

**MEETING MINUTES**  
**NEW HAMPSHIRE WATER SUSTAINABILITY COMMISSION**  
**November 15, 2011**

**Commissioners in attendance:**

David Allen  
Virginia Battles-Raffa  
Robert Beurivage  
Kris Blomback  
Thomas Burack  
John Gilbert, Chair  
Denise Hart  
Martha Lyman, Vice Chair  
Amy Manzelli  
Glenn Normandeau  
Cliff Sinnott  
Chuck Souther

**Commissioners not in attendance:**

Michael Licata  
Alison Watts

**Public in attendance:**

Ted Diers  
Jim Ryan  
Arthur Cunningham  
James Gallagher  
Bill Hounsell  
Sarah Pillsbury  
Paul Susca

*Vice Chair Martha Lyman called the meeting to order at 2:08 pm*

**I. October 18<sup>th</sup> Meeting Minutes**

A motion to accept the October 18<sup>th</sup> meeting minutes was made by Robert Beurivage and seconded by Kris Blomback. The motion passed unanimously.

**II. Updates from working groups**

There were no updates from the Implementation or Information working groups.

**Public Engagement**

Denise Hart reported that a Letter of Interest for a grant request to fund the Carsey Institute's (N.H. Listens) involvement in the public engagement process has gone to the Park Foundation. Martha Lyman met with Dick Ober at N.H. Charitable Foundation and was given the green light to submit a grant proposal to NHCF, which she will do later this week or early next week. Denise asked for the Commission's approval to go ahead with these and similar grant requests with the Chair's and Vice Chair's approval rather than the approval of the full Commission. There were no objections. Amy Manzelli raised the question as to whether there are any state fundraising guidelines that apply to the Commission's efforts. Denise said that although a fiscal sponsor such as a 501(c)(3) organization might be needed in some instances, it would not be needed for an Park Foundation grant. Members of the Public Engagement Working Group will meet with Bruce Mallory at the Carsey Institute on November 22<sup>nd</sup>.

*John Gilbert joined the meeting at 2:14 and took the chair.*

Denise Hart reported that a list of organizations and contacts we might work with on public engagement is nearly ready to share with the full Commission so that more contacts can be added.

The Public Engagement group is working with the N.H. Water Pollution Control Association and N.H. Water Works Association to incorporate the Commission's public engagement efforts into the NHWPCA/NHWWA Legislative Breakfast on February 15, 2012.

Paul Susca provided the following handouts from the Public Engagement group:

- List of events that present opportunities for outreach and/or engagement regarding the Water Sustainability Commission
- Map showing Executive Council districts and major watersheds
- 2-page draft overview of the Commission's work – to be distributed at the LGC Annual Conference on November 16.

The next meeting of the Public Engagement group will be held on December 9<sup>th</sup> at 2:30 at Baldwin and Callen in Concord.

### III. Presentations

Sarah Pillsbury, Administrator, Drinking Water and Groundwater Bureau, N.H. Department of Environmental Services (DES), gave a presentation on water infrastructure funding needs. She distributed two handouts: a table summarizing the water infrastructure funding needs as estimated by the (SB 60) Commission to Study Water Infrastructure Sustainability Funding and a set of three maps (public water systems, water and sewer infrastructure, and active dams) from the *N.H. Water Resources Primer*. She noted that the estimated 10-year need for \$92 million for stormwater infrastructure could be off by an order of magnitude because it only includes the component due to aging and not the need due to inadequately sized structures. It is also reflective of the larger communities that fall under EPA regulation and not the universe of municipalities.

Category	Est. Need (\$ Millions)*
Water Supply	\$857
Wastewater	\$1,300
Stormwater*	\$92*
Dams – State	\$18
Dams- Municipal	\$40
<b>Total</b>	<b>\$2,307</b>

The following points were made during the discussion following Sarah's presentation:

- We do not have data on the value of green infrastructure (natural landscapes such as riparian buffers, wetlands, floodplains) to avoid costs associated with grey infrastructure because DES has not had staff available to look at that (Tom Burack). Work is underway in the Crooked River watershed in Maine to find ways to pay for green infrastructure (Lyman). A great deal of research has been done on the value of vegetated buffers to mitigate nonpoint pollution/stormwater (Sinnott). Research is also available on the avoided treatment costs associated with leaving forested water supply watersheds intact (Pillsbury).
- Current annual subsidized spending to address water infrastructure needs includes about \$8 million/year in drinking water state revolving fund (SRF) loans and \$20 million/year in clean water (wastewater) SRF loans (Pillsbury). There is also subsidized funding available annually from the Rural Development Agency and occasionally from Community Block Grants. Additional amounts are invested by municipalities outside the SRF programs.
- Virginia Battles-Raffa requested information about DES's partnerships with other organizations on water-related outreach. Tom Burack and Sarah Pillsbury indicated that this could be provided, and we can add to the list of outreach events.
- Water infrastructure funding is a national issue, and we should look at programs such as Rhode Island's penny-per-hundred program and other states' efforts to collect revenues needed (Hart).
- To put the issue of aging water infrastructure in perspective, Manchester Water Works has about 500 miles of pipe in the ground, but they only replace 2-3 miles per year, at a cost of about \$1 million per mile; this is all paid by customers through current rates, not through loans (Beaurivage).
- The current political climate does not allow for utilities or the state to build up a reserve against future capital needs (Normandeau). The Stormwater Commission found that following past Clean Water Act grants for wastewater plants, etc., rate structures were not created to maintain the infrastructure. Customers are not paying the true cost of supplying water services (Sinnott). It could be a recommendation to enable towns to have sinking funds for water infrastructure (Battles-Raffa). We should look at what the Infrastructure Commission comes up with in this regard – one idea they are considering is a bank concept to which towns could voluntarily contribute (Burack).
- Commission members are interested in the costs of water services (water supply, wastewater management) and what people pay for these services, as well as what people pay for bottled water and utilities such as phone, internet, and cable (Lyman, Battles-Raffa, Manzelli). It would also be interesting to look at the extent to which the federal government subsidizes each of these services. DES can provide information on what households pay for various utilities and services (Tom Burack).
- John Gilbert requested that the three map handouts be prepared at a watershed scale so that the information can be seen more clearly.

Jim Gallagher, Chief Water Resources Engineer, Water Division, NHDES, presented "Municipal, Private and State-Owned Dams Repair and Funding Issues". The following points were made during the discussion following Jim's presentation (see Appendix A for presentation slides):

- Releases to maintain in-stream flows are controversial due to their impact on lakefront owners.
- The Dam Bureau uses real-time flood forecasting models based on historical operations; these assumptions need to be re-examined in light of climate change, e.g. earlier melting of snow pack, less snow pack, etc.
- DES has recently contracted with UNH to revise the State's Drought Management Plan, this will include climate change predictions.
- What is the likelihood that new reservoirs would be created in the future for water supply? (Sinnott) Jim Gallagher suggested that the environmental impacts would probably be too great; the first step would be to repurpose existing reservoirs.

#### **IV. Discussion of demographics report**

Kenneth M. Johnson (2007). *The Changing Faces of New Hampshire*. Carsey Institute, UNH. [http://www.carseyinstitute.unh.edu/publications/Report\\_NH\\_Demographics.pdf](http://www.carseyinstitute.unh.edu/publications/Report_NH_Demographics.pdf)

John Gilbert noted that Johnson's report seems to be at odds with a report by Peter Francese and Lorraine Stuart Merrill, *Communities & Consequences: The Unbalancing of New Hampshire's Human Ecology, and What We Can Do About It* (2008) (<http://perpublisher.com/per114.html>) with respect to the out-migration of young adults. Martha Lyman noted that since Johnson is updating his analysis, it will be interesting to hear from him at a meeting early next year. John Gilbert has been working on a list of questions to ask Johnson to address.

Cliff Sinnott said it would be interesting to hear from USGS's Marilee Horn (mention by Sarah Pillsbury) with respect to different water demand by households with different ages. Several members agreed that Horn would be interesting to bring in as a speaker.

Robert Beaurivage mentioned that water use per housing unit has been falling in Manchester. Tom Burack and Glenn Normandeau, respectively, noted increased use of closed-loop water systems in industry and car washes in particular.

#### **V. Upcoming meetings**

The Commission hopes to have UNH Professor Cameron Wake speak about climate change at the December 13th meeting. The Information subcommittee will scope what the Commission hopes to learn from his talk.

Amy Manzellis brought up the question of whether the Commission wants to hire someone to write its report. Martha Lyman posed the question of whether an extension should be requested. John Gilbert said that the Governor's staff has indicated that the Governor is open to considering such a request. Manzelli suggested it may be premature to ask for an extension at this point. Martha and John will discuss the need for an extension.

Cliff Sinnott suggested presenting information at the Public Engagement meetings regarding the Commission's findings, including the finding of the other related commissions, sticking to the big issues. Denis Hart asked Commission members to send ideas to her regarding what we should try to address at the PE meetings.

Martha Lyman asked whether we should consider hiring Maureen Hart to continue to work with the Commission, particularly in relation to planning for the public outreach meetings on issues related to sustainability, indicators and measures. John Gilbert indicated that it is probably too soon. Tom Burack suggested using Maureen's time to develop measures of water sustainability.

## **VI. Public comments**

Jim Ryan, Fish & Game Commissioner: coming to the Commission's meetings has been instructive. It would be good to compile the information presented. He wonders how much the Public Engagement meetings will add to the Commission's work.

Arthur Cunningham: He hopes the Commission will address issues in an integrated fashion rather than piecemeal.

Bill Hounsell: The SB 60 Commission as re-established represents the current political leadership. With regard to infrastructure funding recommendations, he thinks the Water Sustainability Commission should be bipartisan, and not be bound by the SB 60 Commission's recommendations

***The next Commission meeting is scheduled for Tuesday, December 13, 2011 from 2:00 to 5:00 pm at the New Hampshire Department of Environmental Services, 29 Hazen Drive, Concord, NH. Meetings are also scheduled for January 17, 2012; February 14, 2012; and March 20, 2012.***

***Meeting adjourned at 5:00 pm.***

**Appendix A** - Presentation Slides “Municipal, Private and State-Owned Dams Repair and Funding Issues” - Jim Gallagher, Chief Water Resources Engineer, Water Division, NHDES.

DRAFT

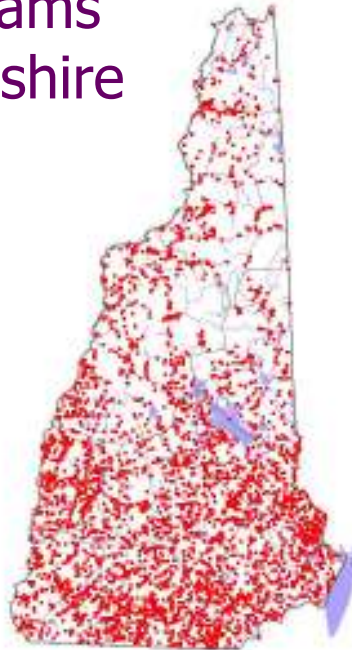
**MUNICIPAL, PRIVATE AND STATE-OWNED DAMS  
REPAIR AND FUNDING ISSUES**

**WATER SUSTAINABILITY COMMISSION  
NOVEMBER 15, 2011**

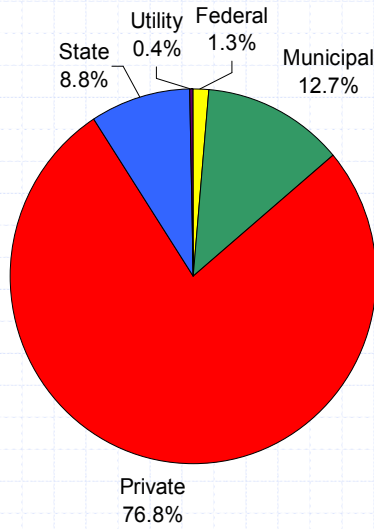


**James W. Gallagher, Jr., P.E**  
**Chief Engineer**  
**Dam Bureau**  
**271-1961**  
**James.Gallagher@des.nh.gov**

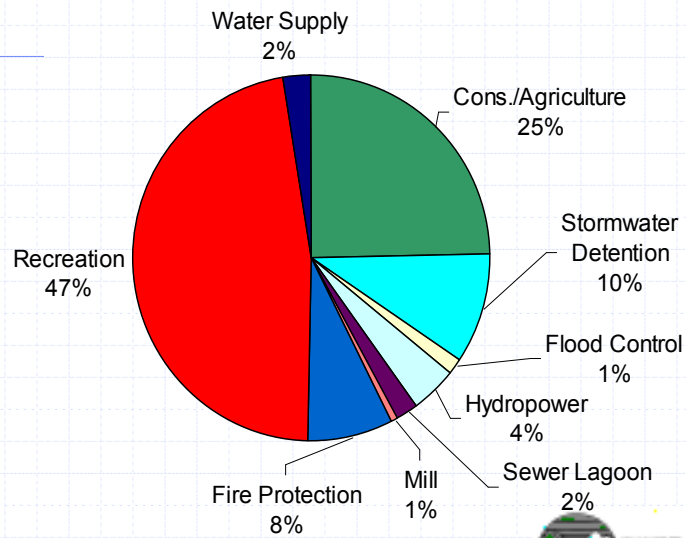
**Location of Dams  
in New Hampshire**



## Dam Ownership in New Hampshire

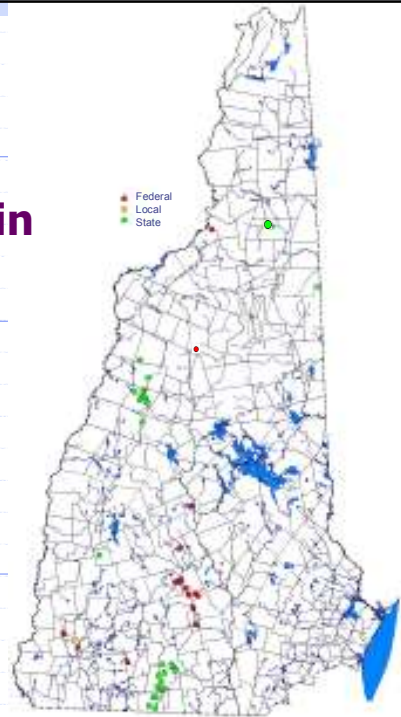


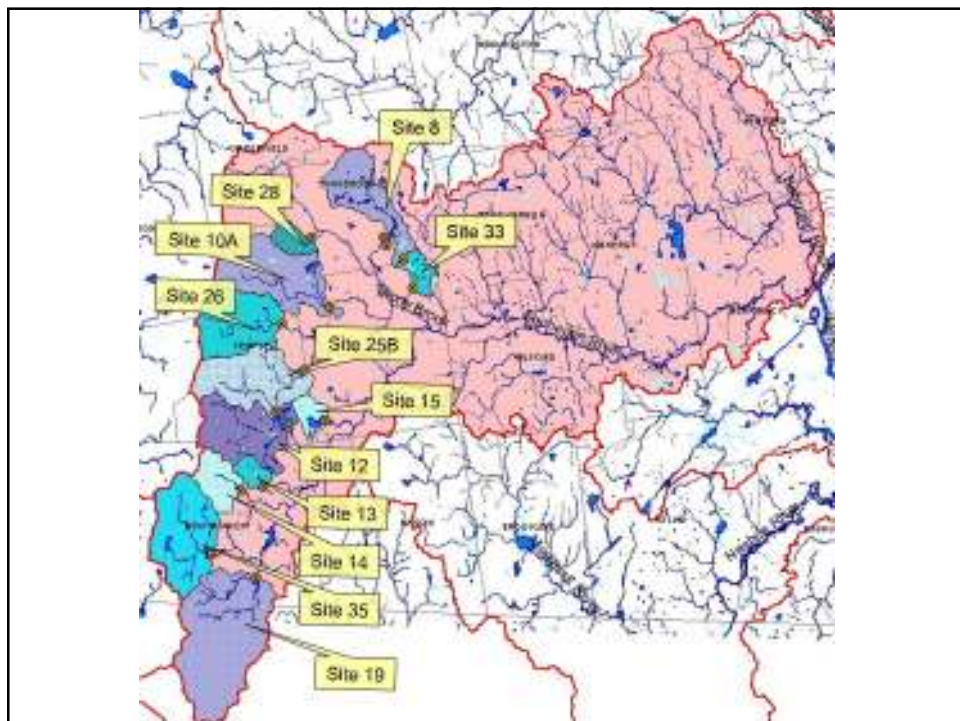
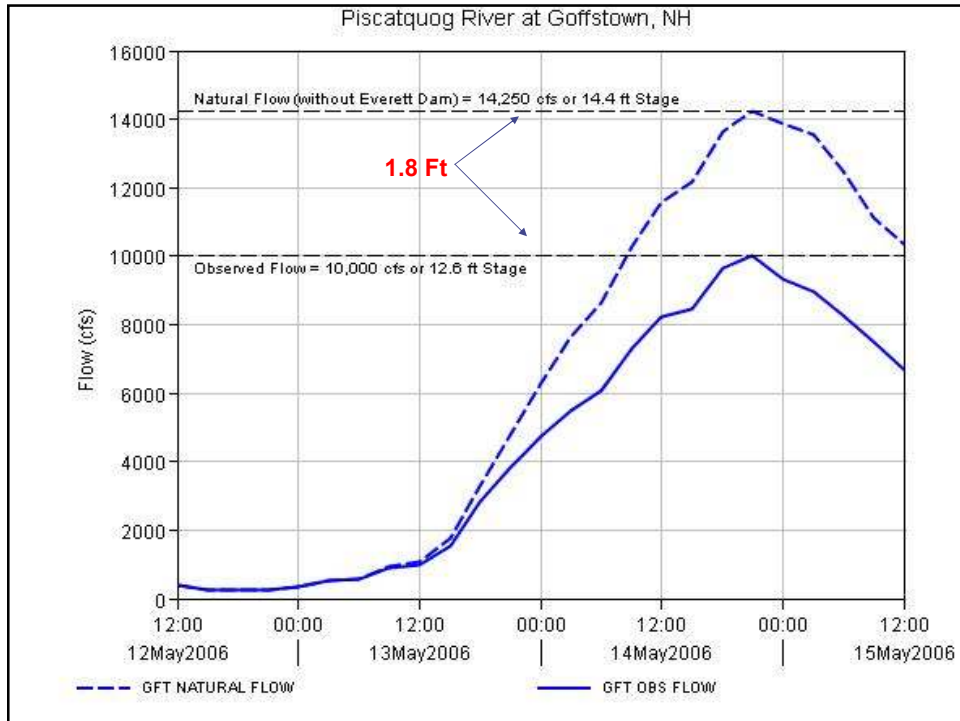
## Functions of Dams in New Hampshire





# Flood Control Dams in New Hampshire









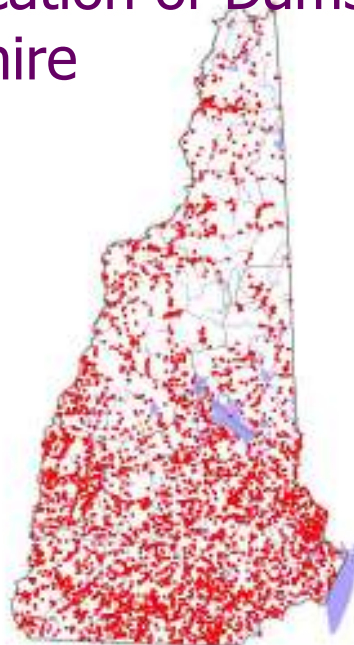
CRITICAL INFRASTRUCTURE IN NEW HAMPSHIRE'S DAM SECTOR										
TIER I DAMS										
DAM NO.	DAM NAME	OWNER	TOWN	PURPOSE	POPULATION AT RISK			POWER		WATER SUPPLY
					HOUSES	STATE ROADS	TOWN ROADS	CAPACITY (KW)	ENERGY (MWH)	
140.17	MOORE RESERVOIR DAM	TRANSCANADA HYDRO NORTHEAST	LITTLETON	Power	4,370			190,000	302,600	N/A
162.01	COMERFORD STORAGE DAM	TRANSCANADA HYDRO NORTHEAST	MONROE	Power	2,185			140,400	344,800	N/A
184.12	MURPHY DAM/KA LAKE FRANCIS	NH DES WATER DIVISION	PITTSBURG	Multi-Purpose	9,058	21	161	N/A	N/A	N/A
134.15	WALDER DAM	TRANSCANADA HYDRO NORTHEAST	LEBANON	Power	1,017	150	11	35,500	170,400	N/A
209.05	ARLINGTON MILLS RES WHEELER DAM	TOWN OF SALEM	SALEM	Water Supply	862	14	42	N/A	N/A	18,000
150.06	MASSABESIC LAKE DAM	MANCHESTER WATER WORKS	MANCHESTER	Water Supply	126	6	20	N/A	N/A	133,000
13.01	TOWER HILL POND DAM	MANCHESTER WATER WORKS	AUBURN	Water Supply	28	4	30	N/A	N/A	133,000
165.04	BOWERS DAM	PENNINGLUCK WATER WORKS INC	NASHUA	Water Supply	8	2	8	N/A	N/A	90,000
165.05	HARRIS POND DAM	PENNINGLUCK WATER WORKS INC	NASHUA	Water Supply	4	0	4	N/A	N/A	90,000
165.06	SUPPLY POND DAM	PENNINGLUCK WATER WORKS INC	NASHUA	Water Supply	3	0	3	N/A	N/A	90,000
TIER II DAMS										
DAM NO.	DAM NAME	OWNER	TOWN	PURPOSE	POPULATION AT RISK			POWER		WATER SUPPLY
					HOUSES	STATE ROADS	TOWN ROADS	CAPACITY (KW)	ENERGY (MWH)	
51.13	PENACOOK LAKE DAM	CITY OF CONCORD	CONCORD	Water Supply	33	1	4	N/A	N/A	43,000
148.13	BELLAMY RESERVOIR DAM	CITY OF PORTSMOUTH PUBLIC WORKS DEPT	MADBURY	Water Supply	128	4	18	N/A	N/A	33,000
206.01	WOODWARD POND DAM	CITY OF KEENE PUBLIC WORKS DEPT	ROXBURY	Water Supply				N/A	N/A	25,000
206.03	BABBIDGE RESERVOIR DAM	CITY OF KEENE PUBLIC WORKS DEPT	ROXBURY	Water Supply				N/A	N/A	26,000
82.02	EXETER RESERVOIR DAM	TOWN OF EXETER PUBLIC WORKS	EXETER	Water Supply	7	1	1	N/A	N/A	11,000
47.14	RICE RESERVOIR DAM	CITY OF CLAREMONT	CLAREMONT	Water Supply	35	10	2	N/A	N/A	9,000
47.30	WHITEWATER BROOK DAM	CITY OF CLAREMONT	CLAREMONT	Water Supply	82	2	20	N/A	N/A	9,000
106.05	LOWER RESERVOIR DAM	HANOVER WATER WORKS CO	HANOVER	Water Supply	1	1	2	N/A	N/A	8,500
106.06	UPPER RESERVOIR DAM	HANOVER WATER WORKS CO	HANOVER	Water Supply	3	0	4	N/A	N/A	8,500
106.14	HANOVER CENTER RESERVOIR DAM	HANOVER WATER WORKS CO	HANOVER	Water Supply	27	0	8	N/A	N/A	8,500
117.01	VERNON DAM	TRANSCANADA HYDRO NORTHEAST	HINSDALE	Power				28,000	122,300	N/A
150.01	MACKSAG DAM	PSNH	MANCHESTER	Power				16,000	83,000	N/A
24.04	SMITH DAM	PSNH	BERLIN	Power	18	0	3	13,000	104,261	N/A
27.12	GARVINS FALLS DAM	PSNH	BOW	Power	53	1	18	12,100	53,000	N/A
162.02	MONROES RESERVOIR DAM	TRANSCANADA HYDRO NORTHEAST	MONROE	Power				10,560	51,000	N/A
83.01	GREIG FALLS DAM	NH DES WATER DIVISION	SOFFSTOWN	Power	258	2	32	3,600	6,733	N/A
116.04	JACKMAN RESERVOIR DAM	PSNH	HILLSBOROUGH	Power	163	2	22	3,200	9,340	N/A
121.19	HOPKINTON FLOOD CTRL DAM	US ARMY CORP OF ENGINEERS	HOPKINTON	Flood Control	282	3	44	N/A	N/A	N/A



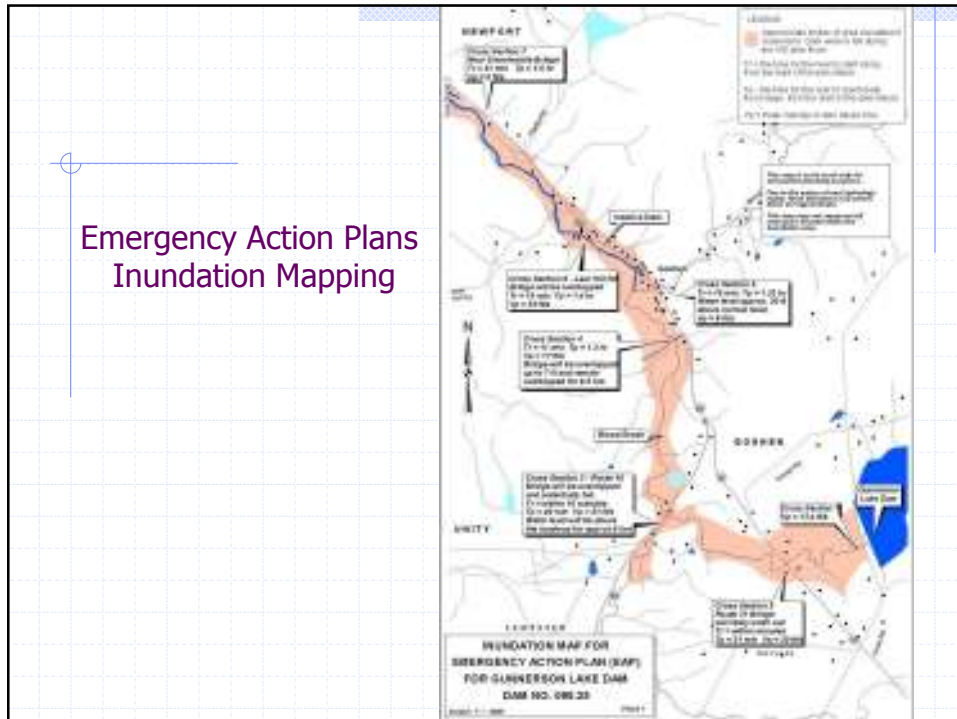


## Hazard Classification of Dams in New Hampshire

High Hazard	134
Significant Hazard	164
Low Hazard	544
Non-Menace	1,773
TOTAL	2,615



## Emergency Action Plans Inundation Mapping



## Population At Risk Downstream of High and Significant Hazard Dams In New Hampshire

- ◆ More than 26,000 houses
- ◆ More than 560 State Road Crossings
- ◆ More than 2,500 Town Road Crossings





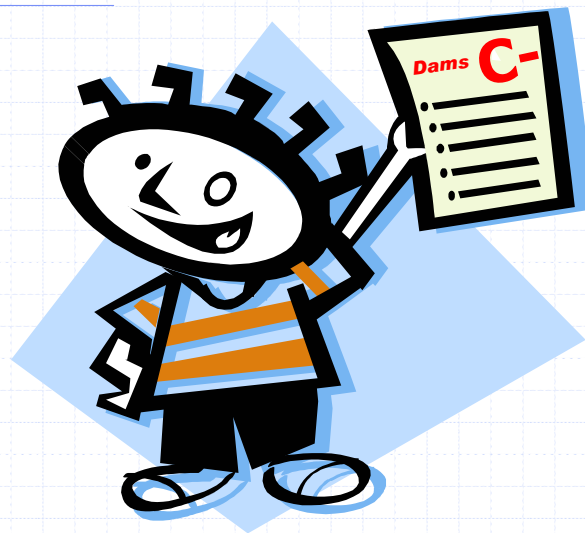
## Periodic Inspection Schedule

Hazard Potential Classification	Number of Structures	Inspection interval	Scheduled Inspections Per Year	Scheduled Inspections Per Month
High	99	1 yrs	99	14
Significant	147	2 yrs	49	7
Low	485	5 yrs	97	14

7 month average inspection year, May through November



## NH ASEA 2011 Report Card





## NH ASCE 2011 Report Card

- ◆ Growing and aging inventory of dams
- ◆ Increased number of deficiencies
- ◆ Lack of resources to maintain private and municipally-owned dams



## Outstanding Letters of Deficiency

	Municipal	Private
High Hazard	23	19
Significant Hazard	27	14
Low Hazard	33	78
TOTAL	83	93





## ESTIMATE OF NEEDS

- ◆ Approximately 50% of dams with outstanding letters of deficiency require major structural reconstruction
- ◆ Per project cost estimate = \$750k



## SUMMARY OF DAM INFRASTRUCTURE NEEDS MUNICIPAL AND PRIVATELY-OWNED DAMS

Owner	Estimated No. of Projects	Estimated Total Present Costs
Municipal	40	\$30,000,000
Private	45	\$33,750,000
TOTAL	85	\$63,750,000



STATE DAM LOAN/GRANT FUNDING PROGRAM SUMMARY

STATE	PROGRAM TYPE	PROGRAM NAME	SOURCE OF FUNDING	ELIGIBILITY	LOAN/GRANT AMOUNT	TERM OF LOAN	EVALUATION CRITERIA	PERMITTING/INSPECTION REQUIREMENTS
AZ	Loan or grant	Dam Repair	Legislature, Lien fund, Inspection fees, filing fees, principle and interest from previous loans	State engineer determines dam to be dangerous to life, non-emergency	Loan - cost of project Grant - portion of cost of project	Up to 20 years at 3-6% interest, depending on length	Determined by State Engineer	
MD	Loan and planning assistance	Maryland Environmental Service	State Agency/Non-profit Corporation	Counties, utilities and private groups. Need to have established service district for water supply, resource reclamation, dredging or stormwater				
MA	Grants		Funding through DEM. In past \$5 million. No new appropriation.	Local communities for repairs or removal	75% of the project, local share can be in-kind contributions			
NJ	Revolving loan fund	Dam Restoration and Clean Water Trust Fund	\$20 million - \$5M for state high hazard dams \$15 M loans. In 2000 an additional \$0.5 was added.	Local units of governments, private owners can be co-applicants	Cost of project for loans Up to 100% for grants	Up to 20 years @2% assessed against real estate benefited	Priority ranking system for type/size of dam/impoundment, hazard, magnitude of problem, etc...	Must be compliant with all state dam safety requirements
NY	grants	Clean Water/ Clean Air Bond Act	\$17 M bonding	Municipality for dam safety projects	75% of eligible project (20% local match) \$300,000 cap per project			
OH	Revolving loan fund	Ohio Water Development Authority	Revolving loan fund	Owner must under mandate from OUNR Dam Safety Loan Program - Local units of gov., state, districts Dam Safety Linked Deposit Program - private owners/eng.	Cost of project	5-25 years at lower than market rate	Applicant needs user charges or revenue to cover loan payment	Must have inspection report and approval of plans from OUNR
PA	Revolving loan fund	Pennvest	Revolving loan fund, \$2 billion from state general purpose funds	Projects associated with wastewater, water supply or stormwater	Up to cost of project	20-30 years at low interest		
UT	Loans or grants	Utah Board of Water Resources	\$15 from general revenue and 0.8 cent sales tax (created originally to deal with flood control problems)	High hazard dam owners. Mandated repairs	80-95% grant for irrigation or water supply dams, loans or grants for other owners		Ranking by state engineer based on severity of deficiencies and population at risk	Can be used for non-structural alternatives.
WI	grants	DNR Municipal Dam Grant Program	\$11.6 M of bonding over 10 years. Currently fully subscribed	Local units of government and Lake Districts	50-50 grants up to a \$200,000 maximum for		Ranking by code criteria based on hazard, financial need and size.	Must be under order or directive of DNR for dam safety deficiencies.

## Chapter 272:5 Laws of 2008

- ◆ Established Dam Maintenance Revolving Loan Fund in RSA 482:5-a to provide low interest loans for repair of privately-owned dams.
- ◆ No loans until fund balance >\$25,000
- ◆ DES must establish rules for disbursement and repayment of loans



## DES River Restoration and Dam Removal Program

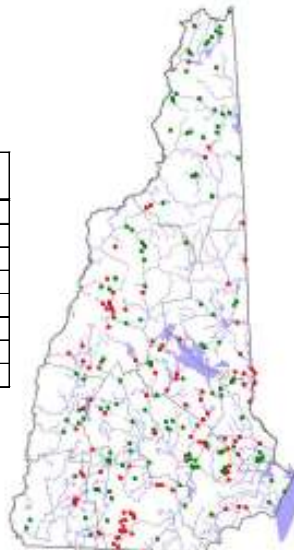


- ◆ We assist
  - Dam owners
  - General public
  - Government agencies
  - Consultants
- ◆ Information about dam removal as an option
- ◆ Help in obtaining funds to offset costs
- ◆ Guidance throughout the permitting process

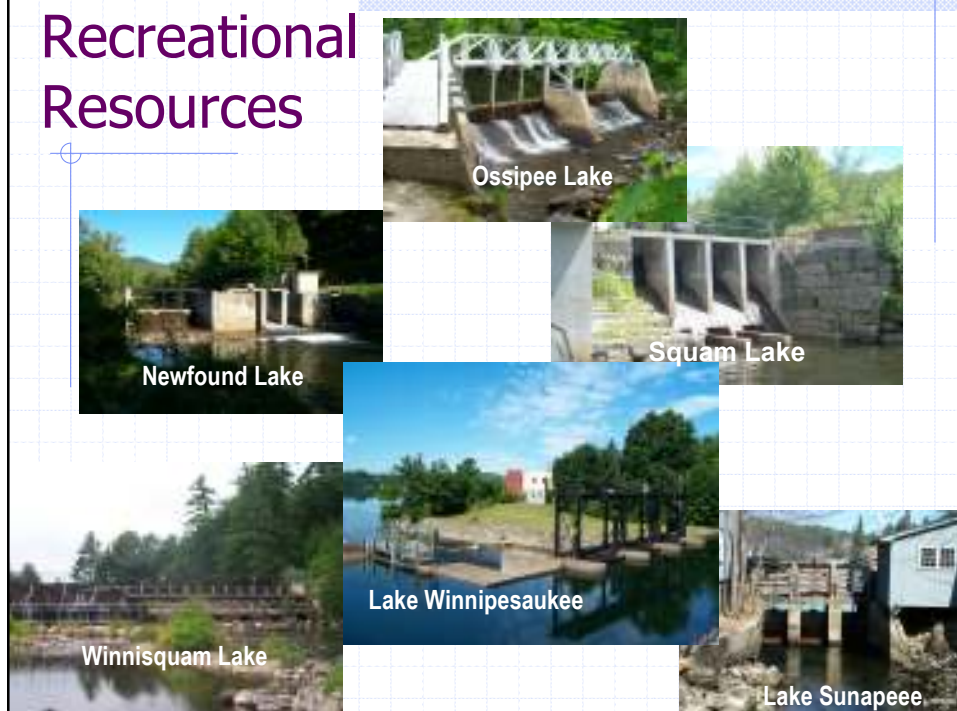


## State Dams

AGENCY	Hazard Classification				TOTALS
	HIGH	SIG.	LOW	NM	
DES	40	24	43	6	113
NHFG	4	7	45	46	102
DRED	2	3	9	14	28
DOT	0	4	3	16	23
UNH	1	1	0	2	4
Glenciff	0	0	0	2	2
Veterans Home	0	0	0	2	2
<b>TOTAL</b>	<b>47</b>	<b>39</b>	<b>100</b>	<b>88</b>	<b>274</b>



## Recreational Resources



## Population At Risk Downstream of State Owned High and Significant Hazard Dams

- ◆ More than 4,000 houses
- ◆ More than 130 State Road Crossings
- ◆ More than 800 Town Road Crossings



# Dam Operations



Back Lake Before



Back Lake After



# Emergency Operations





## Dam Maintenance Crew



## Recently Completed Projects

Big Bog Brook



Melvin Pope



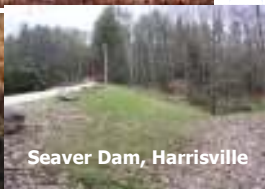
Deering Reservoir



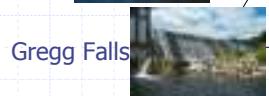
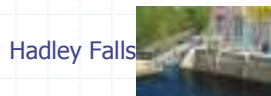
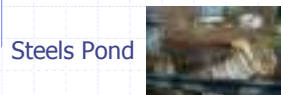
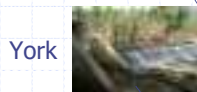
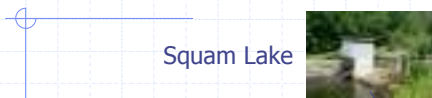
Pittsfield Mill



## Dams in Need of Repair



## Leased Dams



## Lease Terms

Dam	Lease Terms	Power Purchaser	Purchase Rate (\$/kwh)
Steels Pond	20% of Gross Revenue	PSNH	0.1077 to 0.1443
Squam Lake	20% of Adjusted Gross Revenue	PSNH	0.10 to 0.11
Lochmere	26% of Adjusted Gross Revenue	PSNH	0.09
York (Briar Hydro)	3.5% of Adjusted Gross Revenue	PSNH	0.10 to 0.11
Watson-Waldron	11% of Gross Revenue	PSNH	0.1077 to 0.1443
Pontook	19.5 % of Gross Revenue	USGen NE	0.06
Gregg Falls	25-38.5% of Adjusted Gross Revenue	PSNH	0.1166 to 0.1274
Hadley Falls	6% of Adjusted Gross Revenue	PSNH	0.0761 to 0.1035
Lakeport	4% of Adjusted Gross Revenue	PSNH	0.1283
Avery	20% of Adjusted Gross Revenue	PSNH	0.1248 to 0.1678
Kelley Falls	5% of Adjusted Gross Revenue	PSNH	0.09
Pittsfield Mill	10% of Adjusted Gross Revenue	PSNH	0.1442



## RSA 374-F Electric Utility Restructuring

Utilities must take all reasonable measures to mitigate stranded costs, including renegotiation of power purchase contracts





## New Power Purchase Rates

Dam	Power Purchaser	Rate (\$/kwh)	Rate (\$/kwh)
Steels Pond	PSNH	0.1077 to 0.1443	0.05
Squam Lake	PSNH	0.10 to 0.11	0.10 to 0.11
Lochmere	PSNH	0.09	Market
York (Briar Hydro)	PSNH	0.10 to 0.11	0.10 to 0.11
Watson-Waldron	PSNH	0.1077 to 0.1443	0.1077 to 0.1443
Pontook	Brascan	0.06	0.036
Gregg Falls	PSNH	0.1166 to 0.1274	Market
Hadley Falls	PSNH	0.0761 to 0.1035	Market
Lakeport	PSNH	0.1283	Market
Avery	PSNH	0.1248 to 0.1678	Market
Kelley Falls	PSNH	0.09	0.09



## Dam Maintenance Fund Revenue

	Original Projection	Revised Projection
Steels Pond	\$74,000	\$23,500
Squam Lake	\$3,500	\$1,000
Lochmere	\$35,000	\$5,000
York (Briar Hydro)	\$88,400	\$98,400
Watson-Waldron	\$14,700	\$13,200
Pontook	\$745,000	\$414,200
Gregg Falls	\$430,000	\$125,000
Hadley Falls	\$3,000	\$3,000
Lakeport	\$13,000	\$4,000
Avery	\$33,000	\$14,100
Kelley Falls	\$27,400	\$4,000
Pittsfield Mill	\$9,800	\$0
<b>TOTALS</b>	<b>\$1,476,800</b>	<b>\$705,400</b>



## State Legislative Actions

- ◆ SB 488 committee to study the effects of electric utility restructuring on state dams and the alternatives for funding the operation and maintenance of state-owned dams
  - Final Report submitted December 1, 2004
  - Proposed recommendations for alternative funding sources
    - ◆ Unrefunded gas tax
    - ◆ Shoreland assessment fees



## State Owned Dams in Need of Repair

- ◆ Average capital cost is approximately \$365,000 per project
- ◆ 48 dams, given the 6/yr. completion rate, results in meeting the identified dam infrastructure needs by the close of 2017
- ◆ In reality, an additional demand of 3 to 5 dams can be expected to be added to the list of 48 each year – increasing the annual infrastructure funding need by over \$2M



