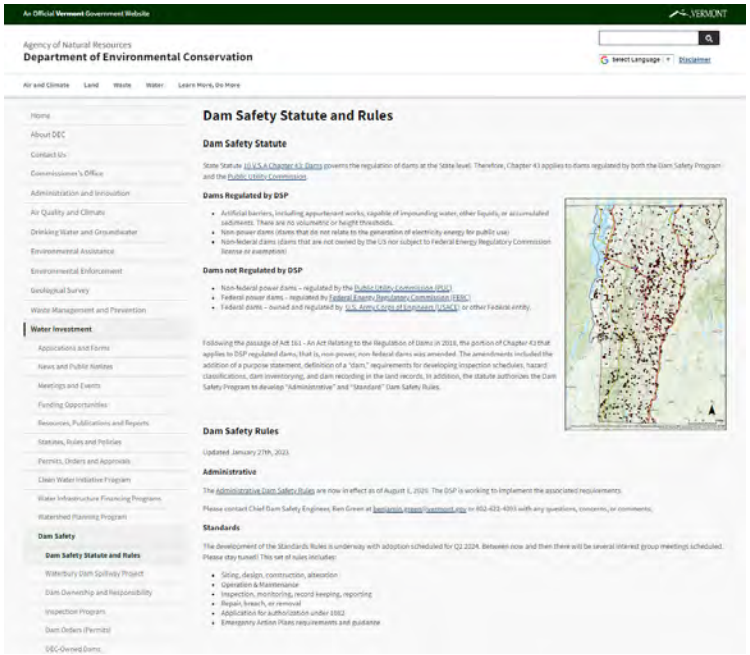
Interest Group Objectives

- Includes representatives from various groups impacted by Dam Safety Rules:
  - Dam Owners
  - Consulting Engineers
  - Environmental Groups/Advocates
  - State Officials
  - Other
- Sounding board during rule development
- Review concepts and objects of working draft of rules
- Provide questions/comments to help guide process



- https://dec.vermont.gov/water-investment/dam-safety/dam-safety-statute-and-rules

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Brief Dam Safety Program Overview

- Located in the Water Investment Division (WID) within the VTDEC

- RESPONSIBILITIES:
  - dam regulation
  - dam ownership
  - lands management

- 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.

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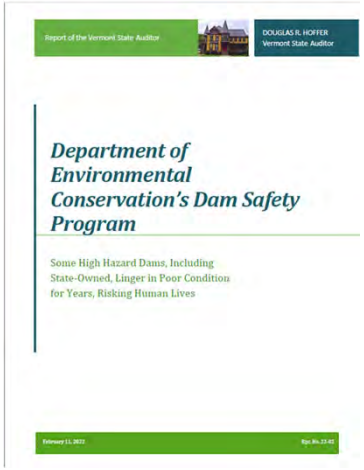
Dam Safety Program Updates

- STAFFING: Increased from 2 to 5, welcome Andrew and Russ (Jan 2022) and Tessa (Feb 2023)

- AUDIT: Adopt rules, improve dam inventory, improve inspection procedure, assess staffing levels



- PERIODIC INSPECTION PROGRAM: ~130 completed (some reports pending)

- DAMS INVENTORY:

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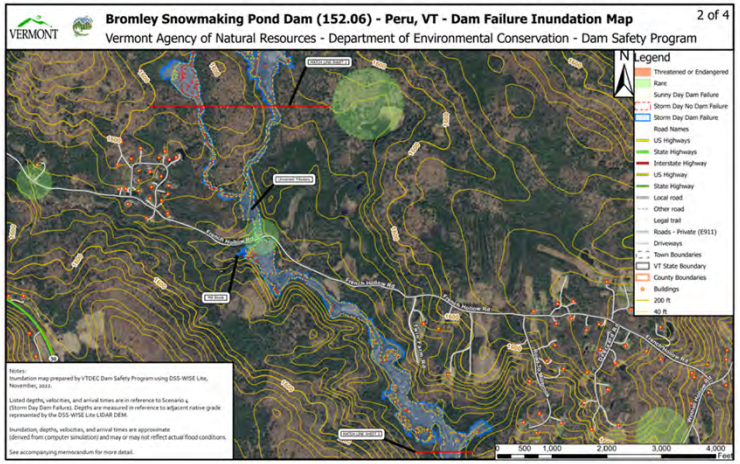
Dam Safety Program Updates

- SIMPLIFIED HAZARD CLASSIFICATION



- HHPD RISK ASSESSMENT

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

- ARPA GF FUNDING
  (test borings at Noyes Pond Dam in Groton)

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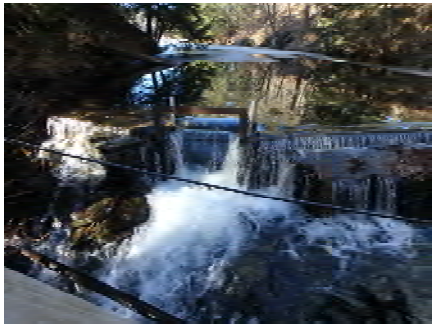
Dam Safety Program Updates

- POTENTIAL STATE OWNERSHIP OF ADDITIONAL DAMS



- WATERBURY DAM SPILLWAY PROJECT

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Private Dam Failure

- No permit, private dam (sub 500,000 cubic feet)
- Completed June 2022, failed December 23rd
- Apparent internal erosion failure, slope instability
- Downstream impacts

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Phase I - Administrative Rules

Quick Review

High points:

- Definitions
- Dam Owner Obligation and Responsibility
- Dam Recording in the Lands Records
- Hazard Potential Classification
- Inspection Schedule
- Compliance with Inspection Results

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Phase II – Technical Standards Rules

<u>Technical Standards</u>:

- Siting, design, construction, alteration, repair, breach, removal
- Operation and Maintenance
- Inspection, monitoring, record keeping, reporting
- Application for authorization under 1082
- Emergency Action Plans

*****References being used include:**

- **Act 161**
- **Rules from other States, Colorado, NH, MA, NY, Oregon, etc.**
- **FEMA Model Dam Safety Program**
- **Federal Guidance Documents (FEMA, USACE, NRCS, USBR, FERC, etc.)**

Act 161
Inspections

Periodic/Non-Periodic Inspection Requirements:

Definition: Visual inspections performed in compliance with Department requirements and standards by the Department or an engineer hired by the owner, performed at a frequency described in the table below.

Technical Requirements:

- File Review, including Dam Inventory data
- Visual Inspection of observable areas of dam
- Review of documents and standards
- Assign Condition Rating

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Act 161
Inspections

Periodic/Non-Periodic Inspection Requirements, cont':

- Report shall include:
  - ➢ Condition rating/ findings/recommendations
  - ➢ Overview of Dam Information
  - ➢ Review of Inspection History
  - ➢ Dam Description/Configuration/Background
  - ➢ EAP review (if applicable)
  - ➢ O&M review
  - ➢ Performance records review (if available)
  - ➢ Instrumentation review (if applicable)
  - ➢ Hazard creep review
  - ➢ Hydrologic and Hydraulic adequacy review
  - ➢ Visual observations of dam components
    - ❑ upstream/downstream/abutment areas
    - ❑ upstream/crest/downstream slopes/faces
    - ❑ principal/auxiliary spillways
    - ❑ outlets
    - ❑ appurtenant structures (as applicable)

VERMONT | Dam Safety Inspection Report

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 Lienhart	

Dam Safety Recommendations

The following recommendations and remedial measures describe the recommended approach to address current deficiencies at 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:
☑ Satisfactory ☐ Fair ☐ Poor ☐ Unsatisfactory ☐ Not Rated
**See General Information section at the end of report for further details*

Maintenance level recommendations

Spillways	• Maintain the principal and/or auxiliary spillway free of debris to ensure free-flow conditions.
Low-level outlets	• 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 **Purpose:** Recreation	**Status:** In Service **Height:** 16 ft **Length:** 225 ft	**Construction date:** 1850 **Foundation conditions:** Glacial till

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Act 161
Inspections

Comprehensive Inspection Requirements

Definition: A detailed inspection performed by an engineer hired by the owner that includes all studies, investigations, and analyses required by the Department to evaluate project risk and safety.

Technical Requirements:

- Depending on hazard class and dam complexity, require team of engineers (H&H, geotech, structural)
- Fill data gaps
- Undertaking depends on existence and quality of existing information
- Review current condition and long-term performance history
- Compare elements of dam to current standards

Act 161
Inspections

Comprehensive Inspection Requirements, cont'

- Comprehensive Inspection may include (as required by Dept. depending on existing information.):
  - Topographic & Bathometric survey (develop existing conditions plan for use in analyses)
  - Detailed file review (as-builts, inspections, rehabs, repairs, performance, instruments, studies, record loading conditions, etc.)
  - Updated visual inspection in compliance with Periodic/Non-Periodic
  - Special Inspections
    - Underwater inspections of upstream slope/face, intake, trashrack, riser, gate, etc.
    - Interior inspections of pipes, conduits, drains (confined space, TV inspections, etc.)
    - Drone or rope access for difficult to access areas (if applicable)
  - H&H Analyses
    - Hydraulic adequacy
    - Dam failure, hazard creep, hazard potential review
    - Low-level outlet adequacy
  - Geologic/Geotechnical Explorations and analyses
    - Test borings
    - Field/laboratory testing
    - Stability analyses, seepage analyses, filter compatibility, etc.

Act 161
Inspections

Comprehensive Inspection Requirements, cont'

- Comprehensive Inspection may include (as required by Dept. depending on existing information.):
  - Structural explorations and analyses
    - Test cores
    - Field/laboratory testing
    - Stability analyses, sliding, overturning, etc.
  - Review of applicable plans
    - EAP
    - O&M
    - Instrumentation
  - Risk Assessment
    - Potential Failure Mode Analysis
    - Screening Level/Semi-quantitative risk assessment
  - Comparison with Technical Standards in rule, guidelines, best practices
  - Ranking of deficiencies for remedial action
  - Documented in a Report

Act 161

Hydrologic and Hydraulic Requirements

Selecting and Accommodating Inflow Design Floods for Dams

FEMA P-94 /August 2013

FEMA

Federal Guidelines for Dam Safety Risk Management

FEMA P-1025/January 2015

FEMA

<u>Options for Selecting the IDF</u>

1.) Prescriptive Approach

2.) Incremental Consequence Analysis

3.) Risk Informed Hydrologic Hazard Analysis

4.) Site Specific PMP Study

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Hydrologic and Hydraulic Requirements

Prescriptive Inflow Design Flood (IDF) – *FEMA P-94*

LOW/MINIMAL:
100-yr

SIGNIFICANT:
1000-yr

HIGH:
Probable Maximum Flood (Full PMF)

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Table 2 IDF Requirements for Dams Using a Prescriptive Approach

Hazard Potential Classification	Definition of Hazard Potential Classification	Inflow Design Flood
High	Probable loss of life due to dam failure or misoperation (economic loss, environmental damage, or disruption of lifeline facilities may also be probable, but are not necessary for this classification)	PMF[1]
Significant	No probable loss of human life but can cause economic loss, environmental damage, or disruption of lifeline facilities due to dam failure or misoperation	0.1% Annual Chance Exceedance Flood (1,000-year Flood)[2]
Low	No probable loss of human life and low economic and/or environmental losses due to dam failure or misoperation	1% Annual Chance Exceedance Flood (100-year Flood) or a smaller flood justified by rationale

(1) Incremental consequence analysis or risk-informed decision making may be used to evaluate the potential for selecting an IDF lower than the prescribed standard. An IDF less than the 0.2% annual chance exceedance flood (500-year flood) is not recommended.

(2) Incremental consequence analysis or risk-informed decision making studies may be used to evaluate the potential for selecting an IDF lower than the prescribed standard. An IDF less than the 1% annual chance exceedance flood (100-year flood) is not recommended.

Act 161

Hydrologic and Hydraulic Requirements

<u>Incremental Consequence Analysis</u> – *FEMA P-94*

LOW/MINIMAL:
Not applicable.

SIGNIFICANT:
Starting Point - 1000-yr
Lower Bound – 100-yr

HIGH:
Starting Point – Full PMF
Lower Bound – 500-yr

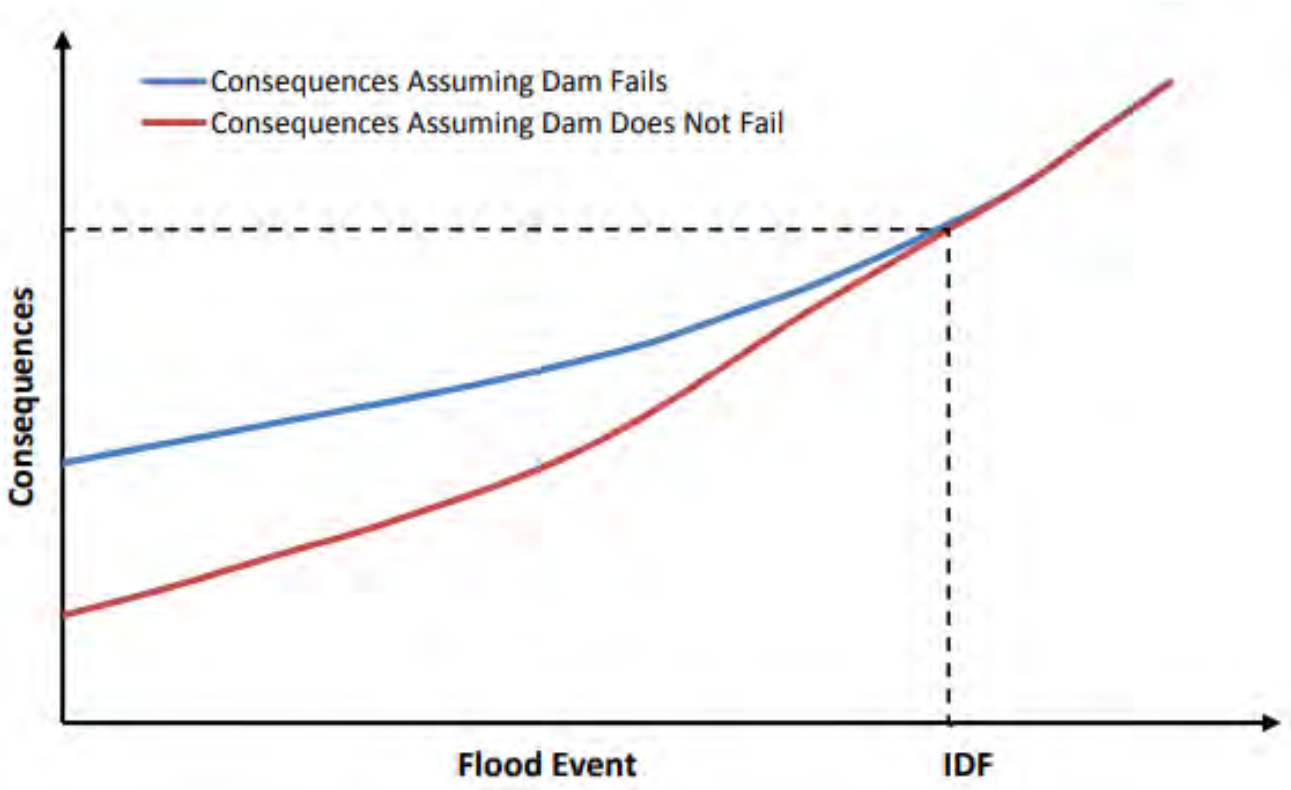

Figure 1 Conceptual Comparison of Incremental Consequences

Act 161

Hydrologic and Hydraulic Requirements

Risk Informed Hazard Analysis – *FEMA P-94*

LOW/MINIMAL:
Not applicable.

SIGNIFICANT:
Would be difficult to apply.

HIGH:
Starting Point – Full PMF
Lower Bound – 500-yr

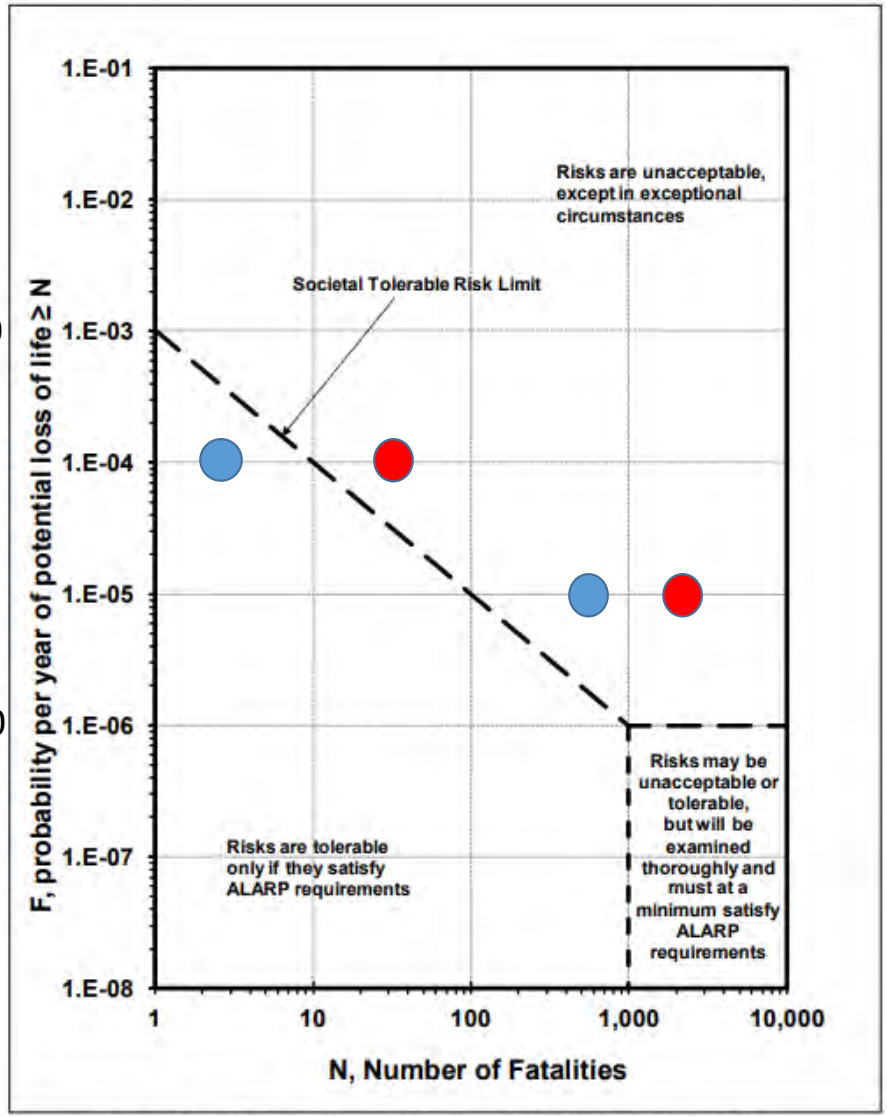

Figure 4.—U.S. Army Corps of Engineers [7] F-N (societal risk) plot.

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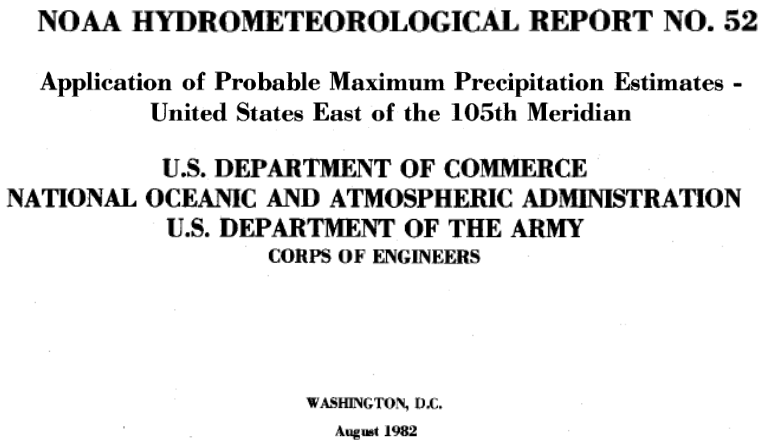
Hydrologic and Hydraulic Requirements

Site Specific PMP Study – ***FEMA P-94***



NOAA HYDROMETEOROLOGICAL REPORT NO. 52

Application of Probable Maximum Precipitation Estimates - United States East of the 105th Meridian

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

WASHINGTON, D.C.
August 1982

If proposing to do this analysis, DSP would require a peer review from an independent qualified consultant.

H.R.1437 - Further Continuing Appropriations and Extensions Act, 2023 117th Congress (2021-2022)

The National Academies of Sciences, Engineering, and Medicine will convene an ad hoc committee to consider approaches for estimating probable maximum precipitation (PMP) in a changing climate, with the goal of recommending an updated approach, appropriate for decision-maker needs.

More specifically, the study will:

- Establish a common understanding of PMP, considering the range of public- and private-sector users, current and future uses, and spatial and temporal scales for decision-making based on PMP estimates, from state to regional levels.
- Review and assess: 1) existing and emerging approaches for PMP estimation, including novel numerical weather prediction and high-performance computing techniques, and 2) approaches to incorporate the impacts of climate change on extreme precipitation into PMP estimation.
- Assess data needs and sources, for PMP estimation and evaluation, and best practices for transparency and accessibility of resulting PMP estimate data and information.
- Recommend a preferred approach for PMP estimation that incorporates the impacts of climate change and the characterization of uncertainty.

The Committee will make recommendations for the development of an updated approach that can serve as a national standard for estimating probable maximum precipitation in a changing climate.

Act 161

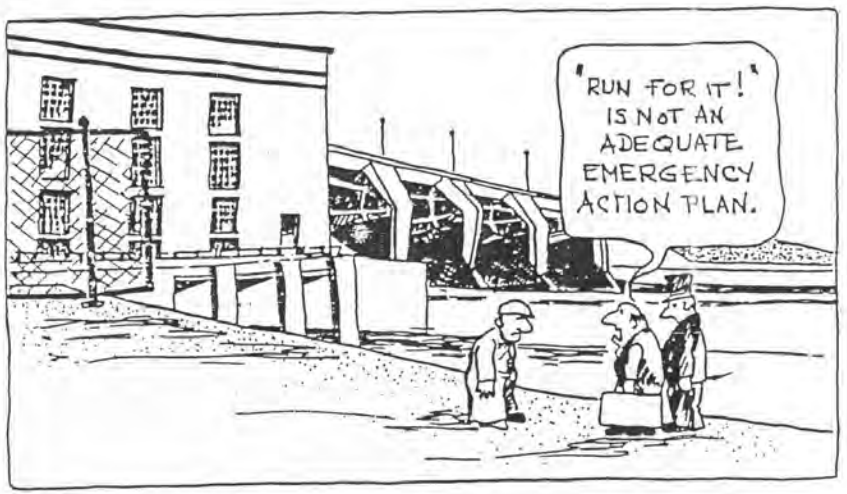
Emergency Action Plan Requirements

Full EAP required for High Hazard Dams

We are currently working on updating the existing EAP for Waterbury dam

What we are learning, particularly regarding notifications, will help us guide others with updates

We may develop an EAP template for HIGH hazard dams



Simplified EAP required for SIGNIFICANT hazard dams

State Developed Template that is available for use

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Emergency Action Plan Requirements

EAPs need to be updated every 2 years

This involves checking contact information, noting any changes in development downstream

Tabletop Exercises – Individual and Regional

- **Tabletop exercise is where you run through the EAP in a room together and see how it would work in real life**
- **We have participated in individual and regional tabletops, they are very valuable**

DSP Regulates Dam Owners, not Emergency Responders or Managers

- **We are in the beginning stages of exploring the regulatory and education means of increasing dam safety**
- **Potentially conduct educational tabletop regional using a host dam or example dam**

Thank you!
Questions?

Next meeting April 2023

Potential Future Meeting topics:

- Sub-500 and +500 dams
- Geotech and Structural Standards
- O&M and Instrumentation Standards
- Dam Removal Standards

Wrightsville Reservoir

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Attachment 2

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Vermont Department of Environmental Conservation

Agency of Natural Resources

Dam Safety Program
Water Investment Division
1 National Life Drive, Davis 3
Montpelier, VT 05620-3510

Sign-in Sheet

SUBJECT: Act 161 – Technical Standards, Interest Group Meeting 1
DAY/TIME: February 15, 2023, 10 AM
LOCATION: ANR Annex, 190 Junction Road, Berlin, Vermont

Name:	Affiliation:	Email/Phone Number:
Don Rhodes	CRC	rrhodes@ctriver.org
Becky Budd	CRC	rbudd@ctriver.org
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Attachment 3

MICROSOFT TEAMS ATTENDANCE LIST: